*E n g i n e e r i n g* *SPT* - STUDIO PIERPAOLO ing. TURCHI

47521 CESENA (FC) - Via Cesare Battisti, 149
Tel 0547-613143 - Fax 0547-613143

Web: http://www.engineeringspt.it
E-mail: studio.ingegneria@aruba.it
info@engineeringspt.it
pierpaolo.turchi@ingpec.eu

**COMUNE DI: GAMBETTOLA** **All.to : 2B-2**

PROPRIETA': **VITROPLANT ITALIA S.r.l. SOCIETA' AGRICOLA**
**Via Loreto n° 170 – LOC. BUDRIO - 47521 CESENA (FC)**
**(P.I. 03437480407)**

COMUNE DI GAMBETTOLA
Comune di Gambettola
E
COPIA CONFORME ALL'ORIGINALE DIGITALE
Protocollo N.0002507/2024 del 12/02/2024
Firmatario: pierpaolo turchi

# TABULATI di CALCOLO
## - BLOCCO SPOGLIATOIO -

OGGETTO: **PROGETTO PER LA COSTRUZIONE DI IMPIANTO SERRICOLO IN AMPLIAMENTO A QUELLO ESISTENTE - ISTANZA PROCEDIMENTO UNICO AI SENSI art. 53 L.R. 24/17 – 47035 GAMBETTOLA (FC).**

Il progettista delle strutture

ORDINE INGEGNERI PROV. FORLI'-CESENA
INGEGNERE
PIERPAOLO TURCHI
LAUREA SPECIALISTICA
Sezione: A
N° 1344 / A
Settori civile ambientale, industriale, dell'informazione

POS. PRAT. 026-902-23

DATA: **GENNAIO 2024**

## INDICE

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## 2a) SPOSTAMENTI/ROTAZIONI NODI NON BLOCCATI

**Combinazione di Carico: 1 - Descrizione: DINAMICA**

| Nodo | Trasl.X | Trasl.Y | Trasl._Z | Rotaz.X | Rotaz.Y | Rotaz.Z |
|---|---|---|---|---|---|---|
| 1 | +0.00e+00 | +0.00e+00 | -1.40e-01 | +9.87e-05 | +6.26e-05 | +0.00e+00 |
| 2 | +0.00e+00 | +0.00e+00 | -2.07e-01 | +2.08e-04 | +1.11e-04 | +0.00e+00 |
| 5 | +0.00e+00 | +0.00e+00 | -1.22e-01 | -1.93e-05 | +1.34e-04 | +0.00e+00 |
| 6 | +0.00e+00 | +0.00e+00 | -1.73e-01 | -6.80e-05 | -1.26e-04 | +0.00e+00 |
| 7 | +0.00e+00 | +0.00e+00 | -1.87e-01 | +4.56e-05 | -1.63e-04 | +0.00e+00 |
| 8 | +0.00e+00 | +0.00e+00 | -1.32e-01 | +2.61e-06 | +1.68e-04 | +0.00e+00 |
| 9 | +8.26e-02 | +2.02e-02 | -1.38e-01 | -5.03e-05 | -5.43e-04 | -9.85e-07 |
| 10 | +8.26e-02 | +1.94e-02 | -1.94e-01 | -2.71e-05 | -3.68e-05 | -9.85e-07 |
| 11 | +8.21e-02 | +1.94e-02 | -1.79e-01 | +5.04e-05 | +3.18e-05 | -9.85e-07 |
| 12 | +8.21e-02 | +2.02e-02 | -1.26e-01 | +6.70e-05 | -3.80e-04 | -9.85e-07 |
| 13 | +8.16e-02 | +2.02e-02 | -1.77e-01 | +3.88e-05 | -8.41e-05 | -9.85e-07 |
| 14 | +8.16e-02 | +1.94e-02 | -2.38e-01 | +1.31e-04 | -7.62e-05 | -9.85e-07 |
| 15 | +8.14e-02 | +1.94e-02 | -2.14e-01 | -1.62e-04 | +3.54e-05 | -9.85e-07 |
| 16 | +8.14e-02 | +2.02e-02 | -1.43e-01 | -1.94e-04 | -1.71e-04 | -9.85e-07 |
| 17 | +8.14e-02 | +2.00e-02 | -1.57e-01 | -1.66e-04 | +9.38e-05 | -9.85e-07 |
| 18 | +0.00e+00 | +0.00e+00 | -1.52e-01 | +1.75e-04 | +9.04e-05 | +0.00e+00 |
| 19 | +8.14e-02 | +1.96e-02 | -1.93e-01 | -2.13e-03 | +1.74e-04 | -9.85e-07 |
| 20 | +0.00e+00 | +0.00e+00 | -1.86e-01 | +2.14e-04 | +7.92e-05 | +0.00e+00 |
| 21 | +0.00e+00 | +0.00e+00 | -2.25e-01 | +5.96e-05 | -8.92e-05 | +0.00e+00 |
| 22 | +8.26e-02 | +1.96e-02 | -2.49e-01 | -1.23e-03 | +1.79e-04 | -9.85e-07 |
| 23 | +0.00e+00 | +0.00e+00 | -1.68e-01 | +2.95e-05 | +2.46e-04 | +0.00e+00 |
| 24 | +8.26e-02 | +2.00e-02 | -1.77e-01 | -9.60e-06 | -5.95e-05 | -9.85e-07 |
| 25 | +8.32e-02 | +1.96e-02 | -6.49e-01 | +1.68e-03 | -4.39e-05 | -9.85e-07 |
| 26 | +8.16e-02 | +1.96e-02 | -6.33e-01 | -1.62e-03 | -7.45e-05 | -9.85e-07 |
| 27 | +8.16e-02 | +2.00e-02 | -1.86e-01 | +5.35e-05 | -7.81e-05 | -9.85e-07 |
| 29 | +0.00e+00 | +0.00e+00 | -1.50e-01 | -6.26e-05 | +2.06e-04 | +0.00e+00 |
| 30 | +8.21e-02 | +2.00e-02 | -1.58e-01 | +7.04e-05 | +1.30e-05 | -9.85e-07 |
| 31 | +8.21e-02 | +1.96e-02 | -2.26e-01 | +1.21e-03 | +2.06e-04 | -9.85e-07 |
| 32 | +8.33e-02 | +2.00e-02 | -1.59e-01 | +2.10e-04 | +1.44e-04 | -9.85e-07 |
| 33 | +8.30e-02 | +2.00e-02 | -1.38e-01 | -5.75e-06 | -1.42e-04 | -9.85e-07 |
| 34 | +0.00e+00 | +0.00e+00 | -1.24e-01 | +2.14e-05 | -1.24e-06 | +0.00e+00 |
| 35 | +8.30e-02 | +1.96e-02 | -8.20e-01 | -5.71e-05 | -2.51e-04 | -9.85e-07 |
| 36 | +0.00e+00 | +0.00e+00 | -2.02e-01 | -9.20e-05 | -6.18e-05 | +0.00e+00 |
| 37 | +8.30e-02 | +1.94e-02 | -1.71e-01 | -7.05e-05 | -3.29e-04 | -9.85e-07 |
| 38 | +8.30e-02 | +2.02e-02 | -1.32e-01 | -4.75e-05 | -6.06e-04 | -9.85e-07 |
| 39 | +0.00e+00 | +0.00e+00 | -1.25e-01 | +9.74e-06 | +2.06e-05 | +0.00e+00 |
| 40 | +0.00e+00 | +0.00e+00 | -1.62e-01 | +6.54e-07 | +9.30e-05 | +0.00e+00 |
| 41 | +0.00e+00 | +0.00e+00 | -1.54e-01 | -2.25e-04 | +8.56e-05 | +0.00e+00 |
| 42 | +8.33e-02 | +1.96e-02 | -1.94e-01 | +2.24e-03 | +2.16e-04 | -9.85e-07 |
| 43 | +0.00e+00 | +0.00e+00 | -1.87e-01 | -2.75e-04 | +8.26e-05 | +0.00e+00 |
| 44 | +8.33e-02 | +1.94e-02 | -2.16e-01 | +1.96e-04 | +7.09e-05 | -9.85e-07 |
| 45 | +8.33e-02 | +2.02e-02 | -1.45e-01 | +2.10e-04 | -1.16e-04 | -9.85e-07 |
| 46 | +0.00e+00 | +0.00e+00 | -1.42e-01 | -1.23e-04 | +5.75e-05 | +0.00e+00 |
| 47 | +0.00e+00 | +0.00e+00 | -2.09e-01 | -2.31e-04 | +1.17e-04 | +0.00e+00 |
| 48 | +8.25e-02 | +1.98e-02 | -2.44e-01 | +1.37e-05 | -9.14e-05 | -9.85e-07 |
| 49 | +8.32e-02 | +2.00e-02 | -1.91e-01 | -4.73e-05 | -4.71e-05 | -9.85e-07 |
| 50 | +8.18e-02 | +1.98e-02 | -7.37e-01 | +7.59e-05 | -1.96e-04 | -9.85e-07 |
| 52 | +8.16e-02 | +1.98e-02 | -5.87e-01 | -1.49e-03 | -7.50e-05 | -9.85e-07 |
| 53 | +0.00e+00 | +0.00e+00 | -1.82e-01 | -3.47e-05 | -1.30e-04 | +0.00e+00 |
| 54 | +0.00e+00 | +0.00e+00 | -1.25e-01 | -1.98e-05 | +1.20e-04 | +0.00e+00 |
| 55 | +8.19e-02 | +1.96e-02 | -6.00e-01 | +1.51e-03 | -8.57e-05 | -9.85e-07 |
| 56 | +0.00e+00 | +0.00e+00 | -1.91e-01 | -8.81e-05 | +1.71e-04 | +0.00e+00 |
| 57 | +0.00e+00 | +0.00e+00 | -2.15e-01 | +5.25e-05 | +1.90e-04 | +0.00e+00 |
| 58 | +8.21e-02 | +1.98e-02 | -2.13e-01 | +1.11e-03 | +1.64e-04 | -9.85e-07 |
| 59 | +8.26e-02 | +1.98e-02 | -2.37e-01 | -1.13e-03 | +1.28e-04 | -9.85e-07 |
| 60 | +8.19e-02 | +2.00e-02 | -1.82e-01 | -5.80e-05 | -9.43e-05 | -9.85e-07 |
| 61 | +8.18e-02 | +1.96e-02 | -7.97e-01 | +8.17e-05 | -2.56e-04 | -9.85e-07 |
| 62 | +8.18e-02 | +2.00e-02 | -1.35e-01 | +4.93e-06 | -1.47e-04 | -9.85e-07 |
| 63 | +8.19e-02 | +1.98e-02 | -5.57e-01 | +1.39e-03 | -8.81e-05 | -9.85e-07 |
| 65 | +8.25e-02 | +2.00e-02 | -2.01e-01 | -1.36e-04 | -1.00e-04 | -9.85e-07 |
| 66 | +8.25e-02 | +1.96e-02 | -2.58e-01 | +2.16e-05 | -8.60e-05 | -9.85e-07 |
| 67 | +8.33e-02 | +1.98e-02 | -1.83e-01 | +2.06e-03 | +2.28e-04 | -9.85e-07 |
| 68 | +8.30e-02 | +1.98e-02 | -7.61e-01 | -4.82e-05 | -1.91e-04 | -9.85e-07 |
| 69 | +8.32e-02 | +1.98e-02 | -6.03e-01 | +1.55e-03 | -4.37e-05 | -9.85e-07 |
| 70 | +8.14e-02 | +1.98e-02 | -1.82e-01 | -1.96e-03 | +1.42e-04 | -9.85e-07 |
| 71 | +8.28e-02 | +1.98e-02 | -5.82e-01 | -1.39e-03 | -1.14e-04 | -9.85e-07 |
| 72 | +8.28e-02 | +1.96e-02 | -6.25e-01 | -1.52e-03 | -1.11e-04 | -9.85e-07 |
| 73 | +8.28e-02 | +2.00e-02 | -1.90e-01 | +1.01e-04 | -1.22e-04 | -9.85e-07 |
| 74 | +8.28e-02 | +1.94e-02 | -2.19e-01 | +6.39e-05 | -1.13e-04 | -9.85e-07 |
| 75 | +8.25e-02 | +1.94e-02 | -2.12e-01 | -6.43e-05 | -8.47e-05 | -9.85e-07 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| 77 | +8.18e-02 | +1.94e-02 | -1.65e-01 | +5.41e-05 | -3.34e-04 | -9.85e-07 |
| 78 | +8.19e-02 | +1.94e-02 | -2.10e-01 | -3.58e-05 | -8.72e-05 | -9.85e-07 |
| 79 | +8.32e-02 | +1.94e-02 | -2.44e-01 | -1.23e-04 | -4.59e-05 | -9.85e-07 |
| 80 | +8.28e-02 | +2.02e-02 | -1.67e-01 | +1.74e-05 | -1.31e-04 | -9.85e-07 |
| 81 | +8.25e-02 | +2.02e-02 | -1.50e-01 | -6.30e-05 | -1.10e-04 | -9.85e-07 |
| 82 | +0.00e+00 | +0.00e+00 | -1.72e-01 | -2.69e-04 | +9.01e-05 | +0.00e+00 |
| 83 | +8.18e-02 | +2.02e-02 | -1.28e-01 | +2.82e-05 | -6.11e-04 | -9.85e-07 |
| 84 | +8.19e-02 | +2.02e-02 | -1.61e-01 | +5.73e-06 | -1.02e-04 | -9.85e-07 |
| 85 | +8.32e-02 | +2.02e-02 | -1.82e-01 | -3.59e-05 | -5.30e-05 | -9.85e-07 |
| 86 | +0.00e+00 | +0.00e+00 | -1.44e-01 | +6.65e-06 | +1.18e-04 | +0.00e+00 |
| 87 | +8.23e-02 | +2.00e-02 | -1.53e-01 | -1.42e-04 | -3.29e-05 | -9.85e-07 |
| 88 | +8.23e-02 | +1.98e-02 | -2.49e-01 | -2.28e-05 | -4.11e-05 | -9.85e-07 |
| 90 | +8.23e-02 | +1.96e-02 | -2.65e-01 | -1.88e-05 | -5.06e-05 | -9.85e-07 |
| 92 | +8.23e-02 | +2.02e-02 | -1.28e-01 | -7.72e-05 | -3.63e-04 | -9.85e-07 |
| 93 | +8.23e-02 | +1.94e-02 | -1.86e-01 | -9.75e-05 | -6.23e-05 | -9.85e-07 |
| 94 | +0.00e+00 | +0.00e+00 | -1.71e-01 | +2.02e-04 | +9.20e-05 | +0.00e+00 |
| 95 | +0.00e+00 | +0.00e+00 | -1.21e-01 | +1.39e-05 | +1.99e-05 | +0.00e+00 |
| 96 | +0.00e+00 | +0.00e+00 | -1.21e-01 | +3.45e-06 | +3.18e-07 | +0.00e+00 |
| 97 | +0.00e+00 | +0.00e+00 | -1.57e-01 | +3.01e-05 | +9.20e-05 | +0.00e+00 |

**MASSIME DEFORMAZIONI NODALI**

| | Trasl.X | Trasl.Y | Trasl.Z | Rotaz.X | Rotaz.Y | Rotaz.Z | DLMax |
|---|---|---|---|---|---|---|---|
| Deform. nodali | +8.33e-02 | +2.02e-02 | -8.20e-01 | +2.24e-03 | -6.11e-04 | -9.85e-07 | +8.24e-01 |
| Nodo | 32 | 9 | 35 | 42 | 83 | 9 | 35 |

**Combinazione di Carico: 2 - Descrizione: STATICA SENZA VENTO**

| Nodo | Trasl.X | Trasl.Y | Trasl._Z | Rotaz.X | Rotaz.Y | Rotaz.Z |
|---|---|---|---|---|---|---|
| 1 | +0.00e+00 | +0.00e+00 | -1.47e-01 | +1.25e-04 | +6.41e-05 | +0.00e+00 |
| 2 | +0.00e+00 | +0.00e+00 | -1.82e-01 | +1.67e-04 | -4.07e-05 | +0.00e+00 |
| 5 | +0.00e+00 | +0.00e+00 | -1.26e-01 | -2.39e-05 | +1.06e-04 | +0.00e+00 |
| 6 | +0.00e+00 | +0.00e+00 | -1.74e-01 | -7.78e-05 | -1.46e-04 | +0.00e+00 |
| 7 | +0.00e+00 | +0.00e+00 | -1.83e-01 | +6.04e-05 | -1.91e-04 | +0.00e+00 |
| 8 | +0.00e+00 | +0.00e+00 | -1.32e-01 | +1.18e-05 | +1.49e-04 | +0.00e+00 |
| 9 | -1.88e-02 | +1.33e-03 | -1.37e-01 | -3.22e-05 | -1.63e-04 | -1.58e-07 |
| 10 | -1.88e-02 | +1.20e-03 | -1.89e-01 | -5.03e-06 | -2.60e-05 | -1.58e-07 |
| 11 | -1.89e-02 | +1.20e-03 | -1.80e-01 | +4.98e-05 | -4.20e-05 | -1.58e-07 |
| 12 | -1.89e-02 | +1.33e-03 | -1.31e-01 | +7.18e-05 | -1.45e-04 | -1.58e-07 |
| 13 | -1.90e-02 | +1.33e-03 | -1.84e-01 | +4.99e-05 | -6.48e-05 | -1.58e-07 |
| 14 | -1.90e-02 | +1.20e-03 | -2.22e-01 | +7.16e-05 | -6.38e-05 | -1.58e-07 |
| 15 | -1.90e-02 | +1.20e-03 | -1.85e-01 | -2.32e-04 | -5.30e-05 | -1.58e-07 |
| 16 | -1.90e-02 | +1.33e-03 | -1.50e-01 | -2.04e-04 | -9.34e-05 | -1.58e-07 |
| 17 | -1.90e-02 | +1.30e-03 | -1.66e-01 | -1.79e-04 | -7.04e-05 | -1.58e-07 |
| 18 | +0.00e+00 | +0.00e+00 | -1.61e-01 | +2.11e-04 | +1.07e-04 | +0.00e+00 |
| 19 | -1.90e-02 | +1.24e-03 | -2.03e-01 | -2.18e-03 | -3.84e-05 | -1.58e-07 |
| 20 | +0.00e+00 | +0.00e+00 | -1.92e-01 | +2.19e-04 | -9.93e-06 | +0.00e+00 |
| 21 | +0.00e+00 | +0.00e+00 | -2.24e-01 | +7.50e-05 | -9.36e-05 | +0.00e+00 |
| 22 | -1.88e-02 | +1.24e-03 | -2.48e-01 | -1.22e-03 | -6.87e-05 | -1.58e-07 |
| 23 | +0.00e+00 | +0.00e+00 | -1.66e-01 | +3.80e-05 | +2.44e-04 | +0.00e+00 |
| 24 | -1.88e-02 | +1.30e-03 | -1.76e-01 | -5.10e-06 | -1.69e-04 | -1.58e-07 |
| 25 | -1.88e-02 | +1.24e-03 | -6.51e-01 | +1.66e-03 | -9.95e-05 | -1.58e-07 |
| 26 | -1.90e-02 | +1.24e-03 | -6.47e-01 | -1.63e-03 | -6.35e-05 | -1.58e-07 |
| 27 | -1.90e-02 | +1.30e-03 | -1.93e-01 | +7.37e-05 | -6.43e-05 | -1.58e-07 |
| 29 | +0.00e+00 | +0.00e+00 | -1.52e-01 | -6.16e-05 | +1.96e-04 | +0.00e+00 |
| 30 | -1.89e-02 | +1.30e-03 | -1.59e-01 | +7.80e-05 | -1.54e-04 | -1.58e-07 |
| 31 | -1.89e-02 | +1.24e-03 | -2.28e-01 | +1.25e-03 | -7.81e-05 | -1.58e-07 |
| 32 | -1.87e-02 | +1.30e-03 | -1.65e-01 | +1.83e-04 | -1.25e-04 | -1.58e-07 |
| 33 | -1.88e-02 | +1.30e-03 | -1.39e-01 | -8.75e-06 | -8.77e-05 | -1.58e-07 |
| 34 | +0.00e+00 | +0.00e+00 | -1.25e-01 | +1.78e-05 | -2.43e-06 | +0.00e+00 |
| 35 | -1.88e-02 | +1.24e-03 | -8.19e-01 | -6.88e-05 | -9.53e-05 | -1.58e-07 |
| 36 | +0.00e+00 | +0.00e+00 | -2.04e-01 | -9.48e-05 | -5.89e-05 | +0.00e+00 |
| 37 | -1.88e-02 | +1.20e-03 | -1.62e-01 | -2.73e-05 | -9.89e-05 | -1.58e-07 |
| 38 | -1.88e-02 | +1.33e-03 | -1.33e-01 | -4.25e-05 | -8.79e-05 | -1.58e-07 |
| 39 | +0.00e+00 | +0.00e+00 | -1.26e-01 | +2.56e-06 | +7.75e-06 | +0.00e+00 |
| 40 | +0.00e+00 | +0.00e+00 | -1.54e-01 | +2.48e-05 | +3.58e-05 | +0.00e+00 |
| 41 | +0.00e+00 | +0.00e+00 | -1.61e-01 | -2.07e-04 | +1.11e-04 | +0.00e+00 |
| 42 | -1.87e-02 | +1.24e-03 | -2.02e-01 | +2.20e-03 | -9.00e-05 | -1.58e-07 |
| 43 | +0.00e+00 | +0.00e+00 | -1.91e-01 | -2.14e-04 | -1.05e-05 | +0.00e+00 |
| 44 | -1.87e-02 | +1.20e-03 | -1.84e-01 | +2.38e-04 | -7.50e-05 | -1.58e-07 |
| 45 | -1.87e-02 | +1.33e-03 | -1.48e-01 | +2.09e-04 | -1.22e-04 | -1.58e-07 |
| 46 | +0.00e+00 | +0.00e+00 | -1.45e-01 | -1.19e-04 | +6.89e-05 | +0.00e+00 |
| 47 | +0.00e+00 | +0.00e+00 | -1.82e-01 | -1.60e-04 | -4.26e-05 | +0.00e+00 |
| 48 | -1.89e-02 | +1.27e-03 | -2.42e-01 | +1.16e-05 | -9.37e-05 | -1.58e-07 |
| 49 | -1.88e-02 | +1.30e-03 | -1.93e-01 | -6.42e-05 | -1.01e-04 | -1.58e-07 |
| 50 | -1.90e-02 | +1.27e-03 | -7.51e-01 | +9.64e-05 | -8.95e-05 | -1.58e-07 |
| 52 | -1.90e-02 | +1.27e-03 | -6.02e-01 | -1.49e-03 | -6.30e-05 | -1.58e-07 |
| 53 | +0.00e+00 | +0.00e+00 | -1.84e-01 | -2.74e-05 | -1.63e-04 | +0.00e+00 |
| 54 | +0.00e+00 | +0.00e+00 | -1.30e-01 | -1.14e-05 | +8.58e-05 | +0.00e+00 |
| 55 | -1.90e-02 | +1.24e-03 | -6.09e-01 | +1.55e-03 | -1.02e-04 | -1.58e-07 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| 56 | +0.00e+00 | +0.00e+00 | -1.92e-01 | -8.75e-05 | +1.75e-04 | +0.00e+00 |
| 57 | +0.00e+00 | +0.00e+00 | -2.14e-01 | +6.57e-05 | +1.93e-04 | +0.00e+00 |
| 58 | -1.89e-02 | +1.27e-03 | -2.14e-01 | +1.15e-03 | -1.36e-04 | -1.58e-07 |
| 59 | -1.88e-02 | +1.27e-03 | -2.36e-01 | -1.13e-03 | -1.41e-04 | -1.58e-07 |
| 60 | -1.90e-02 | +1.30e-03 | -1.83e-01 | -5.69e-05 | -1.05e-04 | -1.58e-07 |
| 61 | -1.90e-02 | +1.24e-03 | -8.10e-01 | +9.80e-05 | -9.40e-05 | -1.58e-07 |
| 62 | -1.90e-02 | +1.30e-03 | -1.36e-01 | +2.53e-05 | -8.57e-05 | -1.58e-07 |
| 63 | -1.90e-02 | +1.27e-03 | -5.65e-01 | +1.43e-03 | -1.04e-04 | -1.58e-07 |
| 65 | -1.89e-02 | +1.30e-03 | -1.99e-01 | -1.33e-04 | -9.62e-05 | -1.58e-07 |
| 66 | -1.89e-02 | +1.24e-03 | -2.57e-01 | +2.21e-05 | -9.05e-05 | -1.58e-07 |
| 67 | -1.87e-02 | +1.27e-03 | -1.94e-01 | +2.03e-03 | -1.16e-04 | -1.58e-07 |
| 68 | -1.88e-02 | +1.27e-03 | -7.62e-01 | -6.40e-05 | -9.17e-05 | -1.58e-07 |
| 69 | -1.88e-02 | +1.27e-03 | -6.07e-01 | +1.53e-03 | -1.00e-04 | -1.58e-07 |
| 70 | -1.90e-02 | +1.27e-03 | -1.94e-01 | -2.00e-03 | +2.23e-05 | -1.58e-07 |
| 71 | -1.88e-02 | +1.27e-03 | -5.81e-01 | -1.40e-03 | -1.06e-04 | -1.58e-07 |
| 72 | -1.88e-02 | +1.24e-03 | -6.24e-01 | -1.52e-03 | -1.04e-04 | -1.58e-07 |
| 73 | -1.88e-02 | +1.30e-03 | -1.90e-01 | +9.63e-05 | -1.08e-04 | -1.58e-07 |
| 74 | -1.88e-02 | +1.20e-03 | -2.13e-01 | +7.42e-05 | -1.03e-04 | -1.58e-07 |
| 75 | -1.89e-02 | +1.20e-03 | -2.12e-01 | -4.13e-05 | -8.82e-05 | -1.58e-07 |
| 77 | -1.90e-02 | +1.20e-03 | -1.58e-01 | +3.29e-05 | -9.96e-05 | -1.58e-07 |
| 78 | -1.90e-02 | +1.20e-03 | -2.08e-01 | -5.79e-05 | -1.02e-04 | -1.58e-07 |
| 79 | -1.88e-02 | +1.20e-03 | -2.24e-01 | -5.96e-05 | -9.92e-05 | -1.58e-07 |
| 80 | -1.88e-02 | +1.33e-03 | -1.67e-01 | +1.12e-05 | -1.08e-04 | -1.58e-07 |
| 81 | -1.89e-02 | +1.33e-03 | -1.53e-01 | -4.14e-05 | -9.74e-05 | -1.58e-07 |
| 82 | +0.00e+00 | +0.00e+00 | -1.83e-01 | -2.26e-04 | +9.65e-05 | +0.00e+00 |
| 83 | -1.90e-02 | +1.33e-03 | -1.31e-01 | +4.56e-05 | -8.53e-05 | -1.58e-07 |
| 84 | -1.90e-02 | +1.33e-03 | -1.64e-01 | +1.34e-06 | -1.05e-04 | -1.58e-07 |
| 85 | -1.88e-02 | +1.33e-03 | -1.84e-01 | -4.05e-05 | -1.01e-04 | -1.58e-07 |
| 86 | +0.00e+00 | +0.00e+00 | -1.44e-01 | +1.55e-05 | +8.92e-05 | +0.00e+00 |
| 87 | -1.89e-02 | +1.30e-03 | -1.53e-01 | -1.27e-04 | -1.12e-04 | -1.58e-07 |
| 88 | -1.89e-02 | +1.27e-03 | -2.48e-01 | -1.85e-05 | -8.77e-05 | -1.58e-07 |
| 90 | -1.89e-02 | +1.24e-03 | -2.64e-01 | -1.31e-05 | -6.05e-05 | -1.58e-07 |
| 92 | -1.89e-02 | +1.33e-03 | -1.34e-01 | -5.94e-05 | -1.19e-04 | -1.58e-07 |
| 93 | -1.89e-02 | +1.20e-03 | -1.88e-01 | -8.07e-05 | -2.99e-05 | -1.58e-07 |
| 94 | +0.00e+00 | +0.00e+00 | -1.83e-01 | +2.31e-04 | +9.46e-05 | +0.00e+00 |
| 95 | +0.00e+00 | +0.00e+00 | -1.24e-01 | +1.40e-05 | +4.44e-07 | +0.00e+00 |
| 96 | +0.00e+00 | +0.00e+00 | -1.22e-01 | +1.30e-06 | -4.93e-06 | +0.00e+00 |
| 97 | +0.00e+00 | +0.00e+00 | -1.50e-01 | -4.10e-06 | +3.99e-05 | +0.00e+00 |

**MASSIME DEFORMAZIONI NODALI**

| | Trasl.X | Trasl.Y | Trasl.Z | Rotaz.X | Rotaz.Y | Rotaz.Z | DLMax |
|---|---|---|---|---|---|---|---|
| Deform. nodali | -1.90e-02 | +1.33e-03 | -8.19e-01 | +2.20e-03 | +2.44e-04 | -1.58e-07 | +8.20e-01 |
| Nodo | 15 | 9 | 35 | 42 | 23 | 9 | 35 |

**Combinazione di Carico: 3 - Descrizione: Rara**

| Nodo | Trasl.X | Trasl.Y | Trasl._Z | Rotaz.X | Rotaz.Y | Rotaz.Z |
|---|---|---|---|---|---|---|
| 1 | +0.00e+00 | +0.00e+00 | -1.12e-01 | +9.34e-05 | +4.52e-05 | +0.00e+00 |
| 2 | +0.00e+00 | +0.00e+00 | -1.38e-01 | +1.24e-04 | -2.79e-05 | +0.00e+00 |
| 5 | +0.00e+00 | +0.00e+00 | -9.60e-02 | -1.78e-05 | +7.31e-05 | +0.00e+00 |
| 6 | +0.00e+00 | +0.00e+00 | -1.32e-01 | -5.74e-05 | -1.03e-04 | +0.00e+00 |
| 7 | +0.00e+00 | +0.00e+00 | -1.39e-01 | +4.43e-05 | -1.37e-04 | +0.00e+00 |
| 8 | +0.00e+00 | +0.00e+00 | -1.01e-01 | +8.68e-06 | +1.06e-04 | +0.00e+00 |
| 9 | -1.33e-02 | +1.05e-03 | -1.04e-01 | -2.36e-05 | -1.16e-04 | -9.27e-08 |
| 10 | -1.33e-02 | +9.78e-04 | -1.43e-01 | -3.72e-06 | -1.79e-05 | -9.27e-08 |
| 11 | -1.33e-02 | +9.78e-04 | -1.36e-01 | +3.61e-05 | -3.02e-05 | -9.27e-08 |
| 12 | -1.33e-02 | +1.05e-03 | -9.95e-02 | +5.24e-05 | -1.03e-04 | -9.27e-08 |
| 13 | -1.34e-02 | +1.05e-03 | -1.39e-01 | +3.81e-05 | -4.52e-05 | -9.27e-08 |
| 14 | -1.34e-02 | +9.78e-04 | -1.67e-01 | +5.38e-05 | -4.46e-05 | -9.27e-08 |
| 15 | -1.34e-02 | +9.78e-04 | -1.40e-01 | -1.69e-04 | -3.74e-05 | -9.27e-08 |
| 16 | -1.34e-02 | +1.05e-03 | -1.14e-01 | -1.49e-04 | -6.57e-05 | -9.27e-08 |
| 17 | -1.34e-02 | +1.03e-03 | -1.26e-01 | -1.29e-04 | -4.93e-05 | -9.27e-08 |
| 18 | +0.00e+00 | +0.00e+00 | -1.22e-01 | +1.58e-04 | +7.81e-05 | +0.00e+00 |
| 19 | -1.34e-02 | +9.98e-04 | -1.53e-01 | -1.59e-03 | -2.66e-05 | -9.27e-08 |
| 20 | +0.00e+00 | +0.00e+00 | -1.45e-01 | +1.63e-04 | -5.75e-06 | +0.00e+00 |
| 21 | +0.00e+00 | +0.00e+00 | -1.68e-01 | +5.50e-05 | -6.63e-05 | +0.00e+00 |
| 22 | -1.33e-02 | +9.98e-04 | -1.86e-01 | -8.94e-04 | -4.90e-05 | -9.27e-08 |
| 23 | +0.00e+00 | +0.00e+00 | -1.25e-01 | +2.77e-05 | +1.78e-04 | +0.00e+00 |
| 24 | -1.33e-02 | +1.03e-03 | -1.32e-01 | -4.05e-06 | -1.21e-04 | -9.27e-08 |
| 25 | -1.32e-02 | +9.98e-04 | -4.81e-01 | +1.21e-03 | -7.08e-05 | -9.27e-08 |
| 26 | -1.34e-02 | +9.98e-04 | -4.78e-01 | -1.19e-03 | -4.44e-05 | -9.27e-08 |
| 27 | -1.34e-02 | +1.03e-03 | -1.45e-01 | +5.64e-05 | -4.49e-05 | -9.27e-08 |
| 29 | +0.00e+00 | +0.00e+00 | -1.14e-01 | -4.54e-05 | +1.41e-04 | +0.00e+00 |
| 30 | -1.33e-02 | +1.03e-03 | -1.20e-01 | +5.75e-05 | -1.10e-04 | -9.27e-08 |
| 31 | -1.33e-02 | +9.98e-04 | -1.71e-01 | +9.13e-04 | -5.61e-05 | -9.27e-08 |
| 32 | -1.32e-02 | +1.03e-03 | -1.25e-01 | +1.32e-04 | -8.96e-05 | -9.27e-08 |
| 33 | -1.33e-02 | +1.03e-03 | -1.05e-01 | -7.05e-06 | -6.14e-05 | -9.27e-08 |
| 34 | +0.00e+00 | +0.00e+00 | -9.46e-02 | +1.28e-05 | -3.37e-06 | +0.00e+00 |
| 35 | -1.33e-02 | +9.98e-04 | -6.04e-01 | -5.09e-05 | -6.80e-05 | -9.27e-08 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| 36 | +0.00e+00 | +0.00e+00 | -1.53e-01 | -6.98e-05 | -3.97e-05 | +0.00e+00 |
| 37 | -1.33e-02 | +9.78e-04 | -1.23e-01 | -2.03e-05 | -7.12e-05 | -9.27e-08 |
| 38 | -1.33e-02 | +1.05e-03 | -1.01e-01 | -3.16e-05 | -6.10e-05 | -9.27e-08 |
| 39 | +0.00e+00 | +0.00e+00 | -9.63e-02 | +1.64e-06 | +2.39e-06 | +0.00e+00 |
| 40 | +0.00e+00 | +0.00e+00 | -1.17e-01 | +1.80e-05 | +2.94e-05 | +0.00e+00 |
| 41 | +0.00e+00 | +0.00e+00 | -1.22e-01 | -1.54e-04 | +8.09e-05 | +0.00e+00 |
| 42 | -1.32e-02 | +9.98e-04 | -1.53e-01 | +1.61e-03 | -6.44e-05 | -9.27e-08 |
| 43 | +0.00e+00 | +0.00e+00 | -1.45e-01 | -1.59e-04 | -6.21e-06 | +0.00e+00 |
| 44 | -1.32e-02 | +9.78e-04 | -1.40e-01 | +1.74e-04 | -5.36e-05 | -9.27e-08 |
| 45 | -1.32e-02 | +1.05e-03 | -1.13e-01 | +1.52e-04 | -8.64e-05 | -9.27e-08 |
| 46 | +0.00e+00 | +0.00e+00 | -1.11e-01 | -8.90e-05 | +4.89e-05 | +0.00e+00 |
| 47 | +0.00e+00 | +0.00e+00 | -1.38e-01 | -1.18e-04 | -2.94e-05 | +0.00e+00 |
| 48 | -1.33e-02 | +1.02e-03 | -1.81e-01 | +6.43e-06 | -6.59e-05 | -9.27e-08 |
| 49 | -1.32e-02 | +1.03e-03 | -1.45e-01 | -4.91e-05 | -7.16e-05 | -9.27e-08 |
| 50 | -1.34e-02 | +1.02e-03 | -5.53e-01 | +7.25e-05 | -6.30e-05 | -9.27e-08 |
| 52 | -1.34e-02 | +1.02e-03 | -4.45e-01 | -1.09e-03 | -4.40e-05 | -9.27e-08 |
| 53 | +0.00e+00 | +0.00e+00 | -1.39e-01 | -2.09e-05 | -1.16e-04 | +0.00e+00 |
| 54 | +0.00e+00 | +0.00e+00 | -9.88e-02 | -8.95e-06 | +5.79e-05 | +0.00e+00 |
| 55 | -1.34e-02 | +9.98e-04 | -4.49e-01 | +1.13e-03 | -7.27e-05 | -9.27e-08 |
| 56 | +0.00e+00 | +0.00e+00 | -1.43e-01 | -6.45e-05 | +1.29e-04 | +0.00e+00 |
| 57 | +0.00e+00 | +0.00e+00 | -1.60e-01 | +4.81e-05 | +1.43e-04 | +0.00e+00 |
| 58 | -1.33e-02 | +1.02e-03 | -1.60e-01 | +8.41e-04 | -9.76e-05 | -9.27e-08 |
| 59 | -1.33e-02 | +1.02e-03 | -1.76e-01 | -8.27e-04 | -1.02e-04 | -9.27e-08 |
| 60 | -1.34e-02 | +1.03e-03 | -1.37e-01 | -4.11e-05 | -7.46e-05 | -9.27e-08 |
| 61 | -1.34e-02 | +9.98e-04 | -5.97e-01 | +7.33e-05 | -6.69e-05 | -9.27e-08 |
| 62 | -1.34e-02 | +1.03e-03 | -1.03e-01 | +1.99e-05 | -5.97e-05 | -9.27e-08 |
| 63 | -1.34e-02 | +1.02e-03 | -4.16e-01 | +1.05e-03 | -7.39e-05 | -9.27e-08 |
| 65 | -1.33e-02 | +1.03e-03 | -1.49e-01 | -9.90e-05 | -6.76e-05 | -9.27e-08 |
| 66 | -1.33e-02 | +9.98e-04 | -1.92e-01 | +1.42e-05 | -6.37e-05 | -9.27e-08 |
| 67 | -1.32e-02 | +1.02e-03 | -1.46e-01 | +1.48e-03 | -8.34e-05 | -9.27e-08 |
| 68 | -1.33e-02 | +1.02e-03 | -5.62e-01 | -4.75e-05 | -6.48e-05 | -9.27e-08 |
| 69 | -1.32e-02 | +1.02e-03 | -4.49e-01 | +1.12e-03 | -7.13e-05 | -9.27e-08 |
| 70 | -1.34e-02 | +1.02e-03 | -1.46e-01 | -1.46e-03 | +1.78e-05 | -9.27e-08 |
| 71 | -1.33e-02 | +1.02e-03 | -4.30e-01 | -1.02e-03 | -7.59e-05 | -9.27e-08 |
| 72 | -1.33e-02 | +9.98e-04 | -4.61e-01 | -1.11e-03 | -7.42e-05 | -9.27e-08 |
| 73 | -1.33e-02 | +1.03e-03 | -1.42e-01 | +7.10e-05 | -7.69e-05 | -9.27e-08 |
| 74 | -1.33e-02 | +9.78e-04 | -1.61e-01 | +5.46e-05 | -7.36e-05 | -9.27e-08 |
| 75 | -1.33e-02 | +9.78e-04 | -1.60e-01 | -3.07e-05 | -6.20e-05 | -9.27e-08 |
| 77 | -1.34e-02 | +9.78e-04 | -1.20e-01 | +2.47e-05 | -7.18e-05 | -9.27e-08 |
| 78 | -1.34e-02 | +9.78e-04 | -1.57e-01 | -4.22e-05 | -7.22e-05 | -9.27e-08 |
| 79 | -1.32e-02 | +9.78e-04 | -1.69e-01 | -4.46e-05 | -7.06e-05 | -9.27e-08 |
| 80 | -1.33e-02 | +1.05e-03 | -1.26e-01 | +8.41e-06 | -7.71e-05 | -9.27e-08 |
| 81 | -1.33e-02 | +1.05e-03 | -1.16e-01 | -3.07e-05 | -6.85e-05 | -9.27e-08 |
| 82 | +0.00e+00 | +0.00e+00 | -1.38e-01 | -1.68e-04 | +7.18e-05 | +0.00e+00 |
| 83 | -1.34e-02 | +1.05e-03 | -9.99e-02 | +3.41e-05 | -5.90e-05 | -9.27e-08 |
| 84 | -1.34e-02 | +1.05e-03 | -1.24e-01 | +1.13e-06 | -7.47e-05 | -9.27e-08 |
| 85 | -1.32e-02 | +1.05e-03 | -1.39e-01 | -3.09e-05 | -7.16e-05 | -9.27e-08 |
| 86 | +0.00e+00 | +0.00e+00 | -1.08e-01 | +1.11e-05 | +6.02e-05 | +0.00e+00 |
| 87 | -1.33e-02 | +1.03e-03 | -1.15e-01 | -9.39e-05 | -7.79e-05 | -9.27e-08 |
| 88 | -1.33e-02 | +1.02e-03 | -1.84e-01 | -1.49e-05 | -6.09e-05 | -9.27e-08 |
| 90 | -1.33e-02 | +9.98e-04 | -1.97e-01 | -1.08e-05 | -4.19e-05 | -9.27e-08 |
| 92 | -1.33e-02 | +1.05e-03 | -1.02e-01 | -4.40e-05 | -8.30e-05 | -9.27e-08 |
| 93 | -1.33e-02 | +9.78e-04 | -1.42e-01 | -5.97e-05 | -2.05e-05 | -9.27e-08 |
| 94 | +0.00e+00 | +0.00e+00 | -1.38e-01 | +1.71e-04 | +7.05e-05 | +0.00e+00 |
| 95 | +0.00e+00 | +0.00e+00 | -9.48e-02 | +1.10e-05 | -3.22e-06 | +0.00e+00 |
| 96 | +0.00e+00 | +0.00e+00 | -9.26e-02 | +1.73e-06 | -5.29e-06 | +0.00e+00 |
| 97 | +0.00e+00 | +0.00e+00 | -1.14e-01 | -2.21e-06 | +3.26e-05 | +0.00e+00 |

**MASSIME DEFORMAZIONI NODALI**

| | Trasl.X | Trasl.Y | Trasl.Z | Rotaz.X | Rotaz.Y | Rotaz.Z | DLMax |
|---|---|---|---|---|---|---|---|
| Deform. nodali | -1.34e-02 | +1.05e-03 | -6.04e-01 | +1.61e-03 | +1.78e-04 | -9.27e-08 | +6.04e-01 |
| Nodo | 15 | 9 | 35 | 42 | 23 | 9 | 35 |

**Combinazione di Carico: 4 - Descrizione: Frequente**

| Nodo | Trasl.X | Trasl.Y | Trasl._Z | Rotaz.X | Rotaz.Y | Rotaz.Z |
|---|---|---|---|---|---|---|
| 1 | +0.00e+00 | +0.00e+00 | -1.06e-01 | +8.04e-05 | +2.40e-05 | +0.00e+00 |
| 2 | +0.00e+00 | +0.00e+00 | -1.28e-01 | +1.01e-04 | -9.97e-06 | +0.00e+00 |
| 5 | +0.00e+00 | +0.00e+00 | -9.06e-02 | -1.48e-05 | +2.98e-05 | +0.00e+00 |
| 6 | +0.00e+00 | +0.00e+00 | -1.20e-01 | -4.51e-05 | -5.33e-05 | +0.00e+00 |
| 7 | +0.00e+00 | +0.00e+00 | -1.27e-01 | +3.31e-05 | -8.71e-05 | +0.00e+00 |
| 8 | +0.00e+00 | +0.00e+00 | -9.54e-02 | +6.68e-06 | +6.17e-05 | +0.00e+00 |
| 9 | -7.10e-03 | +1.20e-03 | -9.81e-02 | -1.74e-05 | -6.89e-05 | +5.90e-08 |
| 10 | -7.10e-03 | +1.24e-03 | -1.30e-01 | -2.96e-06 | -7.01e-06 | +5.90e-08 |
| 11 | -7.07e-03 | +1.24e-03 | -1.23e-01 | +2.47e-05 | -1.89e-05 | +5.90e-08 |
| 12 | -7.07e-03 | +1.20e-03 | -9.33e-02 | +3.73e-05 | -5.51e-05 | +5.90e-08 |
| 13 | -7.03e-03 | +1.20e-03 | -1.24e-01 | +3.64e-05 | -2.15e-05 | +5.90e-08 |
| 14 | -7.03e-03 | +1.24e-03 | -1.48e-01 | +4.68e-05 | -2.17e-05 | +5.90e-08 |
| 15 | -7.02e-03 | +1.24e-03 | -1.29e-01 | -1.21e-04 | -1.97e-05 | +5.90e-08 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| 16 | -7.02e-03 | +1.20e-03 | -1.07e-01 | -1.05e-04 | -3.37e-05 | +5.90e-08 |
| 17 | -7.02e-03 | +1.21e-03 | -1.15e-01 | -8.34e-05 | -2.43e-05 | +5.90e-08 |
| 18 | +0.00e+00 | +0.00e+00 | -1.12e-01 | +1.34e-04 | +5.60e-05 | +0.00e+00 |
| 19 | -7.02e-03 | +1.23e-03 | -1.37e-01 | -1.16e-03 | -1.14e-05 | +5.90e-08 |
| 20 | +0.00e+00 | +0.00e+00 | -1.31e-01 | +1.31e-04 | +4.05e-06 | +0.00e+00 |
| 21 | +0.00e+00 | +0.00e+00 | -1.46e-01 | +4.07e-05 | -3.68e-05 | +0.00e+00 |
| 22 | -7.10e-03 | +1.23e-03 | -1.59e-01 | -6.64e-04 | -2.88e-05 | +5.90e-08 |
| 23 | +0.00e+00 | +0.00e+00 | -1.11e-01 | +2.00e-05 | +1.27e-04 | +0.00e+00 |
| 24 | -7.10e-03 | +1.21e-03 | -1.16e-01 | -4.69e-06 | -7.59e-05 | +5.90e-08 |
| 25 | -7.13e-03 | +1.23e-03 | -3.78e-01 | +8.90e-04 | -4.11e-05 | +5.90e-08 |
| 26 | -7.03e-03 | +1.23e-03 | -3.74e-01 | -8.67e-04 | -2.14e-05 | +5.90e-08 |
| 27 | -7.03e-03 | +1.21e-03 | -1.26e-01 | +5.46e-05 | -2.13e-05 | +5.90e-08 |
| 29 | +0.00e+00 | +0.00e+00 | -1.00e-01 | -3.53e-05 | +9.10e-05 | +0.00e+00 |
| 30 | -7.07e-03 | +1.21e-03 | -1.04e-01 | +4.44e-05 | -6.41e-05 | +5.90e-08 |
| 31 | -7.07e-03 | +1.23e-03 | -1.44e-01 | +6.74e-04 | -3.56e-05 | +5.90e-08 |
| 32 | -7.14e-03 | +1.21e-03 | -1.14e-01 | +8.58e-05 | -5.41e-05 | +5.90e-08 |
| 33 | -7.12e-03 | +1.21e-03 | -9.52e-02 | -8.71e-06 | -2.96e-05 | +5.90e-08 |
| 34 | +0.00e+00 | +0.00e+00 | -8.74e-02 | +8.34e-06 | -1.12e-05 | +0.00e+00 |
| 35 | -7.12e-03 | +1.23e-03 | -4.68e-01 | -4.00e-05 | -4.05e-05 | +5.90e-08 |
| 36 | +0.00e+00 | +0.00e+00 | -1.31e-01 | -5.39e-05 | -1.06e-05 | +0.00e+00 |
| 37 | -7.12e-03 | +1.24e-03 | -1.15e-01 | -1.67e-05 | -4.63e-05 | +5.90e-08 |
| 38 | -7.12e-03 | +1.20e-03 | -9.53e-02 | -2.60e-05 | -2.68e-05 | +5.90e-08 |
| 39 | +0.00e+00 | +0.00e+00 | -9.15e-02 | -1.17e-07 | -1.62e-05 | +0.00e+00 |
| 40 | +0.00e+00 | +0.00e+00 | -1.10e-01 | +1.25e-05 | +3.91e-05 | +0.00e+00 |
| 41 | +0.00e+00 | +0.00e+00 | -1.12e-01 | -1.31e-04 | +5.86e-05 | +0.00e+00 |
| 42 | -7.14e-03 | +1.23e-03 | -1.37e-01 | +1.18e-03 | -3.91e-05 | +5.90e-08 |
| 43 | +0.00e+00 | +0.00e+00 | -1.31e-01 | -1.28e-04 | +3.32e-06 | +0.00e+00 |
| 44 | -7.14e-03 | +1.24e-03 | -1.29e-01 | +1.24e-04 | -3.20e-05 | +5.90e-08 |
| 45 | -7.14e-03 | +1.20e-03 | -1.06e-01 | +1.08e-04 | -4.99e-05 | +5.90e-08 |
| 46 | +0.00e+00 | +0.00e+00 | -1.05e-01 | -7.63e-05 | +2.76e-05 | +0.00e+00 |
| 47 | +0.00e+00 | +0.00e+00 | -1.28e-01 | -9.54e-05 | -1.19e-05 | +0.00e+00 |
| 48 | -7.09e-03 | +1.22e-03 | -1.51e-01 | -6.61e-06 | -3.38e-05 | +5.90e-08 |
| 49 | -7.13e-03 | +1.21e-03 | -1.26e-01 | -4.76e-05 | -4.12e-05 | +5.90e-08 |
| 50 | -7.04e-03 | +1.22e-03 | -4.26e-01 | +6.40e-05 | -3.29e-05 | +5.90e-08 |
| 52 | -7.03e-03 | +1.22e-03 | -3.49e-01 | -7.94e-04 | -2.09e-05 | +5.90e-08 |
| 53 | +0.00e+00 | +0.00e+00 | -1.27e-01 | -2.01e-05 | -6.65e-05 | +0.00e+00 |
| 54 | +0.00e+00 | +0.00e+00 | -9.33e-02 | -9.85e-06 | +1.57e-05 | +0.00e+00 |
| 55 | -7.05e-03 | +1.23e-03 | -3.50e-01 | +8.39e-04 | -4.17e-05 | +5.90e-08 |
| 56 | +0.00e+00 | +0.00e+00 | -1.21e-01 | -4.96e-05 | +1.01e-04 | +0.00e+00 |
| 57 | +0.00e+00 | +0.00e+00 | -1.38e-01 | +3.54e-05 | +1.15e-04 | +0.00e+00 |
| 58 | -7.07e-03 | +1.22e-03 | -1.33e-01 | +6.23e-04 | -6.11e-05 | +5.90e-08 |
| 59 | -7.10e-03 | +1.22e-03 | -1.50e-01 | -6.17e-04 | -6.54e-05 | +5.90e-08 |
| 60 | -7.05e-03 | +1.21e-03 | -1.17e-01 | -2.73e-05 | -4.23e-05 | +5.90e-08 |
| 61 | -7.04e-03 | +1.23e-03 | -4.60e-01 | +6.28e-05 | -3.91e-05 | +5.90e-08 |
| 62 | -7.04e-03 | +1.21e-03 | -9.32e-02 | +2.21e-05 | -2.74e-05 | +5.90e-08 |
| 63 | -7.05e-03 | +1.22e-03 | -3.24e-01 | +7.78e-04 | -4.21e-05 | +5.90e-08 |
| 65 | -7.09e-03 | +1.21e-03 | -1.27e-01 | -8.32e-05 | -3.47e-05 | +5.90e-08 |
| 66 | -7.09e-03 | +1.23e-03 | -1.62e-01 | +2.89e-08 | -3.25e-05 | +5.90e-08 |
| 67 | -7.14e-03 | +1.22e-03 | -1.31e-01 | +1.09e-03 | -5.19e-05 | +5.90e-08 |
| 68 | -7.12e-03 | +1.22e-03 | -4.36e-01 | -3.89e-05 | -3.50e-05 | +5.90e-08 |
| 69 | -7.13e-03 | +1.22e-03 | -3.53e-01 | +8.19e-04 | -4.12e-05 | +5.90e-08 |
| 70 | -7.02e-03 | +1.22e-03 | -1.31e-01 | -1.07e-03 | +2.09e-05 | +5.90e-08 |
| 71 | -7.11e-03 | +1.22e-03 | -3.37e-01 | -7.60e-04 | -4.44e-05 | +5.90e-08 |
| 72 | -7.11e-03 | +1.23e-03 | -3.62e-01 | -8.20e-04 | -4.35e-05 | +5.90e-08 |
| 73 | -7.11e-03 | +1.21e-03 | -1.23e-01 | +5.49e-05 | -4.49e-05 | +5.90e-08 |
| 74 | -7.11e-03 | +1.24e-03 | -1.43e-01 | +4.17e-05 | -4.31e-05 | +5.90e-08 |
| 75 | -7.09e-03 | +1.24e-03 | -1.42e-01 | -2.51e-05 | -3.15e-05 | +5.90e-08 |
| 77 | -7.04e-03 | +1.24e-03 | -1.12e-01 | +2.20e-05 | -4.64e-05 | +5.90e-08 |
| 78 | -7.05e-03 | +1.24e-03 | -1.39e-01 | -3.00e-05 | -4.15e-05 | +5.90e-08 |
| 79 | -7.13e-03 | +1.24e-03 | -1.49e-01 | -3.78e-05 | -4.10e-05 | +5.90e-08 |
| 80 | -7.11e-03 | +1.20e-03 | -1.14e-01 | +7.53e-06 | -4.50e-05 | +5.90e-08 |
| 81 | -7.09e-03 | +1.20e-03 | -1.06e-01 | -2.46e-05 | -3.51e-05 | +5.90e-08 |
| 82 | +0.00e+00 | +0.00e+00 | -1.24e-01 | -1.38e-04 | +5.96e-05 | +0.00e+00 |
| 83 | -7.04e-03 | +1.20e-03 | -9.38e-02 | +2.93e-05 | -2.41e-05 | +5.90e-08 |
| 84 | -7.05e-03 | +1.20e-03 | -1.11e-01 | +1.61e-06 | -4.22e-05 | +5.90e-08 |
| 85 | -7.13e-03 | +1.20e-03 | -1.24e-01 | -2.95e-05 | -4.11e-05 | +5.90e-08 |
| 86 | +0.00e+00 | +0.00e+00 | -9.52e-02 | +6.76e-06 | +1.65e-05 | +0.00e+00 |
| 87 | -7.08e-03 | +1.21e-03 | -1.00e-01 | -7.38e-05 | -3.47e-05 | +5.90e-08 |
| 88 | -7.08e-03 | +1.22e-03 | -1.52e-01 | -1.82e-05 | -2.70e-05 | +5.90e-08 |
| 90 | -7.08e-03 | +1.23e-03 | -1.64e-01 | -1.49e-05 | -1.80e-05 | +5.90e-08 |
| 92 | -7.08e-03 | +1.20e-03 | -9.55e-02 | -3.53e-05 | -3.71e-05 | +5.90e-08 |
| 93 | -7.08e-03 | +1.24e-03 | -1.29e-01 | -4.77e-05 | -7.67e-06 | +5.90e-08 |
| 94 | +0.00e+00 | +0.00e+00 | -1.24e-01 | +1.41e-04 | +5.84e-05 | +0.00e+00 |
| 95 | +0.00e+00 | +0.00e+00 | -9.00e-02 | +1.22e-05 | -2.17e-05 | +0.00e+00 |
| 96 | +0.00e+00 | +0.00e+00 | -8.54e-02 | +5.52e-06 | -1.31e-05 | +0.00e+00 |
| 97 | +0.00e+00 | +0.00e+00 | -1.08e-01 | +2.70e-06 | +4.26e-05 | +0.00e+00 |



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**MASSIME DEFORMAZIONI NODALI**

| | Trasl.X | Trasl.Y | Trasl.Z | Rotaz.X | Rotaz.Y | Rotaz.Z | DLMax |
|---|---|---|---|---|---|---|---|
| Deform. nodali | -7.14e-03 | +1.24e-03 | -4.68e-01 | +1.18e-03 | +1.27e-04 | +5.90e-08 | +4.68e-01 |
| Nodo | 32 | 10 | 35 | 42 | 23 | 9 | 35 |

**Combinazione di Carico: 5 - Descrizione: Quasi permanente**

| Nodo | Trasl.X | Trasl.Y | Trasl._Z | Rotaz.X | Rotaz.Y | Rotaz.Z |
|---|---|---|---|---|---|---|
| 1 | +0.00e+00 | +0.00e+00 | -1.04e-01 | +7.71e-05 | +1.87e-05 | +0.00e+00 |
| 2 | +0.00e+00 | +0.00e+00 | -1.26e-01 | +9.48e-05 | -5.50e-06 | +0.00e+00 |
| 5 | +0.00e+00 | +0.00e+00 | -8.93e-02 | -1.41e-05 | +1.90e-05 | +0.00e+00 |
| 6 | +0.00e+00 | +0.00e+00 | -1.17e-01 | -4.20e-05 | -4.09e-05 | +0.00e+00 |
| 7 | +0.00e+00 | +0.00e+00 | -1.24e-01 | +3.03e-05 | -7.46e-05 | +0.00e+00 |
| 8 | +0.00e+00 | +0.00e+00 | -9.40e-02 | +6.18e-06 | +5.06e-05 | +0.00e+00 |
| 9 | -5.54e-03 | +1.24e-03 | -9.65e-02 | -1.59e-05 | -5.70e-05 | +9.70e-08 |
| 10 | -5.54e-03 | +1.31e-03 | -1.27e-01 | -2.77e-06 | -4.28e-06 | +9.70e-08 |
| 11 | -5.50e-03 | +1.31e-03 | -1.20e-01 | +2.18e-05 | -1.61e-05 | +9.70e-08 |
| 12 | -5.50e-03 | +1.24e-03 | -9.17e-02 | +3.36e-05 | -4.33e-05 | +9.70e-08 |
| 13 | -5.44e-03 | +1.24e-03 | -1.20e-01 | +3.60e-05 | -1.55e-05 | +9.70e-08 |
| 14 | -5.44e-03 | +1.31e-03 | -1.43e-01 | +4.51e-05 | -1.60e-05 | +9.70e-08 |
| 15 | -5.42e-03 | +1.31e-03 | -1.27e-01 | -1.08e-04 | -1.53e-05 | +9.70e-08 |
| 16 | -5.42e-03 | +1.24e-03 | -1.06e-01 | -9.46e-05 | -2.57e-05 | +9.70e-08 |
| 17 | -5.42e-03 | +1.25e-03 | -1.12e-01 | -7.20e-05 | -1.80e-05 | +9.70e-08 |
| 18 | +0.00e+00 | +0.00e+00 | -1.10e-01 | +1.28e-04 | +5.05e-05 | +0.00e+00 |
| 19 | -5.42e-03 | +1.29e-03 | -1.33e-01 | -1.06e-03 | -7.66e-06 | +9.70e-08 |
| 20 | +0.00e+00 | +0.00e+00 | -1.27e-01 | +1.24e-04 | +6.50e-06 | +0.00e+00 |
| 21 | +0.00e+00 | +0.00e+00 | -1.41e-01 | +3.71e-05 | -2.94e-05 | +0.00e+00 |
| 22 | -5.54e-03 | +1.29e-03 | -1.52e-01 | -6.07e-04 | -2.38e-05 | +9.70e-08 |
| 23 | +0.00e+00 | +0.00e+00 | -1.08e-01 | +1.81e-05 | +1.14e-04 | +0.00e+00 |
| 24 | -5.54e-03 | +1.25e-03 | -1.12e-01 | -4.85e-06 | -6.46e-05 | +9.70e-08 |
| 25 | -5.60e-03 | +1.29e-03 | -3.52e-01 | +8.09e-04 | -3.37e-05 | +9.70e-08 |
| 26 | -5.44e-03 | +1.29e-03 | -3.48e-01 | -7.86e-04 | -1.57e-05 | +9.70e-08 |
| 27 | -5.44e-03 | +1.25e-03 | -1.22e-01 | +5.42e-05 | -1.55e-05 | +9.70e-08 |
| 29 | +0.00e+00 | +0.00e+00 | -9.67e-02 | -3.27e-05 | +7.85e-05 | +0.00e+00 |
| 30 | -5.50e-03 | +1.25e-03 | -1.01e-01 | +4.11e-05 | -5.27e-05 | +9.70e-08 |
| 31 | -5.50e-03 | +1.29e-03 | -1.37e-01 | +6.14e-04 | -3.04e-05 | +9.70e-08 |
| 32 | -5.62e-03 | +1.25e-03 | -1.12e-01 | +7.42e-05 | -4.53e-05 | +9.70e-08 |
| 33 | -5.58e-03 | +1.25e-03 | -9.27e-02 | -9.12e-06 | -2.16e-05 | +9.70e-08 |
| 34 | +0.00e+00 | +0.00e+00 | -8.56e-02 | +7.22e-06 | -1.31e-05 | +0.00e+00 |
| 35 | -5.58e-03 | +1.29e-03 | -4.34e-01 | -3.73e-05 | -3.36e-05 | +9.70e-08 |
| 36 | +0.00e+00 | +0.00e+00 | -1.26e-01 | -5.00e-05 | -3.34e-06 | +0.00e+00 |
| 37 | -5.58e-03 | +1.31e-03 | -1.13e-01 | -1.58e-05 | -4.01e-05 | +9.70e-08 |
| 38 | -5.58e-03 | +1.24e-03 | -9.38e-02 | -2.45e-05 | -1.83e-05 | +9.70e-08 |
| 39 | +0.00e+00 | +0.00e+00 | -9.03e-02 | -5.55e-07 | -2.09e-05 | +0.00e+00 |
| 40 | +0.00e+00 | +0.00e+00 | -1.09e-01 | +1.12e-05 | +4.15e-05 | +0.00e+00 |
| 41 | +0.00e+00 | +0.00e+00 | -1.09e-01 | -1.25e-04 | +5.31e-05 | +0.00e+00 |
| 42 | -5.62e-03 | +1.29e-03 | -1.33e-01 | +1.07e-03 | -3.28e-05 | +9.70e-08 |
| 43 | +0.00e+00 | +0.00e+00 | -1.27e-01 | -1.20e-04 | +5.70e-06 | +0.00e+00 |
| 44 | -5.62e-03 | +1.31e-03 | -1.26e-01 | +1.12e-04 | -2.66e-05 | +9.70e-08 |
| 45 | -5.62e-03 | +1.24e-03 | -1.05e-01 | +9.70e-05 | -4.07e-05 | +9.70e-08 |
| 46 | +0.00e+00 | +0.00e+00 | -1.03e-01 | -7.32e-05 | +2.23e-05 | +0.00e+00 |
| 47 | +0.00e+00 | +0.00e+00 | -1.25e-01 | -8.97e-05 | -7.56e-06 | +0.00e+00 |
| 48 | -5.53e-03 | +1.27e-03 | -1.43e-01 | -9.88e-06 | -2.57e-05 | +9.70e-08 |
| 49 | -5.60e-03 | +1.25e-03 | -1.22e-01 | -4.72e-05 | -3.36e-05 | +9.70e-08 |
| 50 | -5.46e-03 | +1.27e-03 | -3.95e-01 | +6.19e-05 | -2.54e-05 | +9.70e-08 |
| 52 | -5.44e-03 | +1.27e-03 | -3.24e-01 | -7.19e-04 | -1.52e-05 | +9.70e-08 |
| 53 | +0.00e+00 | +0.00e+00 | -1.23e-01 | -1.99e-05 | -5.41e-05 | +0.00e+00 |
| 54 | +0.00e+00 | +0.00e+00 | -9.19e-02 | -1.01e-05 | +5.09e-06 | +0.00e+00 |
| 55 | -5.48e-03 | +1.29e-03 | -3.25e-01 | +7.66e-04 | -3.39e-05 | +9.70e-08 |
| 56 | +0.00e+00 | +0.00e+00 | -1.16e-01 | -4.59e-05 | +9.44e-05 | +0.00e+00 |
| 57 | +0.00e+00 | +0.00e+00 | -1.32e-01 | +3.22e-05 | +1.08e-04 | +0.00e+00 |
| 58 | -5.50e-03 | +1.27e-03 | -1.27e-01 | +5.69e-04 | -5.20e-05 | +9.70e-08 |
| 59 | -5.54e-03 | +1.27e-03 | -1.43e-01 | -5.65e-04 | -5.64e-05 | +9.70e-08 |
| 60 | -5.48e-03 | +1.25e-03 | -1.12e-01 | -2.38e-05 | -3.42e-05 | +9.70e-08 |
| 61 | -5.46e-03 | +1.29e-03 | -4.26e-01 | +6.02e-05 | -3.22e-05 | +9.70e-08 |
| 62 | -5.46e-03 | +1.25e-03 | -9.07e-02 | +2.27e-05 | -1.93e-05 | +9.70e-08 |
| 63 | -5.48e-03 | +1.27e-03 | -3.01e-01 | +7.11e-04 | -3.42e-05 | +9.70e-08 |
| 65 | -5.53e-03 | +1.25e-03 | -1.21e-01 | -7.92e-05 | -2.65e-05 | +9.70e-08 |
| 66 | -5.53e-03 | +1.29e-03 | -1.54e-01 | -3.53e-06 | -2.47e-05 | +9.70e-08 |
| 67 | -5.62e-03 | +1.27e-03 | -1.27e-01 | +9.92e-04 | -4.41e-05 | +9.70e-08 |
| 68 | -5.58e-03 | +1.27e-03 | -4.04e-01 | -3.67e-05 | -2.76e-05 | +9.70e-08 |
| 69 | -5.60e-03 | +1.27e-03 | -3.29e-01 | +7.45e-04 | -3.37e-05 | +9.70e-08 |
| 70 | -5.42e-03 | +1.27e-03 | -1.27e-01 | -9.71e-04 | +2.17e-05 | +9.70e-08 |
| 71 | -5.56e-03 | +1.27e-03 | -3.14e-01 | -6.93e-04 | -3.66e-05 | +9.70e-08 |
| 72 | -5.56e-03 | +1.29e-03 | -3.37e-01 | -7.48e-04 | -3.58e-05 | +9.70e-08 |
| 73 | -5.56e-03 | +1.25e-03 | -1.18e-01 | +5.09e-05 | -3.69e-05 | +9.70e-08 |
| 74 | -5.56e-03 | +1.31e-03 | -1.39e-01 | +3.85e-05 | -3.55e-05 | +9.70e-08 |
| 75 | -5.53e-03 | +1.31e-03 | -1.38e-01 | -2.37e-05 | -2.39e-05 | +9.70e-08 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| 77 | -5.46e-03 | +1.31e-03 | -1.10e-01 | +2.13e-05 | -4.00e-05 | +9.70e-08 |
| 78 | -5.48e-03 | +1.31e-03 | -1.34e-01 | -2.69e-05 | -3.38e-05 | +9.70e-08 |
| 79 | -5.60e-03 | +1.31e-03 | -1.45e-01 | -3.62e-05 | -3.36e-05 | +9.70e-08 |
| 80 | -5.56e-03 | +1.24e-03 | -1.11e-01 | +7.31e-06 | -3.69e-05 | +9.70e-08 |
| 81 | -5.53e-03 | +1.24e-03 | -1.04e-01 | -2.31e-05 | -2.68e-05 | +9.70e-08 |
| 82 | +0.00e+00 | +0.00e+00 | -1.21e-01 | -1.30e-04 | +5.65e-05 | +0.00e+00 |
| 83 | -5.46e-03 | +1.24e-03 | -9.23e-02 | +2.81e-05 | -1.54e-05 | +9.70e-08 |
| 84 | -5.48e-03 | +1.24e-03 | -1.08e-01 | +1.73e-06 | -3.41e-05 | +9.70e-08 |
| 85 | -5.60e-03 | +1.24e-03 | -1.21e-01 | -2.92e-05 | -3.35e-05 | +9.70e-08 |
| 86 | +0.00e+00 | +0.00e+00 | -9.19e-02 | +5.68e-06 | +5.52e-06 | +0.00e+00 |
| 87 | -5.52e-03 | +1.25e-03 | -9.64e-02 | -6.88e-05 | -2.40e-05 | +9.70e-08 |
| 88 | -5.52e-03 | +1.27e-03 | -1.44e-01 | -1.91e-05 | -1.85e-05 | +9.70e-08 |
| 90 | -5.52e-03 | +1.29e-03 | -1.56e-01 | -1.59e-05 | -1.20e-05 | +9.70e-08 |
| 92 | -5.52e-03 | +1.24e-03 | -9.39e-02 | -3.31e-05 | -2.56e-05 | +9.70e-08 |
| 93 | -5.52e-03 | +1.31e-03 | -1.26e-01 | -4.47e-05 | -4.46e-06 | +9.70e-08 |
| 94 | +0.00e+00 | +0.00e+00 | -1.21e-01 | +1.33e-04 | +5.54e-05 | +0.00e+00 |
| 95 | +0.00e+00 | +0.00e+00 | -8.87e-02 | +1.25e-05 | -2.63e-05 | +0.00e+00 |
| 96 | +0.00e+00 | +0.00e+00 | -8.36e-02 | +6.46e-06 | -1.50e-05 | +0.00e+00 |
| 97 | +0.00e+00 | +0.00e+00 | -1.06e-01 | +3.92e-06 | +4.51e-05 | +0.00e+00 |

**MASSIME DEFORMAZIONI NODALI**

| | Trasl.X | Trasl.Y | Trasl.Z | Rotaz.X | Rotaz.Y | Rotaz.Z | DLMax |
|---|---|---|---|---|---|---|---|
| Deform. nodali | -5.62e-03 | +1.31e-03 | -4.34e-01 | +1.07e-03 | +1.14e-04 | +9.70e-08 | +4.34e-01 |
| Nodo | 32 | 10 | 35 | 42 | 23 | 9 | 35 |

## Combinazione di Carico: 7 - Descrizione: STATICA + VENTO X

| Nodo | Trasl.X | Trasl.Y | Trasl._Z | Rotaz.X | Rotaz.Y | Rotaz.Z |
|---|---|---|---|---|---|---|
| 1 | +0.00e+00 | +0.00e+00 | -1.42e-01 | +1.17e-04 | +5.80e-05 | +0.00e+00 |
| 2 | +0.00e+00 | +0.00e+00 | -2.08e-01 | +2.28e-04 | +1.15e-04 | +0.00e+00 |
| 5 | +0.00e+00 | +0.00e+00 | -1.24e-01 | -2.33e-05 | +1.29e-04 | +0.00e+00 |
| 6 | +0.00e+00 | +0.00e+00 | -1.76e-01 | -7.32e-05 | -1.23e-04 | +0.00e+00 |
| 7 | +0.00e+00 | +0.00e+00 | -1.85e-01 | +5.59e-05 | -1.67e-04 | +0.00e+00 |
| 8 | +0.00e+00 | +0.00e+00 | -1.30e-01 | +1.13e-05 | +1.72e-04 | +0.00e+00 |
| 9 | +8.27e-02 | +1.82e-03 | -1.35e-01 | -3.28e-05 | -5.45e-04 | -7.25e-07 |
| 10 | +8.27e-02 | +1.26e-03 | -1.91e-01 | -9.14e-06 | -3.48e-05 | -7.25e-07 |
| 11 | +8.24e-02 | +1.26e-03 | -1.81e-01 | +5.41e-05 | +3.13e-05 | -7.25e-07 |
| 12 | +8.24e-02 | +1.82e-03 | -1.28e-01 | +7.18e-05 | -3.77e-04 | -7.25e-07 |
| 13 | +8.20e-02 | +1.82e-03 | -1.80e-01 | +4.37e-05 | -8.26e-05 | -7.25e-07 |
| 14 | +8.20e-02 | +1.26e-03 | -2.40e-01 | +1.35e-04 | -7.49e-05 | -7.25e-07 |
| 15 | +8.18e-02 | +1.26e-03 | -2.15e-01 | -1.86e-04 | +3.57e-05 | -7.25e-07 |
| 16 | +8.18e-02 | +1.82e-03 | -1.45e-01 | -2.09e-04 | -1.68e-04 | -7.25e-07 |
| 17 | +8.18e-02 | +1.69e-03 | -1.58e-01 | -1.97e-04 | +9.63e-05 | -7.25e-07 |
| 18 | +0.00e+00 | +0.00e+00 | -1.54e-01 | +2.09e-04 | +8.65e-05 | +0.00e+00 |
| 19 | +8.18e-02 | +1.42e-03 | -1.94e-01 | -2.19e-03 | +1.75e-04 | -7.25e-07 |
| 20 | +0.00e+00 | +0.00e+00 | -1.87e-01 | +2.56e-04 | +8.14e-05 | +0.00e+00 |
| 21 | +0.00e+00 | +0.00e+00 | -2.24e-01 | +7.23e-05 | -9.27e-05 | +0.00e+00 |
| 22 | +8.27e-02 | +1.42e-03 | -2.48e-01 | -1.21e-03 | +1.81e-04 | -7.25e-07 |
| 23 | +0.00e+00 | +0.00e+00 | -1.66e-01 | +3.87e-05 | +2.50e-04 | +0.00e+00 |
| 24 | +8.27e-02 | +1.69e-03 | -1.76e-01 | -2.59e-06 | -6.03e-05 | -7.25e-07 |
| 25 | +8.31e-02 | +1.42e-03 | -6.45e-01 | +1.67e-03 | -4.44e-05 | -7.25e-07 |
| 26 | +8.20e-02 | +1.42e-03 | -6.41e-01 | -1.65e-03 | -7.31e-05 | -7.25e-07 |
| 27 | +8.20e-02 | +1.69e-03 | -1.89e-01 | +5.55e-05 | -7.67e-05 | -7.25e-07 |
| 29 | +0.00e+00 | +0.00e+00 | -1.52e-01 | -6.35e-05 | +2.03e-04 | +0.00e+00 |
| 30 | +8.24e-02 | +1.69e-03 | -1.59e-01 | +7.49e-05 | +1.51e-05 | -7.25e-07 |
| 31 | +8.24e-02 | +1.42e-03 | -2.28e-01 | +1.24e-03 | +2.06e-04 | -7.25e-07 |
| 32 | +8.33e-02 | +1.69e-03 | -1.58e-01 | +2.00e-04 | +1.43e-04 | -7.25e-07 |
| 33 | +8.30e-02 | +1.69e-03 | -1.38e-01 | +8.65e-07 | -1.43e-04 | -7.25e-07 |
| 34 | +0.00e+00 | +0.00e+00 | -1.24e-01 | +1.79e-05 | +1.44e-06 | +0.00e+00 |
| 35 | +8.30e-02 | +1.42e-03 | -8.15e-01 | -5.67e-05 | -2.51e-04 | -7.25e-07 |
| 36 | +0.00e+00 | +0.00e+00 | -2.04e-01 | -9.25e-05 | -5.79e-05 | +0.00e+00 |
| 37 | +8.30e-02 | +1.26e-03 | -1.69e-01 | -6.29e-05 | -3.28e-04 | -7.25e-07 |
| 38 | +8.30e-02 | +1.82e-03 | -1.31e-01 | -3.99e-05 | -6.07e-04 | -7.25e-07 |
| 39 | +0.00e+00 | +0.00e+00 | -1.24e-01 | +5.08e-06 | +2.46e-05 | +0.00e+00 |
| 40 | +0.00e+00 | +0.00e+00 | -1.61e-01 | -5.18e-06 | +8.95e-05 | +0.00e+00 |
| 41 | +0.00e+00 | +0.00e+00 | -1.53e-01 | -2.06e-04 | +8.82e-05 | +0.00e+00 |
| 42 | +8.33e-02 | +1.42e-03 | -1.93e-01 | +2.21e-03 | +2.16e-04 | -7.25e-07 |
| 43 | +0.00e+00 | +0.00e+00 | -1.86e-01 | -2.52e-04 | +8.13e-05 | +0.00e+00 |
| 44 | +8.33e-02 | +1.26e-03 | -2.15e-01 | +1.92e-04 | +7.13e-05 | -7.25e-07 |
| 45 | +8.33e-02 | +1.82e-03 | -1.44e-01 | +2.12e-04 | -1.18e-04 | -7.25e-07 |
| 46 | +0.00e+00 | +0.00e+00 | -1.41e-01 | -1.13e-04 | +6.11e-05 | +0.00e+00 |
| 47 | +0.00e+00 | +0.00e+00 | -2.08e-01 | -2.21e-04 | +1.14e-04 | +0.00e+00 |
| 48 | +8.26e-02 | +1.56e-03 | -2.43e-01 | +1.49e-05 | -8.96e-05 | -7.25e-07 |
| 49 | +8.31e-02 | +1.69e-03 | -1.89e-01 | -4.68e-05 | -4.77e-05 | -7.25e-07 |
| 50 | +8.21e-02 | +1.56e-03 | -7.46e-01 | +8.03e-05 | -1.94e-04 | -7.25e-07 |
| 52 | +8.20e-02 | +1.56e-03 | -5.94e-01 | -1.51e-03 | -7.36e-05 | -7.25e-07 |
| 53 | +0.00e+00 | +0.00e+00 | -1.85e-01 | -2.60e-05 | -1.30e-04 | +0.00e+00 |
| 54 | +0.00e+00 | +0.00e+00 | -1.27e-01 | -1.18e-05 | +1.14e-04 | +0.00e+00 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| 55 | +8.22e-02 | +1.42e-03 | -6.07e-01 | +1.54e-03 | -8.45e-05 | -7.25e-07 |
| 56 | +0.00e+00 | +0.00e+00 | -1.92e-01 | -8.74e-05 | +1.72e-04 | +0.00e+00 |
| 57 | +0.00e+00 | +0.00e+00 | -2.14e-01 | +6.47e-05 | +1.90e-04 | +0.00e+00 |
| 58 | +8.24e-02 | +1.56e-03 | -2.14e-01 | +1.14e-03 | +1.65e-04 | -7.25e-07 |
| 59 | +8.27e-02 | +1.56e-03 | -2.36e-01 | -1.12e-03 | +1.28e-04 | -7.25e-07 |
| 60 | +8.22e-02 | +1.69e-03 | -1.82e-01 | -6.04e-05 | -9.30e-05 | -7.25e-07 |
| 61 | +8.21e-02 | +1.42e-03 | -8.06e-01 | +8.63e-05 | -2.55e-04 | -7.25e-07 |
| 62 | +8.21e-02 | +1.69e-03 | -1.35e-01 | +1.51e-05 | -1.45e-04 | -7.25e-07 |
| 63 | +8.22e-02 | +1.56e-03 | -5.62e-01 | +1.41e-03 | -8.68e-05 | -7.25e-07 |
| 65 | +8.26e-02 | +1.69e-03 | -2.00e-01 | -1.28e-04 | -9.83e-05 | -7.25e-07 |
| 66 | +8.26e-02 | +1.42e-03 | -2.57e-01 | +2.45e-05 | -8.42e-05 | -7.25e-07 |
| 67 | +8.33e-02 | +1.56e-03 | -1.83e-01 | +2.04e-03 | +2.27e-04 | -7.25e-07 |
| 68 | +8.30e-02 | +1.56e-03 | -7.57e-01 | -4.77e-05 | -1.91e-04 | -7.25e-07 |
| 69 | +8.31e-02 | +1.56e-03 | -5.99e-01 | +1.54e-03 | -4.43e-05 | -7.25e-07 |
| 70 | +8.18e-02 | +1.56e-03 | -1.83e-01 | -2.02e-03 | +1.42e-04 | -7.25e-07 |
| 71 | +8.29e-02 | +1.56e-03 | -5.79e-01 | -1.38e-03 | -1.14e-04 | -7.25e-07 |
| 72 | +8.29e-02 | +1.42e-03 | -6.21e-01 | -1.51e-03 | -1.11e-04 | -7.25e-07 |
| 73 | +8.29e-02 | +1.69e-03 | -1.89e-01 | +9.95e-05 | -1.22e-04 | -7.25e-07 |
| 74 | +8.29e-02 | +1.26e-03 | -2.16e-01 | +5.87e-05 | -1.13e-04 | -7.25e-07 |
| 75 | +8.26e-02 | +1.26e-03 | -2.13e-01 | -4.23e-05 | -8.30e-05 | -7.25e-07 |
| 77 | +8.21e-02 | +1.26e-03 | -1.65e-01 | +6.80e-05 | -3.33e-04 | -7.25e-07 |
| 78 | +8.22e-02 | +1.26e-03 | -2.11e-01 | -4.27e-05 | -8.60e-05 | -7.25e-07 |
| 79 | +8.31e-02 | +1.26e-03 | -2.42e-01 | -1.24e-04 | -4.63e-05 | -7.25e-07 |
| 80 | +8.29e-02 | +1.82e-03 | -1.64e-01 | +1.20e-05 | -1.31e-04 | -7.25e-07 |
| 81 | +8.26e-02 | +1.82e-03 | -1.51e-01 | -4.23e-05 | -1.09e-04 | -7.25e-07 |
| 82 | +0.00e+00 | +0.00e+00 | -1.71e-01 | -2.44e-04 | +9.08e-05 | +0.00e+00 |
| 83 | +8.21e-02 | +1.82e-03 | -1.29e-01 | +4.22e-05 | -6.09e-04 | -7.25e-07 |
| 84 | +8.22e-02 | +1.82e-03 | -1.62e-01 | +5.53e-07 | -1.01e-04 | -7.25e-07 |
| 85 | +8.31e-02 | +1.82e-03 | -1.80e-01 | -3.52e-05 | -5.37e-05 | -7.25e-07 |
| 86 | +0.00e+00 | +0.00e+00 | -1.45e-01 | +1.40e-05 | +1.11e-04 | +0.00e+00 |
| 87 | +8.25e-02 | +1.69e-03 | -1.54e-01 | -1.28e-04 | -2.94e-05 | -7.25e-07 |
| 88 | +8.25e-02 | +1.56e-03 | -2.49e-01 | -2.00e-05 | -3.84e-05 | -7.25e-07 |
| 90 | +8.25e-02 | +1.42e-03 | -2.65e-01 | -1.40e-05 | -4.86e-05 | -7.25e-07 |
| 92 | +8.25e-02 | +1.82e-03 | -1.31e-01 | -5.98e-05 | -3.59e-04 | -7.25e-07 |
| 93 | +8.25e-02 | +1.26e-03 | -1.89e-01 | -7.97e-05 | -6.12e-05 | -7.25e-07 |
| 94 | +0.00e+00 | +0.00e+00 | -1.72e-01 | +2.47e-04 | +9.09e-05 | +0.00e+00 |
| 95 | +0.00e+00 | +0.00e+00 | -1.22e-01 | +1.11e-05 | +1.80e-05 | +0.00e+00 |
| 96 | +0.00e+00 | +0.00e+00 | -1.21e-01 | +9.26e-07 | -5.46e-07 | +0.00e+00 |
| 97 | +0.00e+00 | +0.00e+00 | -1.57e-01 | +2.56e-05 | +9.35e-05 | +0.00e+00 |

**MASSIME DEFORMAZIONI NODALI**

| | Trasl.X | Trasl.Y | Trasl.Z | Rotaz.X | Rotaz.Y | Rotaz.Z | DLMax |
|---|---|---|---|---|---|---|---|
| Deform. nodali | +8.33e-02 | +1.82e-03 | -8.15e-01 | +2.21e-03 | -6.09e-04 | -7.25e-07 | +8.19e-01 |
| Nodo | 32 | 9 | 35 | 42 | 83 | 9 | 35 |

## Combinazione di Carico: 8 - Descrizione: STATICA + VENTO Y

| Nodo | Trasl.X | Trasl.Y | Trasl._Z | Rotaz.X | Rotaz.Y | Rotaz.Z |
|---|---|---|---|---|---|---|
| 1 | +0.00e+00 | +0.00e+00 | -1.45e-01 | +1.06e-04 | +6.87e-05 | +0.00e+00 |
| 2 | +0.00e+00 | +0.00e+00 | -1.81e-01 | +1.47e-04 | -4.41e-05 | +0.00e+00 |
| 5 | +0.00e+00 | +0.00e+00 | -1.24e-01 | -1.99e-05 | +1.11e-04 | +0.00e+00 |
| 6 | +0.00e+00 | +0.00e+00 | -1.71e-01 | -7.26e-05 | -1.50e-04 | +0.00e+00 |
| 7 | +0.00e+00 | +0.00e+00 | -1.86e-01 | +5.01e-05 | -1.87e-04 | +0.00e+00 |
| 8 | +0.00e+00 | +0.00e+00 | -1.35e-01 | +3.10e-06 | +1.45e-04 | +0.00e+00 |
| 9 | -1.89e-02 | +1.97e-02 | -1.41e-01 | -4.96e-05 | -1.62e-04 | -4.18e-07 |
| 10 | -1.89e-02 | +1.94e-02 | -1.93e-01 | -2.30e-05 | -2.80e-05 | -4.18e-07 |
| 11 | -1.91e-02 | +1.94e-02 | -1.77e-01 | +4.60e-05 | -4.15e-05 | -4.18e-07 |
| 12 | -1.91e-02 | +1.97e-02 | -1.29e-01 | +6.70e-05 | -1.48e-04 | -4.18e-07 |
| 13 | -1.94e-02 | +1.97e-02 | -1.81e-01 | +4.50e-05 | -6.62e-05 | -4.18e-07 |
| 14 | -1.94e-02 | +1.94e-02 | -2.20e-01 | +6.76e-05 | -6.51e-05 | -4.18e-07 |
| 15 | -1.95e-02 | +1.94e-02 | -1.83e-01 | -2.08e-04 | -5.33e-05 | -4.18e-07 |
| 16 | -1.95e-02 | +1.97e-02 | -1.48e-01 | -1.89e-04 | -9.67e-05 | -4.18e-07 |
| 17 | -1.95e-02 | +1.96e-02 | -1.65e-01 | -1.49e-04 | -7.29e-05 | -4.18e-07 |
| 18 | +0.00e+00 | +0.00e+00 | -1.60e-01 | +1.77e-04 | +1.11e-04 | +0.00e+00 |
| 19 | -1.95e-02 | +1.95e-02 | -2.02e-01 | -2.11e-03 | -3.89e-05 | -4.18e-07 |
| 20 | +0.00e+00 | +0.00e+00 | -1.91e-01 | +1.77e-04 | -1.21e-05 | +0.00e+00 |
| 21 | +0.00e+00 | +0.00e+00 | -2.26e-01 | +6.23e-05 | -9.01e-05 | +0.00e+00 |
| 22 | -1.89e-02 | +1.95e-02 | -2.50e-01 | -1.24e-03 | -7.02e-05 | -4.18e-07 |
| 23 | +0.00e+00 | +0.00e+00 | -1.68e-01 | +2.87e-05 | +2.40e-04 | +0.00e+00 |
| 24 | -1.89e-02 | +1.96e-02 | -1.77e-01 | -1.21e-05 | -1.68e-04 | -4.18e-07 |
| 25 | -1.87e-02 | +1.95e-02 | -6.55e-01 | +1.67e-03 | -9.90e-05 | -4.18e-07 |
| 26 | -1.94e-02 | +1.95e-02 | -6.39e-01 | -1.61e-03 | -6.48e-05 | -4.18e-07 |
| 27 | -1.94e-02 | +1.96e-02 | -1.90e-01 | +7.17e-05 | -6.57e-05 | -4.18e-07 |
| 29 | +0.00e+00 | +0.00e+00 | -1.50e-01 | -6.07e-05 | +1.99e-04 | +0.00e+00 |
| 30 | -1.91e-02 | +1.96e-02 | -1.58e-01 | +7.34e-05 | -1.56e-04 | -4.18e-07 |
| 31 | -1.91e-02 | +1.95e-02 | -2.27e-01 | +1.22e-03 | -7.79e-05 | -4.18e-07 |
| 32 | -1.86e-02 | +1.96e-02 | -1.66e-01 | +1.93e-04 | -1.24e-04 | -4.18e-07 |
| 33 | -1.88e-02 | +1.96e-02 | -1.40e-01 | -1.54e-05 | -8.66e-05 | -4.18e-07 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| 34 | +0.00e+00 | +0.00e+00 | -1.25e-01 | +2.13e-05 | -5.11e-06 | +0.00e+00 |
| 35 | -1.88e-02 | +1.95e-02 | -8.24e-01 | -6.93e-05 | -9.56e-05 | -4.18e-07 |
| 36 | +0.00e+00 | +0.00e+00 | -2.03e-01 | -9.43e-05 | -6.28e-05 | +0.00e+00 |
| 37 | -1.88e-02 | +1.94e-02 | -1.64e-01 | -3.50e-05 | -9.99e-05 | -4.18e-07 |
| 38 | -1.88e-02 | +1.97e-02 | -1.35e-01 | -5.01e-05 | -8.64e-05 | -4.18e-07 |
| 39 | +0.00e+00 | +0.00e+00 | -1.28e-01 | +7.23e-06 | +3.77e-06 | +0.00e+00 |
| 40 | +0.00e+00 | +0.00e+00 | -1.55e-01 | +3.06e-05 | +3.93e-05 | +0.00e+00 |
| 41 | +0.00e+00 | +0.00e+00 | -1.62e-01 | -2.26e-04 | +1.08e-04 | +0.00e+00 |
| 42 | -1.86e-02 | +1.95e-02 | -2.03e-01 | +2.22e-03 | -9.00e-05 | -4.18e-07 |
| 43 | +0.00e+00 | +0.00e+00 | -1.92e-01 | -2.38e-04 | -9.13e-06 | +0.00e+00 |
| 44 | -1.86e-02 | +1.94e-02 | -1.85e-01 | +2.42e-04 | -7.55e-05 | -4.18e-07 |
| 45 | -1.86e-02 | +1.97e-02 | -1.50e-01 | +2.07e-04 | -1.20e-04 | -4.18e-07 |
| 46 | +0.00e+00 | +0.00e+00 | -1.47e-01 | -1.29e-04 | +6.53e-05 | +0.00e+00 |
| 47 | +0.00e+00 | +0.00e+00 | -1.83e-01 | -1.69e-04 | -4.00e-05 | +0.00e+00 |
| 48 | -1.90e-02 | +1.95e-02 | -2.43e-01 | +1.03e-05 | -9.55e-05 | -4.18e-07 |
| 49 | -1.87e-02 | +1.96e-02 | -1.95e-01 | -6.47e-05 | -1.00e-04 | -4.18e-07 |
| 50 | -1.93e-02 | +1.95e-02 | -7.42e-01 | +9.19e-05 | -9.10e-05 | -4.18e-07 |
| 52 | -1.94e-02 | +1.95e-02 | -5.95e-01 | -1.47e-03 | -6.44e-05 | -4.18e-07 |
| 53 | +0.00e+00 | +0.00e+00 | -1.81e-01 | -3.62e-05 | -1.64e-04 | +0.00e+00 |
| 54 | +0.00e+00 | +0.00e+00 | -1.28e-01 | -1.94e-05 | +9.14e-05 | +0.00e+00 |
| 55 | -1.92e-02 | +1.95e-02 | -6.02e-01 | +1.52e-03 | -1.04e-04 | -4.18e-07 |
| 56 | +0.00e+00 | +0.00e+00 | -1.91e-01 | -8.83e-05 | +1.74e-04 | +0.00e+00 |
| 57 | +0.00e+00 | +0.00e+00 | -2.15e-01 | +5.35e-05 | +1.93e-04 | +0.00e+00 |
| 58 | -1.91e-02 | +1.95e-02 | -2.13e-01 | +1.12e-03 | -1.37e-04 | -4.18e-07 |
| 59 | -1.89e-02 | +1.95e-02 | -2.37e-01 | -1.14e-03 | -1.41e-04 | -4.18e-07 |
| 60 | -1.92e-02 | +1.96e-02 | -1.82e-01 | -5.45e-05 | -1.06e-04 | -4.18e-07 |
| 61 | -1.93e-02 | +1.95e-02 | -8.00e-01 | +9.33e-05 | -9.53e-05 | -4.18e-07 |
| 62 | -1.93e-02 | +1.96e-02 | -1.36e-01 | +1.51e-05 | -8.75e-05 | -4.18e-07 |
| 63 | -1.92e-02 | +1.95e-02 | -5.59e-01 | +1.41e-03 | -1.05e-04 | -4.18e-07 |
| 65 | -1.90e-02 | +1.96e-02 | -2.00e-01 | -1.40e-04 | -9.79e-05 | -4.18e-07 |
| 66 | -1.90e-02 | +1.95e-02 | -2.58e-01 | +1.92e-05 | -9.23e-05 | -4.18e-07 |
| 67 | -1.86e-02 | +1.95e-02 | -1.95e-01 | +2.05e-03 | -1.16e-04 | -4.18e-07 |
| 68 | -1.88e-02 | +1.95e-02 | -7.66e-01 | -6.45e-05 | -9.13e-05 | -4.18e-07 |
| 69 | -1.87e-02 | +1.95e-02 | -6.11e-01 | +1.54e-03 | -9.96e-05 | -4.18e-07 |
| 70 | -1.95e-02 | +1.95e-02 | -1.94e-01 | -1.94e-03 | +2.20e-05 | -4.18e-07 |
| 71 | -1.89e-02 | +1.95e-02 | -5.85e-01 | -1.41e-03 | -1.06e-04 | -4.18e-07 |
| 72 | -1.89e-02 | +1.95e-02 | -6.27e-01 | -1.53e-03 | -1.04e-04 | -4.18e-07 |
| 73 | -1.89e-02 | +1.96e-02 | -1.91e-01 | +9.74e-05 | -1.08e-04 | -4.18e-07 |
| 74 | -1.89e-02 | +1.94e-02 | -2.16e-01 | +7.93e-05 | -1.03e-04 | -4.18e-07 |
| 75 | -1.90e-02 | +1.94e-02 | -2.11e-01 | -6.33e-05 | -8.99e-05 | -4.18e-07 |
| 77 | -1.93e-02 | +1.94e-02 | -1.58e-01 | +1.89e-05 | -1.01e-04 | -4.18e-07 |
| 78 | -1.92e-02 | +1.94e-02 | -2.07e-01 | -5.10e-05 | -1.03e-04 | -4.18e-07 |
| 79 | -1.87e-02 | +1.94e-02 | -2.26e-01 | -5.91e-05 | -9.87e-05 | -4.18e-07 |
| 80 | -1.89e-02 | +1.97e-02 | -1.69e-01 | +1.65e-05 | -1.08e-04 | -4.18e-07 |
| 81 | -1.90e-02 | +1.97e-02 | -1.53e-01 | -6.21e-05 | -9.92e-05 | -4.18e-07 |
| 82 | +0.00e+00 | +0.00e+00 | -1.83e-01 | -2.52e-04 | +9.58e-05 | +0.00e+00 |
| 83 | -1.93e-02 | +1.97e-02 | -1.31e-01 | +3.16e-05 | -8.75e-05 | -4.18e-07 |
| 84 | -1.92e-02 | +1.97e-02 | -1.63e-01 | +6.53e-06 | -1.07e-04 | -4.18e-07 |
| 85 | -1.87e-02 | +1.97e-02 | -1.86e-01 | -4.12e-05 | -1.00e-04 | -4.18e-07 |
| 86 | +0.00e+00 | +0.00e+00 | -1.43e-01 | +8.08e-06 | +9.61e-05 | +0.00e+00 |
| 87 | -1.91e-02 | +1.96e-02 | -1.52e-01 | -1.41e-04 | -1.16e-04 | -4.18e-07 |
| 88 | -1.91e-02 | +1.95e-02 | -2.48e-01 | -2.13e-05 | -9.04e-05 | -4.18e-07 |
| 90 | -1.91e-02 | +1.95e-02 | -2.65e-01 | -1.78e-05 | -6.25e-05 | -4.18e-07 |
| 92 | -1.91e-02 | +1.97e-02 | -1.31e-01 | -7.68e-05 | -1.23e-04 | -4.18e-07 |
| 93 | -1.91e-02 | +1.94e-02 | -1.85e-01 | -9.85e-05 | -3.10e-05 | -4.18e-07 |
| 94 | +0.00e+00 | +0.00e+00 | -1.82e-01 | +1.85e-04 | +9.58e-05 | +0.00e+00 |
| 95 | +0.00e+00 | +0.00e+00 | -1.24e-01 | +1.67e-05 | +2.38e-06 | +0.00e+00 |
| 96 | +0.00e+00 | +0.00e+00 | -1.22e-01 | +3.83e-06 | -4.06e-06 | +0.00e+00 |
| 97 | +0.00e+00 | +0.00e+00 | -1.50e-01 | +3.24e-07 | +3.85e-05 | +0.00e+00 |

**MASSIME DEFORMAZIONI NODALI**

| | Trasl.X | Trasl.Y | Trasl.Z | Rotaz.X | Rotaz.Y | Rotaz.Z | DLMax |
|---|---|---|---|---|---|---|---|
| Deform. nodali | -1.95e-02 | +1.97e-02 | -8.24e-01 | +2.22e-03 | +2.40e-04 | -4.18e-07 | +8.25e-01 |
| Nodo | 15 | 9 | 35 | 42 | 23 | 9 | 35 |



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## 2b) FORZE / MOMENTI

### FORZE MOMENTI PER GRUPPI TRAVE

**Gruppo numero: 1 - Descrizione: MONTANTI**

| Elem./C.c. | Fx/I | Fx/J | Fy/I | Fy/J | Fz/I | Fz/J | Mx/I | Mx/J | My/I | My/J | Mz/I | Mz/J |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| El: 1 - C.c: 1 | 8.521e+02 | -6.972e+02 | 3.797e+02 | 2.573e+02 | 1.495e+02 | 1.363e+02 | 3.538e-02 | -3.538e-02 | -1.370e+04 | 1.147e+04 | 2.667e+04 | -6.175e+03 |
| El: 1 - C.c: 2 | 8.432e+02 | -6.883e+02 | -8.682e+00 | 8.682e+00 | -1.896e+01 | 1.896e+01 | 5.690e-03 | -5.690e-03 | -1.996e+03 | 8.349e+03 | -2.367e+03 | -5.412e+02 |
| El: 1 - C.c: 3 | 6.234e+02 | -5.043e+02 | -6.136e+00 | 6.136e+00 | -1.300e+01 | 1.300e+01 | 3.329e-03 | -3.329e-03 | -1.631e+03 | 5.986e+03 | -1.671e+03 | -3.849e+02 |
| El: 1 - C.c: 4 | 4.927e+02 | -3.735e+02 | -3.319e+00 | 3.319e+00 | -4.742e+00 | 4.742e+00 | -2.121e-03 | 2.121e-03 | -2.129e+03 | 3.718e+03 | -8.907e+02 | -2.213e+02 |
| El: 1 - C.c: 5 | 4.600e+02 | -3.408e+02 | -2.615e+00 | 2.615e+00 | -2.678e+00 | 2.678e+00 | -3.484e-03 | 3.484e-03 | -2.254e+03 | 3.151e+03 | -6.956e+02 | -1.804e+02 |
| El: 1 - C.c: 7 | 8.457e+02 | -6.908e+02 | 3.800e+02 | 2.569e+02 | -2.139e+01 | 2.139e+01 | 2.606e-02 | -2.606e-02 | -1.553e+03 | 8.720e+03 | 2.679e+04 | -6.156e+03 |
| El: 1 - C.c: 8 | 8.496e+02 | -6.947e+02 | -9.070e+00 | 9.070e+00 | 1.520e+02 | 1.338e+02 | 1.500e-02 | -1.500e-02 | -1.414e+04 | 1.110e+04 | -2.478e+03 | -5.604e+02 |
| El: 2 - C.c: 1 | 2.046e+03 | -1.891e+03 | 2.393e+01 | -2.393e+01 | -1.398e+02 | 8.127e+02 | 3.538e-02 | -3.538e-02 | 2.415e+04 | 1.354e+05 | 4.559e+03 | 3.457e+03 |
| El: 2 - C.c: 2 | 3.248e+03 | -3.093e+03 | -6.725e+00 | 6.725e+00 | -5.176e+02 | 5.176e+02 | 5.690e-03 | -5.690e-03 | 4.897e+04 | 1.244e+05 | -1.292e+03 | -9.613e+02 |
| El: 2 - C.c: 3 | 2.384e+03 | -2.264e+03 | -4.912e+00 | 4.912e+00 | -3.778e+02 | 3.778e+02 | 3.329e-03 | -3.329e-03 | 3.565e+04 | 9.091e+04 | -9.437e+02 | -7.017e+02 |
| El: 2 - C.c: 4 | 1.787e+03 | -1.667e+03 | -3.554e+00 | 3.554e+00 | -2.718e+02 | 2.718e+02 | -2.121e-03 | 2.121e-03 | 2.515e+04 | 6.591e+04 | -6.851e+02 | -5.054e+02 |
| El: 2 - C.c: 5 | 1.637e+03 | -1.518e+03 | -3.214e+00 | 3.214e+00 | -2.453e+02 | 2.453e+02 | -3.484e-03 | 3.484e-03 | 2.252e+04 | 5.966e+04 | -6.205e+02 | -4.563e+02 |
| El: 2 - C.c: 7 | 2.048e+03 | -1.893e+03 | 2.391e+01 | -2.391e+01 | -5.114e+02 | 5.114e+02 | 2.606e-02 | -2.606e-02 | 4.711e+04 | 1.242e+05 | 4.546e+03 | 3.463e+03 |
| El: 2 - C.c: 8 | 3.247e+03 | -3.092e+03 | -6.702e+00 | 6.702e+00 | -1.461e+02 | 8.189e+02 | 1.500e-02 | -1.500e-02 | 2.601e+04 | 1.356e+05 | -1.278e+03 | -9.673e+02 |
| El: 3 - C.c: 1 | 1.970e+03 | -1.815e+03 | 1.941e+02 | 1.243e+02 | 2.185e+02 | 1.326e+02 | 3.538e-02 | -3.538e-02 | -2.280e+04 | 8.426e+03 | 1.430e+04 | -2.602e+03 |
| El: 3 - C.c: 2 | 7.492e+02 | -5.944e+02 | -2.058e+00 | 2.058e+00 | -1.537e+01 | 1.537e+01 | 5.690e-03 | -5.690e-03 | -3.697e+03 | 8.845e+03 | -4.159e+02 | -2.734e+02 |
| El: 3 - C.c: 3 | 5.533e+02 | -4.342e+02 | -1.531e+00 | 1.531e+00 | -1.045e+01 | 1.045e+01 | 3.329e-03 | -3.329e-03 | -2.857e+03 | 6.357e+03 | -3.115e+02 | -2.014e+02 |
| El: 3 - C.c: 4 | 4.336e+02 | -3.145e+02 | -1.263e+00 | 1.263e+00 | -3.311e+00 | 3.311e+00 | -2.121e-03 | 2.121e-03 | -2.925e+03 | 4.035e+03 | -2.679e+02 | -1.553e+02 |
| El: 3 - C.c: 5 | 4.036e+02 | -2.845e+02 | -1.196e+00 | 1.196e+00 | -1.527e+00 | 1.527e+00 | -3.484e-03 | 3.484e-03 | -2.942e+03 | 3.454e+03 | -2.570e+02 | -1.437e+02 |
| El: 3 - C.c: 7 | 1.945e+03 | -1.791e+03 | 1.940e+02 | 1.245e+02 | 1.306e+01 | -1.306e+01 | 2.606e-02 | -2.606e-02 | -8.699e+03 | 4.324e+03 | 1.426e+04 | -2.606e+03 |
| El: 3 - C.c: 8 | 7.737e+02 | -6.189e+02 | -1.926e+00 | 1.926e+00 | 1.900e+02 | 1.611e+02 | 1.500e-02 | -1.500e-02 | -1.780e+04 | 1.295e+04 | -3.758e+02 | -2.695e+02 |
| El: 4 - C.c: 1 | 1.466e+03 | -1.311e+03 | 3.106e+01 | -3.106e+01 | 3.239e+02 | 2.558e+02 | 3.538e-02 | -3.538e-02 | -2.726e+04 | 1.586e+04 | 5.223e+03 | 5.183e+03 |
| El: 4 - C.c: 2 | 1.457e+03 | -1.302e+03 | -1.547e+01 | 1.547e+01 | 1.061e+01 | -1.061e+01 | 5.690e-03 | -5.690e-03 | -7.914e+03 | 4.359e+03 | -3.619e+03 | -1.563e+03 |
| El: 4 - C.c: 3 | 1.072e+03 | -9.524e+02 | -1.120e+01 | 1.120e+01 | 9.322e+00 | -9.322e+00 | 3.329e-03 | -3.329e-03 | -6.072e+03 | 2.949e+03 | -2.615e+03 | -1.138e+03 |
| El: 4 - C.c: 4 | 8.142e+02 | -6.951e+02 | -7.578e+00 | 7.578e+00 | 1.535e+01 | -1.535e+01 | -2.121e-03 | 2.121e-03 | -5.992e+03 | 8.504e+02 | -1.735e+03 | -8.038e+02 |
| El: 4 - C.c: 5 | 7.498e+02 | -6.307e+02 | -6.672e+00 | 6.672e+00 | 1.686e+01 | -1.686e+01 | -3.484e-03 | 3.484e-03 | -5.972e+03 | 3.257e+02 | -1.515e+03 | -7.203e+02 |
| El: 4 - C.c: 7 | 1.434e+03 | -1.279e+03 | 3.146e+01 | -3.146e+01 | 6.021e+00 | -6.021e+00 | 2.606e-02 | -2.606e-02 | -7.399e+03 | 5.382e+03 | 5.327e+03 | 5.213e+03 |
| El: 4 - C.c: 8 | 1.489e+03 | -1.334e+03 | -1.587e+01 | 1.587e+01 | 3.285e+02 | 2.513e+02 | 1.500e-02 | -1.500e-02 | -2.778e+04 | 1.484e+04 | -3.724e+03 | -1.593e+03 |
| El: 5 - C.c: 1 | 1.641e+03 | -1.486e+03 | 2.827e+02 | 1.623e+02 | 2.608e+01 | -2.608e+01 | 3.538e-02 | -3.538e-02 | -2.507e+03 | -6.230e+03 | 2.343e+04 | -3.256e+03 |
| El: 5 - C.c: 2 | 1.660e+03 | -1.505e+03 | 7.746e+00 | -7.746e+00 | -5.506e+00 | 5.506e+00 | 5.690e-03 | -5.690e-03 | 2.929e+03 | -1.085e+03 | 1.902e+03 | 6.932e+02 |
| El: 5 - C.c: 3 | 1.222e+03 | -1.103e+03 | 5.496e+00 | -5.496e+00 | -4.109e+00 | 4.109e+00 | 3.329e-03 | -3.329e-03 | 2.160e+03 | -7.838e+02 | 1.343e+03 | 4.986e+02 |
| El: 5 - C.c: 4 | 9.395e+02 | -8.204e+02 | 3.092e+00 | -3.092e+00 | -3.448e+00 | 3.448e+00 | -2.121e-03 | 2.121e-03 | 1.676e+03 | -5.206e+02 | 7.176e+02 | 3.183e+02 |
| El: 5 - C.c: 5 | 8.688e+02 | -7.497e+02 | 2.491e+00 | -2.491e+00 | -3.283e+00 | 3.283e+00 | -3.484e-03 | 3.484e-03 | 1.555e+03 | -4.548e+02 | 5.614e+02 | 2.732e+02 |
| El: 5 - C.c: 7 | 1.654e+03 | -1.499e+03 | 2.825e+02 | 1.625e+02 | -3.047e+00 | 3.047e+00 | 2.606e-02 | -2.606e-02 | 2.513e+03 | -1.492e+03 | 2.337e+04 | -3.263e+03 |
| El: 5 - C.c: 8 | 1.647e+03 | -1.492e+03 | 7.935e+00 | -7.935e+00 | 2.362e+01 | -2.362e+01 | 1.500e-02 | -1.500e-02 | -2.090e+03 | -5.823e+03 | 1.958e+03 | 7.002e+02 |
| El: 6 - C.c: 1 | 1.409e+03 | -1.254e+03 | 5.207e+02 | 3.693e+02 | 4.459e+01 | -4.459e+01 | 3.538e-02 | -3.538e-02 | -6.110e+03 | -8.827e+03 | 3.455e+04 | -9.185e+03 |
| El: 6 - C.c: 2 | 1.424e+03 | -1.269e+03 | -7.577e+00 | 7.577e+00 | 1.481e+01 | -1.481e+01 | 5.690e-03 | -5.690e-03 | -9.746e+02 | -3.986e+03 | -2.725e+03 | 1.871e+02 |
| El: 6 - C.c: 3 | 1.050e+03 | -9.307e+02 | -5.169e+00 | 5.169e+00 | 1.082e+01 | -1.082e+01 | 3.329e-03 | -3.329e-03 | -7.089e+02 | -2.917e+03 | -1.885e+03 | 1.532e+02 |
| El: 6 - C.c: 4 | 8.135e+02 | -6.944e+02 | -1.739e+00 | 1.739e+00 | 7.864e+00 | -7.864e+00 | -2.121e-03 | 2.121e-03 | -4.964e+02 | -2.138e+03 | -7.841e+02 | 2.015e+02 |
| El: 6 - C.c: 5 | 7.544e+02 | -6.353e+02 | -8.814e-01 | 8.814e-01 | 7.125e+00 | -7.125e+00 | -3.484e-03 | 3.484e-03 | -4.433e+02 | -1.944e+03 | -5.089e+02 | 2.136e+02 |
| El: 6 - C.c: 7 | 1.423e+03 | -1.268e+03 | 5.211e+02 | 3.689e+02 | 1.573e+01 | -1.573e+01 | 2.606e-02 | -2.606e-02 | -1.138e+03 | -4.132e+03 | 3.466e+04 | -9.168e+03 |
| El: 6 - C.c: 8 | 1.410e+03 | -1.255e+03 | -7.956e+00 | 7.956e+00 | 4.366e+01 | -4.366e+01 | 1.500e-02 | -1.500e-02 | -5.946e+03 | -8.681e+03 | -2.835e+03 | 1.701e+02 |
| El: 7 - C.c: 1 | 2.335e+03 | -2.180e+03 | 2.789e+01 | -2.789e+01 | 3.372e+01 | -3.372e+01 | 3.538e-02 | -3.538e-02 | -3.555e+03 | -7.742e+03 | 3.549e+03 | 5.792e+03 |
| El: 7 - C.c: 2 | 2.308e+03 | -2.153e+03 | -1.596e+01 | 1.596e+01 | 6.409e+00 | -6.409e+00 | 5.690e-03 | -5.690e-03 | 1.122e+03 | -3.269e+03 | -4.701e+03 | -6.443e+02 |
| El: 7 - C.c: 3 | 1.692e+03 | -1.573e+03 | -1.144e+01 | 1.144e+01 | 4.833e+00 | -4.833e+00 | 3.329e-03 | -3.329e-03 | 8.093e+02 | -2.428e+03 | -3.370e+03 | -4.629e+02 |
| El: 7 - C.c: 4 | 1.262e+03 | -1.143e+03 | -7.119e+00 | 7.119e+00 | 4.326e+00 | -4.326e+00 | -2.121e-03 | 2.121e-03 | 5.283e+02 | -1.978e+03 | -2.092e+03 | -2.929e+02 |
| El: 7 - C.c: 5 | 1.155e+03 | -1.035e+03 | -6.037e+00 | 6.037e+00 | 4.200e+00 | -4.200e+00 | -3.484e-03 | 3.484e-03 | 4.580e+02 | -1.865e+03 | -1.772e+03 | -2.504e+02 |
| El: 7 - C.c: 7 | 2.325e+03 | -2.171e+03 | 2.814e+01 | -2.814e+01 | 5.710e+00 | -5.710e+00 | 2.606e-02 | -2.606e-02 | 1.222e+03 | -3.135e+03 | 3.624e+03 | 5.804e+03 |
| El: 7 - C.c: 8 | 2.317e+03 | -2.163e+03 | -1.621e+01 | 1.621e+01 | 3.442e+01 | -3.442e+01 | 1.500e-02 | -1.500e-02 | -3.655e+03 | -7.876e+03 | -4.775e+03 | -6.562e+02 |
| El: 8 - C.c: 1 | 2.829e+03 | -2.674e+03 | 3.156e+01 | -3.156e+01 | 3.693e+01 | -3.693e+01 | 3.538e-02 | -3.538e-02 | -6.801e+03 | -5.572e+03 | 3.513e+03 | 7.058e+03 |
| El: 8 - C.c: 2 | 2.830e+03 | -2.675e+03 | -1.928e+01 | 1.928e+01 | 1.076e+01 | -1.076e+01 | 5.690e-03 | -5.690e-03 | -2.480e+03 | -1.126e+03 | -5.626e+03 | -8.338e+02 |
| El: 8 - C.c: 3 | 2.073e+03 | -1.953e+03 | -1.399e+01 | 1.399e+01 | 7.910e+00 | -7.910e+00 | 3.329e-03 | -3.329e-03 | -1.825e+03 | -8.251e+02 | -4.079e+03 | -6.077e+02 |
| El: 8 - C.c: 4 | 1.529e+03 | -1.410e+03 | -9.600e+00 | 9.600e+00 | 5.981e+00 | -5.981e+00 | -2.121e-03 | 2.121e-03 | -1.391e+03 | -6.128e+02 | -2.784e+03 | -4.322e+02 |
| El: 8 - C.c: 5 | 1.393e+03 | -1.274e+03 | -8.502e+00 | 8.502e+00 | 5.499e+00 | -5.499e+00 | -3.484e-03 | 3.484e-03 | -1.282e+03 | -5.598e+02 | -2.460e+03 | -3.883e+02 |
| El: 8 - C.c: 7 | 2.844e+03 | -2.689e+03 | 3.128e+01 | -3.128e+01 | 1.225e+01 | -1.225e+01 | 2.606e-02 | -2.606e-02 | -2.701e+03 | -1.402e+03 | 3.439e+03 | 7.041e+03 |
| El: 8 - C.c: 8 | 2.815e+03 | -2.660e+03 | -1.901e+01 | 1.901e+01 | 3.545e+01 | -3.545e+01 | 1.500e-02 | -1.500e-02 | -6.580e+03 | -5.295e+03 | -5.552e+03 | -8.168e+02 |
| El: 9 - C.c: 1 | 1.778e+03 | -1.623e+03 | 6.365e+02 | 4.577e+02 | 1.931e+01 | -1.931e+01 | 3.538e-02 | -3.538e-02 | -4.066e+03 | -2.402e+03 | 4.140e+04 | -1.145e+04 |
| El: 9 - C.c: 2 | 1.486e+03 | -1.331e+03 | -1.015e+01 | 1.015e+01 | -3.311e+00 | 3.311e+00 | 5.690e-03 | -5.690e-03 | -1.371e+02 | 1.246e+03 | -3.512e+03 | 1.107e+02 |
| El: 9 - C.c: 3 | 1.094e+03 | -9.744e+02 | -7.135e+00 | 7.135e+00 | -2.289e+00 | 2.289e+00 | 3.329e-03 | -3.329e-03 | -1.240e+02 | 8.908e+02 | -2.486e+03 | 9.557e+01 |
| El: 9 - C.c: 4 | 8.363e+02 | -7.172e+02 | -3.628e+00 | 3.628e+00 | -9.485e-01 | 9.485e-01 | -2.121e-03 | 2.121e-03 | -2.202e+02 | 5.380e+02 | -1.365e+03 | 1.497e+02 |
| El: 9 - C.c: 5 | 7.720e+02 | -6.529e+02 | -2.751e+00 | 2.751e+00 | -6.134e-01 | 6.134e-01 | -3.484e-03 | 3.484e-03 | -2.443e+02 | 4.498e+02 | -1.085e+03 | 1.632e+02 |
| El: 9 - C.c: 7 | 1.490e+03 | -1.336e+03 | 6.362e+02 | 4.580e+02 | -2.831e+00 | 2.831e+00 | 2.606e-02 | -2.606e-02 | -2.203e+02 | 1.169e+03 | 4.132e+04 | -1.146e+04 |
| El: 9 - C.c: 8 | 1.773e+03 | -1.619e+03 | -9.879e+00 | 9.879e+00 | 1.883e+01 | -1.883e+01 | 1.500e-02 | -1.500e-02 | -3.983e+03 | -2.325e+03 | -3.432e+03 | 1.226e+02 |
| El: 10 - C.c: 1 | 6.918e+03 | -6.764e+03 | 4.152e+01 | -4.152e+01 | -2.790e+02 | 2.790e+02 | 3.538e-02 | -3.538e-02 | 2.645e+04 | 6.700e+04 | 8.510e+03 | 5.398e+03 |
| El: 10 - C.c: 2 | 6.904e+03 | -6.750e+03 | 5.132e+00 | -5.132e+00 | -3.016e+02 | 3.016e+02 | 5.690e-03 | -5.690e-03 | 3.015e+04 | 7.090e+04 | 1.004e+03 | 7.152e+02 |
| El: 10 - C.c: 3 | 5.057e+03 | -4.938e+03 | 3.696e+00 | -3.696e+00 | -2.210e+02 | 2.210e+02 | 3.329e-03 | -3.329e-03 | 2.208e+04 | 5.195e+04 | 7.197e+02 | 5.185e+02 |
| El: 10 - C.c: 4 | 3.736e+03 | -3.617e+03 | 2.388e+00 | -2.388e+00 | -1.634e+02 | 1.634e+02 | -2.121e-03 | 2.121e-03 | 1.628e+04 | 3.847e+04 | 4.460e+02 | 3.539e+02 |
| El: 10 - C.c: 5 | 3.406e+03 | -3.287e+03 | 2.061e+00 | -2.061e+00 | -1.491e+02 | 1.491e+02 | -3.484e-03 | 3.484e-03 | 1.483e+04 | 3.510e+04 | 3.776e+02 | 3.127e+02 |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| El: | 10 - C.c: 7 | 6.904e+03 | -6.749e+03 | 4.178e+01 | -4.178e+01 | -3.003e+02 | 3.003e+02 | 2.606e-02 | -2.606e-02 | 3.008e+04 | 7.054e+04 | 8.583e+03 | 5.414e+03 |
| El: | 10 - C.c: 8 | 6.919e+03 | -6.764e+03 | 4.868e+00 | -4.868e+00 | -2.803e+02 | 2.803e+02 | 1.500e-02 | -1.500e-02 | 2.652e+04 | 6.736e+04 | 9.309e+02 | 6.997e+02 |
| El: | 11 - C.c: 1 | 2.071e+03 | -1.916e+03 | 3.449e+02 | 2.022e+02 | 3.563e+01 | -3.563e+01 | 3.538e-02 | -3.538e-02 | -7.112e+03 | -4.824e+03 | 2.796e+04 | -4.053e+03 |
| El: | 11 - C.c: 2 | 1.817e+03 | -1.663e+03 | 1.072e+01 | -1.072e+01 | 1.659e+01 | -1.659e+01 | 5.690e-03 | -5.690e-03 | -3.808e+03 | -1.749e+03 | 2.750e+03 | 8.415e+02 |
| El: | 11 - C.c: 3 | 1.335e+03 | -1.216e+03 | 7.776e+00 | -7.776e+00 | 1.231e+01 | -1.231e+01 | 3.329e-03 | -3.329e-03 | -2.818e+03 | -1.306e+03 | 1.993e+03 | 6.118e+02 |
| El: | 11 - C.c: 4 | 1.009e+03 | -8.900e+02 | 5.321e+00 | -5.321e+00 | 9.968e+00 | -9.968e+00 | -2.121e-03 | 2.121e-03 | -2.238e+03 | -1.102e+03 | 1.355e+03 | 4.271e+02 |
| El: | 11 - C.c: 5 | 9.275e+02 | -8.084e+02 | 4.707e+00 | -4.707e+00 | 9.383e+00 | -9.383e+00 | -3.484e-03 | 3.484e-03 | -2.092e+03 | -1.051e+03 | 1.196e+03 | 3.809e+02 |
| El: | 11 - C.c: 7 | 1.802e+03 | -1.647e+03 | 3.452e+02 | 2.019e+02 | 1.440e+01 | -1.440e+01 | 2.606e-02 | -2.606e-02 | -3.434e+03 | -1.388e+03 | 2.804e+04 | -4.043e+03 |
| El: | 11 - C.c: 8 | 2.086e+03 | -1.931e+03 | 1.045e+01 | -1.045e+01 | 3.782e+01 | -3.782e+01 | 1.500e-02 | -1.500e-02 | -7.485e+03 | -5.185e+03 | 2.671e+03 | 8.315e+02 |
| El: | 12 - C.c: 1 | 2.527e+03 | -2.372e+03 | 3.733e+02 | 2.228e+02 | 1.222e+01 | -1.222e+01 | 3.538e-02 | -3.538e-02 | -3.167e+03 | -9.268e+02 | 2.680e+04 | -1.584e+03 |
| El: | 12 - C.c: 2 | 2.475e+03 | -2.320e+03 | -5.052e+00 | 5.052e+00 | 1.222e+00 | -1.222e+00 | 5.690e-03 | -5.690e-03 | -1.025e+03 | 6.152e+02 | -1.627e+03 | -6.549e+01 |
| El: | 12 - C.c: 3 | 1.820e+03 | -1.701e+03 | -3.845e+00 | 3.845e+00 | 9.276e-01 | -9.276e-01 | 3.329e-03 | -3.329e-03 | -7.586e+02 | 4.478e+02 | -1.228e+03 | -6.038e+01 |
| El: | 12 - C.c: 4 | 1.383e+03 | -1.264e+03 | -3.627e+00 | 3.627e+00 | 8.630e-01 | -8.630e-01 | -2.121e-03 | 2.121e-03 | -6.050e+02 | 3.159e+02 | -1.103e+03 | -1.124e+02 |
| El: | 12 - C.c: 5 | 1.274e+03 | -1.155e+03 | -3.573e+00 | 3.573e+00 | 8.469e-01 | -8.469e-01 | -3.484e-03 | 3.484e-03 | -5.666e+02 | 2.829e+02 | -1.072e+03 | -1.254e+02 |
| El: | 12 - C.c: 7 | 2.508e+03 | -2.353e+03 | 3.736e+02 | 2.225e+02 | -1.604e+01 | 1.604e+01 | 2.606e-02 | -2.606e-02 | 1.779e+03 | 3.595e+03 | 2.687e+04 | -1.568e+03 |
| El: | 12 - C.c: 8 | 2.494e+03 | -2.339e+03 | -5.304e+00 | 5.304e+00 | 2.948e+01 | -2.948e+01 | 1.500e-02 | -1.500e-02 | -5.970e+03 | -3.906e+03 | -1.696e+03 | -8.119e+01 |
| El: | 13 - C.c: 1 | 2.041e+03 | -1.886e+03 | 7.073e+02 | 4.849e+02 | 2.194e+01 | -2.194e+01 | 3.538e-02 | -3.538e-02 | -4.575e+03 | -2.774e+03 | 4.828e+04 | -1.102e+04 |
| El: | 13 - C.c: 2 | 2.027e+03 | -1.872e+03 | -3.293e+00 | 3.293e+00 | -8.487e+00 | 8.487e+00 | 5.690e-03 | -5.690e-03 | 7.127e+02 | 2.131e+03 | -1.106e+03 | 3.154e+00 |
| El: | 13 - C.c: 3 | 1.493e+03 | -1.374e+03 | -2.115e+00 | 2.115e+00 | -6.284e+00 | 6.284e+00 | 3.329e-03 | -3.329e-03 | 5.297e+02 | 1.576e+03 | -7.221e+02 | 1.349e+01 |
| El: | 13 - C.c: 4 | 1.148e+03 | -1.029e+03 | 5.669e-02 | -5.669e-02 | -5.013e+00 | 5.013e+00 | -2.121e-03 | 2.121e-03 | 4.333e+02 | 1.246e+03 | -5.201e+01 | 7.100e+01 |
| El: | 13 - C.c: 5 | 1.062e+03 | -9.430e+02 | 5.997e-01 | -5.997e-01 | -4.696e+00 | 4.696e+00 | -3.484e-03 | 3.484e-03 | 4.091e+02 | 1.164e+03 | 1.155e+02 | 8.538e+01 |
| El: | 13 - C.c: 7 | 2.024e+03 | -1.869e+03 | 7.071e+02 | 4.851e+02 | -6.349e+00 | 6.349e+00 | 2.606e-02 | -2.606e-02 | 3.558e+02 | 1.771e+03 | 4.821e+04 | -1.103e+04 |
| El: | 13 - C.c: 8 | 2.044e+03 | -1.889e+03 | -3.039e+00 | 3.039e+00 | 1.980e+01 | -1.980e+01 | 1.500e-02 | -1.500e-02 | -4.218e+03 | -2.415e+03 | -1.032e+03 | 1.367e+01 |
| El: | 14 - C.c: 1 | 4.104e+03 | -3.949e+03 | 6.570e+01 | -6.570e+01 | 3.582e+01 | -3.582e+01 | 3.538e-02 | -3.538e-02 | -6.428e+03 | -5.573e+03 | 1.019e+04 | 1.182e+04 |
| El: | 14 - C.c: 2 | 4.095e+03 | -3.940e+03 | -2.264e+00 | 2.264e+00 | 4.449e+00 | -4.449e+00 | 5.690e-03 | -5.690e-03 | -1.163e+03 | -3.280e+02 | -8.738e+02 | 1.154e+02 |
| El: | 14 - C.c: 3 | 3.009e+03 | -2.889e+03 | -1.490e+00 | 1.490e+00 | 3.164e+00 | -3.164e+00 | 3.329e-03 | -3.329e-03 | -8.425e+02 | -2.175e+02 | -5.858e+02 | 8.678e+01 |
| El: | 14 - C.c: 4 | 2.272e+03 | -2.153e+03 | -1.803e-01 | 1.803e-01 | 1.818e+00 | -1.818e+00 | -2.121e-03 | 2.121e-03 | -5.728e+02 | -3.632e+01 | -1.369e+02 | 7.646e+01 |
| El: | 14 - C.c: 5 | 2.088e+03 | -1.969e+03 | 1.470e-01 | -1.470e-01 | 1.482e+00 | -1.482e+00 | -3.484e-03 | 3.484e-03 | -5.054e+02 | 8.965e+00 | -2.464e+01 | 7.388e+01 |
| El: | 14 - C.c: 7 | 4.077e+03 | -3.922e+03 | 6.554e+01 | -6.554e+01 | 7.665e+00 | -7.665e+00 | 2.606e-02 | -2.606e-02 | -1.552e+03 | -1.015e+03 | 1.014e+04 | 1.181e+04 |
| El: | 14 - C.c: 8 | 4.122e+03 | -3.967e+03 | -2.099e+00 | 2.099e+00 | 3.261e+01 | -3.261e+01 | 1.500e-02 | -1.500e-02 | -6.039e+03 | -4.885e+03 | -8.243e+02 | 1.210e+02 |
| El: | 15 - C.c: 1 | 1.432e+03 | -1.277e+03 | 2.757e+01 | -2.757e+01 | 1.727e+02 | 1.172e+02 | 3.538e-02 | -3.538e-02 | -5.890e+03 | -3.401e+03 | 4.957e+03 | 4.277e+03 |
| El: | 15 - C.c: 2 | 1.428e+03 | -1.273e+03 | -1.000e+01 | 1.000e+01 | -4.211e+00 | 4.211e+00 | 5.690e-03 | -5.690e-03 | 6.834e+03 | -5.423e+03 | -3.043e+03 | -3.066e+02 |
| El: | 15 - C.c: 3 | 1.050e+03 | -9.308e+02 | -7.233e+00 | 7.233e+00 | -4.343e+00 | 4.343e+00 | 3.329e-03 | -3.329e-03 | 5.231e+03 | -3.776e+03 | -2.200e+03 | -2.233e+02 |
| El: | 15 - C.c: 4 | 7.993e+02 | -6.802e+02 | -4.848e+00 | 4.848e+00 | -1.008e+01 | 1.008e+01 | -2.121e-03 | 2.121e-03 | 5.100e+03 | -1.722e+03 | -1.466e+03 | -1.581e+02 |
| El: | 15 - C.c: 5 | 7.367e+02 | -6.175e+02 | -4.251e+00 | 4.251e+00 | -1.152e+01 | 1.152e+01 | -3.484e-03 | 3.484e-03 | 5.067e+03 | -1.208e+03 | -1.282e+03 | -1.418e+02 |
| El: | 15 - C.c: 7 | 1.439e+03 | -1.284e+03 | 2.738e+01 | -2.738e+01 | 1.072e+00 | -1.072e+00 | 2.606e-02 | -2.606e-02 | 6.202e+03 | -6.561e+03 | 4.902e+03 | 4.270e+03 |
| El: | 15 - C.c: 8 | 1.421e+03 | -1.266e+03 | -9.814e+00 | 9.814e+00 | 1.674e+02 | 1.225e+02 | 1.500e-02 | -1.500e-02 | -5.258e+03 | -2.263e+03 | -2.988e+03 | -2.996e+02 |
| El: | 16 - C.c: 1 | 8.573e+02 | -7.025e+02 | 3.553e+02 | 2.408e+02 | 1.266e+02 | 1.631e+01 | 3.538e-02 | -3.538e-02 | -7.982e+03 | -1.049e+04 | 2.522e+04 | -6.053e+03 |
| El: | 16 - C.c: 2 | 8.499e+02 | -6.950e+02 | -6.094e+00 | 6.094e+00 | 2.591e+01 | -2.591e+01 | 5.690e-03 | -5.690e-03 | 8.138e+02 | -9.493e+03 | -2.125e+03 | 8.352e+01 |
| El: | 16 - C.c: 3 | 6.285e+02 | -5.094e+02 | -4.270e+00 | 4.270e+00 | 1.837e+01 | -1.837e+01 | 3.329e-03 | -3.329e-03 | 7.149e+02 | -6.870e+03 | -1.500e+03 | 6.966e+01 |
| El: | 16 - C.c: 4 | 4.974e+02 | -3.783e+02 | -2.098e+00 | 2.098e+00 | 1.029e+01 | -1.029e+01 | -2.121e-03 | 2.121e-03 | 1.177e+03 | -4.623e+03 | -8.006e+02 | 9.779e+01 |
| El: | 16 - C.c: 5 | 4.646e+02 | -3.455e+02 | -1.555e+00 | 1.555e+00 | 8.263e+00 | -8.263e+00 | -3.484e-03 | 3.484e-03 | 1.293e+03 | -4.061e+03 | -6.257e+02 | 1.048e+02 |
| El: | 16 - C.c: 7 | 8.528e+02 | -6.979e+02 | 3.550e+02 | 2.411e+02 | 2.912e+01 | -2.912e+01 | 2.606e-02 | -2.606e-02 | 2.328e+02 | -9.987e+03 | 2.515e+04 | -6.062e+03 |
| El: | 16 - C.c: 8 | 8.544e+02 | -6.996e+02 | -5.850e+00 | 5.850e+00 | 1.234e+02 | 1.952e+01 | 1.500e-02 | -1.500e-02 | -7.401e+03 | -9.994e+03 | -2.052e+03 | 9.266e+01 |
| El: | 17 - C.c: 1 | 2.018e+03 | -1.863e+03 | 2.050e+01 | -2.050e+01 | 7.197e+02 | -3.833e+02 | 3.538e-02 | -3.538e-02 | -6.222e+04 | -1.225e+05 | 4.207e+03 | 2.662e+03 |
| El: | 17 - C.c: 2 | 3.243e+03 | -3.088e+03 | -1.164e+00 | 1.164e+00 | 5.279e+02 | -5.279e+02 | 5.690e-03 | -5.690e-03 | -5.047e+04 | -1.264e+05 | -6.564e+02 | 2.664e+02 |
| El: | 17 - C.c: 3 | 2.381e+03 | -2.262e+03 | -8.638e-01 | 8.638e-01 | 3.859e+02 | -3.859e+02 | 3.329e-03 | -3.329e-03 | -3.683e+04 | -9.245e+04 | -4.821e+02 | 1.927e+02 |
| El: | 17 - C.c: 4 | 1.789e+03 | -1.670e+03 | -6.987e-01 | 6.987e-01 | 2.811e+02 | -2.811e+02 | -2.121e-03 | 2.121e-03 | -2.649e+04 | -6.769e+04 | -3.633e+02 | 1.292e+02 |
| El: | 17 - C.c: 5 | 1.641e+03 | -1.522e+03 | -6.574e-01 | 6.574e-01 | 2.549e+02 | -2.549e+02 | -3.484e-03 | 3.484e-03 | -2.391e+04 | -6.150e+04 | -3.336e+02 | 1.133e+02 |
| El: | 17 - C.c: 7 | 2.008e+03 | -1.853e+03 | 2.059e+01 | -2.059e+01 | 5.221e+02 | -5.221e+02 | 2.606e-02 | -2.606e-02 | -4.868e+04 | -1.262e+05 | 4.228e+03 | 2.668e+03 |
| El: | 17 - C.c: 8 | 3.253e+03 | -3.099e+03 | -1.247e+00 | 1.247e+00 | 7.255e+02 | -3.891e+02 | 1.500e-02 | -1.500e-02 | -6.401e+04 | -1.227e+05 | -6.777e+02 | 2.599e+02 |
| El: | 18 - C.c: 1 | 1.973e+03 | -1.818e+03 | 1.809e+02 | 1.171e+02 | 1.095e+02 | 6.611e+01 | 3.538e-02 | -3.538e-02 | -1.812e+03 | -5.449e+03 | 1.339e+04 | -2.714e+03 |
| El: | 18 - C.c: 2 | 7.726e+02 | -6.177e+02 | 5.980e-01 | -5.980e-01 | 2.280e+01 | -2.280e+01 | 5.690e-03 | -5.690e-03 | 2.446e+03 | -1.008e+04 | -8.823e+01 | 2.886e+02 |
| El: | 18 - C.c: 3 | 5.705e+02 | -4.514e+02 | 4.068e-01 | -4.068e-01 | 1.627e+01 | -1.627e+01 | 3.329e-03 | -3.329e-03 | 1.875e+03 | -7.324e+03 | -7.216e+01 | 2.084e+02 |
| El: | 18 - C.c: 4 | 4.467e+02 | -3.276e+02 | 1.298e-01 | -1.298e-01 | 9.662e+00 | -9.662e+00 | -2.121e-03 | 2.121e-03 | 1.841e+03 | -5.078e+03 | -9.447e+01 | 1.379e+02 |
| El: | 18 - C.c: 5 | 4.158e+02 | -2.967e+02 | 6.052e-02 | -6.052e-02 | 8.012e+00 | -8.012e+00 | -3.484e-03 | 3.484e-03 | 1.833e+03 | -4.517e+03 | -1.000e+02 | 1.203e+02 |
| El: | 18 - C.c: 7 | 1.984e+03 | -1.829e+03 | 1.811e+02 | 1.170e+02 | -5.527e+00 | 5.527e+00 | 2.606e-02 | -2.606e-02 | 7.428e+03 | -5.576e+03 | 1.344e+04 | -2.704e+03 |
| El: | 18 - C.c: 8 | 7.615e+02 | -6.066e+02 | 4.404e-01 | -4.404e-01 | 1.378e+02 | 3.779e+01 | 1.500e-02 | -1.500e-02 | -6.794e+03 | -9.954e+03 | -1.318e+02 | 2.794e+02 |
| El: | 19 - C.c: 1 | 6.871e+03 | -6.716e+03 | 3.560e+01 | -3.560e+01 | 3.284e+02 | -3.284e+02 | 3.538e-02 | -3.538e-02 | -3.446e+04 | -7.554e+04 | 7.517e+03 | 4.408e+03 |
| El: | 19 - C.c: 2 | 6.899e+03 | -6.744e+03 | 2.468e+00 | -2.468e+00 | 3.074e+02 | -3.074e+02 | 5.690e-03 | -5.690e-03 | -3.038e+04 | -7.259e+04 | 3.020e+02 | 5.247e+02 |
| El: | 19 - C.c: 3 | 5.055e+03 | -4.936e+03 | 1.658e+00 | -1.658e+00 | 2.251e+02 | -2.251e+02 | 3.329e-03 | -3.329e-03 | -2.225e+04 | -5.318e+04 | 1.826e+02 | 3.729e+02 |
| El: | 19 - C.c: 4 | 3.744e+03 | -3.625e+03 | 4.102e-01 | -4.102e-01 | 1.664e+02 | -1.664e+02 | -2.121e-03 | 2.121e-03 | -1.641e+04 | -3.933e+04 | -7.600e+01 | 2.134e+02 |
| El: | 19 - C.c: 5 | 3.416e+03 | -3.297e+03 | 9.819e-02 | -9.819e-02 | 1.517e+02 | -1.517e+02 | -3.484e-03 | 3.484e-03 | -1.496e+04 | -3.586e+04 | -1.406e+02 | 1.735e+02 |
| El: | 19 - C.c: 7 | 6.898e+03 | -6.743e+03 | 3.535e+01 | -3.535e+01 | 3.066e+02 | -3.066e+02 | 2.606e-02 | -2.606e-02 | -3.039e+04 | -7.234e+04 | 7.453e+03 | 4.391e+03 |
| El: | 19 - C.c: 8 | 6.872e+03 | -6.717e+03 | 2.709e+00 | -2.709e+00 | 3.291e+02 | -3.291e+02 | 1.500e-02 | -1.500e-02 | -3.445e+04 | -7.580e+04 | 3.661e+02 | 5.414e+02 |
| El: | 20 - C.c: 1 | 6.367e+03 | -6.212e+03 | 1.807e+01 | -1.807e+01 | -2.549e+02 | 2.549e+02 | 3.538e-02 | -3.538e-02 | 2.406e+04 | 6.134e+04 | 2.668e+03 | 3.387e+03 |
| El: | 20 - C.c: 2 | 6.355e+03 | -6.200e+03 | -1.690e+01 | 1.690e+01 | -2.794e+02 | 2.794e+02 | 5.690e-03 | -5.690e-03 | 2.803e+04 | 6.558e+04 | -4.768e+03 | -8.949e+02 |
| El: | 20 - C.c: 3 | 4.656e+03 | -4.537e+03 | -1.243e+01 | 1.243e+01 | -2.048e+02 | 2.048e+02 | 3.329e-03 | -3.329e-03 | 2.055e+04 | 4.808e+04 | -3.501e+03 | -6.645e+02 |
| El: | 20 - C.c: 4 | 3.447e+03 | -3.328e+03 | -9.481e+00 | 9.481e+00 | -1.523e+02 | 1.523e+02 | -2.121e-03 | 2.121e-03 | 1.524e+04 | 3.577e+04 | -2.635e+03 | -5.407e+02 |
| El: | 20 - C.c: 5 | 3.145e+03 | -3.026e+03 | -8.742e+00 | 8.742e+00 | -1.392e+02 | 1.392e+02 | -3.484e-03 | 3.484e-03 | 1.392e+04 | 3.270e+04 | -2.419e+03 | -5.097e+02 |
| El: | 20 - C.c: 7 | 6.352e+03 | -6.198e+03 | 1.810e+01 | -1.810e+01 | -2.768e+02 | 2.768e+02 | 2.606e-02 | -2.606e-02 | 2.775e+04 | 6.497e+04 | 2.673e+03 | 3.389e+03 |
| El: | 20 - C.c: 8 | 6.369e+03 | -6.214e+03 | -1.693e+01 | 1.693e+01 | -2.576e+02 | 2.576e+02 | 1.500e-02 | -1.500e-02 | 2.434e+04 | 6.195e+04 | -4.774e+03 | -8.972e+02 |
| El: | 21 - C.c: 1 | 6.332e+03 | -6.177e+03 | 1.599e+01 | -1.599e+01 | 3.033e+02 | -3.033e+02 | 3.538e-02 | -3.538e-02 | -3.189e+04 | -6.971e+04 | 2.636e+03 | 2.722e+03 |
| El: | 21 - C.c: 2 | 6.360e+03 | -6.205e+03 | -1.564e+01 | 1.564e+01 | 2.832e+02 | -2.832e+02 | 5.690e-03 | -5.690e-03 | -2.800e+04 | -6.688e+04 | -4.422e+03 | -8.170e+02 |
| El: | 21 - C.c: 3 | 4.661e+03 | -4.542e+03 | -1.146e+01 | 1.146e+01 | 2.076e+02 | -2.076e+02 | 3.329e-03 | -3.329e-03 | -2.052e+04 | -4.902e+04 | -3.234e+03 | -6.044e+02 |
| El: | 21 - C.c: 4 | 3.462e+03 | -3.343e+03 | -8.485e+00 | 8.485e+00 | 1.540e+02 | -1.540e+02 | -2.121e-03 | 2.121e-03 | -1.521e+04 | -3.639e+04 | -2.363e+03 | -4.789e+02 |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| El: | 21 - C.c: 5 | 3.162e+03 | -3.043e+03 | -7.742e+00 | 7.742e+00 | 1.406e+02 | -1.406e+02 | -3.484e-03 | 3.484e-03 | -1.388e+04 | -3.323e+04 | -2.146e+03 | -4.476e+02 |
| El: | 21 - C.c: 7 | 6.357e+03 | -6.203e+03 | 1.595e+01 | -1.595e+01 | 2.813e+02 | -2.813e+02 | 2.606e-02 | -2.606e-02 | -2.782e+04 | -6.641e+04 | 2.628e+03 | 2.715e+03 |
| El: | 21 - C.c: 8 | 6.334e+03 | -6.179e+03 | -1.559e+01 | 1.559e+01 | 3.052e+02 | -3.052e+02 | 1.500e-02 | -1.500e-02 | -3.207e+04 | -7.018e+04 | -4.414e+03 | -8.100e+02 |
| El: | 22 - C.c: 1 | 2.578e+03 | -2.423e+03 | 4.179e+01 | -4.179e+01 | -4.203e+00 | 4.203e+00 | 3.538e-02 | -3.538e-02 | -1.634e+03 | 3.042e+03 | 6.123e+03 | 7.876e+03 |
| El: | 22 - C.c: 2 | 2.584e+03 | -2.429e+03 | -9.253e+00 | 9.253e+00 | -2.753e+01 | 2.753e+01 | 5.690e-03 | -5.690e-03 | 2.369e+03 | 6.855e+03 | -2.717e+03 | -3.824e+02 |
| El: | 22 - C.c: 3 | 1.900e+03 | -1.781e+03 | -6.368e+00 | 6.368e+00 | -2.032e+01 | 2.032e+01 | 3.329e-03 | -3.329e-03 | 1.753e+03 | 5.055e+03 | -1.868e+03 | -2.654e+02 |
| El: | 22 - C.c: 4 | 1.446e+03 | -1.327e+03 | -2.467e+00 | 2.467e+00 | -1.586e+01 | 1.586e+01 | -2.121e-03 | 2.121e-03 | 1.389e+03 | 3.924e+03 | -7.102e+02 | -1.163e+02 |
| El: | 22 - C.c: 5 | 1.333e+03 | -1.214e+03 | -1.492e+00 | 1.492e+00 | -1.474e+01 | 1.474e+01 | -3.484e-03 | 3.484e-03 | 1.298e+03 | 3.641e+03 | -4.209e+02 | -7.905e+01 |
| El: | 22 - C.c: 7 | 2.568e+03 | -2.413e+03 | 4.225e+01 | -4.225e+01 | -2.752e+01 | 2.752e+01 | 2.606e-02 | -2.606e-02 | 2.376e+03 | 6.844e+03 | 6.260e+03 | 7.893e+03 |
| El: | 22 - C.c: 8 | 2.594e+03 | -2.439e+03 | -9.712e+00 | 9.712e+00 | -4.212e+00 | 4.212e+00 | 1.500e-02 | -1.500e-02 | -1.641e+03 | 3.052e+03 | -2.854e+03 | -3.994e+02 |
| El: | 23 - C.c: 1 | 1.051e+03 | -8.960e+02 | 2.786e+02 | 1.378e+02 | -4.326e+00 | 4.326e+00 | 3.538e-02 | -3.538e-02 | -2.631e+02 | 1.712e+03 | 2.381e+04 | -2.272e+02 |
| El: | 23 - C.c: 2 | 1.299e+03 | -1.145e+03 | 8.251e+00 | -8.251e+00 | -2.676e+01 | 2.676e+01 | 5.690e-03 | -5.690e-03 | 3.644e+03 | 5.320e+03 | 2.154e+03 | 6.099e+02 |
| El: | 23 - C.c: 3 | 9.583e+02 | -8.392e+02 | 5.853e+00 | -5.853e+00 | -1.984e+01 | 1.984e+01 | 3.329e-03 | -3.329e-03 | 2.713e+03 | 3.934e+03 | 1.534e+03 | 4.271e+02 |
| El: | 23 - C.c: 4 | 7.436e+02 | -6.245e+02 | 3.282e+00 | -3.282e+00 | -1.599e+01 | 1.599e+01 | -2.121e-03 | 2.121e-03 | 2.244e+03 | 3.113e+03 | 8.906e+02 | 2.087e+02 |
| El: | 23 - C.c: 5 | 6.899e+02 | -5.708e+02 | 2.639e+00 | -2.639e+00 | -1.503e+01 | 1.503e+01 | -3.484e-03 | 3.484e-03 | 2.127e+03 | 2.908e+03 | 7.299e+02 | 1.541e+02 |
| El: | 23 - C.c: 7 | 1.310e+03 | -1.155e+03 | 2.785e+02 | 1.379e+02 | -2.602e+01 | 2.602e+01 | 2.606e-02 | -2.606e-02 | 3.513e+03 | 5.204e+03 | 2.380e+04 | -2.425e+02 |
| El: | 23 - C.c: 8 | 1.040e+03 | -8.851e+02 | 8.324e+00 | -8.324e+00 | -5.062e+00 | 5.062e+00 | 1.500e-02 | -1.500e-02 | -1.323e+02 | 1.828e+03 | 2.163e+03 | 6.252e+02 |
| El: | 24 - C.c: 1 | 8.971e+02 | -7.422e+02 | 4.921e+02 | 3.408e+02 | 6.206e+00 | -6.206e+00 | 3.538e-02 | -3.538e-02 | -1.942e+03 | -1.367e+02 | 3.312e+04 | -7.786e+03 |
| El: | 24 - C.c: 2 | 1.178e+03 | -1.023e+03 | -8.153e+00 | 8.153e+00 | -1.667e+01 | 1.667e+01 | 5.690e-03 | -5.690e-03 | 2.038e+03 | 3.547e+03 | -2.555e+03 | -1.757e+02 |
| El: | 24 - C.c: 3 | 8.700e+02 | -7.509e+02 | -5.605e+00 | 5.605e+00 | -1.238e+01 | 1.238e+01 | 3.329e-03 | -3.329e-03 | 1.522e+03 | 2.625e+03 | -1.756e+03 | -1.219e+02 |
| El: | 24 - C.c: 4 | 6.808e+02 | -5.616e+02 | -2.141e+00 | 2.141e+00 | -1.007e+01 | 1.007e+01 | -2.121e-03 | 2.121e-03 | 1.286e+03 | 2.086e+03 | -6.646e+02 | -5.278e+01 |
| El: | 24 - C.c: 5 | 6.335e+02 | -5.143e+02 | -1.275e+00 | 1.275e+00 | -9.488e+00 | 9.488e+00 | -3.484e-03 | 3.484e-03 | 1.227e+03 | 1.952e+03 | -3.918e+02 | -3.551e+01 |
| El: | 24 - C.c: 7 | 1.175e+03 | -1.020e+03 | 4.924e+02 | 3.405e+02 | -1.610e+01 | 1.610e+01 | 2.606e-02 | -2.606e-02 | 1.942e+03 | 3.452e+03 | 3.323e+04 | -7.785e+03 |
| El: | 24 - C.c: 8 | 9.000e+02 | -7.452e+02 | -8.475e+00 | 8.475e+00 | 5.636e+00 | -5.636e+00 | 1.500e-02 | -1.500e-02 | -1.847e+03 | -4.166e+01 | -2.662e+03 | -1.772e+02 |
| El: | 25 - C.c: 1 | 3.321e+03 | -3.166e+03 | 1.851e+01 | -1.851e+01 | 6.608e+02 | -3.530e+02 | 3.538e-02 | -3.538e-02 | -5.680e+04 | -1.130e+05 | 3.899e+03 | 2.303e+03 |
| El: | 25 - C.c: 2 | 3.321e+03 | -3.167e+03 | -9.460e+00 | 9.460e+00 | 4.789e+02 | -4.789e+02 | 5.690e-03 | -5.690e-03 | -4.480e+04 | -1.157e+05 | -2.819e+03 | -3.506e+02 |
| El: | 25 - C.c: 3 | 2.438e+03 | -2.319e+03 | -6.938e+00 | 6.938e+00 | 3.500e+02 | -3.500e+02 | 3.329e-03 | -3.329e-03 | -3.266e+04 | -8.460e+04 | -2.063e+03 | -2.618e+02 |
| El: | 25 - C.c: 4 | 1.831e+03 | -1.712e+03 | -5.177e+00 | 5.177e+00 | 2.543e+02 | -2.543e+02 | -2.121e-03 | 2.121e-03 | -2.328e+04 | -6.192e+04 | -1.514e+03 | -2.204e+02 |
| El: | 25 - C.c: 5 | 1.680e+03 | -1.560e+03 | -4.736e+00 | 4.736e+00 | 2.304e+02 | -2.304e+02 | -3.484e-03 | 3.484e-03 | -2.093e+04 | -5.625e+04 | -1.377e+03 | -2.100e+02 |
| El: | 25 - C.c: 7 | 3.324e+03 | -3.169e+03 | 1.846e+01 | -1.846e+01 | 4.790e+02 | -4.790e+02 | 2.606e-02 | -2.606e-02 | -4.428e+04 | -1.162e+05 | 3.882e+03 | 2.303e+03 |
| El: | 25 - C.c: 8 | 3.319e+03 | -3.164e+03 | -9.409e+00 | 9.409e+00 | 6.608e+02 | -3.530e+02 | 1.500e-02 | -1.500e-02 | -5.732e+04 | -1.125e+05 | -2.801e+03 | -3.507e+02 |
| El: | 26 - C.c: 1 | 3.324e+03 | -3.170e+03 | 2.596e+01 | -2.596e+01 | -1.265e+02 | 7.421e+02 | 3.538e-02 | -3.538e-02 | 2.158e+04 | 1.239e+05 | 4.637e+03 | 4.060e+03 |
| El: | 26 - C.c: 2 | 3.298e+03 | -3.143e+03 | -2.374e+01 | 2.374e+01 | -4.675e+02 | 4.675e+02 | 5.690e-03 | -5.690e-03 | 4.319e+04 | 1.134e+05 | -4.395e+03 | -3.557e+03 |
| El: | 26 - C.c: 3 | 2.421e+03 | -2.302e+03 | -1.733e+01 | 1.733e+01 | -3.410e+02 | 3.410e+02 | 3.329e-03 | -3.329e-03 | 3.140e+04 | 8.285e+04 | -3.208e+03 | -2.597e+03 |
| El: | 26 - C.c: 4 | 1.818e+03 | -1.699e+03 | -1.248e+01 | 1.248e+01 | -2.443e+02 | 2.443e+02 | -2.121e-03 | 2.121e-03 | 2.188e+04 | 5.997e+04 | -2.308e+03 | -1.873e+03 |
| El: | 26 - C.c: 5 | 1.667e+03 | -1.548e+03 | -1.127e+01 | 1.127e+01 | -2.202e+02 | 2.202e+02 | -3.484e-03 | 3.484e-03 | 1.951e+04 | 5.424e+04 | -2.083e+03 | -1.692e+03 |
| El: | 26 - C.c: 7 | 3.311e+03 | -3.156e+03 | 2.630e+01 | -2.630e+01 | -4.669e+02 | 4.669e+02 | 2.606e-02 | -2.606e-02 | 4.258e+04 | 1.138e+05 | 4.702e+03 | 4.107e+03 |
| El: | 26 - C.c: 8 | 3.311e+03 | -3.156e+03 | -2.407e+01 | 2.407e+01 | -1.271e+02 | 7.428e+02 | 1.500e-02 | -1.500e-02 | 2.220e+04 | 1.235e+05 | -4.460e+03 | -3.604e+03 |
| El: | 27 - C.c: 1 | 2.017e+03 | -1.862e+03 | 7.072e+02 | 4.850e+02 | 4.310e+01 | -4.310e+01 | 3.538e-02 | -3.538e-02 | -6.992e+03 | -7.445e+03 | 4.823e+04 | -1.101e+04 |
| El: | 27 - C.c: 2 | 2.044e+03 | -1.889e+03 | -2.925e+00 | 2.925e+00 | 1.789e+01 | -1.789e+01 | 5.690e-03 | -5.690e-03 | -2.499e+03 | -3.494e+03 | -9.874e+02 | 7.471e+00 |
| El: | 27 - C.c: 3 | 1.505e+03 | -1.386e+03 | -1.824e+00 | 1.824e+00 | 1.362e+01 | -1.362e+01 | 3.329e-03 | -3.329e-03 | -1.917e+03 | -2.646e+03 | -6.288e+02 | 1.760e+01 |
| El: | 27 - C.c: 4 | 1.156e+03 | -1.037e+03 | 3.894e-01 | -3.894e-01 | 1.290e+01 | -1.290e+01 | -2.121e-03 | 2.121e-03 | -1.892e+03 | -2.429e+03 | 5.120e+01 | 7.924e+01 |
| El: | 27 - C.c: 5 | 1.069e+03 | -9.496e+02 | 9.428e-01 | -9.428e-01 | 1.272e+01 | -1.272e+01 | -3.484e-03 | 3.484e-03 | -1.885e+03 | -2.375e+03 | 2.212e+02 | 9.465e+01 |
| El: | 27 - C.c: 7 | 2.041e+03 | -1.886e+03 | 7.074e+02 | 4.848e+02 | 1.701e+01 | -1.701e+01 | 2.606e-02 | -2.606e-02 | -2.361e+03 | -3.339e+03 | 4.829e+04 | -1.101e+04 |
| El: | 27 - C.c: 8 | 2.020e+03 | -1.866e+03 | -3.104e+00 | 3.104e+00 | 4.397e+01 | -4.397e+01 | 1.500e-02 | -1.500e-02 | -7.131e+03 | -7.599e+03 | -1.041e+03 | 9.384e-01 |
| El: | 28 - C.c: 1 | 4.032e+03 | -3.877e+03 | 6.535e+01 | -6.535e+01 | 3.389e+01 | -3.389e+01 | 3.538e-02 | -3.538e-02 | -5.653e+03 | -5.700e+03 | 1.009e+04 | 1.180e+04 |
| El: | 28 - C.c: 2 | 4.107e+03 | -3.952e+03 | -2.339e+00 | 2.339e+00 | 9.106e+00 | -9.106e+00 | 5.690e-03 | -5.690e-03 | -1.148e+03 | -1.903e+03 | -8.599e+02 | 7.649e+01 |
| El: | 28 - C.c: 3 | 3.015e+03 | -2.896e+03 | -1.535e+00 | 1.535e+00 | 7.367e+00 | -7.367e+00 | 3.329e-03 | -3.329e-03 | -9.481e+02 | -1.520e+03 | -5.726e+02 | 5.830e+01 |
| El: | 28 - C.c: 4 | 2.267e+03 | -2.148e+03 | -1.643e-01 | 1.643e-01 | 9.250e+00 | -9.250e+00 | -2.121e-03 | 2.121e-03 | -1.288e+03 | -1.811e+03 | -1.106e+02 | 5.551e+01 |
| El: | 28 - C.c: 5 | 2.080e+03 | -1.961e+03 | 1.784e-01 | -1.784e-01 | 9.720e+00 | -9.720e+00 | -3.484e-03 | 3.484e-03 | -1.372e+03 | -1.884e+03 | 4.954e+00 | 5.481e+01 |
| El: | 28 - C.c: 7 | 4.088e+03 | -3.933e+03 | 6.545e+01 | -6.545e+01 | 6.928e+00 | -6.928e+00 | 2.606e-02 | -2.606e-02 | -9.377e+02 | -1.383e+03 | 1.012e+04 | 1.180e+04 |
| El: | 28 - C.c: 8 | 4.051e+03 | -3.896e+03 | -2.435e+00 | 2.435e+00 | 3.607e+01 | -3.607e+01 | 1.500e-02 | -1.500e-02 | -5.863e+03 | -6.219e+03 | -8.917e+02 | 7.605e+01 |
| El: | 29 - C.c: 1 | 2.496e+03 | -2.341e+03 | 3.732e+02 | 2.229e+02 | 5.306e+01 | -5.306e+01 | 3.538e-02 | -3.538e-02 | -8.509e+03 | -9.265e+03 | 2.676e+04 | -1.584e+03 |
| El: | 29 - C.c: 2 | 2.493e+03 | -2.338e+03 | -5.517e+00 | 5.517e+00 | 9.532e+00 | -9.532e+00 | 5.690e-03 | -5.690e-03 | -1.015e+03 | -2.178e+03 | -1.733e+03 | -1.149e+02 |
| El: | 29 - C.c: 3 | 1.832e+03 | -1.713e+03 | -4.194e+00 | 4.194e+00 | 7.523e+00 | -7.523e+00 | 3.329e-03 | -3.329e-03 | -8.359e+02 | -1.684e+03 | -1.308e+03 | -9.730e+01 |
| El: | 29 - C.c: 4 | 1.390e+03 | -1.271e+03 | -3.937e+00 | 3.937e+00 | 8.513e+00 | -8.513e+00 | -2.121e-03 | 2.121e-03 | -1.122e+03 | -1.729e+03 | -1.175e+03 | -1.437e+02 |
| El: | 29 - C.c: 5 | 1.280e+03 | -1.161e+03 | -3.873e+00 | 3.873e+00 | 8.760e+00 | -8.760e+00 | -3.484e-03 | 3.484e-03 | -1.194e+03 | -1.740e+03 | -1.142e+03 | -1.553e+02 |
| El: | 29 - C.c: 7 | 2.526e+03 | -2.371e+03 | 3.731e+02 | 2.230e+02 | 2.684e+01 | -2.684e+01 | 2.606e-02 | -2.606e-02 | -3.829e+03 | -5.163e+03 | 2.675e+04 | -1.590e+03 |
| El: | 29 - C.c: 8 | 2.463e+03 | -2.308e+03 | -5.467e+00 | 5.467e+00 | 3.575e+01 | -3.575e+01 | 1.500e-02 | -1.500e-02 | -5.696e+03 | -6.281e+03 | -1.722e+03 | -1.090e+02 |

**Gruppo numero: 2 - Descrizione: TRAVI DI COPERTURA**

| Elem./C.c. | Fx/I | Fx/J | Fy/I | Fy/J | Fz/I | Fz/J | Mx/I | Mx/J | My/I | My/J | Mz/I | Mz/J |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| El: 1 - C.c: 1 | 6.840e+02 | -6.840e+02 | 2.134e+01 | 2.134e+01 | 7.619e-18 | -7.619e-18 | -6.127e-01 | 6.127e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 1 - C.c: 2 | 5.942e+01 | -5.942e+01 | 2.134e+01 | 2.134e+01 | 1.982e-17 | -1.982e-17 | -5.587e-01 | 5.587e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 1 - C.c: 3 | 4.225e+01 | -4.225e+01 | 1.642e+01 | 1.642e+01 | 1.613e-17 | -1.613e-17 | -4.392e-01 | 4.392e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 1 - C.c: 4 | 2.429e+01 | -2.429e+01 | 1.642e+01 | 1.642e+01 | 2.075e-17 | -2.075e-17 | -4.881e-01 | 4.881e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 1 - C.c: 5 | 1.980e+01 | -1.980e+01 | 1.642e+01 | 1.642e+01 | 2.191e-17 | -2.191e-17 | -5.003e-01 | 5.003e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 1 - C.c: 7 | 6.819e+02 | -6.819e+02 | 2.134e+01 | 2.134e+01 | -1.687e-18 | 1.687e-18 | -2.707e-01 | 2.707e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 1 - C.c: 8 | 6.151e+01 | -6.151e+01 | 2.134e+01 | 2.134e+01 | 2.913e-17 | -2.913e-17 | -9.007e-01 | 9.007e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 2 - C.c: 1 | 1.203e+02 | -1.203e+02 | 1.614e+01 | 2.776e+01 | -1.756e+00 | 1.756e+00 | 3.859e+01 | -3.859e+01 | 0.000e+00 | 3.160e+02 | 1.390e-12 | -1.046e+03 |
| El: 2 - C.c: 2 | 2.326e+02 | -2.326e+02 | 4.950e+01 | -5.603e+00 | -1.786e+00 | 1.786e+00 | 3.926e+01 | -3.926e+01 | 0.000e+00 | 3.215e+02 | 1.550e-12 | 4.960e+03 |
| El: 2 - C.c: 3 | 1.684e+02 | -1.684e+02 | 3.668e+01 | -2.911e+00 | -1.308e+00 | 1.308e+00 | 2.875e+01 | -2.875e+01 | 0.000e+00 | 2.355e+02 | 1.140e-12 | 3.563e+03 |
| El: 2 - C.c: 4 | 1.134e+02 | -1.134e+02 | 2.940e+01 | 4.367e+00 | -9.663e-01 | 9.663e-01 | 2.124e+01 | -2.124e+01 | 0.000e+00 | 1.739e+02 | 8.644e-13 | 2.253e+03 |
| El: 2 - C.c: 5 | 9.965e+01 | -9.965e+01 | 2.758e+01 | 6.186e+00 | -8.809e-01 | 8.809e-01 | 1.936e+01 | -1.936e+01 | 0.000e+00 | 1.586e+02 | 7.956e-13 | 1.926e+03 |
| El: 2 - C.c: 7 | 1.150e+02 | -1.150e+02 | 1.546e+01 | 2.844e+01 | -1.784e+00 | 1.784e+00 | 3.921e+01 | -3.921e+01 | 0.000e+00 | 3.212e+02 | 1.365e-12 | -1.168e+03 |
| El: 2 - C.c: 8 | 2.380e+02 | -2.380e+02 | 5.018e+01 | -6.283e+00 | -1.758e+00 | 1.758e+00 | 3.863e+01 | -3.863e+01 | 0.000e+00 | 3.164e+02 | 1.575e-12 | 5.082e+03 |
| El: 3 - C.c: 1 | 7.453e+01 | -7.453e+01 | 1.152e+01 | 3.652e+01 | -1.267e-01 | 1.267e-01 | 3.334e+00 | -3.334e+00 | 2.496e+01 | 0.000e+00 | -2.463e+03 | -1.478e-13 |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| El: | 3 - C.c: 2 | -1.392e+02 | 1.392e+02 | 3.417e+01 | 1.388e+01 | -1.327e-01 | 1.327e-01 | 3.493e+00 | -3.493e+00 | 2.615e+01 | 0.000e+00 | 1.999e+03 | -1.478e-13 |
| El: | 3 - C.c: 3 | -1.018e+02 | 1.018e+02 | 2.612e+01 | 1.084e+01 | -9.703e-02 | 9.703e-02 | 2.554e+00 | -2.554e+00 | 1.912e+01 | 0.000e+00 | 1.505e+03 | -1.137e-13 |
| El: | 3 - C.c: 4 | -7.417e+01 | 7.417e+01 | 2.525e+01 | 1.171e+01 | -7.063e-02 | 7.063e-02 | 1.859e+00 | -1.859e+00 | 1.391e+01 | 0.000e+00 | 1.334e+03 | -1.137e-13 |
| El: | 3 - C.c: 5 | -6.726e+01 | 6.726e+01 | 2.504e+01 | 1.192e+01 | -6.403e-02 | 6.403e-02 | 1.685e+00 | -1.685e+00 | 1.261e+01 | 0.000e+00 | 1.292e+03 | -1.137e-13 |
| El: | 3 - C.c: 7 | 7.485e+01 | -7.485e+01 | 1.164e+01 | 3.641e+01 | -1.318e-01 | 1.318e-01 | 3.468e+00 | -3.468e+00 | 2.596e+01 | 0.000e+00 | -2.439e+03 | -1.478e-13 |
| El: | 3 - C.c: 8 | -1.396e+02 | 1.396e+02 | 3.405e+01 | 1.400e+01 | -1.277e-01 | 1.277e-01 | 3.360e+00 | -3.360e+00 | 2.515e+01 | 0.000e+00 | 1.975e+03 | -1.478e-13 |
| El: | 4 - C.c: 1 | -2.919e+02 | 2.919e+02 | 2.622e+01 | 2.622e+01 | 4.968e-16 | -4.968e-16 | -3.544e+01 | 3.544e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 4 - C.c: 2 | -3.064e+01 | 3.064e+01 | 2.622e+01 | 2.622e+01 | 4.971e-16 | -4.971e-16 | -3.511e+01 | 3.511e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 4 - C.c: 3 | -2.256e+01 | 2.256e+01 | 2.017e+01 | 2.017e+01 | 3.638e-16 | -3.638e-16 | -2.569e+01 | 2.569e+01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 4 - C.c: 4 | -1.730e+01 | 1.730e+01 | 2.017e+01 | 2.017e+01 | 2.672e-16 | -2.672e-16 | -1.881e+01 | 1.881e+01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 4 - C.c: 5 | -1.599e+01 | 1.599e+01 | 2.017e+01 | 2.017e+01 | 2.431e-16 | -2.431e-16 | -1.710e+01 | 1.710e+01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 4 - C.c: 7 | -2.923e+02 | 2.923e+02 | 2.622e+01 | 2.622e+01 | 5.091e-16 | -5.091e-16 | -3.620e+01 | 3.620e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 4 - C.c: 8 | -3.024e+01 | 3.024e+01 | 2.622e+01 | 2.622e+01 | 4.848e-16 | -4.848e-16 | -3.435e+01 | 3.435e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 5 - C.c: 1 | 1.531e+01 | -1.531e+01 | 2.134e+01 | 2.134e+01 | -3.991e-18 | 3.991e-18 | -3.254e-01 | 3.254e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 5 - C.c: 2 | 1.227e+00 | -1.227e+00 | 2.134e+01 | 2.134e+01 | 1.853e-17 | -1.853e-17 | -5.269e-01 | 5.269e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 5 - C.c: 3 | 8.511e-01 | -8.511e-01 | 1.642e+01 | 1.642e+01 | 1.476e-17 | -1.476e-17 | -4.050e-01 | 4.050e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 5 - C.c: 4 | 3.702e-01 | -3.702e-01 | 1.642e+01 | 1.642e+01 | 1.735e-17 | -1.735e-17 | -4.038e-01 | 4.038e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 5 - C.c: 5 | 2.499e-01 | -2.499e-01 | 1.642e+01 | 1.642e+01 | 1.799e-17 | -1.799e-17 | -4.035e-01 | 4.035e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 5 - C.c: 7 | 1.525e+01 | -1.525e+01 | 2.134e+01 | 2.134e+01 | -2.020e-18 | 2.020e-18 | -2.625e-01 | 2.625e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 5 - C.c: 8 | 1.287e+00 | -1.287e+00 | 2.134e+01 | 2.134e+01 | 1.656e-17 | -1.656e-17 | -5.898e-01 | 5.898e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 6 - C.c: 1 | 7.972e+00 | -7.972e+00 | 2.195e+01 | 2.195e+01 | -5.997e-16 | 5.997e-16 | 3.324e+01 | -3.324e+01 | 0.000e+00 | -4.585e-16 | 2.324e-11 | 0.000e+00 |
| El: | 6 - C.c: 2 | 3.183e+00 | -3.183e+00 | 2.195e+01 | 2.195e+01 | -6.031e-16 | 6.031e-16 | 3.379e+01 | -3.379e+01 | 0.000e+00 | -7.375e-17 | 2.376e-11 | 0.000e+00 |
| El: | 6 - C.c: 3 | 2.217e+00 | -2.217e+00 | 1.688e+01 | 1.688e+01 | -4.415e-16 | 4.415e-16 | 2.475e+01 | -2.475e+01 | 0.000e+00 | -4.314e-17 | 1.741e-11 | 0.000e+00 |
| El: | 6 - C.c: 4 | 1.010e+00 | -1.010e+00 | 1.688e+01 | 1.688e+01 | -3.250e-16 | 3.250e-16 | 1.827e+01 | -1.827e+01 | 0.000e+00 | 2.750e-17 | 1.288e-11 | 0.000e+00 |
| El: | 6 - C.c: 5 | 7.089e-01 | -7.089e-01 | 1.688e+01 | 1.688e+01 | -2.959e-16 | 2.959e-16 | 1.665e+01 | -1.665e+01 | 0.000e+00 | 4.516e-17 | 1.175e-11 | 0.000e+00 |
| El: | 6 - C.c: 7 | 7.811e+00 | -7.811e+00 | 2.195e+01 | 2.195e+01 | -6.070e-16 | 6.070e-16 | 3.376e+01 | -3.376e+01 | 0.000e+00 | -3.378e-16 | 2.354e-11 | 0.000e+00 |
| El: | 6 - C.c: 8 | 3.344e+00 | -3.344e+00 | 2.195e+01 | 2.195e+01 | -5.958e-16 | 5.958e-16 | 3.327e+01 | -3.327e+01 | 0.000e+00 | -1.945e-16 | 2.346e-11 | 0.000e+00 |
| El: | 7 - C.c: 1 | 1.137e+00 | -1.137e+00 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | 2.568e+00 | -2.568e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 7 - C.c: 2 | -1.014e+00 | 1.014e+00 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | 2.688e+00 | -2.688e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 7 - C.c: 3 | -8.338e-01 | 8.338e-01 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | 1.968e+00 | -1.968e+00 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 7 - C.c: 4 | -1.115e+00 | 1.115e+00 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | 1.447e+00 | -1.447e+00 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 7 - C.c: 5 | -1.185e+00 | 1.185e+00 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | 1.317e+00 | -1.317e+00 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 7 - C.c: 7 | 1.037e+00 | -1.037e+00 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | 2.621e+00 | -2.621e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 7 - C.c: 8 | -9.141e-01 | 9.141e-01 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | 2.636e+00 | -2.636e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 8 - C.c: 1 | -3.644e+00 | 3.644e+00 | 2.622e+01 | 2.622e+01 | 4.421e-16 | -4.421e-16 | -3.159e+01 | 3.159e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 8 - C.c: 2 | -6.259e-01 | 6.259e-01 | 2.622e+01 | 2.622e+01 | 4.347e-16 | -4.347e-16 | -3.071e+01 | 3.071e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 8 - C.c: 3 | -4.949e-01 | 4.949e-01 | 2.017e+01 | 2.017e+01 | 3.182e-16 | -3.182e-16 | -2.247e+01 | 2.247e+01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 8 - C.c: 4 | -5.650e-01 | 5.650e-01 | 2.017e+01 | 2.017e+01 | 2.342e-16 | -2.342e-16 | -1.648e+01 | 1.648e+01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 8 - C.c: 5 | -5.825e-01 | 5.825e-01 | 2.017e+01 | 2.017e+01 | 2.132e-16 | -2.132e-16 | -1.499e+01 | 1.499e+01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 8 - C.c: 7 | -3.678e+00 | 3.678e+00 | 2.622e+01 | 2.622e+01 | 4.510e-16 | -4.510e-16 | -3.211e+01 | 3.211e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 8 - C.c: 8 | -5.915e-01 | 5.915e-01 | 2.622e+01 | 2.622e+01 | 4.258e-16 | -4.258e-16 | -3.019e+01 | 3.019e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 9 - C.c: 1 | 1.198e+03 | -1.198e+03 | 2.134e+01 | 2.134e+01 | -3.800e-17 | 3.800e-17 | 5.160e-01 | -5.160e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 9 - C.c: 2 | -8.480e-01 | 8.480e-01 | 2.134e+01 | 2.134e+01 | -2.092e-17 | 2.092e-17 | 4.495e-01 | -4.495e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 9 - C.c: 3 | -1.905e+00 | 1.905e+00 | 1.642e+01 | 1.642e+01 | -1.436e-17 | 1.436e-17 | 3.155e-01 | -3.155e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 9 - C.c: 4 | -8.418e+00 | 8.418e+00 | 1.642e+01 | 1.642e+01 | -5.359e-18 | 5.359e-18 | 1.580e-01 | -1.580e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 9 - C.c: 5 | -1.005e+01 | 1.005e+01 | 1.642e+01 | 1.642e+01 | -3.108e-18 | 3.108e-18 | 1.187e-01 | -1.187e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 9 - C.c: 7 | 1.197e+03 | -1.197e+03 | 2.134e+01 | 2.134e+01 | -3.690e-17 | 3.690e-17 | 6.005e-01 | -6.005e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 9 - C.c: 8 | -1.564e-01 | 1.564e-01 | 2.134e+01 | 2.134e+01 | -2.202e-17 | 2.202e-17 | 3.650e-01 | -3.650e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 10 - C.c: 1 | -1.221e+02 | 1.221e+02 | 2.195e+01 | 2.195e+01 | 1.965e-17 | -1.965e-17 | -1.528e+00 | 1.528e+00 | 0.000e+00 | -4.585e-16 | 3.498e-11 | 0.000e+00 |
| El: | 10 - C.c: 2 | -9.491e+00 | 9.491e+00 | 2.195e+01 | 2.195e+01 | 2.604e-17 | -2.604e-17 | -1.531e+00 | 1.531e+00 | 0.000e+00 | -7.374e-17 | 3.569e-11 | 0.000e+00 |
| El: | 10 - C.c: 3 | -8.374e+00 | 8.374e+00 | 1.688e+01 | 1.688e+01 | 1.946e-17 | -1.946e-17 | -1.133e+00 | 1.133e+00 | 0.000e+00 | -4.314e-17 | 2.615e-11 | 0.000e+00 |
| El: | 10 - C.c: 4 | -1.395e+01 | 1.395e+01 | 1.688e+01 | 1.688e+01 | 1.650e-17 | -1.650e-17 | -9.011e-01 | 9.011e-01 | 0.000e+00 | 2.750e-17 | 1.933e-11 | 0.000e+00 |
| El: | 10 - C.c: 5 | -1.535e+01 | 1.535e+01 | 1.688e+01 | 1.688e+01 | 1.576e-17 | -1.576e-17 | -8.431e-01 | 8.431e-01 | 0.000e+00 | 4.516e-17 | 1.763e-11 | 0.000e+00 |
| El: | 10 - C.c: 7 | -1.228e+02 | 1.228e+02 | 2.195e+01 | 2.195e+01 | 1.946e-17 | -1.946e-17 | -1.405e+00 | 1.405e+00 | 0.000e+00 | -3.378e-16 | 3.548e-11 | 0.000e+00 |
| El: | 10 - C.c: 8 | -8.815e+00 | 8.815e+00 | 2.195e+01 | 2.195e+01 | 2.624e-17 | -2.624e-17 | -1.653e+00 | 1.653e+00 | 0.000e+00 | -1.945e-16 | 3.520e-11 | 0.000e+00 |
| El: | 11 - C.c: 1 | -1.384e+02 | 1.384e+02 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -1.155e-01 | 1.155e-01 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 11 - C.c: 2 | -1.034e+01 | 1.034e+01 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -3.124e-02 | 3.124e-02 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 11 - C.c: 3 | -8.954e+00 | 8.954e+00 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | -1.653e-02 | 1.653e-02 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 11 - C.c: 4 | -1.416e+01 | 1.416e+01 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | 2.251e-02 | -2.251e-02 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 11 - C.c: 5 | -1.546e+01 | 1.546e+01 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | 3.227e-02 | -3.227e-02 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 11 - C.c: 7 | -1.390e+02 | 1.390e+02 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -1.182e-01 | 1.182e-01 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 11 - C.c: 8 | -9.698e+00 | 9.698e+00 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -2.849e-02 | 2.849e-02 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 12 - C.c: 1 | -1.635e+02 | 1.635e+02 | 2.622e+01 | 2.622e+01 | -1.308e-17 | 1.308e-17 | 4.985e-01 | -4.985e-01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 12 - C.c: 2 | -1.192e+01 | 1.192e+01 | 2.622e+01 | 2.622e+01 | -1.761e-17 | 1.761e-17 | 1.174e+00 | -1.174e+00 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 12 - C.c: 3 | -1.015e+01 | 1.015e+01 | 2.017e+01 | 2.017e+01 | -1.299e-17 | 1.299e-17 | 8.761e-01 | -8.761e-01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 12 - C.c: 4 | -1.523e+01 | 1.523e+01 | 2.017e+01 | 2.017e+01 | -1.009e-17 | 1.009e-17 | 7.368e-01 | -7.368e-01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 12 - C.c: 5 | -1.651e+01 | 1.651e+01 | 2.017e+01 | 2.017e+01 | -9.362e-18 | 9.362e-18 | 7.020e-01 | -7.020e-01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 12 - C.c: 7 | -1.641e+02 | 1.641e+02 | 2.622e+01 | 2.622e+01 | -9.110e-18 | 9.110e-18 | 3.301e-01 | -3.301e-01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 12 - C.c: 8 | -1.128e+01 | 1.128e+01 | 2.622e+01 | 2.622e+01 | -2.158e-17 | 2.158e-17 | 1.342e+00 | -1.342e+00 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 13 - C.c: 1 | 1.962e+01 | -1.962e+01 | 2.134e+01 | 2.134e+01 | -7.421e-17 | 7.421e-17 | 1.412e+00 | -1.412e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 13 - C.c: 2 | 5.033e-01 | -5.033e-01 | 2.134e+01 | 2.134e+01 | -5.493e-17 | 5.493e-17 | 1.291e+00 | -1.291e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 13 - C.c: 3 | 3.038e-01 | -3.038e-01 | 1.642e+01 | 1.642e+01 | -3.945e-17 | 3.945e-17 | 9.362e-01 | -9.362e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 13 - C.c: 4 | -1.298e-01 | 1.298e-01 | 1.642e+01 | 1.642e+01 | -2.485e-17 | 2.485e-17 | 6.404e-01 | -6.404e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 13 - C.c: 5 | -2.381e-01 | 2.381e-01 | 1.642e+01 | 1.642e+01 | -2.120e-17 | 2.120e-17 | 5.664e-01 | -5.664e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 13 - C.c: 7 | 1.956e+01 | -1.956e+01 | 2.134e+01 | 2.134e+01 | -6.722e-17 | 6.722e-17 | 1.351e+00 | -1.351e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 13 - C.c: 8 | 5.594e-01 | -5.594e-01 | 2.134e+01 | 2.134e+01 | -6.193e-17 | 6.193e-17 | 1.352e+00 | -1.352e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| El: | 14 - C.c: 1 | 1.573e+01 | -1.573e+01 | 2.195e+01 | 2.195e+01 | 5.490e-16 | -5.490e-16 | -3.124e+01 | 3.124e+01 | 0.000e+00 | -4.585e-16 | 2.174e-11 | 0.000e+00 |
| El: | 14 - C.c: 2 | 2.607e+00 | -2.607e+00 | 2.195e+01 | 2.195e+01 | 5.679e-16 | -5.679e-16 | -3.195e+01 | 3.195e+01 | 0.000e+00 | -7.373e-17 | 2.216e-11 | 0.000e+00 |
| El: | 14 - C.c: 3 | 1.740e+00 | -1.740e+00 | 1.688e+01 | 1.688e+01 | 4.163e-16 | -4.163e-16 | -2.341e+01 | 2.341e+01 | 0.000e+00 | -4.313e-17 | 1.623e-11 | 0.000e+00 |
| El: | 14 - C.c: 4 | 3.609e-01 | -3.609e-01 | 1.688e+01 | 1.688e+01 | 3.095e-16 | -3.095e-16 | -1.735e+01 | 1.735e+01 | 0.000e+00 | 2.751e-17 | 1.197e-11 | 0.000e+00 |
| El: | 14 - C.c: 5 | 1.600e-02 | -1.600e-02 | 1.688e+01 | 1.688e+01 | 2.828e-16 | -2.828e-16 | -1.583e+01 | 1.583e+01 | 0.000e+00 | 4.517e-17 | 1.090e-11 | 0.000e+00 |
| El: | 14 - C.c: 7 | 1.558e+01 | -1.558e+01 | 2.195e+01 | 2.195e+01 | 5.597e-16 | -5.597e-16 | -3.173e+01 | 3.173e+01 | 0.000e+00 | -3.378e-16 | 2.206e-11 | 0.000e+00 |
| El: | 14 - C.c: 8 | 2.756e+00 | -2.756e+00 | 2.195e+01 | 2.195e+01 | 5.572e-16 | -5.572e-16 | -3.146e+01 | 3.146e+01 | 0.000e+00 | -1.945e-16 | 2.185e-11 | 0.000e+00 |
| El: | 15 - C.c: 1 | 5.470e+00 | -5.470e+00 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -2.397e+00 | 2.397e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 15 - C.c: 2 | 3.850e+00 | -3.850e+00 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -2.347e+00 | 2.347e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 15 - C.c: 3 | 2.655e+00 | -2.655e+00 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | -1.708e+00 | 1.708e+00 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 15 - C.c: 4 | 1.058e+00 | -1.058e+00 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | -1.199e+00 | 1.199e+00 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 15 - C.c: 5 | 6.593e-01 | -6.593e-01 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | -1.072e+00 | 1.072e+00 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 15 - C.c: 7 | 5.328e+00 | -5.328e+00 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -2.431e+00 | 2.431e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 15 - C.c: 8 | 3.992e+00 | -3.992e+00 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -2.314e+00 | 2.314e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 16 - C.c: 1 | -3.185e+00 | 3.185e+00 | 2.622e+01 | 2.622e+01 | -4.025e-16 | 4.025e-16 | 2.795e+01 | -2.795e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 16 - C.c: 2 | 1.532e+00 | -1.532e+00 | 2.622e+01 | 2.622e+01 | -4.111e-16 | 4.111e-16 | 2.891e+01 | -2.891e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 16 - C.c: 3 | 1.060e+00 | -1.060e+00 | 2.017e+01 | 2.017e+01 | -3.010e-16 | 3.010e-16 | 2.118e+01 | -2.118e+01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 16 - C.c: 4 | 4.405e-01 | -4.405e-01 | 2.017e+01 | 2.017e+01 | -2.219e-16 | 2.219e-16 | 1.567e+01 | -1.567e+01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 16 - C.c: 5 | 2.857e-01 | -2.857e-01 | 2.017e+01 | 2.017e+01 | -2.022e-16 | 2.022e-16 | 1.429e+01 | -1.429e+01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 16 - C.c: 7 | -3.233e+00 | 3.233e+00 | 2.622e+01 | 2.622e+01 | -4.083e-16 | 4.083e-16 | 2.847e+01 | -2.847e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 16 - C.c: 8 | 1.580e+00 | -1.580e+00 | 2.622e+01 | 2.622e+01 | -4.053e-16 | 4.053e-16 | 2.839e+01 | -2.839e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 17 - C.c: 1 | 1.013e+03 | -1.013e+03 | 2.134e+01 | 2.134e+01 | -1.412e-17 | 1.412e-17 | -7.479e-02 | 7.479e-02 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 17 - C.c: 2 | -2.228e+01 | 2.228e+01 | 2.134e+01 | 2.134e+01 | 2.765e-18 | -2.765e-18 | -1.367e-01 | 1.367e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 17 - C.c: 3 | -1.809e+01 | 1.809e+01 | 1.642e+01 | 1.642e+01 | 2.964e-18 | -2.964e-18 | -1.133e-01 | 1.133e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 17 - C.c: 4 | -2.305e+01 | 2.305e+01 | 1.642e+01 | 1.642e+01 | 7.318e-18 | -7.318e-18 | -1.557e-01 | 1.557e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 17 - C.c: 5 | -2.429e+01 | 2.429e+01 | 1.642e+01 | 1.642e+01 | 8.407e-18 | -8.407e-18 | -1.663e-01 | 1.663e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 17 - C.c: 7 | 1.011e+03 | -1.011e+03 | 2.134e+01 | 2.134e+01 | -9.814e-18 | 9.814e-18 | -6.971e-02 | 6.971e-02 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 17 - C.c: 8 | -2.041e+01 | 2.041e+01 | 2.134e+01 | 2.134e+01 | -1.544e-18 | 1.544e-18 | -1.418e-01 | 1.418e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 18 - C.c: 1 | 3.783e+02 | -3.783e+02 | 2.195e+01 | 2.195e+01 | 3.927e-16 | -3.927e-16 | -2.247e+01 | 2.247e+01 | 0.000e+00 | -4.586e-16 | 3.114e-12 | 0.000e+00 |
| El: | 18 - C.c: 2 | 4.505e+01 | -4.505e+01 | 2.195e+01 | 2.195e+01 | 4.094e-16 | -4.094e-16 | -2.305e+01 | 2.305e+01 | 0.000e+00 | -7.371e-17 | 3.110e-12 | 0.000e+00 |
| El: | 18 - C.c: 3 | 3.026e+01 | -3.026e+01 | 1.688e+01 | 1.688e+01 | 3.000e-16 | -3.000e-16 | -1.688e+01 | 1.688e+01 | 0.000e+00 | -4.312e-17 | 2.270e-12 | 0.000e+00 |
| El: | 18 - C.c: 4 | 7.390e+00 | -7.390e+00 | 1.688e+01 | 1.688e+01 | 2.226e-16 | -2.226e-16 | -1.247e+01 | 1.247e+01 | 0.000e+00 | 2.752e-17 | 1.636e-12 | 0.000e+00 |
| El: | 18 - C.c: 5 | 1.673e+00 | -1.673e+00 | 1.688e+01 | 1.688e+01 | 2.032e-16 | -2.032e-16 | -1.137e+01 | 1.137e+01 | 0.000e+00 | 4.518e-17 | 1.477e-12 | 0.000e+00 |
| El: | 18 - C.c: 7 | 3.751e+02 | -3.751e+02 | 2.195e+01 | 2.195e+01 | 4.027e-16 | -4.027e-16 | -2.292e+01 | 2.292e+01 | 0.000e+00 | -3.379e-16 | 3.110e-12 | 0.000e+00 |
| El: | 18 - C.c: 8 | 4.820e+01 | -4.820e+01 | 2.195e+01 | 2.195e+01 | 3.994e-16 | -3.994e-16 | -2.260e+01 | 2.260e+01 | 0.000e+00 | -1.945e-16 | 3.113e-12 | 0.000e+00 |
| El: | 19 - C.c: 1 | 9.757e+01 | -9.757e+01 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -1.960e+00 | 1.960e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 19 - C.c: 2 | 1.327e+02 | -1.327e+02 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -1.941e+00 | 1.941e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 19 - C.c: 3 | 9.504e+01 | -9.504e+01 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | -1.413e+00 | 1.413e+00 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 19 - C.c: 4 | 5.861e+01 | -5.861e+01 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | -1.001e+00 | 1.001e+00 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 19 - C.c: 5 | 4.951e+01 | -4.951e+01 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | -8.977e-01 | 8.977e-01 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 19 - C.c: 7 | 9.514e+01 | -9.514e+01 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -1.998e+00 | 1.998e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 19 - C.c: 8 | 1.351e+02 | -1.351e+02 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -1.902e+00 | 1.902e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 20 - C.c: 1 | -3.666e+02 | 3.666e+02 | 2.622e+01 | 2.622e+01 | -3.035e-16 | 3.035e-16 | 2.097e+01 | -2.097e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 20 - C.c: 2 | 7.577e+01 | -7.577e+01 | 2.622e+01 | 2.622e+01 | -3.071e-16 | 3.071e-16 | 2.158e+01 | -2.158e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 20 - C.c: 3 | 5.453e+01 | -5.453e+01 | 2.017e+01 | 2.017e+01 | -2.249e-16 | 2.249e-16 | 1.581e+01 | -1.581e+01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 20 - C.c: 4 | 3.501e+01 | -3.501e+01 | 2.017e+01 | 2.017e+01 | -1.658e-16 | 1.658e-16 | 1.171e+01 | -1.171e+01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 20 - C.c: 5 | 3.013e+01 | -3.013e+01 | 2.017e+01 | 2.017e+01 | -1.510e-16 | 1.510e-16 | 1.069e+01 | -1.069e+01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 20 - C.c: 7 | -3.673e+02 | 3.673e+02 | 2.622e+01 | 2.622e+01 | -3.079e-16 | 3.079e-16 | 2.139e+01 | -2.139e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 20 - C.c: 8 | 7.647e+01 | -7.647e+01 | 2.622e+01 | 2.622e+01 | -3.027e-16 | 3.027e-16 | 2.116e+01 | -2.116e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 21 - C.c: 1 | 8.517e+02 | -8.517e+02 | 2.134e+01 | 2.134e+01 | -7.508e-17 | 7.508e-17 | 1.434e+00 | -1.434e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 21 - C.c: 2 | 1.877e+01 | -1.877e+01 | 2.134e+01 | 2.134e+01 | -6.336e-17 | 6.336e-17 | 1.499e+00 | -1.499e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 21 - C.c: 3 | 1.309e+01 | -1.309e+01 | 1.642e+01 | 1.642e+01 | -4.627e-17 | 4.627e-17 | 1.105e+00 | -1.105e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 21 - C.c: 4 | 6.078e+00 | -6.078e+00 | 1.642e+01 | 1.642e+01 | -3.346e-17 | 3.346e-17 | 8.534e-01 | -8.534e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 21 - C.c: 5 | 4.326e+00 | -4.326e+00 | 1.642e+01 | 1.642e+01 | -3.026e-17 | 3.026e-17 | 7.905e-01 | -7.905e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 21 - C.c: 7 | 8.517e+02 | -8.517e+02 | 2.134e+01 | 2.134e+01 | -7.365e-17 | 7.365e-17 | 1.510e+00 | -1.510e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 21 - C.c: 8 | 1.883e+01 | -1.883e+01 | 2.134e+01 | 2.134e+01 | -6.478e-17 | 6.478e-17 | 1.423e+00 | -1.423e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 22 - C.c: 1 | -2.065e+01 | 2.065e+01 | 2.195e+01 | 2.195e+01 | 3.815e-17 | -3.815e-17 | -2.566e+00 | 2.566e+00 | 0.000e+00 | -4.585e-16 | 5.527e-12 | 0.000e+00 |
| El: | 22 - C.c: 2 | 6.118e+01 | -6.118e+01 | 2.195e+01 | 2.195e+01 | 4.045e-17 | -4.045e-17 | -2.339e+00 | 2.339e+00 | 0.000e+00 | -7.372e-17 | 5.460e-12 | 0.000e+00 |
| El: | 22 - C.c: 3 | 4.262e+01 | -4.262e+01 | 1.688e+01 | 1.688e+01 | 2.961e-17 | -2.961e-17 | -1.702e+00 | 1.702e+00 | 0.000e+00 | -4.312e-17 | 4.001e-12 | 0.000e+00 |
| El: | 22 - C.c: 4 | 1.955e+01 | -1.955e+01 | 1.688e+01 | 1.688e+01 | 2.177e-17 | -2.177e-17 | -1.197e+00 | 1.197e+00 | 0.000e+00 | 2.751e-17 | 2.966e-12 | 0.000e+00 |
| El: | 22 - C.c: 5 | 1.378e+01 | -1.378e+01 | 1.688e+01 | 1.688e+01 | 1.981e-17 | -1.981e-17 | -1.071e+00 | 1.071e+00 | 0.000e+00 | 4.517e-17 | 2.707e-12 | 0.000e+00 |
| El: | 22 - C.c: 7 | -2.250e+01 | 2.250e+01 | 2.195e+01 | 2.195e+01 | 3.586e-17 | -3.586e-17 | -2.326e+00 | 2.326e+00 | 0.000e+00 | -3.378e-16 | 5.442e-12 | 0.000e+00 |
| El: | 22 - C.c: 8 | 6.302e+01 | -6.302e+01 | 2.195e+01 | 2.195e+01 | 4.274e-17 | -4.274e-17 | -2.579e+00 | 2.579e+00 | 0.000e+00 | -1.945e-16 | 5.546e-12 | 0.000e+00 |
| El: | 23 - C.c: 1 | -2.179e+01 | 2.179e+01 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -7.974e-02 | 7.974e-02 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 23 - C.c: 2 | 6.241e+01 | -6.241e+01 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -1.058e-01 | 1.058e-01 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 23 - C.c: 3 | 4.358e+01 | -4.358e+01 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | -7.889e-02 | 7.889e-02 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 23 - C.c: 4 | 2.056e+01 | -2.056e+01 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | -6.595e-02 | 6.595e-02 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 23 - C.c: 5 | 1.481e+01 | -1.481e+01 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | -6.272e-02 | 6.272e-02 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 23 - C.c: 7 | -2.354e+01 | 2.354e+01 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -1.170e-01 | 1.170e-01 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 23 - C.c: 8 | 6.416e+01 | -6.416e+01 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -6.851e-02 | 6.851e-02 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 24 - C.c: 1 | -2.470e+01 | 2.470e+01 | 2.622e+01 | 2.622e+01 | -2.616e-17 | 2.616e-17 | 1.420e+00 | -1.420e+00 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 24 - C.c: 2 | 6.436e+01 | -6.436e+01 | 2.622e+01 | 2.622e+01 | -1.826e-17 | 1.826e-17 | 1.219e+00 | -1.219e+00 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 24 - C.c: 3 | 4.502e+01 | -4.502e+01 | 2.017e+01 | 2.017e+01 | -1.307e-17 | 1.307e-17 | 8.817e-01 | -8.817e-01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 24 - C.c: 4 | 2.168e+01 | -2.168e+01 | 2.017e+01 | 2.017e+01 | -8.027e-18 | 8.027e-18 | 5.913e-01 | -5.913e-01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 24 - C.c: 5 | 1.584e+01 | -1.584e+01 | 2.017e+01 | 2.017e+01 | -6.765e-18 | 6.765e-18 | 5.187e-01 | -5.187e-01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 24 - C.c: 7 | -2.641e+01 | 2.641e+01 | 2.622e+01 | 2.622e+01 | -2.123e-17 | 2.123e-17 | 1.184e+00 | -1.184e+00 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| El: | 24 - C.c: 8 | 6.606e+01 | -6.606e+01 | 2.622e+01 | 2.622e+01 | -2.319e-17 | 2.319e-17 | 1.455e+00 | -1.455e+00 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 25 - C.c: 1 | 2.651e+01 | -2.651e+01 | 2.134e+01 | 2.134e+01 | -8.258e-17 | 8.258e-17 | 1.619e+00 | -1.619e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 25 - C.c: 2 | 3.143e+00 | -3.143e+00 | 2.134e+01 | 2.134e+01 | -8.448e-17 | 8.448e-17 | 2.022e+00 | -2.022e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 25 - C.c: 3 | 2.207e+00 | -2.207e+00 | 1.642e+01 | 1.642e+01 | -6.280e-17 | 6.280e-17 | 1.514e+00 | -1.514e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 25 - C.c: 4 | 1.110e+00 | -1.110e+00 | 1.642e+01 | 1.642e+01 | -5.142e-17 | 5.142e-17 | 1.298e+00 | -1.298e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 25 - C.c: 5 | 8.354e-01 | -8.354e-01 | 1.642e+01 | 1.642e+01 | -4.858e-17 | 4.858e-17 | 1.244e+00 | -1.244e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 25 - C.c: 7 | 2.651e+01 | -2.651e+01 | 2.134e+01 | 2.134e+01 | -8.972e-17 | 8.972e-17 | 1.907e+00 | -1.907e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 25 - C.c: 8 | 3.144e+00 | -3.144e+00 | 2.134e+01 | 2.134e+01 | -7.734e-17 | 7.734e-17 | 1.734e+00 | -1.734e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 26 - C.c: 1 | 2.168e+01 | -2.168e+01 | 2.195e+01 | 2.195e+01 | 4.990e-17 | -4.990e-17 | -3.226e+00 | 3.226e+00 | 0.000e+00 | -4.585e-16 | 2.449e-12 | 0.000e+00 |
| El: | 26 - C.c: 2 | 6.177e+00 | -6.177e+00 | 2.195e+01 | 2.195e+01 | 5.414e-17 | -5.414e-17 | -3.107e+00 | 3.107e+00 | 0.000e+00 | -7.371e-17 | 2.445e-12 | 0.000e+00 |
| El: | 26 - C.c: 3 | 4.362e+00 | -4.362e+00 | 1.688e+01 | 1.688e+01 | 3.974e-17 | -3.974e-17 | -2.271e+00 | 2.271e+00 | 0.000e+00 | -4.312e-17 | 1.794e-12 | 0.000e+00 |
| El: | 26 - C.c: 4 | 2.339e+00 | -2.339e+00 | 1.688e+01 | 1.688e+01 | 2.983e-17 | -2.983e-17 | -1.649e+00 | 1.649e+00 | 0.000e+00 | 2.751e-17 | 1.343e-12 | 0.000e+00 |
| El: | 26 - C.c: 5 | 1.833e+00 | -1.833e+00 | 1.688e+01 | 1.688e+01 | 2.735e-17 | -2.735e-17 | -1.494e+00 | 1.494e+00 | 0.000e+00 | 4.517e-17 | 1.230e-12 | 0.000e+00 |
| El: | 26 - C.c: 7 | 2.167e+01 | -2.167e+01 | 2.195e+01 | 2.195e+01 | 4.941e-17 | -4.941e-17 | -3.086e+00 | 3.086e+00 | 0.000e+00 | -3.378e-16 | 2.446e-12 | 0.000e+00 |
| El: | 26 - C.c: 8 | 6.190e+00 | -6.190e+00 | 2.195e+01 | 2.195e+01 | 5.463e-17 | -5.463e-17 | -3.247e+00 | 3.247e+00 | 0.000e+00 | -1.945e-16 | 2.449e-12 | 0.000e+00 |
| El: | 27 - C.c: 1 | 1.244e+01 | -1.244e+01 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -1.558e-01 | 1.558e-01 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 27 - C.c: 2 | 7.265e+00 | -7.265e+00 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -2.057e-01 | 2.057e-01 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 27 - C.c: 3 | 5.157e+00 | -5.157e+00 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | -1.538e-01 | 1.538e-01 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 27 - C.c: 4 | 2.913e+00 | -2.913e+00 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | -1.307e-01 | 1.307e-01 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 27 - C.c: 5 | 2.352e+00 | -2.352e+00 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | -1.250e-01 | 1.250e-01 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 27 - C.c: 7 | 1.241e+01 | -1.241e+01 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -1.878e-01 | 1.878e-01 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 27 - C.c: 8 | 7.287e+00 | -7.287e+00 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -1.737e-01 | 1.737e-01 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 28 - C.c: 1 | 2.636e+00 | -2.636e+00 | 2.622e+01 | 2.622e+01 | -2.798e-17 | 2.798e-17 | 1.548e+00 | -1.548e+00 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 28 - C.c: 2 | 4.995e+00 | -4.995e+00 | 2.622e+01 | 2.622e+01 | -1.718e-17 | 1.718e-17 | 1.143e+00 | -1.143e+00 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 28 - C.c: 3 | 3.548e+00 | -3.548e+00 | 2.017e+01 | 2.017e+01 | -1.206e-17 | 1.206e-17 | 8.104e-01 | -8.104e-01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 28 - C.c: 4 | 2.019e+00 | -2.019e+00 | 2.017e+01 | 2.017e+01 | -6.061e-18 | 6.061e-18 | 4.527e-01 | -4.527e-01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 28 - C.c: 5 | 1.637e+00 | -1.637e+00 | 2.017e+01 | 2.017e+01 | -4.560e-18 | 4.560e-18 | 3.633e-01 | -3.633e-01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 28 - C.c: 7 | 2.611e+00 | -2.611e+00 | 2.622e+01 | 2.622e+01 | -2.152e-17 | 2.152e-17 | 1.205e+00 | -1.205e+00 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 28 - C.c: 8 | 5.020e+00 | -5.020e+00 | 2.622e+01 | 2.622e+01 | -2.364e-17 | 2.364e-17 | 1.487e+00 | -1.487e+00 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 29 - C.c: 1 | 1.249e+03 | -1.249e+03 | 2.134e+01 | 2.134e+01 | 1.926e-17 | -1.926e-17 | -9.008e-01 | 9.008e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 29 - C.c: 2 | -1.567e+01 | 1.567e+01 | 2.134e+01 | 2.134e+01 | 2.148e-17 | -2.148e-17 | -5.999e-01 | 5.999e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 29 - C.c: 3 | -1.305e+01 | 1.305e+01 | 1.642e+01 | 1.642e+01 | 1.586e-17 | -1.586e-17 | -4.325e-01 | 4.325e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 29 - C.c: 4 | -1.825e+01 | 1.825e+01 | 1.642e+01 | 1.642e+01 | 1.242e-17 | -1.242e-17 | -2.819e-01 | 2.819e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 29 - C.c: 5 | -1.954e+01 | 1.954e+01 | 1.642e+01 | 1.642e+01 | 1.156e-17 | -1.156e-17 | -2.442e-01 | 2.442e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 29 - C.c: 7 | 1.250e+03 | -1.250e+03 | 2.134e+01 | 2.134e+01 | 1.445e-17 | -1.445e-17 | -6.703e-01 | 6.703e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 29 - C.c: 8 | -1.687e+01 | 1.687e+01 | 2.134e+01 | 2.134e+01 | 2.628e-17 | -2.628e-17 | -8.305e-01 | 8.305e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 30 - C.c: 1 | 4.701e+02 | -4.701e+02 | 2.195e+01 | 2.195e+01 | -4.384e-16 | 4.384e-16 | 2.418e+01 | -2.418e+01 | 0.000e+00 | -4.586e-16 | 3.377e-12 | 0.000e+00 |
| El: | 30 - C.c: 2 | 7.044e+01 | -7.044e+01 | 2.195e+01 | 2.195e+01 | -4.318e-16 | 4.318e-16 | 2.417e+01 | -2.417e+01 | 0.000e+00 | -7.367e-17 | 3.396e-12 | 0.000e+00 |
| El: | 30 - C.c: 3 | 4.969e+01 | -4.969e+01 | 1.688e+01 | 1.688e+01 | -3.164e-16 | 3.164e-16 | 1.772e+01 | -1.772e+01 | 0.000e+00 | -4.309e-17 | 2.494e-12 | 0.000e+00 |
| El: | 30 - C.c: 4 | 2.634e+01 | -2.634e+01 | 1.688e+01 | 1.688e+01 | -2.345e-16 | 2.345e-16 | 1.319e+01 | -1.319e+01 | 0.000e+00 | 2.753e-17 | 1.876e-12 | 0.000e+00 |
| El: | 30 - C.c: 5 | 2.050e+01 | -2.050e+01 | 1.688e+01 | 1.688e+01 | -2.140e-16 | 2.140e-16 | 1.206e+01 | -1.206e+01 | 0.000e+00 | 4.519e-17 | 1.721e-12 | 0.000e+00 |
| El: | 30 - C.c: 7 | 4.730e+02 | -4.730e+02 | 2.195e+01 | 2.195e+01 | -4.336e-16 | 4.336e-16 | 2.402e+01 | -2.402e+01 | 0.000e+00 | -3.379e-16 | 3.392e-12 | 0.000e+00 |
| El: | 30 - C.c: 8 | 6.749e+01 | -6.749e+01 | 2.195e+01 | 2.195e+01 | -4.366e-16 | 4.366e-16 | 2.433e+01 | -2.433e+01 | 0.000e+00 | -1.944e-16 | 3.381e-12 | 0.000e+00 |
| El: | 31 - C.c: 1 | 1.176e+02 | -1.176e+02 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | 1.901e+00 | -1.901e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 31 - C.c: 2 | 1.660e+02 | -1.660e+02 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | 1.828e+00 | -1.828e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 31 - C.c: 3 | 1.206e+02 | -1.206e+02 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | 1.330e+00 | -1.330e+00 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 31 - C.c: 4 | 8.398e+01 | -8.398e+01 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | 9.334e-01 | -9.334e-01 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 31 - C.c: 5 | 7.481e+01 | -7.481e+01 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | 8.344e-01 | -8.344e-01 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 31 - C.c: 7 | 1.203e+02 | -1.203e+02 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | 1.881e+00 | -1.881e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 31 - C.c: 8 | 1.633e+02 | -1.633e+02 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | 1.848e+00 | -1.848e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 32 - C.c: 1 | -4.536e+02 | 4.536e+02 | 2.622e+01 | 2.622e+01 | 3.014e-16 | -3.014e-16 | -2.167e+01 | 2.167e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 32 - C.c: 2 | 8.969e+01 | -8.969e+01 | 2.622e+01 | 2.622e+01 | 3.098e-16 | -3.098e-16 | -2.191e+01 | 2.191e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 32 - C.c: 3 | 6.526e+01 | -6.526e+01 | 2.017e+01 | 2.017e+01 | 2.273e-16 | -2.273e-16 | -1.606e+01 | 1.606e+01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 32 - C.c: 4 | 4.581e+01 | -4.581e+01 | 2.017e+01 | 2.017e+01 | 1.696e-16 | -1.696e-16 | -1.193e+01 | 1.193e+01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 32 - C.c: 5 | 4.095e+01 | -4.095e+01 | 2.017e+01 | 2.017e+01 | 1.552e-16 | -1.552e-16 | -1.090e+01 | 1.090e+01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 32 - C.c: 7 | -4.526e+02 | 4.526e+02 | 2.622e+01 | 2.622e+01 | 3.037e-16 | -3.037e-16 | -2.172e+01 | 2.172e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 32 - C.c: 8 | 8.864e+01 | -8.864e+01 | 2.622e+01 | 2.622e+01 | 3.076e-16 | -3.076e-16 | -2.186e+01 | 2.186e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 33 - C.c: 1 | 2.213e+01 | -2.213e+01 | 2.134e+01 | 2.134e+01 | 5.740e-17 | -5.740e-17 | -1.845e+00 | 1.845e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 33 - C.c: 2 | 8.579e-01 | -8.579e-01 | 2.134e+01 | 2.134e+01 | 7.343e-17 | -7.343e-17 | -1.885e+00 | 1.885e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 33 - C.c: 3 | 5.765e-01 | -5.765e-01 | 1.642e+01 | 1.642e+01 | 5.438e-17 | -5.438e-17 | -1.386e+00 | 1.386e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 33 - C.c: 4 | 1.428e-01 | -1.428e-01 | 1.642e+01 | 1.642e+01 | 4.343e-17 | -4.343e-17 | -1.049e+00 | 1.049e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 33 - C.c: 5 | 3.443e-02 | -3.443e-02 | 1.642e+01 | 1.642e+01 | 4.069e-17 | -4.069e-17 | -9.651e-01 | 9.651e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 33 - C.c: 7 | 2.220e+01 | -2.220e+01 | 2.134e+01 | 2.134e+01 | 6.572e-17 | -6.572e-17 | -1.939e+00 | 1.939e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 33 - C.c: 8 | 7.939e-01 | -7.939e-01 | 2.134e+01 | 2.134e+01 | 6.511e-17 | -6.511e-17 | -1.791e+00 | 1.791e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 34 - C.c: 1 | 1.907e+01 | -1.907e+01 | 2.195e+01 | 2.195e+01 | -5.803e-16 | 5.803e-16 | 3.215e+01 | -3.215e+01 | 0.000e+00 | -4.585e-16 | 2.275e-11 | 0.000e+00 |
| El: | 34 - C.c: 2 | 3.776e+00 | -3.776e+00 | 2.195e+01 | 2.195e+01 | -5.742e-16 | 5.742e-16 | 3.216e+01 | -3.216e+01 | 0.000e+00 | -7.368e-17 | 2.273e-11 | 0.000e+00 |
| El: | 34 - C.c: 3 | 2.639e+00 | -2.639e+00 | 1.688e+01 | 1.688e+01 | -4.208e-16 | 4.208e-16 | 2.358e+01 | -2.358e+01 | 0.000e+00 | -4.310e-17 | 1.667e-11 | 0.000e+00 |
| El: | 34 - C.c: 4 | 1.258e+00 | -1.258e+00 | 1.688e+01 | 1.688e+01 | -3.120e-16 | 3.120e-16 | 1.754e+01 | -1.754e+01 | 0.000e+00 | 2.753e-17 | 1.242e-11 | 0.000e+00 |
| El: | 34 - C.c: 5 | 9.126e-01 | -9.126e-01 | 1.688e+01 | 1.688e+01 | -2.849e-16 | 2.849e-16 | 1.603e+01 | -1.603e+01 | 0.000e+00 | 4.518e-17 | 1.136e-11 | 0.000e+00 |
| El: | 34 - C.c: 7 | 1.926e+01 | -1.926e+01 | 2.195e+01 | 2.195e+01 | -5.746e-16 | 5.746e-16 | 3.194e+01 | -3.194e+01 | 0.000e+00 | -3.377e-16 | 2.262e-11 | 0.000e+00 |
| El: | 34 - C.c: 8 | 3.589e+00 | -3.589e+00 | 2.195e+01 | 2.195e+01 | -5.799e-16 | 5.799e-16 | 3.237e+01 | -3.237e+01 | 0.000e+00 | -1.944e-16 | 2.286e-11 | 0.000e+00 |
| El: | 35 - C.c: 1 | 7.238e+00 | -7.238e+00 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | 2.435e+00 | -2.435e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 35 - C.c: 2 | 5.193e+00 | -5.193e+00 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | 2.341e+00 | -2.341e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 35 - C.c: 3 | 3.686e+00 | -3.686e+00 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | 1.704e+00 | -1.704e+00 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 35 - C.c: 4 | 2.084e+00 | -2.084e+00 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | 1.200e+00 | -1.200e+00 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 35 - C.c: 5 | 1.684e+00 | -1.684e+00 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | 1.074e+00 | -1.074e+00 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| El: | 35 - C.c: 7 | 7.428e+00 | -7.428e+00 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | 2.420e+00 | -2.420e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 35 - C.c: 8 | 5.003e+00 | -5.003e+00 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | 2.357e+00 | -2.357e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 36 - C.c: 1 | -3.487e+00 | 3.487e+00 | 2.622e+01 | 2.622e+01 | 3.980e-16 | -3.980e-16 | -2.848e+01 | 2.848e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 36 - C.c: 2 | 2.034e+00 | -2.034e+00 | 2.622e+01 | 2.622e+01 | 4.058e-16 | -4.058e-16 | -2.868e+01 | 2.868e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 36 - C.c: 3 | 1.444e+00 | -1.444e+00 | 2.017e+01 | 2.017e+01 | 2.975e-16 | -2.975e-16 | -2.101e+01 | 2.101e+01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 36 - C.c: 4 | 8.206e-01 | -8.206e-01 | 2.017e+01 | 2.017e+01 | 2.209e-16 | -2.209e-16 | -1.555e+01 | 1.555e+01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 36 - C.c: 5 | 6.646e-01 | -6.646e-01 | 2.017e+01 | 2.017e+01 | 2.018e-16 | -2.018e-16 | -1.418e+01 | 1.418e+01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 36 - C.c: 7 | -3.415e+00 | 3.415e+00 | 2.622e+01 | 2.622e+01 | 3.959e-16 | -3.959e-16 | -2.822e+01 | 2.822e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 36 - C.c: 8 | 1.962e+00 | -1.962e+00 | 2.622e+01 | 2.622e+01 | 4.079e-16 | -4.079e-16 | -2.894e+01 | 2.894e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 37 - C.c: 1 | 1.198e+03 | -1.198e+03 | 2.134e+01 | 2.134e+01 | 2.020e-17 | -2.020e-17 | -9.242e-01 | 9.242e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 37 - C.c: 2 | 4.764e-01 | -4.764e-01 | 2.134e+01 | 2.134e+01 | 2.745e-17 | -2.745e-17 | -7.476e-01 | 7.476e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 37 - C.c: 3 | -8.346e-01 | 8.346e-01 | 1.642e+01 | 1.642e+01 | 2.037e-17 | -2.037e-17 | -5.439e-01 | 5.439e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 37 - C.c: 4 | -7.080e+00 | 7.080e+00 | 1.642e+01 | 1.642e+01 | 1.647e-17 | -1.647e-17 | -3.821e-01 | 3.821e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 37 - C.c: 5 | -8.641e+00 | 8.641e+00 | 1.642e+01 | 1.642e+01 | 1.549e-17 | -1.549e-17 | -3.416e-01 | 3.416e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 37 - C.c: 7 | 1.200e+03 | -1.200e+03 | 2.134e+01 | 2.134e+01 | 2.386e-17 | -2.386e-17 | -9.030e-01 | 9.030e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 37 - C.c: 8 | -6.354e-01 | 6.354e-01 | 2.134e+01 | 2.134e+01 | 2.380e-17 | -2.380e-17 | -7.688e-01 | 7.688e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 38 - C.c: 1 | -1.229e+02 | 1.229e+02 | 2.195e+01 | 2.195e+01 | -2.389e-17 | 2.389e-17 | 9.147e-01 | -9.147e-01 | 0.000e+00 | -4.584e-16 | 3.616e-11 | 0.000e+00 |
| El: | 38 - C.c: 2 | -9.984e+00 | 9.984e+00 | 2.195e+01 | 2.195e+01 | -2.245e-17 | 2.245e-17 | 1.190e+00 | -1.190e+00 | 0.000e+00 | -7.369e-17 | 3.619e-11 | 0.000e+00 |
| El: | 38 - C.c: 3 | -8.643e+00 | 8.643e+00 | 1.688e+01 | 1.688e+01 | -1.628e-17 | 1.628e-17 | 8.723e-01 | -8.723e-01 | 0.000e+00 | -4.310e-17 | 2.653e-11 | 0.000e+00 |
| El: | 38 - C.c: 4 | -1.365e+01 | 1.365e+01 | 1.688e+01 | 1.688e+01 | -1.114e-17 | 1.114e-17 | 6.497e-01 | -6.497e-01 | 0.000e+00 | 2.752e-17 | 1.976e-11 | 0.000e+00 |
| El: | 38 - C.c: 5 | -1.491e+01 | 1.491e+01 | 1.688e+01 | 1.688e+01 | -9.859e-18 | 9.859e-18 | 5.940e-01 | -5.940e-01 | 0.000e+00 | 4.518e-17 | 1.807e-11 | 0.000e+00 |
| El: | 38 - C.c: 7 | -1.213e+02 | 1.213e+02 | 2.195e+01 | 2.195e+01 | -2.425e-17 | 2.425e-17 | 1.046e+00 | -1.046e+00 | 0.000e+00 | -3.377e-16 | 3.596e-11 | 0.000e+00 |
| El: | 38 - C.c: 8 | -1.162e+01 | 1.162e+01 | 2.195e+01 | 2.195e+01 | -2.209e-17 | 2.209e-17 | 1.058e+00 | -1.058e+00 | 0.000e+00 | -1.944e-16 | 3.639e-11 | 0.000e+00 |
| El: | 39 - C.c: 1 | -1.388e+02 | 1.388e+02 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | 1.755e-01 | -1.755e-01 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 39 - C.c: 2 | -8.326e+00 | 8.326e+00 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | 9.585e-02 | -9.585e-02 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 39 - C.c: 3 | -7.394e+00 | 7.394e+00 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | 6.555e-02 | -6.555e-02 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 39 - C.c: 4 | -1.254e+01 | 1.254e+01 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | 2.304e-02 | -2.304e-02 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 39 - C.c: 5 | -1.383e+01 | 1.383e+01 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | 1.242e-02 | -1.242e-02 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 39 - C.c: 7 | -1.372e+02 | 1.372e+02 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | 1.768e-01 | -1.768e-01 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 39 - C.c: 8 | -9.939e+00 | 9.939e+00 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | 9.454e-02 | -9.454e-02 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 40 - C.c: 1 | -1.635e+02 | 1.635e+02 | 2.622e+01 | 2.622e+01 | -9.411e-18 | 9.411e-18 | 2.413e-01 | -2.413e-01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 40 - C.c: 2 | -7.397e+00 | 7.397e+00 | 2.622e+01 | 2.622e+01 | 9.679e-18 | -9.679e-18 | -7.484e-01 | 7.484e-01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 40 - C.c: 3 | -6.753e+00 | 6.753e+00 | 2.017e+01 | 2.017e+01 | 7.267e-18 | -7.267e-18 | -5.507e-01 | 5.507e-01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 40 - C.c: 4 | -1.228e+01 | 1.228e+01 | 2.017e+01 | 2.017e+01 | 6.342e-18 | -6.342e-18 | -4.205e-01 | 4.205e-01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 40 - C.c: 5 | -1.366e+01 | 1.366e+01 | 2.017e+01 | 2.017e+01 | 6.111e-18 | -6.111e-18 | -3.880e-01 | 3.880e-01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 40 - C.c: 7 | -1.619e+02 | 1.619e+02 | 2.622e+01 | 2.622e+01 | -5.980e-18 | 5.980e-18 | 1.112e-01 | -1.112e-01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 40 - C.c: 8 | -9.079e+00 | 9.079e+00 | 2.622e+01 | 2.622e+01 | 6.249e-18 | -6.249e-18 | -6.183e-01 | 6.183e-01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 41 - C.c: 1 | 1.535e+01 | -1.535e+01 | 2.134e+01 | 2.134e+01 | -2.733e-17 | 2.733e-17 | 2.521e-01 | -2.521e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 41 - C.c: 2 | 2.003e-01 | -2.003e-01 | 2.134e+01 | 2.134e+01 | -2.400e-17 | 2.400e-17 | 5.256e-01 | -5.256e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 41 - C.c: 3 | 1.067e-01 | -1.067e-01 | 1.642e+01 | 1.642e+01 | -1.793e-17 | 1.793e-17 | 4.038e-01 | -4.038e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 41 - C.c: 4 | -1.396e-01 | 1.396e-01 | 1.642e+01 | 1.642e+01 | -1.518e-17 | 1.518e-17 | 4.010e-01 | -4.010e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 41 - C.c: 5 | -2.012e-01 | 2.012e-01 | 1.642e+01 | 1.642e+01 | -1.449e-17 | 1.449e-17 | 4.003e-01 | -4.003e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 41 - C.c: 7 | 1.540e+01 | -1.540e+01 | 2.134e+01 | 2.134e+01 | -2.302e-17 | 2.302e-17 | 2.570e-01 | -2.570e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 41 - C.c: 8 | 1.488e-01 | -1.488e-01 | 2.134e+01 | 2.134e+01 | -2.831e-17 | 2.831e-17 | 5.207e-01 | -5.207e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 42 - C.c: 1 | 8.455e+00 | -8.455e+00 | 2.195e+01 | 2.195e+01 | 6.061e-16 | -6.061e-16 | -3.445e+01 | 3.445e+01 | 0.000e+00 | -4.585e-16 | 2.390e-11 | 0.000e+00 |
| El: | 42 - C.c: 2 | 1.041e+00 | -1.041e+00 | 2.195e+01 | 2.195e+01 | 6.088e-16 | -6.088e-16 | -3.424e+01 | 3.424e+01 | 0.000e+00 | -7.367e-17 | 2.404e-11 | 0.000e+00 |
| El: | 42 - C.c: 3 | 6.643e-01 | -6.643e-01 | 1.688e+01 | 1.688e+01 | 4.465e-16 | -4.465e-16 | -2.510e+01 | 2.510e+01 | 0.000e+00 | -4.309e-17 | 1.763e-11 | 0.000e+00 |
| El: | 42 - C.c: 4 | -4.501e-02 | 4.501e-02 | 1.688e+01 | 1.688e+01 | 3.331e-16 | -3.331e-16 | -1.867e+01 | 1.867e+01 | 0.000e+00 | 2.753e-17 | 1.313e-11 | 0.000e+00 |
| El: | 42 - C.c: 5 | -2.223e-01 | 2.223e-01 | 1.688e+01 | 1.688e+01 | 3.048e-16 | -3.048e-16 | -1.707e+01 | 1.707e+01 | 0.000e+00 | 4.519e-17 | 1.200e-11 | 0.000e+00 |
| El: | 42 - C.c: 7 | 8.599e+00 | -8.599e+00 | 2.195e+01 | 2.195e+01 | 6.042e-16 | -6.042e-16 | -3.423e+01 | 3.423e+01 | 0.000e+00 | -3.378e-16 | 2.379e-11 | 0.000e+00 |
| El: | 42 - C.c: 8 | 8.975e-01 | -8.975e-01 | 2.195e+01 | 2.195e+01 | 6.107e-16 | -6.107e-16 | -3.446e+01 | 3.446e+01 | 0.000e+00 | -1.944e-16 | 2.414e-11 | 0.000e+00 |
| El: | 43 - C.c: 1 | -4.115e-01 | 4.115e-01 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -2.559e+00 | 2.559e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 43 - C.c: 2 | 1.585e+00 | -1.585e+00 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -2.590e+00 | 2.590e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 43 - C.c: 3 | 1.067e+00 | -1.067e+00 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | -1.894e+00 | 1.894e+00 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 43 - C.c: 4 | 2.767e-01 | -2.767e-01 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | -1.380e+00 | 1.380e+00 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 43 - C.c: 5 | 7.900e-02 | -7.900e-02 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | -1.252e+00 | 1.252e+00 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 43 - C.c: 7 | -2.627e-01 | 2.627e-01 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -2.530e+00 | 2.530e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 43 - C.c: 8 | 1.436e+00 | -1.436e+00 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -2.620e+00 | 2.620e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 44 - C.c: 1 | -4.147e+00 | 4.147e+00 | 2.622e+01 | 2.622e+01 | -4.678e-16 | 4.678e-16 | 3.255e+01 | -3.255e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 44 - C.c: 2 | 6.116e-01 | -6.116e-01 | 2.622e+01 | 2.622e+01 | -4.401e-16 | 4.401e-16 | 3.096e+01 | -3.096e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 44 - C.c: 3 | 4.099e-01 | -4.099e-01 | 2.017e+01 | 2.017e+01 | -3.221e-16 | 3.221e-16 | 2.267e+01 | -2.267e+01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 44 - C.c: 4 | 9.482e-02 | -9.482e-02 | 2.017e+01 | 2.017e+01 | -2.368e-16 | 2.368e-16 | 1.672e+01 | -1.672e+01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 44 - C.c: 5 | 1.604e-02 | -1.604e-02 | 2.017e+01 | 2.017e+01 | -2.155e-16 | 2.155e-16 | 1.524e+01 | -1.524e+01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 44 - C.c: 7 | -4.086e+00 | 4.086e+00 | 2.622e+01 | 2.622e+01 | -4.635e-16 | 4.635e-16 | 3.236e+01 | -3.236e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 44 - C.c: 8 | 5.506e-01 | -5.506e-01 | 2.622e+01 | 2.622e+01 | -4.444e-16 | 4.444e-16 | 3.115e+01 | -3.115e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 45 - C.c: 1 | 6.710e+02 | -6.710e+02 | 2.134e+01 | 2.134e+01 | -1.727e-17 | 1.727e-17 | 3.078e-03 | -3.078e-03 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 45 - C.c: 2 | -9.797e+00 | 9.797e+00 | 2.134e+01 | 2.134e+01 | -2.579e-17 | 2.579e-17 | 5.699e-01 | -5.699e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 45 - C.c: 3 | -8.108e+00 | 8.108e+00 | 1.642e+01 | 1.642e+01 | -1.968e-17 | 1.968e-17 | 4.471e-01 | -4.471e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 45 - C.c: 4 | -1.108e+01 | 1.108e+01 | 1.642e+01 | 1.642e+01 | -1.886e-17 | 1.886e-17 | 4.921e-01 | -4.921e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 45 - C.c: 5 | -1.182e+01 | 1.182e+01 | 1.642e+01 | 1.642e+01 | -1.866e-17 | 1.866e-17 | 5.034e-01 | -5.034e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 45 - C.c: 7 | 6.720e+02 | -6.720e+02 | 2.134e+01 | 2.134e+01 | -2.347e-17 | 2.347e-17 | 2.683e-01 | -2.683e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 45 - C.c: 8 | -1.078e+01 | 1.078e+01 | 2.134e+01 | 2.134e+01 | -1.959e-17 | 1.959e-17 | 3.047e-01 | -3.047e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 46 - C.c: 1 | 2.094e+02 | -2.094e+02 | 2.195e+01 | 2.195e+01 | 7.033e-16 | -7.033e-16 | -3.990e+01 | 3.990e+01 | 0.000e+00 | -4.588e-16 | 1.358e-12 | 0.000e+00 |
| El: | 46 - C.c: 2 | 2.251e+01 | -2.251e+01 | 2.195e+01 | 2.195e+01 | 7.056e-16 | -7.056e-16 | -3.968e+01 | 3.968e+01 | 0.000e+00 | -7.365e-17 | 1.591e-12 | 0.000e+00 |
| El: | 46 - C.c: 3 | 1.542e+01 | -1.542e+01 | 1.688e+01 | 1.688e+01 | 5.175e-16 | -5.175e-16 | -2.909e+01 | 2.909e+01 | 0.000e+00 | -4.307e-17 | 1.170e-12 | 0.000e+00 |
| El: | 46 - C.c: 4 | 5.565e+00 | -5.565e+00 | 1.688e+01 | 1.688e+01 | 3.857e-16 | -3.857e-16 | -2.163e+01 | 2.163e+01 | 0.000e+00 | 2.754e-17 | 8.910e-13 | 0.000e+00 |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| El: | 46 - C.c: 5 | 3.101e+00 | -3.101e+00 | 1.688e+01 | 1.688e+01 | 3.528e-16 | -3.528e-16 | -1.976e+01 | 1.976e+01 | 0.000e+00 | 4.520e-17 | 8.212e-13 | 0.000e+00 |
| El: | 46 - C.c: 7 | 2.111e+02 | -2.111e+02 | 2.195e+01 | 2.195e+01 | 7.008e-16 | -7.008e-16 | -3.965e+01 | 3.965e+01 | 0.000e+00 | -3.380e-16 | 1.376e-12 | 0.000e+00 |
| El: | 46 - C.c: 8 | 2.081e+01 | -2.081e+01 | 2.195e+01 | 2.195e+01 | 7.081e-16 | -7.081e-16 | -3.993e+01 | 3.993e+01 | 0.000e+00 | -1.944e-16 | 1.573e-12 | 0.000e+00 |
| El: | 47 - C.c: 1 | -2.717e+01 | 2.717e+01 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -3.451e+00 | 3.451e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 47 - C.c: 2 | 6.035e+01 | -6.035e+01 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -3.399e+00 | 3.399e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 47 - C.c: 3 | 4.366e+01 | -4.366e+01 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | -2.483e+00 | 2.483e+00 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 47 - C.c: 4 | 2.930e+01 | -2.930e+01 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | -1.794e+00 | 1.794e+00 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 47 - C.c: 5 | 2.571e+01 | -2.571e+01 | 1.848e+01 | 1.848e+01 | 0.000e+00 | 0.000e+00 | -1.622e+00 | 1.622e+00 | 0.000e+00 | 0.000e+00 | 1.137e-13 | 0.000e+00 |
| El: | 47 - C.c: 7 | -2.549e+01 | 2.549e+01 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -3.383e+00 | 3.383e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 47 - C.c: 8 | 5.867e+01 | -5.867e+01 | 2.402e+01 | 2.402e+01 | 0.000e+00 | 0.000e+00 | -3.468e+00 | 3.468e+00 | 0.000e+00 | 0.000e+00 | 1.478e-13 | 0.000e+00 |
| El: | 48 - C.c: 1 | -3.044e+02 | 3.044e+02 | 2.622e+01 | 2.622e+01 | -5.283e-16 | 5.283e-16 | 3.682e+01 | -3.682e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 48 - C.c: 2 | 3.146e+01 | -3.146e+01 | 2.622e+01 | 2.622e+01 | -5.022e-16 | 5.022e-16 | 3.533e+01 | -3.533e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 48 - C.c: 3 | 2.273e+01 | -2.273e+01 | 2.017e+01 | 2.017e+01 | -3.675e-16 | 3.675e-16 | 2.587e+01 | -2.587e+01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 48 - C.c: 4 | 1.510e+01 | -1.510e+01 | 2.017e+01 | 2.017e+01 | -2.699e-16 | 2.699e-16 | 1.905e+01 | -1.905e+01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 48 - C.c: 5 | 1.319e+01 | -1.319e+01 | 2.017e+01 | 2.017e+01 | -2.455e-16 | 2.455e-16 | 1.735e+01 | -1.735e+01 | 0.000e+00 | 0.000e+00 | -1.137e-13 | 0.000e+00 |
| El: | 48 - C.c: 7 | -3.034e+02 | 3.034e+02 | 2.622e+01 | 2.622e+01 | -5.212e-16 | 5.212e-16 | 3.643e+01 | -3.643e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 48 - C.c: 8 | 3.046e+01 | -3.046e+01 | 2.622e+01 | 2.622e+01 | -5.093e-16 | 5.093e-16 | 3.572e+01 | -3.572e+01 | 0.000e+00 | 0.000e+00 | -1.478e-13 | 0.000e+00 |
| El: | 49 - C.c: 1 | -1.257e+03 | 1.257e+03 | 6.759e+02 | 1.355e+02 | 1.214e+00 | -1.214e+00 | -4.971e+00 | 4.971e+00 | -1.108e+02 | -1.108e+02 | 2.656e+04 | 2.274e+04 |
| El: | 49 - C.c: 2 | -1.371e+03 | 1.371e+03 | 6.670e+02 | 1.444e+02 | 3.990e-01 | -3.990e-01 | -1.634e+00 | 1.634e+00 | -3.641e+01 | -3.641e+01 | 2.480e+04 | 2.288e+04 |
| El: | 49 - C.c: 3 | -1.008e+03 | 1.008e+03 | 4.879e+02 | 1.063e+02 | 2.849e-01 | -2.849e-01 | -1.167e+00 | 1.167e+00 | -2.599e+01 | -2.599e+01 | 1.808e+04 | 1.674e+04 |
| El: | 49 - C.c: 4 | -7.656e+02 | 7.656e+02 | 3.571e+02 | 8.119e+01 | 1.702e-01 | -1.702e-01 | -6.970e-01 | 6.970e-01 | -1.553e+01 | -1.553e+01 | 1.291e+04 | 1.227e+04 |
| El: | 49 - C.c: 5 | -7.049e+02 | 7.049e+02 | 3.244e+02 | 7.492e+01 | 1.415e-01 | -1.415e-01 | -5.796e-01 | 5.796e-01 | -1.291e+01 | -1.291e+01 | 1.161e+04 | 1.116e+04 |
| El: | 49 - C.c: 7 | -1.364e+03 | 1.364e+03 | 6.694e+02 | 1.419e+02 | 1.188e+00 | -1.188e+00 | -4.868e+00 | 4.868e+00 | -1.085e+02 | -1.085e+02 | 2.509e+04 | 2.304e+04 |
| El: | 49 - C.c: 8 | -1.264e+03 | 1.264e+03 | 6.734e+02 | 1.380e+02 | 4.243e-01 | -4.243e-01 | -1.738e+00 | 1.738e+00 | -3.872e+01 | -3.872e+01 | 2.628e+04 | 2.258e+04 |
| El: | 50 - C.c: 1 | 5.712e+01 | -5.712e+01 | -1.569e+02 | 9.682e+02 | -7.347e+00 | 7.347e+00 | 3.009e+01 | -3.009e+01 | 6.705e+02 | 6.705e+02 | -3.852e+04 | -6.415e+04 |
| El: | 50 - C.c: 2 | 2.336e+01 | -2.336e+01 | -1.658e+02 | 9.771e+02 | -2.869e-01 | 2.869e-01 | 1.175e+00 | -1.175e+00 | 2.618e+01 | 2.618e+01 | -3.961e+04 | -6.468e+04 |
| El: | 50 - C.c: 3 | 2.125e+01 | -2.125e+01 | -1.227e+02 | 7.168e+02 | -1.910e-01 | 1.910e-01 | 7.824e-01 | -7.824e-01 | 1.743e+01 | 1.743e+01 | -2.909e+04 | -4.752e+04 |
| El: | 50 - C.c: 4 | 3.831e+01 | -3.831e+01 | -9.760e+01 | 5.359e+02 | -3.680e-02 | 3.680e-02 | 1.507e-01 | -1.507e-01 | 3.358e+00 | 3.358e+00 | -2.192e+04 | -3.589e+04 |
| El: | 50 - C.c: 5 | 4.258e+01 | -4.258e+01 | -9.133e+01 | 4.907e+02 | 1.762e-03 | -1.762e-03 | -7.215e-03 | 7.215e-03 | -1.608e-01 | -1.608e-01 | -2.013e+04 | -3.298e+04 |
| El: | 50 - C.c: 7 | 7.987e+00 | -7.987e+00 | -1.633e+02 | 9.746e+02 | -7.339e+00 | 7.339e+00 | 3.006e+01 | -3.006e+01 | 6.697e+02 | 6.697e+02 | -3.951e+04 | -6.432e+04 |
| El: | 50 - C.c: 8 | 7.250e+01 | -7.250e+01 | -1.593e+02 | 9.707e+02 | -2.956e-01 | 2.956e-01 | 1.211e+00 | -1.211e+00 | 2.697e+01 | 2.697e+01 | -3.862e+04 | -6.450e+04 |
| El: | 51 - C.c: 1 | 1.214e+02 | -1.214e+02 | 8.723e+02 | -6.096e+01 | 7.099e+00 | -7.099e+00 | -2.907e+01 | 2.907e+01 | -6.478e+02 | -6.478e+02 | 5.593e+04 | 2.924e+04 |
| El: | 51 - C.c: 2 | 2.389e+02 | -2.389e+02 | 8.909e+02 | -7.954e+01 | -2.768e-01 | 2.768e-01 | 1.134e+00 | -1.134e+00 | 2.526e+01 | 2.526e+01 | 5.860e+04 | 2.996e+04 |
| El: | 51 - C.c: 3 | 1.782e+02 | -1.782e+02 | 6.529e+02 | -5.878e+01 | -2.193e-01 | 2.193e-01 | 8.982e-01 | -8.982e-01 | 2.001e+01 | 2.001e+01 | 4.299e+04 | 2.196e+04 |
| El: | 51 - C.c: 4 | 1.494e+02 | -1.494e+02 | 4.846e+02 | -4.627e+01 | -2.524e-01 | 2.524e-01 | 1.034e+00 | -1.034e+00 | 2.303e+01 | 2.303e+01 | 3.213e+04 | 1.631e+04 |
| El: | 51 - C.c: 5 | 1.422e+02 | -1.422e+02 | 4.425e+02 | -4.314e+01 | -2.607e-01 | 2.607e-01 | 1.068e+00 | -1.068e+00 | 2.379e+01 | 2.379e+01 | 2.941e+04 | 1.490e+04 |
| El: | 51 - C.c: 7 | 2.248e+02 | -2.248e+02 | 8.898e+02 | -7.844e+01 | 7.088e+00 | -7.088e+00 | -2.903e+01 | 2.903e+01 | -6.468e+02 | -6.468e+02 | 5.838e+04 | 2.997e+04 |
| El: | 51 - C.c: 8 | 1.354e+02 | -1.354e+02 | 8.734e+02 | -6.206e+01 | -2.663e-01 | 2.663e-01 | 1.090e+00 | -1.090e+00 | 2.430e+01 | 2.430e+01 | 5.615e+04 | 2.922e+04 |
| El: | 52 - C.c: 1 | -3.309e+02 | 3.309e+02 | 3.962e+01 | 7.718e+02 | -3.871e+00 | 3.871e+00 | 1.585e+01 | -1.585e+01 | 3.532e+02 | 3.532e+02 | -2.381e+04 | -4.300e+04 |
| El: | 52 - C.c: 2 | -3.805e+02 | 3.805e+02 | 5.820e+01 | 7.532e+02 | -5.583e-01 | 5.583e-01 | 2.286e+00 | -2.286e+00 | 5.094e+01 | 5.094e+01 | -2.252e+04 | -4.089e+04 |
| El: | 52 - C.c: 3 | -2.766e+02 | 2.766e+02 | 4.236e+01 | 5.518e+02 | -3.892e-01 | 3.892e-01 | 1.594e+00 | -1.594e+00 | 3.551e+01 | 3.551e+01 | -1.650e+04 | -2.998e+04 |
| El: | 52 - C.c: 4 | -1.929e+02 | 1.929e+02 | 2.986e+01 | 4.085e+02 | -1.799e-01 | 1.799e-01 | 7.366e-01 | -7.366e-01 | 1.641e+01 | 1.641e+01 | -1.221e+04 | -2.234e+04 |
| El: | 52 - C.c: 5 | -1.720e+02 | 1.720e+02 | 2.673e+01 | 3.726e+02 | -1.275e-01 | 1.275e-01 | 5.223e-01 | -5.223e-01 | 1.164e+01 | 1.164e+01 | -1.113e+04 | -2.043e+04 |
| El: | 52 - C.c: 7 | -3.847e+02 | 3.847e+02 | 5.710e+01 | 7.543e+02 | -3.850e+00 | 3.850e+00 | 1.577e+01 | -1.577e+01 | 3.513e+02 | 3.513e+02 | -2.266e+04 | -4.096e+04 |
| El: | 52 - C.c: 8 | -3.268e+02 | 3.268e+02 | 4.072e+01 | 7.707e+02 | -5.790e-01 | 5.790e-01 | 2.371e+00 | -2.371e+00 | 5.284e+01 | 5.284e+01 | -2.367e+04 | -4.293e+04 |
| El: | 53 - C.c: 1 | 6.933e+02 | -6.933e+02 | 4.612e+02 | 4.502e+02 | 1.655e-01 | -1.655e-01 | -8.530e-01 | 8.530e-01 | -1.697e+01 | -1.697e+01 | 2.188e+04 | -2.076e+04 |
| El: | 53 - C.c: 2 | 6.306e+02 | -6.306e+02 | 4.944e+02 | 4.170e+02 | 2.551e-01 | -2.551e-01 | -1.315e+00 | 1.315e+00 | -2.615e+01 | -2.615e+01 | 2.477e+04 | -1.683e+04 |
| El: | 53 - C.c: 3 | 4.631e+02 | -4.631e+02 | 3.625e+02 | 3.049e+02 | 1.933e-01 | -1.933e-01 | -9.960e-01 | 9.960e-01 | -1.981e+01 | -1.981e+01 | 1.819e+04 | -1.230e+04 |
| El: | 53 - C.c: 4 | 3.490e+02 | -3.490e+02 | 2.695e+02 | 2.228e+02 | 1.779e-01 | -1.779e-01 | -9.167e-01 | 9.167e-01 | -1.823e+01 | -1.823e+01 | 1.370e+04 | -8.914e+03 |
| El: | 53 - C.c: 5 | 3.205e+02 | -3.205e+02 | 2.463e+02 | 2.023e+02 | 1.740e-01 | -1.740e-01 | -8.968e-01 | 8.968e-01 | -1.784e+01 | -1.784e+01 | 1.257e+04 | -8.068e+03 |
| El: | 53 - C.c: 7 | 6.325e+02 | -6.325e+02 | 4.928e+02 | 4.186e+02 | 1.718e-01 | -1.718e-01 | -8.852e-01 | 8.852e-01 | -1.761e+01 | -1.761e+01 | 2.462e+04 | -1.701e+04 |
| El: | 53 - C.c: 8 | 6.914e+02 | -6.914e+02 | 4.628e+02 | 4.486e+02 | 2.488e-01 | -2.488e-01 | -1.282e+00 | 1.282e+00 | -2.551e+01 | -2.551e+01 | 2.203e+04 | -2.058e+04 |
| El: | 54 - C.c: 1 | -1.036e+02 | 1.036e+02 | 6.600e+02 | -5.980e+01 | 8.601e+00 | -8.601e+00 | -1.949e+01 | 1.949e+01 | -5.805e+02 | -5.805e+02 | 3.019e+04 | 1.840e+04 |
| El: | 54 - C.c: 2 | -1.314e+02 | 1.314e+02 | 6.535e+02 | -5.335e+01 | 7.493e-01 | -7.493e-01 | -1.698e+00 | 1.698e+00 | -5.057e+01 | -5.057e+01 | 2.952e+04 | 1.820e+04 |
| El: | 54 - C.c: 3 | -9.737e+01 | 9.737e+01 | 4.791e+02 | -3.963e+01 | 4.942e-01 | -4.942e-01 | -1.120e+00 | 1.120e+00 | -3.336e+01 | -3.336e+01 | 2.165e+04 | 1.337e+04 |
| El: | 54 - C.c: 4 | -7.802e+01 | 7.802e+01 | 3.565e+02 | -3.231e+01 | 6.695e-02 | -6.695e-02 | -1.517e-01 | 1.517e-01 | -4.519e+00 | -4.519e+00 | 1.612e+04 | 1.012e+04 |
| El: | 54 - C.c: 5 | -7.319e+01 | 7.319e+01 | 3.259e+02 | -3.048e+01 | -3.986e-02 | 3.986e-02 | 9.032e-02 | -9.032e-02 | 2.690e+00 | 2.690e+00 | 1.474e+04 | 9.311e+03 |
| El: | 54 - C.c: 7 | -1.280e+02 | 1.280e+02 | 6.542e+02 | -5.397e+01 | 8.542e+00 | -8.542e+00 | -1.936e+01 | 1.936e+01 | -5.766e+02 | -5.766e+02 | 2.959e+04 | 1.821e+04 |
| El: | 54 - C.c: 8 | -1.071e+02 | 1.071e+02 | 6.594e+02 | -5.918e+01 | 8.075e-01 | -8.075e-01 | -1.830e+00 | 1.830e+00 | -5.451e+01 | -5.451e+01 | 3.012e+04 | 1.839e+04 |
| El: | 55 - C.c: 1 | -7.394e+01 | 7.394e+01 | 3.846e+01 | 7.173e+02 | -7.450e+00 | 7.450e+00 | 2.653e+01 | -2.653e+01 | 6.333e+02 | 6.333e+02 | -1.876e+04 | -3.895e+04 |
| El: | 55 - C.c: 2 | -5.329e+01 | 5.329e+01 | 3.201e+01 | 7.238e+02 | -1.131e+00 | 1.131e+00 | 4.028e+00 | -4.028e+00 | 9.615e+01 | 9.615e+01 | -1.914e+04 | -3.967e+04 |
| El: | 55 - C.c: 3 | -4.109e+01 | 4.109e+01 | 2.322e+01 | 5.302e+02 | -8.234e-01 | 8.234e-01 | 2.932e+00 | -2.932e+00 | 6.999e+01 | 6.999e+01 | -1.405e+04 | -2.905e+04 |
| El: | 55 - C.c: 4 | -4.158e+01 | 4.158e+01 | 1.589e+01 | 3.924e+02 | -5.805e-01 | 5.805e-01 | 2.067e+00 | -2.067e+00 | 4.934e+01 | 4.934e+01 | -1.056e+04 | -2.144e+04 |
| El: | 55 - C.c: 5 | -4.170e+01 | 4.170e+01 | 1.406e+01 | 3.579e+02 | -5.197e-01 | 5.197e-01 | 1.851e+00 | -1.851e+00 | 4.418e+01 | 4.418e+01 | -9.690e+03 | -1.954e+04 |
| El: | 55 - C.c: 7 | -5.454e+01 | 5.454e+01 | 3.263e+01 | 7.232e+02 | -7.503e+00 | 7.503e+00 | 2.672e+01 | -2.672e+01 | 6.378e+02 | 6.378e+02 | -1.909e+04 | -3.960e+04 |
| El: | 55 - C.c: 8 | -7.269e+01 | 7.269e+01 | 3.784e+01 | 7.180e+02 | -1.078e+00 | 1.078e+00 | 3.839e+00 | -3.839e+00 | 9.163e+01 | 9.163e+01 | -1.880e+04 | -3.901e+04 |
| El: | 56 - C.c: 1 | -3.653e+02 | 3.653e+02 | 7.425e+02 | 6.889e+01 | 5.751e+00 | -5.751e+00 | -2.355e+01 | 2.355e+01 | -5.248e+02 | -5.248e+02 | 4.004e+04 | 2.142e+04 |
| El: | 56 - C.c: 2 | -2.339e+02 | 2.339e+02 | 7.638e+02 | 4.754e+01 | 7.640e-01 | -7.640e-01 | -3.129e+00 | 3.129e+00 | -6.972e+01 | -6.972e+01 | 4.308e+04 | 2.228e+04 |
| El: | 56 - C.c: 3 | -1.726e+02 | 1.726e+02 | 5.592e+02 | 3.500e+01 | 5.466e-01 | -5.466e-01 | -2.239e+00 | 2.239e+00 | -4.988e+01 | -4.988e+01 | 3.152e+04 | 1.631e+04 |
| El: | 56 - C.c: 4 | -1.347e+02 | 1.347e+02 | 4.114e+02 | 2.686e+01 | 3.329e-01 | -3.329e-01 | -1.364e+00 | 1.364e+00 | -3.038e+01 | -3.038e+01 | 2.310e+04 | 1.200e+04 |
| El: | 56 - C.c: 5 | -1.252e+02 | 1.252e+02 | 3.745e+02 | 2.483e+01 | 2.795e-01 | -2.795e-01 | -1.145e+00 | 1.145e+00 | -2.551e+01 | -2.551e+01 | 2.099e+04 | 1.092e+04 |
| El: | 56 - C.c: 7 | -2.422e+02 | 2.422e+02 | 7.640e+02 | 4.741e+01 | 5.768e+00 | -5.768e+00 | -2.362e+01 | 2.362e+01 | -5.263e+02 | -5.263e+02 | 4.302e+04 | 2.236e+04 |
| El: | 56 - C.c: 8 | -3.571e+02 | 3.571e+02 | 7.424e+02 | 6.902e+01 | 7.475e-01 | -7.475e-01 | -3.061e+00 | 3.061e+00 | -6.821e+01 | -6.821e+01 | 4.010e+04 | 2.134e+04 |
| El: | 57 - C.c: 1 | 3.502e+02 | -3.502e+02 | -9.023e+01 | 9.016e+02 | -6.626e+00 | 6.626e+00 | 2.714e+01 | -2.714e+01 | 6.046e+02 | 6.046e+02 | -3.001e+04 | -6.050e+04 |
| El: | 57 - C.c: 2 | 2.896e+02 | -2.896e+02 | -6.888e+01 | 8.803e+02 | 2.843e-01 | -2.843e-01 | -1.164e+00 | 1.164e+00 | -2.594e+01 | -2.594e+01 | -2.856e+04 | -5.805e+04 |
| El: | 57 - C.c: 3 | 2.160e+02 | -2.160e+02 | -5.142e+01 | 6.456e+02 | 2.242e-01 | -2.242e-01 | -9.184e-01 | 9.184e-01 | -2.046e+01 | -2.046e+01 | -2.097e+04 | -4.263e+04 |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| El: | 57 - C.c: 4 | 1.807e+02 | -1.807e+02 | -4.328e+01 | 4.816e+02 | 2.531e-01 | -2.531e-01 | -1.036e+00 | 1.036e+00 | -2.309e+01 | -2.309e+01 | -1.578e+04 | -3.211e+04 |
| El: | 57 - C.c: 5 | 1.719e+02 | -1.719e+02 | -4.124e+01 | 4.406e+02 | 2.603e-01 | -2.603e-01 | -1.066e+00 | 1.066e+00 | -2.375e+01 | -2.375e+01 | -1.448e+04 | -2.948e+04 |
| El: | 57 - C.c: 7 | 2.802e+02 | -2.802e+02 | -6.875e+01 | 8.801e+02 | -6.645e+00 | 6.645e+00 | 2.721e+01 | -2.721e+01 | 6.063e+02 | 6.063e+02 | -2.863e+04 | -5.796e+04 |
| El: | 57 - C.c: 8 | 3.596e+02 | -3.596e+02 | -9.036e+01 | 9.017e+02 | 3.036e-01 | -3.036e-01 | -1.243e+00 | 1.243e+00 | -2.770e+01 | -2.770e+01 | -2.994e+04 | -6.059e+04 |
| El: | 58 - C.c: 1 | -6.230e+01 | 6.230e+01 | 9.630e+02 | -1.516e+02 | 7.707e+00 | -7.707e+00 | -3.157e+01 | 3.157e+01 | -7.033e+02 | -7.033e+02 | 6.268e+04 | 3.903e+04 |
| El: | 58 - C.c: 2 | -1.080e+01 | 1.080e+01 | 9.704e+02 | -1.591e+02 | -1.783e-01 | 1.783e-01 | 7.301e-01 | -7.301e-01 | 1.627e+01 | 1.627e+01 | 6.378e+04 | 3.928e+04 |
| El: | 58 - C.c: 3 | -3.877e+00 | 3.877e+00 | 7.118e+02 | -1.176e+02 | -1.472e-01 | 1.472e-01 | 6.028e-01 | -6.028e-01 | 1.343e+01 | 1.343e+01 | 4.684e+04 | 2.884e+04 |
| El: | 58 - C.c: 4 | 1.917e+01 | -1.917e+01 | 5.312e+02 | -9.288e+01 | -1.995e-01 | 1.995e-01 | 8.171e-01 | -8.171e-01 | 1.821e+01 | 1.821e+01 | 3.530e+04 | 2.165e+04 |
| El: | 58 - C.c: 5 | 2.493e+01 | -2.493e+01 | 4.860e+02 | -8.670e+01 | -2.126e-01 | 2.126e-01 | 8.707e-01 | -8.707e-01 | 1.940e+01 | 1.940e+01 | 3.241e+04 | 1.985e+04 |
| El: | 58 - C.c: 7 | -2.547e+01 | 2.547e+01 | 9.675e+02 | -1.562e+02 | 7.719e+00 | -7.719e+00 | -3.162e+01 | 3.162e+01 | -7.044e+02 | -7.044e+02 | 6.340e+04 | 3.914e+04 |
| El: | 58 - C.c: 8 | -4.763e+01 | 4.763e+01 | 9.659e+02 | -1.545e+02 | -1.904e-01 | 1.904e-01 | 7.800e-01 | -7.800e-01 | 1.738e+01 | 1.738e+01 | 6.306e+04 | 3.917e+04 |
| El: | 59 - C.c: 1 | -1.330e+03 | 1.330e+03 | 1.303e+02 | 6.811e+02 | -8.743e-01 | 8.743e-01 | 3.581e+00 | -3.581e+00 | 7.978e+01 | 7.978e+01 | -2.382e+04 | -2.644e+04 |
| El: | 59 - C.c: 2 | -1.345e+03 | 1.345e+03 | 1.377e+02 | 6.737e+02 | -2.903e-01 | 2.903e-01 | 1.189e+00 | -1.189e+00 | 2.649e+01 | 2.649e+01 | -2.327e+04 | -2.563e+04 |
| El: | 59 - C.c: 3 | -9.875e+02 | 9.875e+02 | 1.012e+02 | 4.930e+02 | -2.068e-01 | 2.068e-01 | 8.472e-01 | -8.472e-01 | 1.887e+01 | 1.887e+01 | -1.703e+04 | -1.872e+04 |
| El: | 59 - C.c: 4 | -7.422e+02 | 7.422e+02 | 7.646e+01 | 3.618e+02 | -1.215e-01 | 1.215e-01 | 4.974e-01 | -4.974e-01 | 1.108e+01 | 1.108e+01 | -1.251e+04 | -1.353e+04 |
| El: | 59 - C.c: 5 | -6.809e+02 | 6.809e+02 | 7.028e+01 | 3.291e+02 | -1.001e-01 | 1.001e-01 | 4.100e-01 | -4.100e-01 | 9.135e+00 | 9.135e+00 | -1.138e+04 | -1.223e+04 |
| El: | 59 - C.c: 7 | -1.334e+03 | 1.334e+03 | 1.348e+02 | 6.766e+02 | -8.909e-01 | 8.909e-01 | 3.649e+00 | -3.649e+00 | 8.129e+01 | 8.129e+01 | -2.344e+04 | -2.599e+04 |
| El: | 59 - C.c: 8 | -1.341e+03 | 1.341e+03 | 1.332e+02 | 6.782e+02 | -2.737e-01 | 2.737e-01 | 1.121e+00 | -1.121e+00 | 2.497e+01 | 2.497e+01 | -2.365e+04 | -2.609e+04 |
| El: | 60 - C.c: 1 | -2.042e+03 | 2.042e+03 | 1.273e+03 | 3.249e+02 | -6.326e+00 | 6.326e+00 | 1.537e+01 | -1.537e+01 | 5.772e+02 | 5.772e+02 | 4.644e+04 | 4.012e+04 |
| El: | 60 - C.c: 2 | -2.345e+03 | 2.345e+03 | 1.232e+03 | 3.668e+02 | 2.236e-01 | -2.236e-01 | -5.433e-01 | 5.433e-01 | -2.040e+01 | -2.040e+01 | 3.948e+04 | 3.943e+04 |
| El: | 60 - C.c: 3 | -1.720e+03 | 1.720e+03 | 8.993e+02 | 2.694e+02 | 1.617e-01 | -1.617e-01 | -3.930e-01 | 3.930e-01 | -1.475e+01 | -1.475e+01 | 2.870e+04 | 2.877e+04 |
| El: | 60 - C.c: 4 | -1.281e+03 | 1.281e+03 | 6.492e+02 | 2.034e+02 | 1.082e-01 | -1.082e-01 | -2.631e-01 | 2.631e-01 | -9.876e+00 | -9.877e+00 | 2.004e+04 | 2.065e+04 |
| El: | 60 - C.c: 5 | -1.172e+03 | 1.172e+03 | 5.867e+02 | 1.868e+02 | 9.487e-02 | -9.487e-02 | -2.306e-01 | 2.306e-01 | -8.657e+00 | -8.657e+00 | 1.788e+04 | 1.861e+04 |
| El: | 60 - C.c: 7 | -2.343e+03 | 2.343e+03 | 1.242e+03 | 3.562e+02 | -6.364e+00 | 6.364e+00 | 1.547e+01 | -1.547e+01 | 5.807e+02 | 5.807e+02 | 4.047e+04 | 4.037e+04 |
| El: | 60 - C.c: 8 | -2.045e+03 | 2.045e+03 | 1.263e+03 | 3.355e+02 | 2.615e-01 | -2.615e-01 | -6.355e-01 | 6.355e-01 | -2.386e+01 | -2.386e+01 | 4.545e+04 | 3.917e+04 |
| El: | 61 - C.c: 1 | 4.510e+02 | -4.510e+02 | -3.682e+02 | 1.967e+03 | -2.537e+00 | 2.537e+00 | 6.165e+00 | -6.165e+00 | 2.315e+02 | 2.315e+02 | -7.755e+04 | -1.355e+05 |
| El: | 61 - C.c: 2 | 4.494e+02 | -4.494e+02 | -4.101e+02 | 2.009e+03 | -7.866e-01 | 7.866e-01 | 1.912e+00 | -1.912e+00 | 7.178e+01 | 7.178e+01 | -8.139e+04 | -1.393e+05 |
| El: | 61 - C.c: 3 | 3.386e+02 | -3.386e+02 | -3.027e+02 | 1.471e+03 | -5.434e-01 | 5.434e-01 | 1.321e+00 | -1.321e+00 | 4.958e+01 | 4.958e+01 | -5.967e+04 | -1.022e+05 |
| El: | 61 - C.c: 4 | 3.014e+02 | -3.014e+02 | -2.367e+02 | 1.089e+03 | -2.223e-01 | 2.223e-01 | 5.404e-01 | -5.404e-01 | 2.029e+01 | 2.029e+01 | -4.441e+04 | -7.658e+04 |
| El: | 61 - C.c: 5 | 2.921e+02 | -2.921e+02 | -2.201e+02 | 9.937e+02 | -1.421e-01 | 1.421e-01 | 3.453e-01 | -3.453e-01 | 1.297e+01 | 1.297e+01 | -4.059e+04 | -7.017e+04 |
| El: | 61 - C.c: 7 | 3.755e+02 | -3.755e+02 | -3.995e+02 | 1.998e+03 | -2.523e+00 | 2.523e+00 | 6.131e+00 | -6.131e+00 | 2.302e+02 | 2.302e+02 | -8.119e+04 | -1.376e+05 |
| El: | 61 - C.c: 8 | 5.249e+02 | -5.249e+02 | -3.788e+02 | 1.977e+03 | -8.005e-01 | 8.005e-01 | 1.946e+00 | -1.946e+00 | 7.305e+01 | 7.305e+01 | -7.775e+04 | -1.372e+05 |
| El: | 62 - C.c: 1 | 5.844e+02 | -5.844e+02 | 1.867e+03 | -2.687e+02 | 1.941e+00 | -1.941e+00 | -4.718e+00 | 4.718e+00 | -1.772e+02 | -1.772e+02 | 1.278e+05 | 6.708e+04 |
| El: | 62 - C.c: 2 | 7.636e+02 | -7.636e+02 | 1.900e+03 | -3.020e+02 | -7.112e-01 | 7.112e-01 | 1.729e+00 | -1.729e+00 | 6.490e+01 | 6.490e+01 | 1.327e+05 | 6.827e+04 |
| El: | 62 - C.c: 3 | 5.667e+02 | -5.667e+02 | 1.391e+03 | -2.227e+02 | -5.472e-01 | 5.472e-01 | 1.330e+00 | -1.330e+00 | 4.993e+01 | 4.993e+01 | 9.729e+04 | 5.001e+04 |
| El: | 62 - C.c: 4 | 4.591e+02 | -4.591e+02 | 1.026e+03 | -1.730e+02 | -5.479e-01 | 5.479e-01 | 1.332e+00 | -1.332e+00 | 5.000e+01 | 5.000e+01 | 7.240e+04 | 3.696e+04 |
| El: | 62 - C.c: 5 | 4.323e+02 | -4.323e+02 | 9.341e+02 | -1.606e+02 | -5.481e-01 | 5.481e-01 | 1.332e+00 | -1.332e+00 | 5.001e+01 | 5.001e+01 | 6.618e+04 | 3.370e+04 |
| El: | 62 - C.c: 7 | 7.012e+02 | -7.012e+02 | 1.892e+03 | -2.939e+02 | 1.922e+00 | -1.922e+00 | -4.672e+00 | 4.672e+00 | -1.754e+02 | -1.754e+02 | 1.313e+05 | 6.817e+04 |
| El: | 62 - C.c: 8 | 6.468e+02 | -6.468e+02 | 1.875e+03 | -2.768e+02 | -6.923e-01 | 6.923e-01 | 1.683e+00 | -1.683e+00 | 6.318e+01 | 6.318e+01 | 1.292e+05 | 6.718e+04 |
| El: | 63 - C.c: 1 | -1.192e+03 | 1.192e+03 | 2.254e+02 | 1.373e+03 | 3.947e+00 | -3.947e+00 | -9.594e+00 | 9.594e+00 | -3.602e+02 | -3.602e+02 | -4.040e+04 | -6.432e+04 |
| El: | 63 - C.c: 2 | -1.253e+03 | 1.253e+03 | 2.587e+02 | 1.340e+03 | -1.798e+00 | 1.798e+00 | 4.369e+00 | -4.369e+00 | 1.640e+02 | 1.640e+02 | -3.799e+04 | -6.066e+04 |
| El: | 63 - C.c: 3 | -9.157e+02 | 9.157e+02 | 1.894e+02 | 9.793e+02 | -1.289e+00 | 1.289e+00 | 3.133e+00 | -3.133e+00 | 1.176e+02 | 1.176e+02 | -2.775e+04 | -4.433e+04 |
| El: | 63 - C.c: 4 | -6.654e+02 | 6.654e+02 | 1.397e+02 | 7.129e+02 | -8.013e-01 | 8.013e-01 | 1.947e+00 | -1.947e+00 | 7.312e+01 | 7.312e+01 | -2.008e+04 | -3.223e+04 |
| El: | 63 - C.c: 5 | -6.029e+02 | 6.029e+02 | 1.273e+02 | 6.463e+02 | -6.793e-01 | 6.793e-01 | 1.651e+00 | -1.651e+00 | 6.199e+01 | 6.199e+01 | -1.816e+04 | -2.920e+04 |
| El: | 63 - C.c: 7 | -1.257e+03 | 1.257e+03 | 2.506e+02 | 1.348e+03 | 3.976e+00 | -3.976e+00 | -9.664e+00 | 9.664e+00 | -3.628e+02 | -3.628e+02 | -3.877e+04 | -6.136e+04 |
| El: | 63 - C.c: 8 | -1.188e+03 | 1.188e+03 | 2.335e+02 | 1.365e+03 | -1.827e+00 | 1.827e+00 | 4.440e+00 | -4.440e+00 | 1.667e+02 | 1.667e+02 | -3.962e+04 | -6.363e+04 |
| El: | 64 - C.c: 1 | 1.021e+03 | -1.021e+03 | 7.639e+02 | 1.001e+03 | -4.521e-01 | 4.521e-01 | 2.330e+00 | -2.330e+00 | 4.634e+01 | 4.634e+01 | 2.647e+04 | -5.076e+04 |
| El: | 64 - C.c: 2 | 9.856e+02 | -9.856e+02 | 7.698e+02 | 9.949e+02 | 4.119e-01 | -4.119e-01 | -2.123e+00 | 2.123e+00 | -4.222e+01 | -4.222e+01 | 2.679e+04 | -4.985e+04 |
| El: | 64 - C.c: 3 | 7.275e+02 | -7.275e+02 | 5.607e+02 | 7.285e+02 | 3.124e-01 | -3.124e-01 | -1.610e+00 | 1.610e+00 | -3.202e+01 | -3.202e+01 | 1.946e+04 | -3.666e+04 |
| El: | 64 - C.c: 4 | 5.680e+02 | -5.680e+02 | 3.968e+02 | 5.373e+02 | 2.892e-01 | -2.892e-01 | -1.490e+00 | 1.490e+00 | -2.964e+01 | -2.964e+01 | 1.347e+04 | -2.787e+04 |
| El: | 64 - C.c: 5 | 5.281e+02 | -5.281e+02 | 3.558e+02 | 4.895e+02 | 2.834e-01 | -2.834e-01 | -1.460e+00 | 1.460e+00 | -2.905e+01 | -2.905e+01 | 1.197e+04 | -2.567e+04 |
| El: | 64 - C.c: 7 | 9.752e+02 | -9.752e+02 | 7.794e+02 | 9.853e+02 | -4.389e-01 | 4.389e-01 | 2.262e+00 | -2.262e+00 | 4.499e+01 | 4.499e+01 | 2.768e+04 | -4.879e+04 |
| El: | 64 - C.c: 8 | 1.031e+03 | -1.031e+03 | 7.543e+02 | 1.010e+03 | 3.988e-01 | -3.988e-01 | -2.055e+00 | 2.055e+00 | -4.088e+01 | -4.088e+01 | 2.558e+04 | -5.182e+04 |
| El: | 65 - C.c: 1 | -4.252e+01 | 4.252e+01 | 1.379e+03 | -2.165e+02 | -2.289e+00 | 2.289e+00 | 5.186e+00 | -5.186e+00 | 1.545e+02 | 1.545e+02 | 6.656e+04 | 4.112e+04 |
| El: | 65 - C.c: 2 | 4.077e+01 | -4.077e+01 | 1.391e+03 | -2.284e+02 | 5.431e-01 | -5.431e-01 | -1.231e+00 | 1.231e+00 | -3.666e+01 | -3.666e+01 | 6.805e+04 | 4.123e+04 |
| El: | 65 - C.c: 3 | 3.733e+01 | -3.733e+01 | 1.019e+03 | -1.702e+02 | 3.506e-01 | -3.506e-01 | -7.944e-01 | 7.944e-01 | -2.367e+01 | -2.367e+01 | 5.000e+04 | 3.028e+04 |
| El: | 65 - C.c: 4 | 6.840e+01 | -6.840e+01 | 7.565e+02 | -1.414e+02 | 1.394e-03 | -1.394e-03 | -3.140e-03 | 3.140e-03 | -9.408e-02 | -9.407e-02 | 3.779e+04 | 2.282e+04 |
| El: | 65 - C.c: 5 | 7.617e+01 | -7.617e+01 | 6.908e+02 | -1.342e+02 | -8.591e-02 | 8.591e-02 | 1.947e-01 | -1.947e-01 | 5.799e+00 | 5.799e+00 | 3.474e+04 | 2.095e+04 |
| El: | 65 - C.c: 7 | 2.941e+00 | -2.941e+00 | 1.384e+03 | -2.220e+02 | -2.346e+00 | 2.346e+00 | 5.316e+00 | -5.316e+00 | 1.584e+02 | 1.584e+02 | 6.730e+04 | 4.111e+04 |
| El: | 65 - C.c: 8 | -4.697e+00 | 4.697e+00 | 1.385e+03 | -2.229e+02 | 6.005e-01 | -6.005e-01 | -1.361e+00 | 1.361e+00 | -4.053e+01 | -4.053e+01 | 6.730e+04 | 4.123e+04 |
| El: | 66 - C.c: 1 | -7.332e+02 | 7.332e+02 | 1.732e+02 | 1.290e+03 | 6.986e-01 | -6.986e-01 | -2.488e+00 | 2.488e+00 | -5.938e+01 | -5.938e+01 | -3.282e+04 | -6.212e+04 |
| El: | 66 - C.c: 2 | -7.393e+02 | 7.393e+02 | 1.851e+02 | 1.278e+03 | -1.257e+00 | 1.257e+00 | 4.475e+00 | -4.475e+00 | 1.068e+02 | 1.068e+02 | -3.186e+04 | -6.106e+04 |
| El: | 66 - C.c: 3 | -5.503e+02 | 5.503e+02 | 1.369e+02 | 9.322e+02 | -9.252e-01 | 9.252e-01 | 3.295e+00 | -3.295e+00 | 7.864e+01 | 7.864e+01 | -2.322e+04 | -4.438e+04 |
| El: | 66 - C.c: 4 | -4.549e+02 | 4.549e+02 | 1.081e+02 | 6.665e+02 | -7.095e-01 | 7.095e-01 | 2.527e+00 | -2.527e+00 | 6.031e+01 | 6.031e+01 | -1.653e+04 | -3.093e+04 |
| El: | 66 - C.c: 5 | -4.310e+02 | 4.310e+02 | 1.009e+02 | 6.001e+02 | -6.556e-01 | 6.556e-01 | 2.335e+00 | -2.335e+00 | 5.573e+01 | 5.573e+01 | -1.486e+04 | -2.757e+04 |
| El: | 66 - C.c: 7 | -7.289e+02 | 7.289e+02 | 1.787e+02 | 1.285e+03 | 6.534e-01 | -6.534e-01 | -2.327e+00 | 2.327e+00 | -5.554e+01 | -5.554e+01 | -3.232e+04 | -6.169e+04 |
| El: | 66 - C.c: 8 | -7.436e+02 | 7.436e+02 | 1.796e+02 | 1.284e+03 | -1.211e+00 | 1.211e+00 | 4.314e+00 | -4.314e+00 | 1.030e+02 | 1.030e+02 | -3.236e+04 | -6.149e+04 |
| El: | 67 - C.c: 1 | -1.024e+03 | 1.024e+03 | 1.340e+03 | 2.581e+02 | -2.302e+00 | 2.302e+00 | 5.595e+00 | -5.595e+00 | 2.101e+02 | 2.101e+02 | 6.308e+04 | 3.567e+04 |
| El: | 67 - C.c: 2 | -9.412e+02 | 9.412e+02 | 1.354e+03 | 2.448e+02 | 2.252e+00 | -2.252e+00 | -5.472e+00 | 5.472e+00 | -2.055e+02 | -2.055e+02 | 6.516e+04 | 3.603e+04 |
| El: | 67 - C.c: 3 | -6.965e+02 | 6.965e+02 | 9.879e+02 | 1.809e+02 | 1.637e+00 | -1.637e+00 | -3.978e+00 | 3.978e+00 | -1.493e+02 | -1.493e+02 | 4.738e+04 | 2.626e+04 |
| El: | 67 - C.c: 4 | -5.533e+02 | 5.533e+02 | 7.102e+02 | 1.424e+02 | 1.141e+00 | -1.141e+00 | -2.772e+00 | 2.772e+00 | -1.041e+02 | -1.041e+02 | 3.315e+04 | 1.867e+04 |
| El: | 67 - C.c: 5 | -5.175e+02 | 5.175e+02 | 6.408e+02 | 1.327e+02 | 1.017e+00 | -1.017e+00 | -2.471e+00 | 2.471e+00 | -9.276e+01 | -9.276e+01 | 2.959e+04 | 1.678e+04 |
| El: | 67 - C.c: 7 | -9.483e+02 | 9.483e+02 | 1.361e+03 | 2.376e+02 | -2.275e+00 | 2.275e+00 | 5.528e+00 | -5.528e+00 | 2.075e+02 | 2.075e+02 | 6.574e+04 | 3.676e+04 |
| El: | 67 - C.c: 8 | -1.017e+03 | 1.017e+03 | 1.333e+03 | 2.653e+02 | 2.224e+00 | -2.224e+00 | -5.406e+00 | 5.406e+00 | -2.030e+02 | -2.030e+02 | 6.250e+04 | 3.494e+04 |
| El: | 68 - C.c: 1 | 9.882e+02 | -9.882e+02 | -3.014e+02 | 1.900e+03 | -7.207e-01 | 7.207e-01 | 1.752e+00 | -1.752e+00 | 6.576e+01 | 6.576e+01 | -6.589e+04 | -1.350e+05 |
| El: | 68 - C.c: 2 | 9.750e+02 | -9.750e+02 | -2.880e+02 | 1.886e+03 | 7.447e-01 | -7.447e-01 | -1.810e+00 | 1.810e+00 | -6.796e+01 | -6.796e+01 | -6.481e+04 | -1.336e+05 |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| El: | 68 - C.c: 3 | 7.243e+02 | -7.243e+02 | -2.142e+02 | 1.383e+03 | 5.716e-01 | -5.716e-01 | -1.389e+00 | 1.389e+00 | -5.216e+01 | -5.216e+01 | -4.759e+04 | -9.814e+04 |
| El: | 68 - C.c: 4 | 5.905e+02 | -5.905e+02 | -1.757e+02 | 1.028e+03 | 5.648e-01 | -5.648e-01 | -1.373e+00 | 1.373e+00 | -5.154e+01 | -5.154e+01 | -3.585e+04 | -7.401e+04 |
| El: | 68 - C.c: 5 | 5.571e+02 | -5.571e+02 | -1.660e+02 | 9.396e+02 | 5.631e-01 | -5.631e-01 | -1.369e+00 | 1.369e+00 | -5.139e+01 | -5.139e+01 | -3.291e+04 | -6.798e+04 |
| El: | 68 - C.c: 7 | 9.162e+02 | -9.162e+02 | -2.809e+02 | 1.879e+03 | -7.567e-01 | 7.567e-01 | 1.839e+00 | -1.839e+00 | 6.905e+01 | 6.905e+01 | -6.476e+04 | -1.324e+05 |
| El: | 68 - C.c: 8 | 1.047e+03 | -1.047e+03 | -3.086e+02 | 1.907e+03 | 7.807e-01 | -7.807e-01 | -1.898e+00 | 1.898e+00 | -7.124e+01 | -7.124e+01 | -6.593e+04 | -1.362e+05 |
| El: | 69 - C.c: 1 | 3.859e+02 | -3.859e+02 | 2.006e+03 | -4.077e+02 | 3.478e+00 | -3.478e+00 | -8.453e+00 | 8.453e+00 | -3.174e+02 | -3.174e+02 | 1.384e+05 | 8.182e+04 |
| El: | 69 - C.c: 2 | 5.151e+02 | -5.151e+02 | 2.011e+03 | -4.122e+02 | -4.743e-01 | 4.743e-01 | 1.153e+00 | -1.153e+00 | 4.328e+01 | 4.328e+01 | 1.402e+05 | 8.090e+04 |
| El: | 69 - C.c: 3 | 3.906e+02 | -3.906e+02 | 1.473e+03 | -3.045e+02 | -3.750e-01 | 3.750e-01 | 9.113e-01 | -9.113e-01 | 3.421e+01 | 3.421e+01 | 1.029e+05 | 5.929e+04 |
| El: | 69 - C.c: 4 | 3.612e+02 | -3.612e+02 | 1.092e+03 | -2.390e+02 | -4.276e-01 | 4.276e-01 | 1.039e+00 | -1.039e+00 | 3.902e+01 | 3.902e+01 | 7.741e+04 | 4.400e+04 |
| El: | 69 - C.c: 5 | 3.538e+02 | -3.538e+02 | 9.961e+02 | -2.226e+02 | -4.407e-01 | 4.407e-01 | 1.071e+00 | -1.071e+00 | 4.022e+01 | 4.022e+01 | 7.103e+04 | 4.018e+04 |
| El: | 69 - C.c: 7 | 4.424e+02 | -4.424e+02 | 2.000e+03 | -4.013e+02 | 3.495e+00 | -3.495e+00 | -8.494e+00 | 8.494e+00 | -3.189e+02 | -3.189e+02 | 1.384e+05 | 8.066e+04 |
| El: | 69 - C.c: 8 | 4.586e+02 | -4.586e+02 | 2.017e+03 | -4.185e+02 | -4.913e-01 | 4.913e-01 | 1.194e+00 | -1.194e+00 | 4.483e+01 | 4.483e+01 | 1.402e+05 | 8.206e+04 |
| El: | 70 - C.c: 1 | -2.391e+03 | 2.391e+03 | 3.644e+02 | 1.234e+03 | 7.036e+00 | -7.036e+00 | -1.710e+01 | 1.710e+01 | -6.421e+02 | -6.421e+02 | -4.013e+04 | -3.923e+04 |
| El: | 70 - C.c: 2 | -2.295e+03 | 2.295e+03 | 3.689e+02 | 1.229e+03 | -9.084e-01 | 9.084e-01 | 2.208e+00 | -2.208e+00 | 8.289e+01 | 8.289e+01 | -3.872e+04 | -3.981e+04 |
| El: | 70 - C.c: 3 | -1.680e+03 | 1.680e+03 | 2.712e+02 | 8.975e+02 | -6.629e-01 | 6.629e-01 | 1.611e+00 | -1.611e+00 | 6.049e+01 | 6.049e+01 | -2.820e+04 | -2.895e+04 |
| El: | 70 - C.c: 4 | -1.238e+03 | 1.238e+03 | 2.057e+02 | 6.469e+02 | -4.764e-01 | 4.764e-01 | 1.158e+00 | -1.158e+00 | 4.347e+01 | 4.347e+01 | -1.999e+04 | -2.027e+04 |
| El: | 70 - C.c: 5 | -1.128e+03 | 1.128e+03 | 1.893e+02 | 5.842e+02 | -4.298e-01 | 4.298e-01 | 1.045e+00 | -1.045e+00 | 3.922e+01 | 3.922e+01 | -1.793e+04 | -1.811e+04 |
| El: | 70 - C.c: 7 | -2.289e+03 | 2.289e+03 | 3.581e+02 | 1.240e+03 | 7.006e+00 | -7.006e+00 | -1.703e+01 | 1.703e+01 | -6.393e+02 | -6.393e+02 | -3.965e+04 | -4.086e+04 |
| El: | 70 - C.c: 8 | -2.397e+03 | 2.397e+03 | 3.753e+02 | 1.223e+03 | -8.779e-01 | 8.779e-01 | 2.134e+00 | -2.134e+00 | 8.011e+01 | 8.011e+01 | -3.919e+04 | -3.818e+04 |
| El: | 71 - C.c: 1 | -4.348e+03 | 4.348e+03 | 3.130e+03 | -1.439e+03 | -7.973e+00 | 7.973e+00 | 1.938e+01 | -1.938e+01 | 7.275e+02 | 7.275e+02 | 1.892e+05 | 2.278e+05 |
| El: | 71 - C.c: 2 | -4.703e+03 | 4.703e+03 | 3.114e+03 | -1.423e+03 | -3.139e+00 | 3.139e+00 | 7.630e+00 | -7.630e+00 | 2.865e+02 | 2.865e+02 | 1.840e+05 | 2.300e+05 |
| El: | 71 - C.c: 3 | -3.447e+03 | 3.447e+03 | 2.278e+03 | -1.042e+03 | -2.274e+00 | 2.274e+00 | 5.526e+00 | -5.526e+00 | 2.075e+02 | 2.075e+02 | 1.346e+05 | 1.684e+05 |
| El: | 71 - C.c: 4 | -2.561e+03 | 2.561e+03 | 1.669e+03 | -7.685e+02 | -1.539e+00 | 1.539e+00 | 3.740e+00 | -3.740e+00 | 1.404e+02 | 1.404e+02 | 9.840e+04 | 1.240e+05 |
| El: | 71 - C.c: 5 | -2.339e+03 | 2.339e+03 | 1.517e+03 | -7.002e+02 | -1.355e+00 | 1.355e+00 | 3.294e+00 | -3.294e+00 | 1.237e+02 | 1.237e+02 | 8.935e+04 | 1.130e+05 |
| El: | 71 - C.c: 7 | -4.695e+03 | 4.695e+03 | 3.116e+03 | -1.425e+03 | -7.935e+00 | 7.935e+00 | 1.929e+01 | -1.929e+01 | 7.240e+02 | 7.240e+02 | 1.843e+05 | 2.301e+05 |
| El: | 71 - C.c: 8 | -4.356e+03 | 4.356e+03 | 3.128e+03 | -1.437e+03 | -3.177e+00 | 3.177e+00 | 7.723e+00 | -7.723e+00 | 2.899e+02 | 2.899e+02 | 1.889e+05 | 2.276e+05 |
| El: | 72 - C.c: 1 | -1.454e+04 | 1.454e+04 | 1.393e+03 | 2.983e+02 | -4.443e+00 | 4.443e+00 | 1.080e+01 | -1.080e+01 | 4.055e+02 | 4.055e+02 | -7.487e+04 | 1.748e+05 |
| El: | 72 - C.c: 2 | -1.478e+04 | 1.478e+04 | 1.377e+03 | 3.144e+02 | -9.724e-01 | 9.724e-01 | 2.363e+00 | -2.363e+00 | 8.873e+01 | 8.872e+01 | -7.882e+04 | 1.758e+05 |
| El: | 72 - C.c: 3 | -1.082e+04 | 1.082e+04 | 1.007e+03 | 2.299e+02 | -6.986e-01 | 6.986e-01 | 1.698e+00 | -1.698e+00 | 6.375e+01 | 6.374e+01 | -5.778e+04 | 1.287e+05 |
| El: | 72 - C.c: 4 | -7.964e+03 | 7.964e+03 | 7.331e+02 | 1.675e+02 | -4.417e-01 | 4.417e-01 | 1.074e+00 | -1.074e+00 | 4.031e+01 | 4.030e+01 | -4.296e+04 | 9.458e+04 |
| El: | 72 - C.c: 5 | -7.251e+03 | 7.251e+03 | 6.648e+02 | 1.519e+02 | -3.775e-01 | 3.775e-01 | 9.174e-01 | -9.174e-01 | 3.445e+01 | 3.444e+01 | -3.926e+04 | 8.606e+04 |
| El: | 72 - C.c: 7 | -1.479e+04 | 1.479e+04 | 1.379e+03 | 3.122e+02 | -4.437e+00 | 4.437e+00 | 1.078e+01 | -1.078e+01 | 4.049e+02 | 4.049e+02 | -7.870e+04 | 1.761e+05 |
| El: | 72 - C.c: 8 | -1.453e+04 | 1.453e+04 | 1.391e+03 | 3.005e+02 | -9.787e-01 | 9.787e-01 | 2.379e+00 | -2.379e+00 | 8.931e+01 | 8.930e+01 | -7.499e+04 | 1.745e+05 |
| El: | 73 - C.c: 1 | -1.223e+04 | 1.223e+04 | -3.442e+02 | 2.035e+03 | 3.962e+00 | -3.962e+00 | -9.629e+00 | 9.629e+00 | -3.615e+02 | -3.615e+02 | -2.094e+05 | -7.699e+03 |
| El: | 73 - C.c: 2 | -1.235e+04 | 1.235e+04 | -3.604e+02 | 2.052e+03 | -5.339e-01 | 5.339e-01 | 1.298e+00 | -1.298e+00 | 4.873e+01 | 4.872e+01 | -2.122e+05 | -7.901e+03 |
| El: | 73 - C.c: 3 | -9.037e+03 | 9.037e+03 | -2.652e+02 | 1.502e+03 | -3.990e-01 | 3.990e-01 | 9.697e-01 | -9.697e-01 | 3.641e+01 | 3.641e+01 | -1.554e+05 | -5.845e+03 |
| El: | 73 - C.c: 4 | -6.632e+03 | 6.632e+03 | -2.029e+02 | 1.103e+03 | -3.381e-01 | 3.381e-01 | 8.217e-01 | -8.217e-01 | 3.086e+01 | 3.085e+01 | -1.146e+05 | -4.634e+03 |
| El: | 73 - C.c: 5 | -6.030e+03 | 6.030e+03 | -1.873e+02 | 1.004e+03 | -3.229e-01 | 3.229e-01 | 7.847e-01 | -7.847e-01 | 2.947e+01 | 2.946e+01 | -1.044e+05 | -4.331e+03 |
| El: | 73 - C.c: 7 | -1.237e+04 | 1.237e+04 | -3.581e+02 | 2.049e+03 | 3.951e+00 | -3.951e+00 | -9.602e+00 | 9.602e+00 | -3.605e+02 | -3.605e+02 | -2.122e+05 | -7.447e+03 |
| El: | 73 - C.c: 8 | -1.220e+04 | 1.220e+04 | -3.465e+02 | 2.038e+03 | -5.228e-01 | 5.228e-01 | 1.271e+00 | -1.271e+00 | 4.771e+01 | 4.770e+01 | -2.094e+05 | -8.153e+03 |
| El: | 74 - C.c: 1 | 2.589e+03 | -2.589e+03 | -2.081e+03 | 3.773e+03 | 9.261e+00 | -9.261e+00 | -2.251e+01 | 2.251e+01 | -8.451e+02 | -8.451e+02 | -2.146e+05 | -3.196e+05 |
| El: | 74 - C.c: 2 | 2.583e+03 | -2.583e+03 | -2.098e+03 | 3.789e+03 | -1.176e+00 | 1.176e+00 | 2.857e+00 | -2.857e+00 | 1.073e+02 | 1.073e+02 | -2.161e+05 | -3.210e+05 |
| El: | 74 - C.c: 3 | 1.898e+03 | -1.898e+03 | -1.537e+03 | 2.773e+03 | -8.712e-01 | 8.712e-01 | 2.117e+00 | -2.117e+00 | 7.949e+01 | 7.949e+01 | -1.582e+05 | -2.351e+05 |
| El: | 74 - C.c: 4 | 1.438e+03 | -1.438e+03 | -1.139e+03 | 2.040e+03 | -6.983e-01 | 6.983e-01 | 1.697e+00 | -1.697e+00 | 6.372e+01 | 6.372e+01 | -1.164e+05 | -1.736e+05 |
| El: | 74 - C.c: 5 | 1.323e+03 | -1.323e+03 | -1.039e+03 | 1.856e+03 | -6.551e-01 | 6.551e-01 | 1.592e+00 | -1.592e+00 | 5.978e+01 | 5.978e+01 | -1.060e+05 | -1.582e+05 |
| El: | 74 - C.c: 7 | 2.543e+03 | -2.543e+03 | -2.095e+03 | 3.787e+03 | 9.246e+00 | -9.246e+00 | -2.247e+01 | 2.247e+01 | -8.437e+02 | -8.437e+02 | -2.163e+05 | -3.204e+05 |
| El: | 74 - C.c: 8 | 2.629e+03 | -2.629e+03 | -2.084e+03 | 3.775e+03 | -1.161e+00 | 1.161e+00 | 2.821e+00 | -2.821e+00 | 1.059e+02 | 1.059e+02 | -2.144e+05 | -3.202e+05 |
| El: | 75 - C.c: 1 | 5.462e+03 | -5.462e+03 | 2.358e+03 | -4.894e+02 | -2.020e+00 | 2.020e+00 | 1.041e+01 | -1.041e+01 | 2.070e+02 | 2.070e+02 | 2.232e+05 | 6.871e+04 |
| El: | 75 - C.c: 2 | 5.607e+03 | -5.607e+03 | 2.370e+03 | -5.011e+02 | 4.754e-01 | -4.754e-01 | -2.449e+00 | 2.449e+00 | -4.873e+01 | -4.872e+01 | 2.256e+05 | 6.871e+04 |
| El: | 75 - C.c: 3 | 4.115e+03 | -4.115e+03 | 1.734e+03 | -3.684e+02 | 3.610e-01 | -3.610e-01 | -1.860e+00 | 1.860e+00 | -3.701e+01 | -3.701e+01 | 1.652e+05 | 5.027e+04 |
| El: | 75 - C.c: 4 | 3.083e+03 | -3.083e+03 | 1.268e+03 | -2.798e+02 | 3.370e-01 | -3.370e-01 | -1.737e+00 | 1.737e+00 | -3.454e+01 | -3.454e+01 | 1.218e+05 | 3.686e+04 |
| El: | 75 - C.c: 5 | 2.826e+03 | -2.826e+03 | 1.151e+03 | -2.576e+02 | 3.310e-01 | -3.310e-01 | -1.706e+00 | 1.706e+00 | -3.393e+01 | -3.393e+01 | 1.109e+05 | 3.351e+04 |
| El: | 75 - C.c: 7 | 5.571e+03 | -5.571e+03 | 2.370e+03 | -5.009e+02 | -2.002e+00 | 2.002e+00 | 1.031e+01 | -1.031e+01 | 2.052e+02 | 2.052e+02 | 2.253e+05 | 6.900e+04 |
| El: | 75 - C.c: 8 | 5.499e+03 | -5.499e+03 | 2.359e+03 | -4.895e+02 | 4.571e-01 | -4.571e-01 | -2.355e+00 | 2.355e+00 | -4.685e+01 | -4.685e+01 | 2.235e+05 | 6.842e+04 |
| El: | 76 - C.c: 1 | -2.661e+02 | 2.661e+02 | 4.434e+02 | 7.874e+02 | -1.714e+00 | 1.714e+00 | 3.884e+00 | -3.884e+00 | 1.157e+02 | 1.157e+02 | 2.965e+01 | -2.325e+04 |
| El: | 76 - C.c: 2 | -2.196e+02 | 2.196e+02 | 4.551e+02 | 7.757e+02 | -2.035e-01 | 2.035e-01 | 4.610e-01 | -4.610e-01 | 1.373e+01 | 1.373e+01 | 1.206e+03 | -2.284e+04 |
| El: | 76 - C.c: 3 | -1.553e+02 | 1.553e+02 | 3.331e+02 | 5.660e+02 | -1.687e-01 | 1.687e-01 | 3.823e-01 | -3.823e-01 | 1.139e+01 | 1.139e+01 | 9.647e+02 | -1.669e+04 |
| El: | 76 - C.c: 4 | -8.480e+01 | 8.480e+01 | 2.444e+02 | 4.062e+02 | -2.323e-01 | 2.323e-01 | 5.263e-01 | -5.263e-01 | 1.568e+01 | 1.568e+01 | 1.156e+03 | -1.208e+04 |
| El: | 76 - C.c: 5 | -6.717e+01 | 6.717e+01 | 2.223e+02 | 3.663e+02 | -2.481e-01 | 2.481e-01 | 5.623e-01 | -5.623e-01 | 1.675e+01 | 1.675e+01 | 1.204e+03 | -1.092e+04 |
| El: | 76 - C.c: 7 | -2.548e+02 | 2.548e+02 | 4.550e+02 | 7.758e+02 | -1.747e+00 | 1.747e+00 | 3.958e+00 | -3.958e+00 | 1.179e+02 | 1.179e+02 | 9.038e+02 | -2.256e+04 |
| El: | 76 - C.c: 8 | -2.309e+02 | 2.309e+02 | 4.436e+02 | 7.873e+02 | -1.709e-01 | 1.709e-01 | 3.872e-01 | -3.872e-01 | 1.153e+01 | 1.153e+01 | 3.321e+02 | -2.353e+04 |
| El: | 77 - C.c: 1 | 6.642e+03 | -6.642e+03 | -8.334e+02 | 2.383e+03 | 3.774e+00 | -3.774e+00 | -1.344e+01 | 1.344e+01 | -3.208e+02 | -3.208e+02 | -5.965e+04 | -2.138e+05 |
| El: | 77 - C.c: 2 | 6.601e+03 | -6.601e+03 | -8.217e+02 | 2.372e+03 | -8.159e-01 | 8.159e-01 | 2.905e+00 | -2.905e+00 | 6.935e+01 | 6.936e+01 | -5.900e+04 | -2.124e+05 |
| El: | 77 - C.c: 3 | 4.829e+03 | -4.829e+03 | -6.013e+02 | 1.733e+03 | -6.143e-01 | 6.143e-01 | 2.187e+00 | -2.187e+00 | 5.222e+01 | 5.222e+01 | -4.313e+04 | -1.553e+05 |
| El: | 77 - C.c: 4 | 3.538e+03 | -3.538e+03 | -4.416e+02 | 1.261e+03 | -5.449e-01 | 5.449e-01 | 1.940e+00 | -1.940e+00 | 4.632e+01 | 4.632e+01 | -3.140e+04 | -1.133e+05 |
| El: | 77 - C.c: 5 | 3.215e+03 | -3.215e+03 | -4.016e+02 | 1.143e+03 | -5.276e-01 | 5.276e-01 | 1.879e+00 | -1.879e+00 | 4.484e+01 | 4.485e+01 | -2.847e+04 | -1.028e+05 |
| El: | 77 - C.c: 7 | 6.567e+03 | -6.567e+03 | -8.218e+02 | 2.372e+03 | 3.749e+00 | -3.749e+00 | -1.335e+01 | 1.335e+01 | -3.187e+02 | -3.187e+02 | -5.930e+04 | -2.122e+05 |
| El: | 77 - C.c: 8 | 6.676e+03 | -6.676e+03 | -8.332e+02 | 2.383e+03 | -7.911e-01 | 7.911e-01 | 2.817e+00 | -2.817e+00 | 6.724e+01 | 6.724e+01 | -5.936e+04 | -2.140e+05 |
| El: | 78 - C.c: 1 | 2.410e+03 | -2.410e+03 | 3.783e+03 | -2.091e+03 | -8.912e+00 | 8.912e+00 | 2.166e+01 | -2.166e+01 | 8.133e+02 | 8.133e+02 | 3.187e+05 | 2.173e+05 |
| El: | 78 - C.c: 2 | 2.506e+03 | -2.506e+03 | 3.782e+03 | -2.091e+03 | 1.275e+00 | -1.275e+00 | -3.097e+00 | 3.097e+00 | -1.163e+02 | -1.163e+02 | 3.196e+05 | 2.163e+05 |
| El: | 78 - C.c: 3 | 1.830e+03 | -1.830e+03 | 2.768e+03 | -1.532e+03 | 9.470e-01 | -9.470e-01 | -2.301e+00 | 2.301e+00 | -8.641e+01 | -8.641e+01 | 2.339e+05 | 1.584e+05 |
| El: | 78 - C.c: 4 | 1.323e+03 | -1.323e+03 | 2.032e+03 | -1.131e+03 | 7.730e-01 | -7.730e-01 | -1.879e+00 | 1.879e+00 | -7.053e+01 | -7.053e+01 | 1.717e+05 | 1.169e+05 |
| El: | 78 - C.c: 5 | 1.196e+03 | -1.196e+03 | 1.848e+03 | -1.031e+03 | 7.295e-01 | -7.295e-01 | -1.773e+00 | 1.773e+00 | -6.656e+01 | -6.656e+01 | 1.562e+05 | 1.066e+05 |
| El: | 78 - C.c: 7 | 2.464e+03 | -2.464e+03 | 3.780e+03 | -2.089e+03 | -8.926e+00 | 8.926e+00 | 2.169e+01 | -2.169e+01 | 8.145e+02 | 8.145e+02 | 3.190e+05 | 2.165e+05 |
| El: | 78 - C.c: 8 | 2.452e+03 | -2.452e+03 | 3.785e+03 | -2.094e+03 | 1.288e+00 | -1.288e+00 | -3.129e+00 | 3.129e+00 | -1.175e+02 | -1.175e+02 | 3.193e+05 | 2.171e+05 |
| El: | 79 - C.c: 1 | -1.248e+04 | 1.248e+04 | 2.045e+03 | -3.542e+02 | -2.802e+00 | 2.802e+00 | 6.810e+00 | -6.810e+00 | 2.557e+02 | 2.557e+02 | 6.011e+03 | 2.130e+05 |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| El: | 79 - C.c: 2 | -1.238e+04 | 1.238e+04 | 2.045e+03 | -3.539e+02 | 5.431e-01 | -5.431e-01 | -1.320e+00 | 1.320e+00 | -4.956e+01 | -4.956e+01 | 6.996e+03 | 2.119e+05 |
| El: | 79 - C.c: 3 | -9.066e+03 | 9.066e+03 | 1.496e+03 | -2.598e+02 | 4.063e-01 | -4.063e-01 | -9.873e-01 | 9.873e-01 | -3.707e+01 | -3.707e+01 | 5.048e+03 | 1.552e+05 |
| El: | 79 - C.c: 4 | -6.692e+03 | 6.692e+03 | 1.096e+03 | -1.952e+02 | 3.463e-01 | -3.463e-01 | -8.416e-01 | 8.416e-01 | -3.160e+01 | -3.160e+01 | 3.314e+03 | 1.145e+05 |
| El: | 79 - C.c: 5 | -6.098e+03 | 6.098e+03 | 9.958e+02 | -1.791e+02 | 3.313e-01 | -3.313e-01 | -8.052e-01 | 8.052e-01 | -3.023e+01 | -3.023e+01 | 2.881e+03 | 1.043e+05 |
| El: | 79 - C.c: 7 | -1.240e+04 | 1.240e+04 | 2.043e+03 | -3.514e+02 | -2.817e+00 | 2.817e+00 | 6.846e+00 | -6.846e+00 | 2.570e+02 | 2.570e+02 | 6.523e+03 | 2.119e+05 |
| El: | 79 - C.c: 8 | -1.245e+04 | 1.245e+04 | 2.048e+03 | -3.567e+02 | 5.579e-01 | -5.579e-01 | -1.356e+00 | 1.356e+00 | -5.091e+01 | -5.091e+01 | 6.483e+03 | 2.129e+05 |
| El: | 80 - C.c: 1 | -1.486e+04 | 1.486e+04 | 3.082e+02 | 1.383e+03 | 5.403e+00 | -5.403e+00 | -1.313e+01 | 1.313e+01 | -4.931e+02 | -4.931e+02 | -1.772e+05 | 7.912e+04 |
| El: | 80 - C.c: 2 | -1.476e+04 | 1.476e+04 | 3.079e+02 | 1.383e+03 | -3.127e-01 | 3.127e-01 | 7.600e-01 | -7.600e-01 | 2.854e+01 | 2.853e+01 | -1.762e+05 | 7.805e+04 |
| El: | 80 - C.c: 3 | -1.081e+04 | 1.081e+04 | 2.244e+02 | 1.012e+03 | -2.386e-01 | 2.386e-01 | 5.798e-01 | -5.798e-01 | 2.177e+01 | 2.177e+01 | -1.290e+05 | 5.718e+04 |
| El: | 80 - C.c: 4 | -7.970e+03 | 7.970e+03 | 1.599e+02 | 7.408e+02 | -2.281e-01 | 2.281e-01 | 5.544e-01 | -5.544e-01 | 2.082e+01 | 2.081e+01 | -9.533e+04 | 4.232e+04 |
| El: | 80 - C.c: 5 | -7.260e+03 | 7.260e+03 | 1.437e+02 | 6.730e+02 | -2.255e-01 | 2.255e-01 | 5.481e-01 | -5.481e-01 | 2.058e+01 | 2.058e+01 | -8.690e+04 | 3.861e+04 |
| El: | 80 - C.c: 7 | -1.477e+04 | 1.477e+04 | 3.054e+02 | 1.386e+03 | 5.399e+00 | -5.399e+00 | -1.312e+01 | 1.312e+01 | -4.926e+02 | -4.926e+02 | -1.765e+05 | 7.789e+04 |
| El: | 80 - C.c: 8 | -1.486e+04 | 1.486e+04 | 3.107e+02 | 1.381e+03 | -3.080e-01 | 3.080e-01 | 7.484e-01 | -7.484e-01 | 2.811e+01 | 2.810e+01 | -1.769e+05 | 7.928e+04 |
| El: | 81 - C.c: 1 | -4.742e+03 | 4.742e+03 | -1.429e+03 | 3.120e+03 | 9.982e+00 | -9.982e+00 | -2.426e+01 | 2.426e+01 | -9.108e+02 | -9.108e+02 | -2.309e+05 | -1.842e+05 |
| El: | 81 - C.c: 2 | -4.639e+03 | 4.639e+03 | -1.429e+03 | 3.121e+03 | -5.937e-01 | 5.937e-01 | 1.443e+00 | -1.443e+00 | 5.418e+01 | 5.418e+01 | -2.299e+05 | -1.853e+05 |
| El: | 81 - C.c: 3 | -3.398e+03 | 3.398e+03 | -1.047e+03 | 2.284e+03 | -4.466e-01 | 4.466e-01 | 1.085e+00 | -1.085e+00 | 4.076e+01 | 4.076e+01 | -1.684e+05 | -1.356e+05 |
| El: | 81 - C.c: 4 | -2.511e+03 | 2.511e+03 | -7.761e+02 | 1.677e+03 | -3.942e-01 | 3.942e-01 | 9.580e-01 | -9.580e-01 | 3.597e+01 | 3.597e+01 | -1.242e+05 | -9.961e+04 |
| El: | 81 - C.c: 5 | -2.290e+03 | 2.290e+03 | -7.083e+02 | 1.525e+03 | -3.811e-01 | 3.811e-01 | 9.262e-01 | -9.262e-01 | 3.478e+01 | 3.478e+01 | -1.132e+05 | -9.061e+04 |
| El: | 81 - C.c: 7 | -4.628e+03 | 4.628e+03 | -1.432e+03 | 3.123e+03 | 9.974e+00 | -9.974e+00 | -2.424e+01 | 2.424e+01 | -9.101e+02 | -9.101e+02 | -2.300e+05 | -1.856e+05 |
| El: | 81 - C.c: 8 | -4.754e+03 | 4.754e+03 | -1.427e+03 | 3.118e+03 | -5.862e-01 | 5.862e-01 | 1.424e+00 | -1.424e+00 | 5.349e+01 | 5.349e+01 | -2.308e+05 | -1.838e+05 |
| El: | 82 - C.c: 1 | -4.709e+03 | 4.709e+03 | 3.406e+03 | -1.567e+03 | -9.150e+00 | 9.150e+00 | 2.224e+01 | -2.224e+01 | 8.349e+02 | 8.349e+02 | 2.061e+05 | 2.477e+05 |
| El: | 82 - C.c: 2 | -5.083e+03 | 5.083e+03 | 3.389e+03 | -1.550e+03 | -9.217e-01 | 9.217e-01 | 2.240e+00 | -2.240e+00 | 8.411e+01 | 8.410e+01 | 2.007e+05 | 2.500e+05 |
| El: | 82 - C.c: 3 | -3.724e+03 | 3.724e+03 | 2.479e+03 | -1.135e+03 | -6.538e-01 | 6.538e-01 | 1.589e+00 | -1.589e+00 | 5.966e+01 | 5.966e+01 | 1.468e+05 | 1.830e+05 |
| El: | 82 - C.c: 4 | -2.755e+03 | 2.755e+03 | 1.814e+03 | -8.366e+02 | -3.670e-01 | 3.670e-01 | 8.922e-01 | -8.922e-01 | 3.349e+01 | 3.349e+01 | 1.073e+05 | 1.346e+05 |
| El: | 82 - C.c: 5 | -2.513e+03 | 2.513e+03 | 1.647e+03 | -7.619e+02 | -2.953e-01 | 2.953e-01 | 7.179e-01 | -7.179e-01 | 2.695e+01 | 2.694e+01 | 9.737e+04 | 1.225e+05 |
| El: | 82 - C.c: 7 | -5.094e+03 | 5.094e+03 | 3.390e+03 | -1.551e+03 | -9.119e+00 | 9.119e+00 | 2.216e+01 | -2.216e+01 | 8.321e+02 | 8.321e+02 | 2.007e+05 | 2.502e+05 |
| El: | 82 - C.c: 8 | -4.698e+03 | 4.698e+03 | 3.405e+03 | -1.566e+03 | -9.530e-01 | 9.530e-01 | 2.316e+00 | -2.316e+00 | 8.696e+01 | 8.696e+01 | 2.061e+05 | 2.475e+05 |
| El: | 83 - C.c: 1 | -1.580e+04 | 1.580e+04 | 1.517e+03 | 3.224e+02 | -6.682e+00 | 6.682e+00 | 1.624e+01 | -1.624e+01 | 6.097e+02 | 6.097e+02 | -8.120e+04 | 1.902e+05 |
| El: | 83 - C.c: 2 | -1.606e+04 | 1.606e+04 | 1.500e+03 | 3.387e+02 | -1.122e+00 | 1.122e+00 | 2.727e+00 | -2.727e+00 | 1.024e+02 | 1.024e+02 | -8.534e+04 | 1.913e+05 |
| El: | 83 - C.c: 3 | -1.175e+04 | 1.175e+04 | 1.097e+03 | 2.474e+02 | -8.288e-01 | 8.288e-01 | 2.014e+00 | -2.014e+00 | 7.564e+01 | 7.563e+01 | -6.253e+04 | 1.400e+05 |
| El: | 83 - C.c: 4 | -8.637e+03 | 8.637e+03 | 7.979e+02 | 1.792e+02 | -6.509e-01 | 6.509e-01 | 1.582e+00 | -1.582e+00 | 5.940e+01 | 5.939e+01 | -4.634e+04 | 1.028e+05 |
| El: | 83 - C.c: 5 | -7.857e+03 | 7.857e+03 | 7.233e+02 | 1.621e+02 | -6.064e-01 | 6.064e-01 | 1.474e+00 | -1.474e+00 | 5.534e+01 | 5.533e+01 | -4.229e+04 | 9.349e+04 |
| El: | 83 - C.c: 7 | -1.608e+04 | 1.608e+04 | 1.501e+03 | 3.380e+02 | -6.684e+00 | 6.684e+00 | 1.625e+01 | -1.625e+01 | 6.099e+02 | 6.099e+02 | -8.545e+04 | 1.916e+05 |
| El: | 83 - C.c: 8 | -1.579e+04 | 1.579e+04 | 1.516e+03 | 3.232e+02 | -1.120e+00 | 1.120e+00 | 2.721e+00 | -2.721e+00 | 1.022e+02 | 1.022e+02 | -8.109e+04 | 1.899e+05 |
| El: | 84 - C.c: 1 | -1.330e+04 | 1.330e+04 | -3.727e+02 | 2.212e+03 | 6.270e+00 | -6.270e+00 | -1.524e+01 | 1.524e+01 | -5.721e+02 | -5.721e+02 | -2.277e+05 | -8.132e+03 |
| El: | 84 - C.c: 2 | -1.344e+04 | 1.344e+04 | -3.890e+02 | 2.228e+03 | -3.063e-01 | 3.063e-01 | 7.443e-01 | -7.443e-01 | 2.796e+01 | 2.795e+01 | -2.306e+05 | -8.183e+03 |
| El: | 84 - C.c: 3 | -9.835e+03 | 9.835e+03 | -2.861e+02 | 1.630e+03 | -2.128e-01 | 2.128e-01 | 5.171e-01 | -5.171e-01 | 1.942e+01 | 1.941e+01 | -1.688e+05 | -6.034e+03 |
| El: | 84 - C.c: 4 | -7.208e+03 | 7.208e+03 | -2.178e+02 | 1.195e+03 | -9.408e-02 | 9.408e-02 | 2.286e-01 | -2.286e-01 | 8.587e+00 | 8.581e+00 | -1.242e+05 | -4.682e+03 |
| El: | 84 - C.c: 5 | -6.551e+03 | 6.551e+03 | -2.008e+02 | 1.086e+03 | -6.439e-02 | 6.439e-02 | 1.564e-01 | -1.564e-01 | 5.879e+00 | 5.873e+00 | -1.131e+05 | -4.344e+03 |
| El: | 84 - C.c: 7 | -1.346e+04 | 1.346e+04 | -3.882e+02 | 2.227e+03 | 6.267e+00 | -6.267e+00 | -1.523e+01 | 1.523e+01 | -5.718e+02 | -5.718e+02 | -2.308e+05 | -7.881e+03 |
| El: | 84 - C.c: 8 | -1.328e+04 | 1.328e+04 | -3.734e+02 | 2.212e+03 | -3.032e-01 | 3.032e-01 | 7.368e-01 | -7.368e-01 | 2.767e+01 | 2.766e+01 | -2.275e+05 | -8.434e+03 |
| El: | 85 - C.c: 1 | 2.796e+03 | -2.796e+03 | -2.262e+03 | 4.101e+03 | 1.074e+01 | -1.074e+01 | -2.610e+01 | 2.610e+01 | -9.799e+02 | -9.799e+02 | -2.334e+05 | -3.472e+05 |
| El: | 85 - C.c: 2 | 2.774e+03 | -2.774e+03 | -2.278e+03 | 4.117e+03 | 8.905e-01 | -8.905e-01 | -2.165e+00 | 2.165e+00 | -8.126e+01 | -8.126e+01 | -2.351e+05 | -3.485e+05 |
| El: | 85 - C.c: 3 | 2.037e+03 | -2.037e+03 | -1.669e+03 | 3.013e+03 | 6.108e-01 | -6.108e-01 | -1.485e+00 | 1.485e+00 | -5.574e+01 | -5.573e+01 | -1.721e+05 | -2.551e+05 |
| El: | 85 - C.c: 4 | 1.531e+03 | -1.531e+03 | -1.234e+03 | 2.211e+03 | 2.250e-01 | -2.250e-01 | -5.470e-01 | 5.470e-01 | -2.053e+01 | -2.053e+01 | -1.264e+05 | -1.879e+05 |
| El: | 85 - C.c: 5 | 1.405e+03 | -1.405e+03 | -1.125e+03 | 2.010e+03 | 1.285e-01 | -1.285e-01 | -3.125e-01 | 3.125e-01 | -1.173e+01 | -1.173e+01 | -1.150e+05 | -1.710e+05 |
| El: | 85 - C.c: 7 | 2.746e+03 | -2.746e+03 | -2.277e+03 | 4.116e+03 | 1.069e+01 | -1.069e+01 | -2.597e+01 | 2.597e+01 | -9.752e+02 | -9.752e+02 | -2.353e+05 | -3.481e+05 |
| El: | 85 - C.c: 8 | 2.824e+03 | -2.824e+03 | -2.263e+03 | 4.102e+03 | 9.421e-01 | -9.421e-01 | -2.290e+00 | 2.290e+00 | -8.597e+01 | -8.596e+01 | -2.332e+05 | -3.476e+05 |
| El: | 86 - C.c: 1 | 5.922e+03 | -5.922e+03 | 2.565e+03 | -5.304e+02 | -2.533e+00 | 2.533e+00 | 1.305e+01 | -1.305e+01 | 2.596e+02 | 2.597e+02 | 2.425e+05 | 7.477e+04 |
| El: | 86 - C.c: 2 | 6.055e+03 | -6.055e+03 | 2.577e+03 | -5.418e+02 | 1.732e-01 | -1.732e-01 | -8.923e-01 | 8.923e-01 | -1.776e+01 | -1.775e+01 | 2.448e+05 | 7.484e+04 |
| El: | 86 - C.c: 3 | 4.441e+03 | -4.441e+03 | 1.884e+03 | -3.982e+02 | 1.397e-01 | -1.397e-01 | -7.197e-01 | 7.197e-01 | -1.432e+01 | -1.432e+01 | 1.792e+05 | 5.475e+04 |
| El: | 86 - C.c: 4 | 3.312e+03 | -3.312e+03 | 1.375e+03 | -3.015e+02 | 1.734e-01 | -1.734e-01 | -8.932e-01 | 8.932e-01 | -1.777e+01 | -1.777e+01 | 1.318e+05 | 4.012e+04 |
| El: | 86 - C.c: 5 | 3.029e+03 | -3.029e+03 | 1.248e+03 | -2.773e+02 | 1.818e-01 | -1.818e-01 | -9.365e-01 | 9.365e-01 | -1.863e+01 | -1.863e+01 | 1.199e+05 | 3.646e+04 |
| El: | 86 - C.c: 7 | 6.030e+03 | -6.030e+03 | 2.577e+03 | -5.417e+02 | -2.512e+00 | 2.512e+00 | 1.295e+01 | -1.295e+01 | 2.575e+02 | 2.575e+02 | 2.446e+05 | 7.504e+04 |
| El: | 86 - C.c: 8 | 5.947e+03 | -5.947e+03 | 2.565e+03 | -5.305e+02 | 1.521e-01 | -1.521e-01 | -7.833e-01 | 7.833e-01 | -1.559e+01 | -1.558e+01 | 2.428e+05 | 7.457e+04 |
| El: | 87 - C.c: 1 | -2.943e+02 | 2.943e+02 | 4.801e+02 | 8.599e+02 | -1.206e+00 | 1.206e+00 | 2.732e+00 | -2.732e+00 | 8.139e+01 | 8.139e+01 | -1.838e+02 | -2.545e+04 |
| El: | 87 - C.c: 2 | -2.566e+02 | 2.566e+02 | 4.916e+02 | 8.485e+02 | -1.023e+00 | 1.023e+00 | 2.317e+00 | -2.317e+00 | 6.902e+01 | 6.902e+01 | 9.021e+02 | -2.499e+04 |
| El: | 87 - C.c: 3 | -1.831e+02 | 1.831e+02 | 3.595e+02 | 6.191e+02 | -7.395e-01 | 7.395e-01 | 1.676e+00 | -1.676e+00 | 4.991e+01 | 4.991e+01 | 7.311e+02 | -1.825e+04 |
| El: | 87 - C.c: 4 | -1.088e+02 | 1.088e+02 | 2.628e+02 | 4.444e+02 | -4.945e-01 | 4.945e-01 | 1.120e+00 | -1.120e+00 | 3.338e+01 | 3.338e+01 | 9.248e+02 | -1.318e+04 |
| El: | 87 - C.c: 5 | -9.026e+01 | 9.026e+01 | 2.386e+02 | 4.007e+02 | -4.332e-01 | 4.332e-01 | 9.816e-01 | -9.816e-01 | 2.924e+01 | 2.924e+01 | 9.732e+02 | -1.191e+04 |
| El: | 87 - C.c: 7 | -2.810e+02 | 2.810e+02 | 4.915e+02 | 8.486e+02 | -1.213e+00 | 1.213e+00 | 2.748e+00 | -2.748e+00 | 8.185e+01 | 8.185e+01 | 6.937e+02 | -2.480e+04 |
| El: | 87 - C.c: 8 | -2.699e+02 | 2.699e+02 | 4.802e+02 | 8.599e+02 | -1.016e+00 | 1.016e+00 | 2.302e+00 | -2.302e+00 | 6.856e+01 | 6.856e+01 | 2.456e+01 | -2.565e+04 |
| El: | 88 - C.c: 1 | 7.248e+03 | -7.248e+03 | -9.102e+02 | 2.598e+03 | 4.563e+00 | -4.563e+00 | -1.625e+01 | 1.625e+01 | -3.879e+02 | -3.879e+02 | -6.506e+04 | -2.331e+05 |
| El: | 88 - C.c: 2 | 7.200e+03 | -7.200e+03 | -8.987e+02 | 2.586e+03 | 3.754e-01 | -3.754e-01 | -1.337e+00 | 1.337e+00 | -3.191e+01 | -3.191e+01 | -6.448e+04 | -2.317e+05 |
| El: | 88 - C.c: 3 | 5.266e+03 | -5.266e+03 | -6.577e+02 | 1.890e+03 | 2.524e-01 | -2.524e-01 | -8.992e-01 | 8.992e-01 | -2.146e+01 | -2.146e+01 | -4.714e+04 | -1.694e+05 |
| El: | 88 - C.c: 4 | 3.852e+03 | -3.852e+03 | -4.830e+02 | 1.374e+03 | 6.354e-02 | -6.354e-02 | -2.264e-01 | 2.264e-01 | -5.402e+00 | -5.399e+00 | -3.434e+04 | -1.235e+05 |
| El: | 88 - C.c: 5 | 3.498e+03 | -3.498e+03 | -4.394e+02 | 1.244e+03 | 1.631e-02 | -1.631e-02 | -5.822e-02 | 5.822e-02 | -1.387e+00 | -1.385e+00 | -3.114e+04 | -1.120e+05 |
| El: | 88 - C.c: 7 | 7.176e+03 | -7.176e+03 | -8.988e+02 | 2.586e+03 | 4.558e+00 | -4.558e+00 | -1.623e+01 | 1.623e+01 | -3.875e+02 | -3.875e+02 | -6.469e+04 | -2.315e+05 |
| El: | 88 - C.c: 8 | 7.272e+03 | -7.272e+03 | -9.101e+02 | 2.598e+03 | 3.800e-01 | -3.800e-01 | -1.353e+00 | 1.353e+00 | -3.230e+01 | -3.230e+01 | -6.485e+04 | -2.333e+05 |
| El: | 89 - C.c: 1 | 2.662e+03 | -2.662e+03 | 4.116e+03 | -2.277e+03 | -1.068e+01 | 1.068e+01 | 2.596e+01 | -2.596e+01 | 9.748e+02 | 9.748e+02 | 3.472e+05 | 2.361e+05 |
| El: | 89 - C.c: 2 | 2.748e+03 | -2.748e+03 | 4.113e+03 | -2.274e+03 | -1.305e+00 | 1.305e+00 | 3.172e+00 | -3.172e+00 | 1.191e+02 | 1.191e+02 | 3.478e+05 | 2.350e+05 |
| El: | 89 - C.c: 3 | 2.007e+03 | -2.007e+03 | 3.009e+03 | -1.665e+03 | -9.290e-01 | 9.290e-01 | 2.258e+00 | -2.258e+00 | 8.477e+01 | 8.478e+01 | 2.545e+05 | 1.720e+05 |
| El: | 89 - C.c: 4 | 1.449e+03 | -1.449e+03 | 2.205e+03 | -1.227e+03 | -5.407e-01 | 5.407e-01 | 1.314e+00 | -1.314e+00 | 4.934e+01 | 4.934e+01 | 1.864e+05 | 1.267e+05 |
| El: | 89 - C.c: 5 | 1.309e+03 | -1.309e+03 | 2.003e+03 | -1.118e+03 | -4.437e-01 | 4.437e-01 | 1.078e+00 | -1.078e+00 | 4.048e+01 | 4.048e+01 | 1.694e+05 | 1.154e+05 |
| El: | 89 - C.c: 7 | 2.719e+03 | -2.719e+03 | 4.112e+03 | -2.273e+03 | -1.074e+01 | 1.074e+01 | 2.609e+01 | -2.609e+01 | 9.796e+02 | 9.796e+02 | 3.474e+05 | 2.352e+05 |
| El: | 89 - C.c: 8 | 2.692e+03 | -2.692e+03 | 4.117e+03 | -2.278e+03 | -1.252e+00 | 1.252e+00 | 3.043e+00 | -3.043e+00 | 1.142e+02 | 1.142e+02 | 3.476e+05 | 2.359e+05 |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| El: | 90 - C.c: 1 | -1.354e+04 | 1.354e+04 | 2.226e+03 | -3.875e+02 | -5.145e+00 | 5.145e+00 | 1.250e+01 | -1.250e+01 | 4.695e+02 | 4.694e+02 | 6.994e+03 | 2.315e+05 |
| El: | 90 - C.c: 2 | -1.344e+04 | 1.344e+04 | 2.224e+03 | -3.849e+02 | 3.263e-01 | -3.263e-01 | -7.928e-01 | 7.928e-01 | -2.977e+01 | -2.978e+01 | 7.843e+03 | 2.302e+05 |
| El: | 90 - C.c: 3 | -9.839e+03 | 9.839e+03 | 1.627e+03 | -2.825e+02 | 2.285e-01 | -2.285e-01 | -5.553e-01 | 5.553e-01 | -2.085e+01 | -2.086e+01 | 5.660e+03 | 1.685e+05 |
| El: | 90 - C.c: 4 | -7.247e+03 | 7.247e+03 | 1.189e+03 | -2.117e+02 | 1.117e-01 | -1.117e-01 | -2.714e-01 | 2.714e-01 | -1.019e+01 | -1.020e+01 | 3.722e+03 | 1.241e+05 |
| El: | 90 - C.c: 5 | -6.599e+03 | 6.599e+03 | 1.079e+03 | -1.941e+02 | 8.249e-02 | -8.249e-02 | -2.004e-01 | 2.004e-01 | -7.525e+00 | -7.530e+00 | 3.237e+03 | 1.130e+05 |
| El: | 90 - C.c: 7 | -1.346e+04 | 1.346e+04 | 2.223e+03 | -3.839e+02 | -5.137e+00 | 5.137e+00 | 1.248e+01 | -1.248e+01 | 4.687e+02 | 4.687e+02 | 7.520e+03 | 2.304e+05 |
| El: | 90 - C.c: 8 | -1.352e+04 | 1.352e+04 | 2.227e+03 | -3.885e+02 | 3.183e-01 | -3.183e-01 | -7.734e-01 | 7.734e-01 | -2.904e+01 | -2.905e+01 | 7.317e+03 | 2.314e+05 |
| El: | 91 - C.c: 1 | -1.615e+04 | 1.615e+04 | 3.372e+02 | 1.502e+03 | 7.624e+00 | -7.624e+00 | -1.853e+01 | 1.853e+01 | -6.956e+02 | -6.957e+02 | -1.924e+05 | 8.615e+04 |
| El: | 91 - C.c: 2 | -1.603e+04 | 1.603e+04 | 3.347e+02 | 1.504e+03 | -1.538e-01 | 1.538e-01 | 3.736e-01 | -3.736e-01 | 1.404e+01 | 1.402e+01 | -1.914e+05 | 8.463e+04 |
| El: | 91 - C.c: 3 | -1.173e+04 | 1.173e+04 | 2.438e+02 | 1.100e+03 | -1.028e-01 | 1.028e-01 | 2.499e-01 | -2.499e-01 | 9.388e+00 | 9.378e+00 | -1.401e+05 | 6.198e+04 |
| El: | 91 - C.c: 4 | -8.632e+03 | 8.632e+03 | 1.731e+02 | 8.040e+02 | -2.251e-02 | 2.251e-02 | 5.467e-02 | -5.467e-02 | 2.058e+00 | 2.051e+00 | -1.033e+05 | 4.574e+04 |
| El: | 91 - C.c: 5 | -7.857e+03 | 7.857e+03 | 1.554e+02 | 7.300e+02 | -2.432e-03 | 2.432e-03 | 5.873e-03 | -5.873e-03 | 2.251e-01 | 2.186e-01 | -9.410e+04 | 4.167e+04 |
| El: | 91 - C.c: 7 | -1.604e+04 | 1.604e+04 | 3.337e+02 | 1.505e+03 | 7.595e+00 | -7.595e+00 | -1.846e+01 | 1.846e+01 | -6.931e+02 | -6.931e+02 | -1.916e+05 | 8.471e+04 |
| El: | 91 - C.c: 8 | -1.614e+04 | 1.614e+04 | 3.382e+02 | 1.501e+03 | -1.255e-01 | 1.255e-01 | 3.049e-01 | -3.049e-01 | 1.146e+01 | 1.144e+01 | -1.922e+05 | 8.607e+04 |
| El: | 92 - C.c: 1 | -5.163e+03 | 5.163e+03 | -1.552e+03 | 3.391e+03 | 9.552e+00 | -9.552e+00 | -2.322e+01 | 2.322e+01 | -8.716e+02 | -8.717e+02 | -2.510e+05 | -2.000e+05 |
| El: | 92 - C.c: 2 | -5.021e+03 | 5.021e+03 | -1.555e+03 | 3.394e+03 | 3.489e-01 | -3.489e-01 | -8.482e-01 | 8.482e-01 | -3.183e+01 | -3.184e+01 | -2.498e+05 | -2.017e+05 |
| El: | 92 - C.c: 3 | -3.676e+03 | 3.676e+03 | -1.139e+03 | 2.483e+03 | 2.366e-01 | -2.366e-01 | -5.752e-01 | 5.752e-01 | -2.159e+01 | -2.159e+01 | -1.829e+05 | -1.476e+05 |
| El: | 92 - C.c: 4 | -2.707e+03 | 2.707e+03 | -8.427e+02 | 1.820e+03 | 7.136e-02 | -7.136e-02 | -1.736e-01 | 1.736e-01 | -6.510e+00 | -6.513e+00 | -1.346e+05 | -1.083e+05 |
| El: | 92 - C.c: 5 | -2.464e+03 | 2.464e+03 | -7.686e+02 | 1.654e+03 | 3.005e-02 | -3.005e-02 | -7.320e-02 | 7.320e-02 | -2.741e+00 | -2.743e+00 | -1.226e+05 | -9.848e+04 |
| El: | 92 - C.c: 7 | -5.030e+03 | 5.030e+03 | -1.556e+03 | 3.394e+03 | 9.569e+00 | -9.569e+00 | -2.326e+01 | 2.326e+01 | -8.732e+02 | -8.732e+02 | -2.500e+05 | -2.017e+05 |
| El: | 92 - C.c: 8 | -5.154e+03 | 5.154e+03 | -1.551e+03 | 3.390e+03 | 3.318e-01 | -3.318e-01 | -8.068e-01 | 8.068e-01 | -3.028e+01 | -3.028e+01 | -2.508e+05 | -2.000e+05 |
| El: | 93 - C.c: 1 | -1.583e+03 | 1.583e+03 | 7.707e+02 | 2.095e+02 | -1.555e+00 | 1.555e+00 | 6.370e+00 | -6.370e+00 | 1.419e+02 | 1.419e+02 | 2.738e+04 | 2.383e+04 |
| El: | 93 - C.c: 2 | -1.638e+03 | 1.638e+03 | 7.877e+02 | 1.925e+02 | -1.502e-01 | 1.502e-01 | 6.151e-01 | -6.151e-01 | 1.370e+01 | 1.370e+01 | 2.847e+04 | 2.584e+04 |
| El: | 93 - C.c: 3 | -1.203e+03 | 1.203e+03 | 5.760e+02 | 1.412e+02 | -1.014e-01 | 1.014e-01 | 4.154e-01 | -4.154e-01 | 9.254e+00 | 9.253e+00 | 2.077e+04 | 1.891e+04 |
| El: | 93 - C.c: 4 | -9.038e+02 | 9.038e+02 | 4.202e+02 | 1.054e+02 | -2.806e-02 | 2.806e-02 | 1.150e-01 | -1.150e-01 | 2.561e+00 | 2.560e+00 | 1.486e+04 | 1.386e+04 |
| El: | 93 - C.c: 5 | -8.290e+02 | 8.290e+02 | 3.813e+02 | 9.650e+01 | -9.724e-03 | 9.724e-03 | 3.986e-02 | -3.986e-02 | 8.877e-01 | 8.869e-01 | 1.339e+04 | 1.260e+04 |
| El: | 93 - C.c: 7 | -1.735e+03 | 1.735e+03 | 7.597e+02 | 2.205e+02 | -1.541e+00 | 1.541e+00 | 6.312e+00 | -6.312e+00 | 1.406e+02 | 1.406e+02 | 2.511e+04 | 2.409e+04 |
| El: | 93 - C.c: 8 | -1.486e+03 | 1.486e+03 | 7.987e+02 | 1.815e+02 | -1.645e-01 | 1.645e-01 | 6.737e-01 | -6.737e-01 | 1.501e+01 | 1.501e+01 | 3.074e+04 | 2.557e+04 |
| El: | 94 - C.c: 1 | 4.174e+02 | -4.174e+02 | -2.357e+02 | 1.216e+03 | -3.593e+00 | 3.593e+00 | 1.471e+01 | -1.471e+01 | 3.278e+02 | 3.278e+02 | -4.786e+04 | -8.460e+04 |
| El: | 94 - C.c: 2 | 2.092e+02 | -2.092e+02 | -2.187e+02 | 1.199e+03 | -5.002e-01 | 5.002e-01 | 2.048e+00 | -2.048e+00 | 4.564e+01 | 4.564e+01 | -4.804e+04 | -8.132e+04 |
| El: | 94 - C.c: 3 | 1.566e+02 | -1.566e+02 | -1.614e+02 | 8.785e+02 | -3.782e-01 | 3.782e-01 | 1.549e+00 | -1.549e+00 | 3.451e+01 | 3.451e+01 | -3.524e+04 | -5.965e+04 |
| El: | 94 - C.c: 4 | 1.343e+02 | -1.343e+02 | -1.256e+02 | 6.513e+02 | -3.440e-01 | 3.440e-01 | 1.409e+00 | -1.409e+00 | 3.139e+01 | 3.139e+01 | -2.634e+04 | -4.456e+04 |
| El: | 94 - C.c: 5 | 1.287e+02 | -1.287e+02 | -1.167e+02 | 5.945e+02 | -3.355e-01 | 3.355e-01 | 1.374e+00 | -1.374e+00 | 3.061e+01 | 3.061e+01 | -2.411e+04 | -4.078e+04 |
| El: | 94 - C.c: 7 | 3.635e+02 | -3.635e+02 | -2.467e+02 | 1.227e+03 | -3.598e+00 | 3.598e+00 | 1.473e+01 | -1.473e+01 | 3.283e+02 | 3.283e+02 | -4.931e+04 | -8.515e+04 |
| El: | 94 - C.c: 8 | 2.631e+02 | -2.631e+02 | -2.077e+02 | 1.188e+03 | -4.953e-01 | 4.953e-01 | 2.028e+00 | -2.028e+00 | 4.519e+01 | 4.519e+01 | -4.659e+04 | -8.077e+04 |
| El: | 95 - C.c: 1 | 4.856e+02 | -4.856e+02 | 1.099e+03 | -1.190e+02 | 3.440e+00 | -3.440e+00 | -1.409e+01 | 1.409e+01 | -3.139e+02 | -3.139e+02 | 7.452e+04 | 3.665e+04 |
| El: | 95 - C.c: 2 | 4.900e+02 | -4.900e+02 | 1.113e+03 | -1.324e+02 | -2.677e-02 | 2.677e-02 | 1.098e-01 | -1.098e-01 | 2.442e+00 | 2.443e+00 | 7.578e+04 | 3.783e+04 |
| El: | 95 - C.c: 3 | 3.614e+02 | -3.614e+02 | 8.146e+02 | -9.739e+01 | -6.238e-03 | 6.238e-03 | 2.568e-02 | -2.568e-02 | 5.691e-01 | 5.694e-01 | 5.551e+04 | 2.770e+04 |
| El: | 95 - C.c: 4 | 2.804e+02 | -2.804e+02 | 5.999e+02 | -7.416e+01 | 6.838e-02 | -6.838e-02 | -2.800e-01 | 2.800e-01 | -6.240e+00 | -6.240e+00 | 4.107e+04 | 2.043e+04 |
| El: | 95 - C.c: 5 | 2.602e+02 | -2.602e+02 | 5.462e+02 | -6.835e+01 | 8.704e-02 | -8.704e-02 | -3.564e-01 | 3.564e-01 | -7.942e+00 | -7.942e+00 | 3.746e+04 | 1.861e+04 |
| El: | 95 - C.c: 7 | 5.981e+02 | -5.981e+02 | 1.118e+03 | -1.379e+02 | 3.442e+00 | -3.442e+00 | -1.410e+01 | 1.410e+01 | -3.141e+02 | -3.141e+02 | 7.718e+04 | 3.744e+04 |
| El: | 95 - C.c: 8 | 3.774e+02 | -3.774e+02 | 1.094e+03 | -1.135e+02 | -2.953e-02 | 2.953e-02 | 1.211e-01 | -1.211e-01 | 2.694e+00 | 2.694e+00 | 7.312e+04 | 3.704e+04 |
| El: | 96 - C.c: 1 | -4.654e+02 | 4.654e+02 | 9.280e+01 | 8.874e+02 | 1.659e+00 | -1.659e+00 | -6.793e+00 | 6.793e+00 | -1.514e+02 | -1.514e+02 | -2.521e+04 | -4.730e+04 |
| El: | 96 - C.c: 2 | -5.814e+02 | 5.814e+02 | 1.062e+02 | 8.740e+02 | 8.300e-01 | -8.300e-01 | -3.400e+00 | 3.400e+00 | -7.574e+01 | -7.574e+01 | -2.495e+04 | -4.511e+04 |
| El: | 96 - C.c: 3 | -4.227e+02 | 4.227e+02 | 7.722e+01 | 6.399e+02 | 5.863e-01 | -5.863e-01 | -2.401e+00 | 2.401e+00 | -5.350e+01 | -5.350e+01 | -1.827e+04 | -3.307e+04 |
| El: | 96 - C.c: 4 | -2.950e+02 | 2.950e+02 | 5.399e+01 | 4.717e+02 | 3.147e-01 | -3.147e-01 | -1.289e+00 | 1.289e+00 | -2.871e+01 | -2.871e+01 | -1.351e+04 | -2.461e+04 |
| El: | 96 - C.c: 5 | -2.631e+02 | 2.631e+02 | 4.819e+01 | 4.296e+02 | 2.468e-01 | -2.468e-01 | -1.011e+00 | 1.011e+00 | -2.252e+01 | -2.252e+01 | -1.232e+04 | -2.249e+04 |
| El: | 96 - C.c: 7 | -5.230e+02 | 5.230e+02 | 1.117e+02 | 8.685e+02 | 1.635e+00 | -1.635e+00 | -6.695e+00 | 6.695e+00 | -1.492e+02 | -1.492e+02 | -2.396e+04 | -4.510e+04 |
| El: | 96 - C.c: 8 | -5.239e+02 | 5.239e+02 | 8.728e+01 | 8.929e+02 | 8.540e-01 | -8.540e-01 | -3.498e+00 | 3.498e+00 | -7.792e+01 | -7.792e+01 | -2.620e+04 | -4.732e+04 |
| El: | 97 - C.c: 1 | 7.108e+02 | -7.108e+02 | 5.727e+02 | 5.284e+02 | -9.285e-01 | 9.285e-01 | 4.785e+00 | -4.785e+00 | 9.517e+01 | 9.517e+01 | 2.698e+04 | -2.244e+04 |
| El: | 97 - C.c: 2 | 6.272e+02 | -6.272e+02 | 6.045e+02 | 4.965e+02 | 1.196e-01 | -1.196e-01 | -6.163e-01 | 6.163e-01 | -1.226e+01 | -1.226e+01 | 2.955e+04 | -1.848e+04 |
| El: | 97 - C.c: 3 | 4.607e+02 | -4.607e+02 | 4.430e+02 | 3.626e+02 | 9.502e-02 | -9.502e-02 | -4.897e-01 | 4.897e-01 | -9.740e+00 | -9.739e+00 | 2.171e+04 | -1.346e+04 |
| El: | 97 - C.c: 4 | 3.478e+02 | -3.478e+02 | 3.285e+02 | 2.620e+02 | 1.107e-01 | -1.107e-01 | -5.706e-01 | 5.706e-01 | -1.135e+01 | -1.135e+01 | 1.638e+04 | -9.562e+03 |
| El: | 97 - C.c: 5 | 3.195e+02 | -3.195e+02 | 2.999e+02 | 2.368e+02 | 1.146e-01 | -1.146e-01 | -5.908e-01 | 5.908e-01 | -1.175e+01 | -1.175e+01 | 1.505e+04 | -8.587e+03 |
| El: | 97 - C.c: 7 | 6.432e+02 | -6.432e+02 | 6.040e+02 | 4.970e+02 | -9.120e-01 | 9.120e-01 | 4.700e+00 | -4.700e+00 | 9.348e+01 | 9.348e+01 | 2.963e+04 | -1.866e+04 |
| El: | 97 - C.c: 8 | 6.947e+02 | -6.947e+02 | 5.732e+02 | 5.279e+02 | 1.031e-01 | -1.031e-01 | -5.314e-01 | 5.314e-01 | -1.057e+01 | -1.057e+01 | 2.689e+04 | -2.225e+04 |
| El: | 98 - C.c: 1 | -2.425e+02 | 2.425e+02 | 7.987e+02 | -7.367e+01 | -7.625e-01 | 7.625e-01 | 1.728e+00 | -1.728e+00 | 5.147e+01 | 5.147e+01 | 3.559e+04 | 2.330e+04 |
| El: | 98 - C.c: 2 | -2.873e+02 | 2.873e+02 | 7.921e+02 | -6.703e+01 | -1.985e+00 | 1.985e+00 | 4.498e+00 | -4.498e+00 | 1.340e+02 | 1.340e+02 | 3.477e+04 | 2.322e+04 |
| El: | 98 - C.c: 3 | -2.120e+02 | 2.120e+02 | 5.802e+02 | -4.969e+01 | -1.412e+00 | 1.412e+00 | 3.199e+00 | -3.199e+00 | 9.529e+01 | 9.529e+01 | 2.547e+04 | 1.705e+04 |
| El: | 98 - C.c: 4 | -1.649e+02 | 1.649e+02 | 4.288e+02 | -3.996e+01 | -8.131e-01 | 8.131e-01 | 1.843e+00 | -1.843e+00 | 5.489e+01 | 5.489e+01 | 1.883e+04 | 1.281e+04 |
| El: | 98 - C.c: 5 | -1.532e+02 | 1.532e+02 | 3.910e+02 | -3.753e+01 | -6.635e-01 | 6.635e-01 | 1.503e+00 | -1.503e+00 | 4.478e+01 | 4.478e+01 | 1.717e+04 | 1.176e+04 |
| El: | 98 - C.c: 7 | -2.729e+02 | 2.729e+02 | 7.916e+02 | -6.656e+01 | -7.421e-01 | 7.421e-01 | 1.682e+00 | -1.682e+00 | 5.010e+01 | 5.009e+01 | 3.486e+04 | 2.307e+04 |
| El: | 98 - C.c: 8 | -2.570e+02 | 2.570e+02 | 7.992e+02 | -7.414e+01 | -2.005e+00 | 2.005e+00 | 4.544e+00 | -4.544e+00 | 1.354e+02 | 1.354e+02 | 3.550e+04 | 2.345e+04 |
| El: | 99 - C.c: 1 | -2.154e+02 | 2.154e+02 | 4.745e+01 | 8.656e+02 | 8.252e-01 | -8.252e-01 | -2.939e+00 | 2.939e+00 | -7.015e+01 | -7.015e+01 | -2.362e+04 | -4.592e+04 |
| El: | 99 - C.c: 2 | -2.103e+02 | 2.103e+02 | 4.082e+01 | 8.722e+02 | 1.069e+00 | -1.069e+00 | -3.808e+00 | 3.808e+00 | -9.089e+01 | -9.089e+01 | -2.414e+04 | -4.653e+04 |
| El: | 99 - C.c: 3 | -1.564e+02 | 1.564e+02 | 2.952e+01 | 6.385e+02 | 7.580e-01 | -7.580e-01 | -2.699e+00 | 2.699e+00 | -6.443e+01 | -6.443e+01 | -1.772e+04 | -3.405e+04 |
| El: | 99 - C.c: 4 | -1.282e+02 | 1.282e+02 | 1.979e+01 | 4.699e+02 | 4.223e-01 | -4.223e-01 | -1.504e+00 | 1.504e+00 | -3.590e+01 | -3.590e+01 | -1.326e+04 | -2.500e+04 |
| El: | 99 - C.c: 5 | -1.211e+02 | 1.211e+02 | 1.736e+01 | 4.277e+02 | 3.384e-01 | -3.384e-01 | -1.205e+00 | 1.205e+00 | -2.876e+01 | -2.876e+01 | -1.214e+04 | -2.274e+04 |
| El: | 99 - C.c: 7 | -1.923e+02 | 1.923e+02 | 4.034e+01 | 8.727e+02 | 8.295e-01 | -8.295e-01 | -2.954e+00 | 2.954e+00 | -7.051e+01 | -7.051e+01 | -2.404e+04 | -4.671e+04 |
| El: | 99 - C.c: 8 | -2.334e+02 | 2.334e+02 | 4.792e+01 | 8.651e+02 | 1.065e+00 | -1.065e+00 | -3.793e+00 | 3.793e+00 | -9.053e+01 | -9.053e+01 | -2.373e+04 | -4.573e+04 |
| El: | 100 - C.c: 1 | -4.913e+02 | 4.913e+02 | 8.578e+02 | 1.224e+02 | -1.062e+00 | 1.062e+00 | 4.348e+00 | -4.348e+00 | 9.687e+01 | 9.687e+01 | 4.439e+04 | 2.272e+04 |
| El: | 100 - C.c: 2 | -4.276e+02 | 4.276e+02 | 8.846e+02 | 9.555e+01 | -1.076e+00 | 1.076e+00 | 4.408e+00 | -4.408e+00 | 9.820e+01 | 9.820e+01 | 4.736e+04 | 2.464e+04 |
| El: | 100 - C.c: 3 | -3.148e+02 | 3.148e+02 | 6.472e+02 | 7.002e+01 | -7.755e-01 | 7.755e-01 | 3.176e+00 | -3.176e+00 | 7.076e+01 | 7.076e+01 | 3.463e+04 | 1.804e+04 |
| El: | 100 - C.c: 4 | -2.411e+02 | 2.411e+02 | 4.738e+02 | 5.189e+01 | -5.035e-01 | 5.035e-01 | 2.062e+00 | -2.062e+00 | 4.594e+01 | 4.594e+01 | 2.524e+04 | 1.325e+04 |
| El: | 100 - C.c: 5 | -2.227e+02 | 2.227e+02 | 4.305e+02 | 4.736e+01 | -4.354e-01 | 4.354e-01 | 1.783e+00 | -1.783e+00 | 3.973e+01 | 3.973e+01 | 2.290e+04 | 1.206e+04 |
| El: | 100 - C.c: 7 | -3.663e+02 | 3.663e+02 | 8.794e+02 | 1.008e+02 | -1.088e+00 | 1.088e+00 | 4.457e+00 | -4.457e+00 | 9.930e+01 | 9.930e+01 | 4.739e+04 | 2.366e+04 |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| El: 100 - C.c: 8 | -5.526e+02 | 5.526e+02 | 8.630e+02 | 1.171e+02 | -1.050e+00 | 1.050e+00 | 4.299e+00 | -4.299e+00 | 9.577e+01 | 9.577e+01 | 4.435e+04 | 2.371e+04 |
| El: 101 - C.c: 1 | 7.256e+02 | -7.256e+02 | -1.486e+02 | 1.129e+03 | -3.012e+00 | 3.012e+00 | 1.233e+01 | -1.233e+01 | 2.748e+02 | 2.748e+02 | -3.735e+04 | -7.921e+04 |
| El: 101 - C.c: 2 | 5.481e+02 | -5.481e+02 | -1.218e+02 | 1.102e+03 | 6.101e-02 | -6.101e-02 | -2.500e-01 | 2.500e-01 | -5.567e+00 | -5.567e+00 | -3.638e+04 | -7.529e+04 |
| El: 101 - C.c: 3 | 4.045e+02 | -4.045e+02 | -9.018e+01 | 8.074e+02 | 3.216e-02 | -3.216e-02 | -1.318e-01 | 1.318e-01 | -2.935e+00 | -2.935e+00 | -2.669e+04 | -5.521e+04 |
| El: 101 - C.c: 4 | 3.154e+02 | -3.154e+02 | -7.206e+01 | 5.977e+02 | -4.463e-02 | 4.463e-02 | 1.827e-01 | -1.827e-01 | 4.073e+00 | 4.073e+00 | -1.995e+04 | -4.117e+04 |
| El: 101 - C.c: 5 | 2.931e+02 | -2.931e+02 | -6.753e+01 | 5.453e+02 | -6.383e-02 | 6.383e-02 | 2.613e-01 | -2.613e-01 | 5.825e+00 | 5.825e+00 | -1.826e+04 | -3.766e+04 |
| El: 101 - C.c: 7 | 6.565e+02 | -6.565e+02 | -1.270e+02 | 1.107e+03 | -2.998e+00 | 2.998e+00 | 1.228e+01 | -1.228e+01 | 2.736e+02 | 2.736e+02 | -3.596e+04 | -7.666e+04 |
| El: 101 - C.c: 8 | 6.172e+02 | -6.172e+02 | -1.434e+02 | 1.124e+03 | 4.729e-02 | -4.729e-02 | -1.939e-01 | 1.939e-01 | -4.316e+00 | -4.315e+00 | -3.778e+04 | -7.783e+04 |
| El: 102 - C.c: 1 | 2.838e+02 | -2.838e+02 | 1.217e+03 | -2.367e+02 | 3.947e+00 | -3.947e+00 | -1.616e+01 | 1.616e+01 | -3.601e+02 | -3.601e+02 | 8.358e+04 | 4.906e+04 |
| El: 102 - C.c: 2 | 1.743e+02 | -1.743e+02 | 1.192e+03 | -2.116e+02 | -5.074e-03 | 5.074e-03 | 2.098e-02 | -2.098e-02 | 4.629e-01 | 4.631e-01 | 8.039e+04 | 4.768e+04 |
| El: 102 - C.c: 3 | 1.309e+02 | -1.309e+02 | 8.731e+02 | -1.559e+02 | 8.600e-03 | -8.600e-03 | -3.508e-02 | 3.508e-02 | -7.848e-01 | -7.847e-01 | 5.894e+04 | 3.496e+04 |
| El: 102 - C.c: 4 | 1.141e+02 | -1.141e+02 | 6.460e+02 | -1.203e+02 | 7.361e-02 | -7.361e-02 | -3.014e-01 | 3.014e-01 | -6.717e+00 | -6.717e+00 | 4.390e+04 | 2.602e+04 |
| El: 102 - C.c: 5 | 1.099e+02 | -1.099e+02 | 5.892e+02 | -1.114e+02 | 8.987e-02 | -8.987e-02 | -3.680e-01 | 3.680e-01 | -8.200e+00 | -8.200e+00 | 4.014e+04 | 2.379e+04 |
| El: 102 - C.c: 7 | 3.278e+02 | -3.278e+02 | 1.220e+03 | -2.395e+02 | 3.925e+00 | -3.925e+00 | -1.608e+01 | 1.608e+01 | -3.582e+02 | -3.582e+02 | 8.420e+04 | 4.895e+04 |
| El: 102 - C.c: 8 | 1.303e+02 | -1.303e+02 | 1.189e+03 | -2.088e+02 | 1.639e-02 | -1.639e-02 | -6.694e-02 | 6.694e-02 | -1.496e+00 | -1.496e+00 | 7.977e+04 | 4.779e+04 |
| El: 103 - C.c: 1 | -1.725e+03 | 1.725e+03 | 2.105e+02 | 7.697e+02 | 1.628e+00 | -1.628e+00 | -6.667e+00 | 6.667e+00 | -1.485e+02 | -1.485e+02 | -2.492e+04 | -2.611e+04 |
| El: 103 - C.c: 2 | -1.609e+03 | 1.609e+03 | 1.854e+02 | 7.948e+02 | 3.369e-01 | -3.369e-01 | -1.380e+00 | 1.380e+00 | -3.074e+01 | -3.074e+01 | -2.624e+04 | -2.936e+04 |
| El: 103 - C.c: 3 | -1.180e+03 | 1.180e+03 | 1.358e+02 | 5.814e+02 | 2.378e-01 | -2.378e-01 | -9.739e-01 | 9.739e-01 | -2.170e+01 | -2.170e+01 | -1.921e+04 | -2.145e+04 |
| El: 103 - C.c: 4 | -8.762e+02 | 8.762e+02 | 1.001e+02 | 4.256e+02 | 1.266e-01 | -1.266e-01 | -5.186e-01 | 5.186e-01 | -1.155e+01 | -1.155e+01 | -1.412e+04 | -1.557e+04 |
| El: 103 - C.c: 5 | -8.004e+02 | 8.004e+02 | 9.122e+01 | 3.866e+02 | 9.882e-02 | -9.882e-02 | -4.048e-01 | 4.048e-01 | -9.017e+00 | -9.017e+00 | -1.285e+04 | -1.410e+04 |
| El: 103 - C.c: 7 | -1.706e+03 | 1.706e+03 | 2.133e+02 | 7.669e+02 | 1.641e+00 | -1.641e+00 | -6.719e+00 | 6.719e+00 | -1.497e+02 | -1.497e+02 | -2.451e+04 | -2.601e+04 |
| El: 103 - C.c: 8 | -1.628e+03 | 1.628e+03 | 1.826e+02 | 7.976e+02 | 3.242e-01 | -3.242e-01 | -1.328e+00 | 1.328e+00 | -2.958e+01 | -2.958e+01 | -2.666e+04 | -2.946e+04 |

**Gruppo numero: 3 - Descrizione: DIAGONALI DI PARETE**

| Elem./C.c. | Fx/I | Fx/J | Fy/I | Fy/J | Fz/I | Fz/J | Mx/I | Mx/J | My/I | My/J | Mz/I | Mz/J |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| El: 1 - C.c: 1 | -1.919e+02 | 1.919e+02 | -8.792e-17 | 8.792e-17 | -1.133e-16 | 1.133e-16 | 1.721e+00 | -1.721e+00 | 5.308e-15 | 9.394e-15 | -1.708e-14 | 0.000e+00 |
| El: 1 - C.c: 2 | 2.406e+02 | -2.406e+02 | -1.666e-17 | 1.666e-17 | 7.112e-18 | -7.112e-18 | 6.458e-01 | -6.458e-01 | -1.210e-15 | -2.142e-15 | -2.881e-15 | 0.000e+00 |
| El: 1 - C.c: 3 | 1.777e+02 | -1.777e+02 | -1.225e-17 | 1.225e-17 | 4.790e-18 | -4.790e-18 | 4.520e-01 | -4.520e-01 | -8.544e-16 | -1.512e-15 | -2.092e-15 | 0.000e+00 |
| El: 1 - C.c: 4 | 1.394e+02 | -1.394e+02 | -9.303e-18 | 9.303e-18 | 1.252e-18 | -1.252e-18 | 2.189e-01 | -2.189e-01 | -4.558e-16 | -8.067e-16 | -1.447e-15 | 0.000e+00 |
| El: 1 - C.c: 5 | 1.298e+02 | -1.298e+02 | -8.566e-18 | 8.566e-18 | 3.680e-19 | -3.680e-19 | 1.607e-01 | -1.607e-01 | -3.562e-16 | -6.304e-16 | -1.285e-15 | 0.000e+00 |
| El: 1 - C.c: 7 | 2.338e+02 | -2.338e+02 | -1.874e-17 | 1.874e-17 | -1.138e-16 | 1.138e-16 | 1.709e+00 | -1.709e+00 | 5.314e-15 | 9.405e-15 | -3.289e-15 | 0.000e+00 |
| El: 1 - C.c: 8 | -1.851e+02 | 1.851e+02 | -8.584e-17 | 8.584e-17 | 7.591e-18 | -7.591e-18 | 6.575e-01 | -6.575e-01 | -1.216e-15 | -2.153e-15 | -1.667e-14 | 0.000e+00 |
| El: 2 - C.c: 1 | 5.265e+02 | -5.265e+02 | 8.181e-17 | -8.181e-17 | 9.573e-17 | -9.573e-17 | -1.373e+00 | 1.373e+00 | -5.289e-15 | -9.360e-15 | 1.688e-14 | 0.000e+00 |
| El: 2 - C.c: 2 | 9.255e+01 | -9.255e+01 | 1.133e-17 | -1.133e-17 | -1.382e-17 | 1.382e-17 | -6.960e-01 | 6.960e-01 | 1.214e-15 | 2.148e-15 | 2.870e-15 | 0.000e+00 |
| El: 2 - C.c: 3 | 6.716e+01 | -6.716e+01 | 8.863e-18 | -8.863e-18 | -9.901e-18 | 9.901e-18 | -4.904e-01 | 4.904e-01 | 8.563e-16 | 1.515e-15 | 2.219e-15 | 0.000e+00 |
| El: 2 - C.c: 4 | 4.619e+01 | -4.619e+01 | 9.614e-18 | -9.614e-18 | -6.105e-18 | 6.105e-18 | -2.564e-01 | 2.564e-01 | 4.547e-16 | 8.047e-16 | 2.280e-15 | 0.000e+00 |
| El: 2 - C.c: 5 | 4.095e+01 | -4.095e+01 | 9.802e-18 | -9.802e-18 | -5.156e-18 | 5.156e-18 | -1.979e-01 | 1.979e-01 | 3.543e-16 | 6.270e-16 | 2.295e-15 | 0.000e+00 |
| El: 2 - C.c: 7 | 9.956e+01 | -9.956e+01 | 1.332e-17 | -1.332e-17 | 9.535e-17 | -9.535e-17 | -1.376e+00 | 1.376e+00 | -5.300e-15 | -9.379e-15 | 3.253e-15 | 0.000e+00 |
| El: 2 - C.c: 8 | 5.195e+02 | -5.195e+02 | 7.983e-17 | -7.983e-17 | -1.345e-17 | 1.345e-17 | -6.925e-01 | 6.925e-01 | 1.225e-15 | 2.167e-15 | 1.649e-14 | 0.000e+00 |
| El: 3 - C.c: 1 | -2.246e+02 | 2.246e+02 | -6.723e-17 | 6.723e-17 | -8.259e-17 | 8.259e-17 | -2.391e-01 | 2.391e-01 | 5.308e-15 | 9.394e-15 | -1.215e-14 | 0.000e+00 |
| El: 3 - C.c: 2 | 1.631e+02 | -1.631e+02 | 4.780e-18 | -4.780e-18 | 6.813e-18 | -6.813e-18 | -3.548e-01 | 3.548e-01 | -1.210e-15 | -2.142e-15 | 2.256e-15 | 0.000e+00 |
| El: 3 - C.c: 3 | 1.213e+02 | -1.213e+02 | 3.544e-18 | -3.544e-18 | 4.807e-18 | -4.807e-18 | -2.538e-01 | 2.538e-01 | -8.544e-16 | -1.512e-15 | 1.701e-15 | 0.000e+00 |
| El: 3 - C.c: 4 | 9.994e+01 | -9.994e+01 | 2.855e-18 | -2.855e-18 | 2.552e-18 | -2.552e-18 | -1.543e-01 | 1.543e-01 | -4.558e-16 | -8.067e-16 | 1.519e-15 | 0.000e+00 |
| El: 3 - C.c: 5 | 9.459e+01 | -9.459e+01 | 2.683e-18 | -2.683e-18 | 1.988e-18 | -1.988e-18 | -1.295e-01 | 1.295e-01 | -3.562e-16 | -6.304e-16 | 1.474e-15 | 0.000e+00 |
| El: 3 - C.c: 7 | 1.771e+02 | -1.771e+02 | 1.985e-18 | -1.985e-18 | -8.249e-17 | 8.249e-17 | -2.435e-01 | 2.435e-01 | 5.314e-15 | 9.405e-15 | 1.616e-15 | 0.000e+00 |
| El: 3 - C.c: 8 | -2.387e+02 | 2.387e+02 | -6.444e-17 | 6.444e-17 | 6.721e-18 | -6.721e-18 | -3.505e-01 | 3.505e-01 | -1.216e-15 | -2.153e-15 | -1.151e-14 | 0.000e+00 |
| El: 4 - C.c: 1 | 6.185e+02 | -6.185e+02 | 1.090e-16 | -1.090e-16 | 8.620e-17 | -8.620e-17 | 2.645e-01 | -2.645e-01 | -5.289e-15 | -9.360e-15 | 2.445e-14 | 0.000e+00 |
| El: 4 - C.c: 2 | 2.302e+02 | -2.302e+02 | 4.392e-17 | -4.392e-17 | -5.198e-18 | 5.198e-18 | 4.172e-01 | -4.172e-01 | 1.214e-15 | 2.148e-15 | 1.181e-14 | 0.000e+00 |
| El: 4 - C.c: 3 | 1.674e+02 | -1.674e+02 | 3.290e-17 | -3.290e-17 | -3.597e-18 | 3.597e-18 | 3.023e-01 | -3.023e-01 | 8.563e-16 | 1.515e-15 | 8.802e-15 | 0.000e+00 |
| El: 4 - C.c: 4 | 1.170e+02 | -1.170e+02 | 2.833e-17 | -2.833e-17 | -1.511e-18 | 1.511e-18 | 2.056e-01 | -2.056e-01 | 4.547e-16 | 8.047e-16 | 7.344e-15 | 0.000e+00 |
| El: 4 - C.c: 5 | 1.043e+02 | -1.043e+02 | 2.719e-17 | -2.719e-17 | -9.891e-19 | 9.891e-19 | 1.815e-01 | -1.815e-01 | 3.543e-16 | 6.270e-16 | 6.980e-15 | 0.000e+00 |
| El: 4 - C.c: 7 | 2.155e+02 | -2.155e+02 | 4.133e-17 | -4.133e-17 | 8.643e-17 | -8.643e-17 | 2.772e-01 | -2.772e-01 | -5.300e-15 | -9.379e-15 | 1.107e-14 | 0.000e+00 |
| El: 4 - C.c: 8 | 6.331e+02 | -6.331e+02 | 1.116e-16 | -1.116e-16 | -5.427e-18 | 5.427e-18 | 4.045e-01 | -4.045e-01 | 1.225e-15 | 2.167e-15 | 2.519e-14 | 0.000e+00 |
| El: 5 - C.c: 1 | -1.215e+03 | 1.215e+03 | 3.041e-16 | -3.041e-16 | -2.156e-17 | 2.156e-17 | -1.113e+00 | 1.113e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 5 - C.c: 2 | 2.416e+02 | -2.416e+02 | -6.956e-17 | 6.956e-17 | -1.337e-18 | 1.337e-18 | -1.071e+00 | 1.071e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 5 - C.c: 3 | 1.785e+02 | -1.785e+02 | -4.885e-17 | 4.885e-17 | -1.086e-18 | 1.086e-18 | -7.875e-01 | 7.875e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 5 - C.c: 4 | 1.403e+02 | -1.403e+02 | -2.462e-17 | 2.462e-17 | -1.382e-18 | 1.382e-18 | -5.979e-01 | 5.979e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 5 - C.c: 5 | 1.308e+02 | -1.308e+02 | -1.857e-17 | 1.857e-17 | -1.456e-18 | 1.456e-18 | -5.505e-01 | 5.505e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 5 - C.c: 7 | -1.231e+03 | 1.231e+03 | 3.031e-16 | -3.031e-16 | -1.404e-18 | 1.404e-18 | -1.049e+00 | 1.049e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 5 - C.c: 8 | 2.580e+02 | -2.580e+02 | -6.851e-17 | 6.851e-17 | -2.150e-17 | 2.150e-17 | -1.135e+00 | 1.135e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 6 - C.c: 1 | 1.875e+03 | -1.875e+03 | -2.782e-16 | 2.782e-16 | 2.180e-17 | -2.180e-17 | 5.848e+00 | -5.848e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 6 - C.c: 2 | 4.224e+02 | -4.224e+02 | 9.565e-17 | -9.565e-17 | 1.375e-18 | -1.375e-18 | 5.582e+00 | -5.582e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 6 - C.c: 3 | 3.086e+02 | -3.086e+02 | 6.799e-17 | -6.799e-17 | 1.108e-18 | -1.108e-18 | 4.088e+00 | -4.088e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 6 - C.c: 4 | 2.237e+02 | -2.237e+02 | 3.893e-17 | -3.893e-17 | 1.368e-18 | -1.368e-18 | 3.021e+00 | -3.021e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 6 - C.c: 5 | 2.025e+02 | -2.025e+02 | 3.166e-17 | -3.166e-17 | 1.433e-18 | -1.433e-18 | 2.755e+00 | -2.755e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 6 - C.c: 7 | 1.891e+03 | -1.891e+03 | -2.771e-16 | 2.771e-16 | 1.578e-18 | -1.578e-18 | 5.764e+00 | -5.764e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 6 - C.c: 8 | 4.059e+02 | -4.059e+02 | 9.460e-17 | -9.460e-17 | 2.160e-17 | -2.160e-17 | 5.666e+00 | -5.666e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 7 - C.c: 1 | 1.874e+03 | -1.874e+03 | -2.700e-16 | 2.700e-16 | 2.180e-17 | -2.180e-17 | -5.524e+00 | 5.524e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 7 - C.c: 2 | 3.999e+02 | -3.999e+02 | 9.608e-17 | -9.608e-17 | 1.375e-18 | -1.375e-18 | -5.552e+00 | 5.552e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 7 - C.c: 3 | 2.922e+02 | -2.922e+02 | 6.811e-17 | -6.811e-17 | 1.108e-18 | -1.108e-18 | -4.065e+00 | 4.065e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 7 - C.c: 4 | 2.117e+02 | -2.117e+02 | 3.796e-17 | -3.796e-17 | 1.368e-18 | -1.368e-18 | -2.994e+00 | 2.994e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 7 - C.c: 5 | 1.915e+02 | -1.915e+02 | 3.042e-17 | -3.042e-17 | 1.433e-18 | -1.433e-18 | -2.726e+00 | 2.726e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 7 - C.c: 7 | 1.854e+03 | -1.854e+03 | -2.726e-16 | 2.726e-16 | 1.578e-18 | -1.578e-18 | -5.730e+00 | 5.730e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 7 - C.c: 8 | 4.200e+02 | -4.200e+02 | 9.862e-17 | -9.862e-17 | 2.160e-17 | -2.160e-17 | -5.347e+00 | 5.347e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 8 - C.c: 1 | -1.210e+03 | 1.210e+03 | 2.961e-16 | -2.961e-16 | -2.156e-17 | 2.156e-17 | 8.930e-01 | -8.930e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 8 - C.c: 2 | 2.609e+02 | -2.609e+02 | -7.012e-17 | 7.012e-17 | -1.337e-18 | 1.337e-18 | 1.068e+00 | -1.068e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: 8 - C.c: 3 | 1.924e+02 | -1.924e+02 | -4.907e-17 | 4.907e-17 | -1.085e-18 | 1.085e-18 | 7.855e-01 | -7.855e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |



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| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| El: | 8 - C.c: 4 | 1.497e+02 | -1.497e+02 | -2.377e-17 | 2.377e-17 | -1.382e-18 | 1.382e-18 | 5.962e-01 | -5.962e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 8 - C.c: 5 | 1.390e+02 | -1.390e+02 | -1.744e-17 | 1.744e-17 | -1.456e-18 | 1.456e-18 | 5.489e-01 | -5.489e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 8 - C.c: 7 | -1.194e+03 | 1.194e+03 | 2.985e-16 | -2.985e-16 | -1.404e-18 | 1.404e-18 | 1.050e+00 | -1.050e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |
| El: | 8 - C.c: 8 | 2.448e+02 | -2.448e+02 | -7.250e-17 | 7.250e-17 | -2.150e-17 | 2.150e-17 | 9.114e-01 | -9.114e-01 | 0.000e+00 | 0.000e+00 | 0.000e+00 | 0.000e+00 |

**FORZE MOMENTI PER GRUPPI TRAVE DI FONDAZIONE**

**Gruppo numero: 1 - Descrizione: CORDOLI DI FONDAZIONE**

**Trave numero: 1 - Lunghezza: 175.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -7.147e+02 | -1.147e+05 | +3.960e+03 | -1.399e-01 | +9.866e-05 | +6.264e-05 | 0.33574 |
| 0.000 | 2 | -6.003e+02 | -1.293e+05 | +4.796e+04 | -1.470e-01 | +1.247e-04 | +6.407e-05 | 0.35285 |
| 0.000 | 3 | -4.551e+02 | -9.634e+04 | +3.637e+04 | -1.119e-01 | +9.338e-05 | +4.521e-05 | 0.26854 |
| 0.000 | 4 | -4.209e+02 | -8.023e+04 | +3.366e+04 | -1.057e-01 | +8.038e-05 | +2.402e-05 | 0.25358 |
| 0.000 | 5 | -4.122e+02 | -7.620e+04 | +3.298e+04 | -1.041e-01 | +7.712e-05 | +1.872e-05 | 0.24984 |
| 0.000 | 7 | -7.639e+02 | -1.374e+05 | +1.944e+03 | -1.419e-01 | +1.174e-04 | +5.804e-05 | 0.34066 |
| 0.000 | 8 | -5.511e+02 | -1.065e+05 | +4.998e+04 | -1.450e-01 | +1.059e-04 | +6.866e-05 | 0.34793 |
| 35.000 | 1 | -7.147e+02 | -1.147e+05 | +2.897e+04 | -1.420e-01 | +1.140e-04 | +6.430e-05 | 0.34090 |
| 35.000 | 2 | -6.003e+02 | -1.293e+05 | +6.897e+04 | -1.493e-01 | +1.420e-04 | +6.997e-05 | 0.35834 |
| 35.000 | 3 | -4.552e+02 | -9.634e+04 | +5.230e+04 | -1.135e-01 | +1.063e-04 | +4.969e-05 | 0.27242 |
| 35.000 | 4 | -4.209e+02 | -8.023e+04 | +4.839e+04 | -1.065e-01 | +9.111e-05 | +2.816e-05 | 0.25567 |
| 35.000 | 5 | -4.122e+02 | -7.620e+04 | +4.741e+04 | -1.048e-01 | +8.732e-05 | +2.278e-05 | 0.25147 |
| 35.000 | 7 | -7.639e+02 | -1.374e+05 | +2.868e+04 | -1.439e-01 | +1.358e-04 | +5.959e-05 | 0.34543 |
| 35.000 | 8 | -5.511e+02 | -1.065e+05 | +6.926e+04 | -1.474e-01 | +1.201e-04 | +7.468e-05 | 0.35383 |
| 70.000 | 1 | -6.130e+02 | -1.147e+05 | +5.043e+04 | -1.443e-01 | +1.293e-04 | +6.831e-05 | 0.34634 |
| 70.000 | 2 | -4.620e+02 | -1.293e+05 | +8.514e+04 | -1.519e-01 | +1.592e-04 | +7.775e-05 | 0.36444 |
| 70.000 | 3 | -3.555e+02 | -9.634e+04 | +6.475e+04 | -1.153e-01 | +1.192e-04 | +5.559e-05 | 0.27677 |
| 70.000 | 4 | -3.565e+02 | -8.023e+04 | +6.086e+04 | -1.076e-01 | +1.018e-04 | +3.368e-05 | 0.25819 |
| 70.000 | 5 | -3.566e+02 | -7.620e+04 | +5.989e+04 | -1.056e-01 | +9.752e-05 | +2.820e-05 | 0.25354 |
| 70.000 | 7 | -6.527e+02 | -1.374e+05 | +5.153e+04 | -1.460e-01 | +1.542e-04 | +6.364e-05 | 0.35045 |
| 70.000 | 8 | -4.223e+02 | -1.065e+05 | +8.405e+04 | -1.501e-01 | +1.344e-04 | +8.242e-05 | 0.36034 |
| 105.000 | 1 | -4.999e+02 | -1.147e+05 | +6.793e+04 | -1.468e-01 | +1.447e-04 | +7.429e-05 | 0.35222 |
| 105.000 | 2 | -3.109e+02 | -1.293e+05 | +9.603e+04 | -1.547e-01 | +1.765e-04 | +8.690e-05 | 0.37130 |
| 105.000 | 3 | -2.469e+02 | -9.634e+04 | +7.339e+04 | -1.174e-01 | +1.321e-04 | +6.257e-05 | 0.28169 |
| 105.000 | 4 | -2.868e+02 | -8.023e+04 | +7.090e+04 | -1.089e-01 | +1.126e-04 | +4.033e-05 | 0.26124 |
| 105.000 | 5 | -2.966e+02 | -7.620e+04 | +7.028e+04 | -1.067e-01 | +1.077e-04 | +3.477e-05 | 0.25613 |
| 105.000 | 7 | -5.310e+02 | -1.374e+05 | +7.011e+04 | -1.483e-01 | +1.726e-04 | +6.978e-05 | 0.35594 |
| 105.000 | 8 | -2.798e+02 | -1.065e+05 | +9.384e+04 | -1.532e-01 | +1.486e-04 | +9.140e-05 | 0.36758 |
| 140.000 | 1 | -3.745e+02 | -1.147e+05 | +8.104e+04 | -1.495e-01 | +1.600e-04 | +8.180e-05 | 0.35870 |
| 140.000 | 2 | -1.454e+02 | -1.293e+05 | +1.011e+05 | -1.579e-01 | +1.938e-04 | +9.685e-05 | 0.37898 |
| 140.000 | 3 | -1.279e+02 | -9.634e+04 | +7.786e+04 | -1.197e-01 | +1.449e-04 | +7.020e-05 | 0.28723 |
| 140.000 | 4 | -2.106e+02 | -8.023e+04 | +7.827e+04 | -1.104e-01 | +1.233e-04 | +4.786e-05 | 0.26489 |
| 140.000 | 5 | -2.314e+02 | -7.620e+04 | +7.837e+04 | -1.081e-01 | +1.179e-04 | +4.227e-05 | 0.25932 |
| 140.000 | 7 | -3.978e+02 | -1.374e+05 | +8.404e+04 | -1.508e-01 | +1.910e-04 | +7.756e-05 | 0.36204 |
| 140.000 | 8 | -1.222e+02 | -1.065e+05 | +9.812e+04 | -1.565e-01 | +1.629e-04 | +1.011e-04 | 0.37562 |
| 175.000 | 1 | +2.355e+02 | +1.147e+05 | -8.928e+04 | -1.524e-01 | +1.754e-04 | +9.040e-05 | 0.36588 |
| 175.000 | 2 | -3.614e+01 | +1.293e+05 | -9.985e+04 | -1.615e-01 | +2.111e-04 | +1.070e-04 | 0.38755 |
| 175.000 | 3 | -2.860e+00 | +9.634e+04 | -7.776e+04 | -1.223e-01 | +1.578e-04 | +7.806e-05 | 0.29345 |
| 175.000 | 4 | +1.269e+02 | +8.023e+04 | -8.271e+04 | -1.122e-01 | +1.341e-04 | +5.599e-05 | 0.26923 |
| 175.000 | 5 | +1.592e+02 | +7.620e+04 | -8.395e+04 | -1.097e-01 | +1.281e-04 | +5.047e-05 | 0.26316 |
| 175.000 | 7 | +2.517e+02 | +1.374e+05 | -9.285e+04 | -1.537e-01 | +2.094e-04 | +8.649e-05 | 0.36888 |
| 175.000 | 8 | -5.237e+01 | +1.065e+05 | -9.629e+04 | -1.602e-01 | +1.771e-04 | +1.109e-04 | 0.38455 |

**Trave numero: 2 - Lunghezza: 180.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | +8.178e+02 | -3.804e+04 | +9.717e+04 | -1.524e-01 | +1.754e-04 | +9.040e-05 | 0.36588 |
| 0.000 | 2 | +1.305e+03 | -2.821e+04 | +1.198e+05 | -1.615e-01 | +2.111e-04 | +1.070e-04 | 0.38755 |
| 0.000 | 3 | +9.800e+02 | -1.975e+04 | +9.251e+04 | -1.223e-01 | +1.578e-04 | +7.806e-05 | 0.29345 |
| 0.000 | 4 | +8.587e+02 | -9.592e+03 | +9.450e+04 | -1.122e-01 | +1.341e-04 | +5.599e-05 | 0.26923 |
| 0.000 | 5 | +8.284e+02 | -7.053e+03 | +9.499e+04 | -1.097e-01 | +1.281e-04 | +5.047e-05 | 0.26316 |
| 0.000 | 7 | +7.857e+02 | -5.487e+04 | +1.002e+05 | -1.537e-01 | +2.094e-04 | +8.649e-05 | 0.36888 |
| 0.000 | 8 | +1.337e+03 | -1.138e+04 | +1.167e+05 | -1.602e-01 | +1.771e-04 | +1.109e-04 | 0.38455 |
| 36.000 | 1 | +9.947e+02 | -3.804e+04 | +6.773e+04 | -1.559e-01 | +1.806e-04 | +9.896e-05 | 0.37423 |
| 36.000 | 2 | +1.531e+03 | -2.821e+04 | +7.281e+04 | -1.656e-01 | +2.150e-04 | +1.170e-04 | 0.39751 |
| 36.000 | 3 | +1.144e+03 | -1.975e+04 | +5.723e+04 | -1.253e-01 | +1.606e-04 | +8.583e-05 | 0.30077 |
| 36.000 | 4 | +9.660e+02 | -9.592e+03 | +6.358e+04 | -1.144e-01 | +1.354e-04 | +6.419e-05 | 0.27461 |
| 36.000 | 5 | +9.210e+02 | -7.053e+03 | +6.517e+04 | -1.117e-01 | +1.291e-04 | +5.878e-05 | 0.26808 |
| 36.000 | 7 | +9.677e+02 | -5.487e+04 | +7.190e+04 | -1.570e-01 | +2.169e-04 | +9.542e-05 | 0.37692 |
| 36.000 | 8 | +1.558e+03 | -1.138e+04 | +6.864e+04 | -1.645e-01 | +1.787e-04 | +1.205e-04 | 0.39485 |
| 72.000 | 1 | +1.191e+03 | -3.804e+04 | +3.193e+04 | -1.597e-01 | +1.859e-04 | +1.041e-04 | 0.38323 |
| 72.000 | 2 | +1.781e+03 | -2.821e+04 | +1.769e+04 | -1.701e-01 | +2.189e-04 | +1.217e-04 | 0.40819 |
| 72.000 | 3 | +1.324e+03 | -1.975e+04 | +1.606e+04 | -1.286e-01 | +1.633e-04 | +8.964e-05 | 0.30859 |
| 72.000 | 4 | +1.086e+03 | -9.592e+03 | +2.881e+04 | -1.169e-01 | +1.367e-04 | +6.899e-05 | 0.28058 |
| 72.000 | 5 | +1.026e+03 | -7.053e+03 | +3.200e+04 | -1.140e-01 | +1.301e-04 | +6.383e-05 | 0.27358 |
| 72.000 | 7 | +1.170e+03 | -5.487e+04 | +3.705e+04 | -1.607e-01 | +2.245e-04 | +1.011e-04 | 0.38563 |
| 72.000 | 8 | +1.802e+03 | -1.138e+04 | +1.257e+04 | -1.691e-01 | +1.803e-04 | +1.248e-04 | 0.40579 |
| 108.000 | 1 | +1.407e+03 | -3.804e+04 | -1.092e+04 | -1.636e-01 | +1.911e-04 | +1.052e-04 | 0.39257 |
| 108.000 | 2 | +2.055e+03 | -2.821e+04 | -4.643e+04 | -1.746e-01 | +2.228e-04 | +1.202e-04 | 0.41904 |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 108.000 | 3 | +1.522e+03 | -1.975e+04 | -3.161e+04 | -1.319e-01 | +1.660e-04 | +8.883e-05 | 0.31661 |
| 108.000 | 4 | +1.219e+03 | -9.592e+03 | -1.028e+04 | -1.195e-01 | +1.380e-04 | +6.995e-05 | 0.28685 |
| 108.000 | 5 | +1.144e+03 | -7.053e+03 | -4.948e+03 | -1.164e-01 | +1.310e-04 | +6.523e-05 | 0.27938 |
| 108.000 | 7 | +1.390e+03 | -5.487e+04 | -5.038e+03 | -1.645e-01 | +2.320e-04 | +1.027e-04 | 0.39470 |
| 108.000 | 8 | +2.071e+03 | -1.138e+04 | -5.231e+04 | -1.737e-01 | +1.818e-04 | +1.227e-04 | 0.41690 |
| 144.000 | 1 | +1.643e+03 | -3.804e+04 | -6.155e+04 | -1.674e-01 | +1.963e-04 | +1.015e-04 | 0.40181 |
| 144.000 | 2 | +2.351e+03 | -2.821e+04 | -1.204e+05 | -1.790e-01 | +2.267e-04 | +1.115e-04 | 0.42953 |
| 144.000 | 3 | +1.737e+03 | -1.975e+04 | -8.641e+04 | -1.352e-01 | +1.687e-04 | +8.270e-05 | 0.32436 |
| 144.000 | 4 | +1.366e+03 | -9.592e+03 | -5.418e+04 | -1.221e-01 | +1.393e-04 | +6.660e-05 | 0.29302 |
| 144.000 | 5 | +1.274e+03 | -7.053e+03 | -4.613e+04 | -1.188e-01 | +1.320e-04 | +6.258e-05 | 0.28517 |
| 144.000 | 7 | +1.631e+03 | -5.487e+04 | -5.508e+04 | -1.682e-01 | +2.396e-04 | +9.962e-05 | 0.40375 |
| 144.000 | 8 | +2.363e+03 | -1.138e+04 | -1.269e+05 | -1.781e-01 | +1.834e-04 | +1.134e-04 | 0.42756 |
| 180.000 | 1 | -1.642e+03 | +3.804e+04 | +1.207e+05 | -1.711e-01 | +2.016e-04 | +9.201e-05 | 0.41054 |
| 180.000 | 2 | -2.350e+03 | +2.821e+04 | +2.050e+05 | -1.829e-01 | +2.305e-04 | +9.464e-05 | 0.43896 |
| 180.000 | 3 | -1.737e+03 | +1.975e+04 | +1.489e+05 | -1.381e-01 | +1.714e-04 | +7.048e-05 | 0.33139 |
| 180.000 | 4 | -1.366e+03 | +9.592e+03 | +1.034e+05 | -1.245e-01 | +1.407e-04 | +5.843e-05 | 0.29873 |
| 180.000 | 5 | -1.274e+03 | +7.053e+03 | +9.198e+04 | -1.211e-01 | +1.330e-04 | +5.541e-05 | 0.29057 |
| 180.000 | 7 | -1.630e+03 | +5.487e+04 | +1.138e+05 | -1.718e-01 | +2.471e-04 | +9.086e-05 | 0.41237 |
| 180.000 | 8 | -2.362e+03 | +1.138e+04 | +2.119e+05 | -1.821e-01 | +1.850e-04 | +9.579e-05 | 0.43714 |

**Trave numero: 3 - Lunghezza: 197.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -1.415e+03 | -1.646e+04 | -1.253e+05 | -1.711e-01 | +2.016e-04 | +9.201e-05 | 0.41054 |
| 0.000 | 2 | -6.159e+02 | +1.498e+04 | -2.006e+05 | -1.829e-01 | +2.305e-04 | +9.464e-05 | 0.43896 |
| 0.000 | 3 | -4.432e+02 | +1.165e+04 | -1.457e+05 | -1.381e-01 | +1.714e-04 | +7.048e-05 | 0.33139 |
| 0.000 | 4 | -2.848e+02 | +1.229e+04 | -1.011e+05 | -1.245e-01 | +1.407e-04 | +5.843e-05 | 0.29873 |
| 0.000 | 5 | -2.450e+02 | +1.245e+04 | -8.990e+04 | -1.211e-01 | +1.330e-04 | +5.541e-05 | 0.29057 |
| 0.000 | 7 | -1.410e+03 | -1.229e+04 | -1.185e+05 | -1.718e-01 | +2.471e-04 | +9.086e-05 | 0.41237 |
| 0.000 | 8 | -6.208e+02 | +1.081e+04 | -2.075e+05 | -1.821e-01 | +1.850e-04 | +9.579e-05 | 0.43714 |
| 39.400 | 1 | -1.415e+03 | -1.646e+04 | -6.958e+04 | -1.743e-01 | +2.040e-04 | +8.093e-05 | 0.41834 |
| 39.400 | 2 | -6.160e+02 | +1.498e+04 | -1.763e+05 | -1.861e-01 | +2.283e-04 | +7.322e-05 | 0.44674 |
| 39.400 | 3 | -4.433e+02 | +1.165e+04 | -1.283e+05 | -1.405e-01 | +1.697e-04 | +5.491e-05 | 0.33720 |
| 39.400 | 4 | -2.848e+02 | +1.229e+04 | -8.985e+04 | -1.265e-01 | +1.388e-04 | +4.758e-05 | 0.30367 |
| 39.400 | 5 | -2.451e+02 | +1.245e+04 | -8.024e+04 | -1.230e-01 | +1.311e-04 | +4.574e-05 | 0.29527 |
| 39.400 | 7 | -1.410e+03 | -1.229e+04 | -6.292e+04 | -1.750e-01 | +2.490e-04 | +8.055e-05 | 0.42010 |
| 39.400 | 8 | -6.209e+02 | +1.081e+04 | -1.830e+05 | -1.854e-01 | +1.833e-04 | +7.360e-05 | 0.44498 |
| 78.800 | 1 | -1.118e+03 | -1.646e+04 | -2.556e+04 | -1.773e-01 | +2.065e-04 | +7.552e-05 | 0.42547 |
| 78.800 | 2 | -2.513e+02 | +1.498e+04 | -1.664e+05 | -1.886e-01 | +2.260e-04 | +5.375e-05 | 0.45269 |
| 78.800 | 3 | -1.781e+02 | +1.165e+04 | -1.212e+05 | -1.424e-01 | +1.679e-04 | +4.074e-05 | 0.34166 |
| 78.800 | 4 | -9.875e+01 | +1.229e+04 | -8.595e+04 | -1.282e-01 | +1.369e-04 | +3.759e-05 | 0.30766 |
| 78.800 | 5 | +9.635e+01 | +1.245e+04 | -7.713e+04 | -1.247e-01 | +1.292e-04 | +3.680e-05 | 0.29916 |
| 78.800 | 7 | -1.108e+03 | -1.229e+04 | -1.926e+04 | -1.780e-01 | +2.508e-04 | +7.588e-05 | 0.42722 |
| 78.800 | 8 | -2.604e+02 | +1.081e+04 | -1.727e+05 | -1.879e-01 | +1.817e-04 | +5.339e-05 | 0.45094 |
| 118.200 | 1 | -8.030e+02 | -1.646e+04 | +6.074e+03 | -1.802e-01 | +2.090e-04 | +7.442e-05 | 0.43236 |
| 118.200 | 2 | +5.160e+02 | +1.498e+04 | -1.714e+05 | -1.904e-01 | +2.238e-04 | +3.455e-05 | 0.45689 |
| 118.200 | 3 | +3.811e+02 | +1.165e+04 | -1.251e+05 | -1.437e-01 | +1.662e-04 | +2.674e-05 | 0.34488 |
| 118.200 | 4 | +2.995e+02 | +1.229e+04 | -8.976e+04 | -1.295e-01 | +1.351e-04 | +2.760e-05 | 0.31078 |
| 118.200 | 5 | +2.790e+02 | +1.245e+04 | -8.093e+04 | -1.259e-01 | +1.273e-04 | +2.782e-05 | 0.30226 |
| 118.200 | 7 | -7.898e+02 | -1.229e+04 | +1.186e+04 | -1.809e-01 | +2.527e-04 | +7.546e-05 | 0.43416 |
| 118.200 | 8 | +4.985e+02 | +1.081e+04 | -1.772e+05 | -1.896e-01 | +1.801e-04 | +3.350e-05 | 0.45506 |
| 157.600 | 1 | -4.724e+02 | -1.646e+04 | +2.468e+04 | -1.831e-01 | +2.115e-04 | +7.616e-05 | 0.43934 |
| 157.600 | 2 | +9.108e+02 | +1.498e+04 | -1.918e+05 | -1.914e-01 | +2.215e-04 | +1.391e-05 | 0.45931 |
| 157.600 | 3 | +6.691e+02 | +1.165e+04 | -1.401e+05 | -1.445e-01 | +1.644e-04 | +1.167e-05 | 0.34680 |
| 157.600 | 4 | +5.074e+02 | +1.229e+04 | -1.016e+05 | -1.304e-01 | +1.332e-04 | +1.673e-05 | 0.31294 |
| 157.600 | 5 | +4.669e+02 | +1.245e+04 | -9.192e+04 | -1.269e-01 | +1.255e-04 | +1.799e-05 | 0.30449 |
| 157.600 | 7 | -4.549e+02 | -1.229e+04 | +2.978e+04 | -1.839e-01 | +2.545e-04 | +7.783e-05 | 0.44129 |
| 157.600 | 8 | +8.878e+02 | +1.081e+04 | -1.969e+05 | -1.906e-01 | +1.785e-04 | +1.225e-05 | 0.45737 |
| 197.000 | 1 | +1.252e+02 | +1.646e+04 | -2.962e+04 | -1.861e-01 | +2.139e-04 | +7.925e-05 | 0.44666 |
| 197.000 | 2 | -9.103e+02 | -1.498e+04 | +2.276e+05 | -1.916e-01 | +2.193e-04 | -9.926e-06 | 0.45972 |
| 197.000 | 3 | -6.692e+02 | -1.165e+04 | +1.665e+05 | -1.447e-01 | +1.627e-04 | -5.750e-06 | 0.34726 |
| 197.000 | 4 | -5.074e+02 | -1.229e+04 | +1.216e+05 | -1.309e-01 | +1.314e-04 | +4.051e-06 | 0.31406 |
| 197.000 | 5 | -4.669e+02 | -1.245e+04 | +1.103e+05 | -1.274e-01 | +1.236e-04 | +6.501e-06 | 0.30576 |
| 197.000 | 7 | +1.031e+02 | +1.229e+04 | -3.384e+04 | -1.870e-01 | +2.564e-04 | +8.144e-05 | 0.44880 |
| 197.000 | 8 | -8.882e+02 | -1.081e+04 | +2.319e+05 | -1.907e-01 | +1.768e-04 | -1.212e-05 | 0.45758 |

**Trave numero: 4 - Lunghezza: 215.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -7.723e+02 | +7.690e+03 | +2.506e+04 | -1.861e-01 | +2.139e-04 | +7.925e-05 | 0.44666 |
| 0.000 | 2 | -2.144e+03 | +6.395e+04 | -2.264e+05 | -1.916e-01 | +2.193e-04 | -9.926e-06 | 0.45972 |
| 0.000 | 3 | -1.574e+03 | +4.730e+04 | -1.655e+05 | -1.447e-01 | +1.627e-04 | -5.750e-06 | 0.34726 |
| 0.000 | 4 | -1.185e+03 | +3.744e+04 | -1.209e+05 | -1.309e-01 | +1.314e-04 | +4.051e-06 | 0.31406 |
| 0.000 | 5 | -1.088e+03 | +3.498e+04 | -1.097e+05 | -1.274e-01 | +1.236e-04 | +6.501e-06 | 0.30576 |
| 0.000 | 7 | -7.597e+02 | +3.482e+04 | +2.929e+04 | -1.870e-01 | +2.564e-04 | +8.144e-05 | 0.44880 |
| 0.000 | 8 | -2.157e+03 | +3.682e+04 | -2.306e+05 | -1.907e-01 | +1.768e-04 | -1.212e-05 | 0.45758 |
| 43.000 | 1 | -7.723e+02 | +7.690e+03 | +5.827e+04 | -1.895e-01 | +2.127e-04 | +8.442e-05 | 0.45490 |
| 43.000 | 2 | -2.143e+03 | +6.395e+04 | -1.342e+05 | -1.904e-01 | +2.088e-04 | -3.228e-05 | 0.45694 |
| 43.000 | 3 | -1.574e+03 | +4.730e+04 | -9.784e+04 | -1.439e-01 | +1.549e-04 | -2.208e-05 | 0.34536 |
| 43.000 | 4 | -1.185e+03 | +3.744e+04 | -6.991e+04 | -1.306e-01 | +1.252e-04 | -7.780e-06 | 0.31354 |
| 43.000 | 5 | -1.087e+03 | +3.498e+04 | -6.293e+04 | -1.273e-01 | +1.178e-04 | -4.204e-06 | 0.30557 |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 43.000 | 7 | -7.596e+02 | +3.482e+04 | +6.196e+04 | -1.905e-01 | +2.507e-04 | +8.710e-05 | 0.45727 |
| 43.000 | 8 | -2.156e+03 | +3.682e+04 | -1.379e+05 | -1.894e-01 | +1.708e-04 | -3.497e-05 | 0.45454 |
| 86.000 | 1 | -3.533e+02 | +7.690e+03 | +7.346e+04 | -1.933e-01 | +2.114e-04 | +9.259e-05 | 0.46392 |
| 86.000 | 2 | -1.719e+03 | +6.395e+04 | -6.024e+04 | -1.885e-01 | +1.982e-04 | -4.434e-05 | 0.45250 |
| 86.000 | 3 | -1.263e+03 | +4.730e+04 | -4.351e+04 | -1.426e-01 | +1.471e-04 | -3.085e-05 | 0.34226 |
| 86.000 | 4 | -9.562e+02 | +3.744e+04 | -2.878e+04 | -1.301e-01 | +1.191e-04 | -1.390e-05 | 0.31214 |
| 86.000 | 5 | -8.798e+02 | +3.498e+04 | -2.509e+04 | -1.269e-01 | +1.121e-04 | -9.663e-06 | 0.30461 |
| 86.000 | 7 | -3.345e+02 | +3.482e+04 | +7.634e+04 | -1.944e-01 | +2.450e-04 | +9.568e-05 | 0.46661 |
| 86.000 | 8 | -1.738e+03 | +3.682e+04 | -6.313e+04 | -1.874e-01 | +1.647e-04 | -4.743e-05 | 0.44981 |
| 129.000 | 1 | +5.571e+02 | +7.690e+03 | +6.964e+04 | -1.975e-01 | +2.102e-04 | +1.015e-04 | 0.47395 |
| 129.000 | 2 | -1.306e+03 | +6.395e+04 | -4.057e+03 | -1.864e-01 | +1.877e-04 | -4.833e-05 | 0.44734 |
| 129.000 | 3 | -9.612e+02 | +4.730e+04 | -2.183e+03 | -1.411e-01 | +1.393e-04 | -3.368e-05 | 0.33866 |
| 129.000 | 4 | -7.318e+02 | +3.744e+04 | +2.692e+03 | -1.293e-01 | +1.129e-04 | -1.552e-05 | 0.31042 |
| 129.000 | 5 | -6.745e+02 | +3.498e+04 | +3.910e+03 | -1.264e-01 | +1.063e-04 | -1.098e-05 | 0.30334 |
| 129.000 | 7 | +5.907e+02 | +3.482e+04 | +7.141e+04 | -1.988e-01 | +2.392e-04 | +1.048e-04 | 0.47700 |
| 129.000 | 8 | -1.332e+03 | +3.682e+04 | -5.833e+03 | -1.851e-01 | +1.587e-04 | -5.171e-05 | 0.44431 |
| 172.000 | 1 | +1.053e+03 | +7.690e+03 | +4.568e+04 | -2.021e-01 | +2.089e-04 | +1.086e-04 | 0.48497 |
| 172.000 | 2 | -9.072e+02 | +6.395e+04 | +3.495e+04 | -1.842e-01 | +1.772e-04 | -4.641e-05 | 0.44220 |
| 172.000 | 3 | -6.678e+02 | +4.730e+04 | +2.653e+04 | -1.396e-01 | +1.316e-04 | -3.217e-05 | 0.33509 |
| 172.000 | 4 | -5.115e+02 | +3.744e+04 | +2.468e+04 | -1.286e-01 | +1.068e-04 | -1.382e-05 | 0.30874 |
| 172.000 | 5 | -4.723e+02 | +3.498e+04 | +2.422e+04 | -1.259e-01 | +1.006e-04 | -9.232e-06 | 0.30216 |
| 172.000 | 7 | +1.096e+03 | +3.482e+04 | +4.601e+04 | -2.035e-01 | +2.335e-04 | +1.121e-04 | 0.48835 |
| 172.000 | 8 | -9.412e+02 | +3.682e+04 | +3.462e+04 | -1.828e-01 | +1.526e-04 | -4.992e-05 | 0.43879 |
| 215.000 | 1 | -1.054e+03 | -7.690e+03 | -3.758e+02 | -2.069e-01 | +2.076e-04 | +1.115e-04 | 0.49661 |
| 215.000 | 2 | +5.209e+02 | -6.395e+04 | -5.735e+04 | -1.823e-01 | +1.667e-04 | -4.069e-05 | 0.43754 |
| 215.000 | 3 | +3.838e+02 | -4.730e+04 | -4.303e+04 | -1.383e-01 | +1.238e-04 | -2.786e-05 | 0.33187 |
| 215.000 | 4 | +2.954e+02 | -3.744e+04 | -3.739e+04 | -1.281e-01 | +1.006e-04 | -9.971e-06 | 0.30744 |
| 215.000 | 5 | +2.732e+02 | -3.498e+04 | -3.597e+04 | -1.256e-01 | +9.483e-05 | -5.499e-06 | 0.30132 |
| 215.000 | 7 | -1.096e+03 | -3.482e+04 | +1.117e+03 | -2.085e-01 | +2.278e-04 | +1.149e-04 | 0.50040 |
| 215.000 | 8 | +5.633e+02 | -3.682e+04 | -5.884e+04 | -1.807e-01 | +1.466e-04 | -4.413e-05 | 0.43378 |

**Trave numero: 5 - Lunghezza: 175.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -1.640e+03 | +1.554e+04 | -1.608e+05 | -1.215e-01 | +1.385e-05 | +1.989e-05 | 0.29155 |
| 0.000 | 2 | -1.509e+03 | +1.894e+04 | -1.202e+05 | -1.244e-01 | +1.397e-05 | +4.443e-07 | 0.29861 |
| 0.000 | 3 | -1.159e+03 | +1.383e+04 | -8.878e+04 | -9.478e-02 | +1.098e-05 | -3.215e-06 | 0.22747 |
| 0.000 | 4 | -1.149e+03 | +9.994e+03 | -6.977e+04 | -8.996e-02 | +1.220e-05 | -2.171e-05 | 0.21589 |
| 0.000 | 5 | -1.147e+03 | +9.035e+03 | -6.502e+04 | -8.875e-02 | +1.251e-05 | -2.633e-05 | 0.21300 |
| 0.000 | 7 | -1.617e+03 | +1.521e+04 | -1.567e+05 | -1.216e-01 | +1.110e-05 | +1.795e-05 | 0.29194 |
| 0.000 | 8 | -1.532e+03 | +1.928e+04 | -1.243e+05 | -1.243e-01 | +1.673e-05 | +2.381e-06 | 0.29822 |
| 35.000 | 1 | -1.640e+03 | +1.554e+04 | -1.034e+05 | -1.218e-01 | +1.177e-05 | +6.549e-06 | 0.29230 |
| 35.000 | 2 | -1.509e+03 | +1.894e+04 | -6.735e+04 | -1.241e-01 | +1.144e-05 | -9.022e-06 | 0.29791 |
| 35.000 | 3 | -1.159e+03 | +1.383e+04 | -4.822e+04 | -9.444e-02 | +9.131e-06 | -1.013e-05 | 0.22666 |
| 35.000 | 4 | -1.149e+03 | +9.994e+03 | -2.955e+04 | -8.900e-02 | +1.087e-05 | -2.672e-05 | 0.21360 |
| 35.000 | 5 | -1.147e+03 | +9.035e+03 | -2.488e+04 | -8.764e-02 | +1.130e-05 | -3.087e-05 | 0.21034 |
| 35.000 | 7 | -1.617e+03 | +1.521e+04 | -1.001e+05 | -1.219e-01 | +9.065e-06 | +4.992e-06 | 0.29254 |
| 35.000 | 8 | -1.532e+03 | +1.928e+04 | -7.072e+04 | -1.240e-01 | +1.415e-05 | -7.466e-06 | 0.29767 |
| 70.000 | 1 | -1.436e+03 | +1.554e+04 | -5.320e+04 | -1.217e-01 | +9.693e-06 | -1.359e-06 | 0.29220 |
| 70.000 | 2 | -1.293e+03 | +1.894e+04 | -2.210e+04 | -1.236e-01 | +8.902e-06 | -1.354e-05 | 0.29669 |
| 70.000 | 3 | -9.979e+02 | +1.383e+04 | -1.329e+04 | -9.394e-02 | +7.280e-06 | -1.324e-05 | 0.22546 |
| 70.000 | 4 | -1.016e+03 | +9.994e+03 | +5.994e+03 | -8.795e-02 | +9.528e-06 | -2.791e-05 | 0.21109 |
| 70.000 | 5 | -1.020e+03 | +9.035e+03 | +1.082e+04 | -8.646e-02 | +1.009e-05 | -3.158e-05 | 0.20749 |
| 70.000 | 7 | -1.412e+03 | +1.521e+04 | -5.066e+04 | -1.218e-01 | +7.030e-06 | -2.617e-06 | 0.29234 |
| 70.000 | 8 | -1.316e+03 | +1.928e+04 | -2.465e+04 | -1.236e-01 | +1.157e-05 | -1.228e-05 | 0.29657 |
| 105.000 | 1 | -1.231e+03 | +1.554e+04 | -1.010e+04 | -1.215e-01 | +7.613e-06 | -4.554e-06 | 0.29170 |
| 105.000 | 2 | -1.079e+03 | +1.894e+04 | +1.567e+04 | -1.230e-01 | +6.367e-06 | -1.386e-05 | 0.29530 |
| 105.000 | 3 | -8.394e+02 | +1.383e+04 | +1.609e+04 | -9.340e-02 | +5.429e-06 | -1.310e-05 | 0.22417 |
| 105.000 | 4 | -8.873e+02 | +9.994e+03 | +3.705e+04 | -8.693e-02 | +8.191e-06 | -2.574e-05 | 0.20864 |
| 105.000 | 5 | -8.992e+02 | +9.035e+03 | +4.229e+04 | -8.531e-02 | +8.881e-06 | -2.890e-05 | 0.20475 |
| 105.000 | 7 | -1.208e+03 | +1.521e+04 | -8.384e+03 | -1.216e-01 | +4.996e-06 | -5.597e-06 | 0.29172 |
| 105.000 | 8 | -1.103e+03 | +1.928e+04 | +1.396e+04 | -1.230e-01 | +8.985e-06 | -1.282e-05 | 0.29527 |
| 140.000 | 1 | -1.028e+03 | +1.554e+04 | +2.590e+04 | -1.213e-01 | +5.533e-06 | -3.757e-06 | 0.29112 |
| 140.000 | 2 | -8.687e+02 | +1.894e+04 | +4.608e+04 | -1.225e-01 | +3.833e-06 | -1.074e-05 | 0.29407 |
| 140.000 | 3 | -6.837e+02 | +1.383e+04 | +4.002e+04 | -9.293e-02 | +3.578e-06 | -1.026e-05 | 0.22304 |
| 140.000 | 4 | -7.641e+02 | +9.994e+03 | +6.379e+04 | -8.605e-02 | +6.853e-06 | -2.065e-05 | 0.20652 |
| 140.000 | 5 | -7.842e+02 | +9.035e+03 | +6.974e+04 | -8.433e-02 | +7.672e-06 | -2.325e-05 | 0.20239 |
| 140.000 | 7 | -1.005e+03 | +1.521e+04 | +2.678e+04 | -1.213e-01 | +2.961e-06 | -4.668e-06 | 0.29107 |
| 140.000 | 8 | -8.925e+02 | +1.928e+04 | +4.519e+04 | -1.226e-01 | +6.405e-06 | -9.834e-06 | 0.29412 |
| 175.000 | 1 | +8.266e+02 | -1.554e+04 | -5.483e+04 | -1.212e-01 | +3.453e-06 | +3.175e-07 | 0.29078 |
| 175.000 | 2 | +6.606e+02 | -1.894e+04 | -6.920e+04 | -1.222e-01 | +1.298e-06 | -4.926e-06 | 0.29328 |
| 175.000 | 3 | +5.303e+02 | -1.383e+04 | -5.858e+04 | -9.261e-02 | +1.727e-06 | -5.286e-06 | 0.22227 |
| 175.000 | 4 | +6.454e+02 | -9.994e+03 | -8.638e+04 | -8.540e-02 | +5.516e-06 | -1.307e-05 | 0.20496 |
| 175.000 | 5 | +6.742e+02 | -9.035e+03 | -9.333e+04 | -8.360e-02 | +6.463e-06 | -1.501e-05 | 0.20064 |
| 175.000 | 7 | +8.029e+02 | -1.521e+04 | -5.488e+04 | -1.211e-01 | +9.264e-07 | -5.465e-07 | 0.29066 |
| 175.000 | 8 | +6.843e+02 | -1.928e+04 | -6.914e+04 | -1.222e-01 | +3.825e-06 | -4.062e-06 | 0.29338 |

**Trave numero: 6 - Lunghezza: 592.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -6.417e+02 | -1.176e+04 | +1.621e+03 | -1.212e-01 | +3.453e-06 | +3.175e-07 | 0.24232 |



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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 2 | -4.809e+02 | +2.386e+03 | +2.452e+04 | -1.222e-01 | +1.298e-06 | -4.926e-06 | 0.24440 |
| 0.000 | 3 | -3.292e+02 | +1.740e+03 | +2.571e+04 | -9.261e-02 | +1.727e-06 | -5.286e-06 | 0.18522 |
| 0.000 | 4 | -1.177e+02 | +1.245e+03 | +6.128e+04 | -8.540e-02 | +5.516e-06 | -1.307e-05 | 0.17080 |
| 0.000 | 5 | -6.482e+01 | +1.122e+03 | +7.018e+04 | -8.360e-02 | +6.463e-06 | -1.501e-05 | 0.16720 |
| 0.000 | 7 | -6.406e+02 | -1.092e+04 | +2.437e+03 | -1.211e-01 | +9.264e-07 | -5.465e-07 | 0.24222 |
| 0.000 | 8 | -4.819e+02 | +1.547e+03 | +2.371e+04 | -1.222e-01 | +3.825e-06 | -4.062e-06 | 0.24448 |
| 118.400 | 1 | -6.417e+02 | -1.176e+04 | +7.759e+04 | -1.216e-01 | +8.777e-06 | +1.384e-05 | 0.24314 |
| 118.400 | 2 | -4.809e+02 | +2.386e+03 | +8.146e+04 | -1.224e-01 | +2.181e-07 | +1.317e-05 | 0.24472 |
| 118.400 | 3 | -3.292e+02 | +1.740e+03 | +6.469e+04 | -9.268e-02 | +9.395e-07 | +1.015e-05 | 0.18535 |
| 118.400 | 4 | -1.177e+02 | +1.245e+03 | +7.522e+04 | -8.515e-02 | +4.952e-06 | +1.024e-05 | 0.17031 |
| 118.400 | 5 | -6.482e+01 | +1.122e+03 | +7.785e+04 | -8.327e-02 | +5.956e-06 | +1.026e-05 | 0.16655 |
| 118.400 | 7 | -6.406e+02 | -1.092e+04 | +7.829e+04 | -1.214e-01 | +5.870e-06 | +1.324e-05 | 0.24286 |
| 118.400 | 8 | -4.819e+02 | +1.547e+03 | +8.077e+04 | -1.225e-01 | +3.125e-06 | +1.378e-05 | 0.24498 |
| 236.800 | 1 | -2.997e+02 | -1.176e+04 | +1.131e+05 | -1.249e-01 | +1.410e-05 | +4.640e-05 | 0.24986 |
| 236.800 | 2 | +2.721e+02 | +2.386e+03 | +9.657e+04 | -1.256e-01 | -8.620e-07 | +4.357e-05 | 0.25126 |
| 236.800 | 3 | +2.093e+02 | +1.740e+03 | +7.393e+04 | -9.523e-02 | +1.517e-07 | +3.382e-05 | 0.19045 |
| 236.800 | 4 | +2.095e+02 | +1.245e+03 | +7.207e+04 | -8.787e-02 | +4.389e-06 | +3.539e-05 | 0.17575 |
| 236.800 | 5 | +2.095e+02 | +1.122e+03 | +7.161e+04 | -8.603e-02 | +5.448e-06 | +3.579e-05 | 0.17207 |
| 236.800 | 7 | -3.006e+02 | -1.092e+04 | +1.139e+05 | -1.247e-01 | +1.081e-05 | +4.605e-05 | 0.24948 |
| 236.800 | 8 | +2.756e+02 | +1.547e+03 | +9.578e+04 | -1.258e-01 | +2.425e-06 | +4.392e-05 | 0.25164 |
| 355.200 | 1 | +5.896e+02 | -1.176e+04 | +1.024e+05 | -1.327e-01 | +1.943e-05 | +8.320e-05 | 0.26532 |
| 355.200 | 2 | +7.708e+02 | +2.386e+03 | +6.436e+04 | -1.326e-01 | -1.942e-06 | +7.106e-05 | 0.26520 |
| 355.200 | 3 | +5.733e+02 | +1.740e+03 | +4.915e+04 | -1.006e-01 | -6.361e-07 | +5.484e-05 | 0.20124 |
| 355.200 | 4 | +4.711e+02 | +1.245e+03 | +4.727e+04 | -9.341e-02 | +3.825e-06 | +5.577e-05 | 0.18682 |
| 355.200 | 5 | +4.455e+02 | +1.122e+03 | +4.680e+04 | -9.161e-02 | +4.940e-06 | +5.600e-05 | 0.18322 |
| 355.200 | 7 | +5.830e+02 | -1.092e+04 | +1.036e+05 | -1.324e-01 | +1.576e-05 | +8.320e-05 | 0.26490 |
| 355.200 | 8 | +7.774e+02 | +1.547e+03 | +6.314e+04 | -1.328e-01 | +1.725e-06 | +7.106e-05 | 0.26564 |
| 473.600 | 1 | +1.254e+03 | -1.176e+04 | +3.261e+04 | -1.443e-01 | +2.475e-05 | +1.063e-04 | 0.28856 |
| 473.600 | 2 | +1.402e+03 | +2.386e+03 | -2.690e+04 | -1.419e-01 | -3.022e-06 | +7.745e-05 | 0.28382 |
| 473.600 | 3 | +1.039e+03 | +1.740e+03 | -1.873e+04 | -1.078e-01 | -1.424e-06 | +6.003e-05 | 0.21560 |
| 473.600 | 4 | +8.366e+02 | +1.245e+03 | -8.504e+03 | -1.007e-01 | +3.261e-06 | +6.239e-05 | 0.20144 |
| 473.600 | 5 | +7.859e+02 | +1.122e+03 | -5.948e+03 | -9.895e-02 | +4.432e-06 | +6.298e-05 | 0.19791 |
| 473.600 | 7 | +1.245e+03 | -1.092e+04 | +3.461e+04 | -1.441e-01 | +2.070e-05 | +1.068e-04 | 0.28818 |
| 473.600 | 8 | +1.411e+03 | +1.547e+03 | -2.890e+04 | -1.421e-01 | +1.024e-06 | +7.691e-05 | 0.28420 |
| 592.000 | 1 | -1.254e+03 | +1.176e+04 | +1.159e+05 | -1.569e-01 | +3.007e-05 | +9.204e-05 | 0.31372 |
| 592.000 | 2 | -1.402e+03 | -2.386e+03 | +1.929e+05 | -1.498e-01 | -4.102e-06 | +3.992e-05 | 0.29962 |
| 592.000 | 3 | -1.039e+03 | -1.740e+03 | +1.418e+05 | -1.140e-01 | -2.212e-06 | +3.262e-05 | 0.22798 |
| 592.000 | 4 | -8.366e+02 | -1.245e+03 | +1.076e+05 | -1.075e-01 | +2.697e-06 | +4.257e-05 | 0.21500 |
| 592.000 | 5 | -7.859e+02 | -1.122e+03 | +9.899e+04 | -1.059e-01 | +3.925e-06 | +4.506e-05 | 0.21176 |
| 592.000 | 7 | -1.245e+03 | +1.092e+04 | +1.128e+05 | -1.568e-01 | +2.565e-05 | +9.345e-05 | 0.31358 |
| 592.000 | 8 | -1.411e+03 | -1.547e+03 | +1.960e+05 | -1.499e-01 | +3.242e-07 | +3.851e-05 | 0.29978 |

**Trave numero: 7 - Lunghezza: 175.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -1.169e+03 | +6.474e+04 | +6.630e+04 | -1.216e-01 | -1.933e-05 | +1.343e-04 | 0.29179 |
| 0.000 | 2 | -1.165e+03 | +5.633e+04 | +1.039e+05 | -1.262e-01 | -2.388e-05 | +1.059e-04 | 0.30283 |
| 0.000 | 3 | -9.013e+02 | +4.127e+04 | +7.604e+04 | -9.602e-02 | -1.780e-05 | +7.313e-05 | 0.23046 |
| 0.000 | 4 | -9.302e+02 | +3.054e+04 | +5.585e+04 | -9.061e-02 | -1.484e-05 | +2.985e-05 | 0.21747 |
| 0.000 | 5 | -9.374e+02 | +2.786e+04 | +5.080e+04 | -8.926e-02 | -1.409e-05 | +1.903e-05 | 0.21422 |
| 0.000 | 7 | -1.245e+03 | +6.006e+04 | +6.438e+04 | -1.237e-01 | -2.334e-05 | +1.291e-04 | 0.29683 |
| 0.000 | 8 | -1.089e+03 | +6.100e+04 | +1.058e+05 | -1.241e-01 | -1.987e-05 | +1.111e-04 | 0.29779 |
| 35.000 | 1 | -1.169e+03 | +6.474e+04 | +1.072e+05 | -1.263e-01 | -2.799e-05 | +1.430e-04 | 0.30317 |
| 35.000 | 2 | -1.165e+03 | +5.633e+04 | +1.447e+05 | -1.300e-01 | -3.142e-05 | +1.184e-04 | 0.31200 |
| 35.000 | 3 | -9.013e+02 | +4.127e+04 | +1.076e+05 | -9.866e-02 | -2.332e-05 | +8.240e-05 | 0.23679 |
| 35.000 | 4 | -9.302e+02 | +3.054e+04 | +8.840e+04 | -9.170e-02 | -1.892e-05 | +3.713e-05 | 0.22007 |
| 35.000 | 5 | -9.374e+02 | +2.786e+04 | +8.361e+04 | -8.996e-02 | -1.782e-05 | +2.581e-05 | 0.21589 |
| 35.000 | 7 | -1.245e+03 | +6.006e+04 | +1.079e+05 | -1.282e-01 | -3.138e-05 | +1.378e-04 | 0.30778 |
| 35.000 | 8 | -1.089e+03 | +6.100e+04 | +1.439e+05 | -1.281e-01 | -2.803e-05 | +1.237e-04 | 0.30742 |
| 70.000 | 1 | -9.416e+02 | +6.474e+04 | +1.402e+05 | -1.315e-01 | -3.665e-05 | +1.555e-04 | 0.31550 |
| 70.000 | 2 | -9.188e+02 | +5.633e+04 | +1.768e+05 | -1.344e-01 | -3.896e-05 | +1.347e-04 | 0.32244 |
| 70.000 | 3 | -7.191e+02 | +4.127e+04 | +1.328e+05 | -1.017e-01 | -2.885e-05 | +9.453e-05 | 0.24406 |
| 70.000 | 4 | -7.830e+02 | +3.054e+04 | +1.158e+05 | -9.311e-02 | -2.301e-05 | +4.744e-05 | 0.22345 |
| 70.000 | 5 | -7.990e+02 | +2.786e+04 | +1.116e+05 | -9.096e-02 | -2.155e-05 | +3.567e-05 | 0.21830 |
| 70.000 | 7 | -1.008e+03 | +6.006e+04 | +1.432e+05 | -1.332e-01 | -3.941e-05 | +1.505e-04 | 0.31966 |
| 70.000 | 8 | -8.526e+02 | +6.100e+04 | +1.738e+05 | -1.326e-01 | -3.620e-05 | +1.397e-04 | 0.31829 |
| 105.000 | 1 | -6.885e+02 | +6.474e+04 | +1.643e+05 | -1.371e-01 | -4.531e-05 | +1.709e-04 | 0.32906 |
| 105.000 | 2 | -6.512e+02 | +5.633e+04 | +1.996e+05 | -1.393e-01 | -4.650e-05 | +1.537e-04 | 0.33439 |
| 105.000 | 3 | -5.215e+02 | +4.127e+04 | +1.510e+05 | -1.052e-01 | -3.437e-05 | +1.089e-04 | 0.25248 |
| 105.000 | 4 | -6.288e+02 | +3.054e+04 | +1.378e+05 | -9.493e-02 | -2.710e-05 | +6.024e-05 | 0.22784 |
| 105.000 | 5 | -6.556e+02 | +2.786e+04 | +1.345e+05 | -9.236e-02 | -2.528e-05 | +4.809e-05 | 0.22167 |
| 105.000 | 7 | -7.460e+02 | +6.006e+04 | +1.693e+05 | -1.387e-01 | -4.745e-05 | +1.663e-04 | 0.33278 |
| 105.000 | 8 | -5.937e+02 | +6.100e+04 | +1.945e+05 | -1.378e-01 | -4.436e-05 | +1.583e-04 | 0.33067 |
| 140.000 | 1 | -4.070e+02 | +6.474e+04 | +1.785e+05 | -1.434e-01 | -5.398e-05 | +1.882e-04 | 0.34406 |
| 140.000 | 2 | -3.585e+02 | +5.633e+04 | +2.122e+05 | -1.450e-01 | -5.403e-05 | +1.745e-04 | 0.34810 |
| 140.000 | 3 | -3.063e+02 | +4.127e+04 | +1.617e+05 | -1.093e-01 | -3.989e-05 | +1.246e-04 | 0.26222 |
| 140.000 | 4 | -4.653e+02 | +3.054e+04 | +1.541e+05 | -9.726e-02 | -3.118e-05 | +7.498e-05 | 0.23341 |
| 140.000 | 5 | -5.051e+02 | +2.786e+04 | +1.522e+05 | -9.425e-02 | -2.900e-05 | +6.256e-05 | 0.22621 |
| 140.000 | 7 | -4.566e+02 | +6.006e+04 | +1.853e+05 | -1.447e-01 | -5.549e-05 | +1.842e-04 | 0.34740 |



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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 140.000 | 8 | -3.088e+02 | +6.100e+04 | +2.054e+05 | -1.436e-01 | -5.252e-05 | +1.785e-04 | 0.34476 |
| 175.000 | 1 | +9.395e+01 | -6.474e+04 | -1.818e+05 | -1.503e-01 | -6.264e-05 | +2.064e-04 | 0.36062 |
| 175.000 | 2 | +3.694e+01 | -5.633e+04 | -2.134e+05 | -1.515e-01 | -6.157e-05 | +1.959e-04 | 0.36365 |
| 175.000 | 3 | +7.063e+01 | -4.127e+04 | -1.642e+05 | -1.139e-01 | -4.541e-05 | +1.411e-04 | 0.27338 |
| 175.000 | 4 | +2.902e+02 | -3.054e+04 | -1.643e+05 | -1.001e-01 | -3.527e-05 | +9.105e-05 | 0.24031 |
| 175.000 | 5 | +3.450e+02 | -2.786e+04 | -1.643e+05 | -9.669e-02 | -3.273e-05 | +7.853e-05 | 0.23206 |
| 175.000 | 7 | +1.365e+02 | -6.006e+04 | -1.901e+05 | -1.515e-01 | -6.353e-05 | +2.031e-04 | 0.36365 |
| 175.000 | 8 | -5.658e+00 | -6.100e+04 | -2.052e+05 | -1.503e-01 | -6.069e-05 | +1.992e-04 | 0.36062 |

**Trave numero: 8 - Lunghezza: 180.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | +2.806e+03 | +3.706e+04 | +2.311e+05 | -1.503e-01 | -6.264e-05 | +2.064e-04 | 0.36062 |
| 0.000 | 2 | +2.986e+03 | +3.767e+04 | +2.750e+05 | -1.515e-01 | -6.157e-05 | +1.959e-04 | 0.36365 |
| 0.000 | 3 | +2.206e+03 | +2.767e+04 | +2.098e+05 | -1.139e-01 | -4.541e-05 | +1.411e-04 | 0.27338 |
| 0.000 | 4 | +1.735e+03 | +2.090e+04 | +2.008e+05 | -1.001e-01 | -3.527e-05 | +9.105e-05 | 0.24031 |
| 0.000 | 5 | +1.617e+03 | +1.920e+04 | +1.986e+05 | -9.669e-02 | -3.273e-05 | +7.853e-05 | 0.23206 |
| 0.000 | 7 | +2.807e+03 | +3.466e+04 | +2.399e+05 | -1.515e-01 | -6.353e-05 | +2.031e-04 | 0.36365 |
| 0.000 | 8 | +2.985e+03 | +4.007e+04 | +2.662e+05 | -1.503e-01 | -6.069e-05 | +1.992e-04 | 0.36062 |
| 36.000 | 1 | +3.205e+03 | +3.706e+04 | +1.300e+05 | -1.583e-01 | -6.774e-05 | +2.251e-04 | 0.37990 |
| 36.000 | 2 | +3.391e+03 | +3.767e+04 | +1.675e+05 | -1.593e-01 | -6.676e-05 | +2.189e-04 | 0.38225 |
| 36.000 | 3 | +2.502e+03 | +2.767e+04 | +1.304e+05 | -1.195e-01 | -4.922e-05 | +1.588e-04 | 0.28682 |
| 36.000 | 4 | +1.949e+03 | +2.090e+04 | +1.384e+05 | -1.039e-01 | -3.814e-05 | +1.087e-04 | 0.24934 |
| 36.000 | 5 | +1.811e+03 | +1.920e+04 | +1.404e+05 | -9.999e-02 | -3.538e-05 | +9.613e-05 | 0.23998 |
| 36.000 | 7 | +3.213e+03 | +3.466e+04 | +1.388e+05 | -1.594e-01 | -6.830e-05 | +2.228e-04 | 0.38268 |
| 36.000 | 8 | +3.383e+03 | +4.007e+04 | +1.588e+05 | -1.581e-01 | -6.620e-05 | +2.213e-04 | 0.37946 |
| 72.000 | 1 | +3.649e+03 | +3.706e+04 | +1.466e+04 | -1.668e-01 | -7.284e-05 | +2.327e-04 | 0.40039 |
| 72.000 | 2 | +3.839e+03 | +3.767e+04 | +4.548e+04 | -1.677e-01 | -7.194e-05 | +2.300e-04 | 0.40241 |
| 72.000 | 3 | +2.829e+03 | +2.767e+04 | +4.034e+04 | -1.256e-01 | -5.303e-05 | +1.676e-04 | 0.30151 |
| 72.000 | 4 | +2.186e+03 | +2.090e+04 | +6.820e+04 | -1.082e-01 | -4.102e-05 | +1.194e-04 | 0.25963 |
| 72.000 | 5 | +2.026e+03 | +1.920e+04 | +7.517e+04 | -1.038e-01 | -3.802e-05 | +1.073e-04 | 0.24917 |
| 72.000 | 7 | +3.662e+03 | +3.466e+04 | +2.314e+04 | -1.679e-01 | -7.307e-05 | +2.312e-04 | 0.40303 |
| 72.000 | 8 | +3.826e+03 | +4.007e+04 | +3.700e+04 | -1.666e-01 | -7.172e-05 | +2.314e-04 | 0.39979 |
| 108.000 | 1 | +4.137e+03 | +3.706e+04 | -1.167e+05 | -1.755e-01 | -7.794e-05 | +2.274e-04 | 0.42110 |
| 108.000 | 2 | +4.331e+03 | +3.767e+04 | -9.271e+04 | -1.763e-01 | -7.712e-05 | +2.275e-04 | 0.42305 |
| 108.000 | 3 | +3.189e+03 | +2.767e+04 | -6.151e+04 | -1.319e-01 | -5.684e-05 | +1.665e-04 | 0.31658 |
| 108.000 | 4 | +2.447e+03 | +2.090e+04 | -1.050e+04 | -1.127e-01 | -4.390e-05 | +1.224e-04 | 0.27058 |
| 108.000 | 5 | +2.261e+03 | +1.920e+04 | +2.248e+03 | -1.080e-01 | -4.066e-05 | +1.113e-04 | 0.25908 |
| 108.000 | 7 | +4.156e+03 | +3.466e+04 | -1.087e+05 | -1.765e-01 | -7.784e-05 | +2.267e-04 | 0.42365 |
| 108.000 | 8 | +4.313e+03 | +4.007e+04 | -1.007e+05 | -1.752e-01 | -7.723e-05 | +2.281e-04 | 0.42050 |
| 144.000 | 1 | +4.668e+03 | +3.706e+04 | -2.656e+05 | -1.837e-01 | -8.305e-05 | +2.075e-04 | 0.44083 |
| 144.000 | 2 | +4.867e+03 | +3.767e+04 | -2.486e+05 | -1.846e-01 | -8.231e-05 | +2.098e-04 | 0.44294 |
| 144.000 | 3 | +3.580e+03 | +2.767e+04 | -1.763e+05 | -1.380e-01 | -6.065e-05 | +1.542e-04 | 0.33115 |
| 144.000 | 4 | +2.731e+03 | +2.090e+04 | -9.859e+04 | -1.173e-01 | -4.677e-05 | +1.167e-04 | 0.28147 |
| 144.000 | 5 | +2.518e+03 | +1.920e+04 | -7.915e+04 | -1.121e-01 | -4.331e-05 | +1.074e-04 | 0.26904 |
| 144.000 | 7 | +4.692e+03 | +3.466e+04 | -2.583e+05 | -1.847e-01 | -8.261e-05 | +2.077e-04 | 0.44338 |
| 144.000 | 8 | +4.843e+03 | +4.007e+04 | -2.560e+05 | -1.835e-01 | -8.275e-05 | +2.096e-04 | 0.44040 |
| 180.000 | 1 | -4.668e+03 | -3.706e+04 | +4.337e+05 | -1.909e-01 | -8.815e-05 | +1.712e-04 | 0.45826 |
| 180.000 | 2 | -4.867e+03 | -3.767e+04 | +4.238e+05 | -1.919e-01 | -8.749e-05 | +1.749e-04 | 0.46066 |
| 180.000 | 3 | -3.580e+03 | -2.767e+04 | +3.052e+05 | -1.434e-01 | -6.446e-05 | +1.292e-04 | 0.34423 |
| 180.000 | 4 | -2.731e+03 | -2.090e+04 | +1.969e+05 | -1.215e-01 | -4.965e-05 | +1.014e-04 | 0.29150 |
| 180.000 | 5 | -2.518e+03 | -1.920e+04 | +1.698e+05 | -1.160e-01 | -4.595e-05 | +9.442e-05 | 0.27833 |
| 180.000 | 7 | -4.692e+03 | -3.466e+04 | +4.272e+05 | -1.920e-01 | -8.738e-05 | +1.721e-04 | 0.46085 |
| 180.000 | 8 | -4.843e+03 | -4.007e+04 | +4.303e+05 | -1.909e-01 | -8.826e-05 | +1.740e-04 | 0.45809 |

**Trave numero: 9 - Lunghezza: 197.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -1.068e+03 | +5.167e+03 | -4.363e+05 | -1.909e-01 | -8.815e-05 | +1.712e-04 | 0.45826 |
| 0.000 | 2 | -8.920e+02 | +9.673e+03 | -4.194e+05 | -1.919e-01 | -8.749e-05 | +1.749e-04 | 0.46066 |
| 0.000 | 3 | -6.418e+02 | +7.158e+03 | -3.020e+05 | -1.434e-01 | -6.446e-05 | +1.292e-04 | 0.34423 |
| 0.000 | 4 | -4.110e+02 | +5.688e+03 | -1.945e+05 | -1.215e-01 | -4.965e-05 | +1.014e-04 | 0.29150 |
| 0.000 | 5 | -3.533e+02 | +5.320e+03 | -1.677e+05 | -1.160e-01 | -4.595e-05 | +9.442e-05 | 0.27833 |
| 0.000 | 7 | -1.064e+03 | +6.835e+03 | -4.299e+05 | -1.920e-01 | -8.738e-05 | +1.721e-04 | 0.46085 |
| 0.000 | 8 | -8.965e+02 | +8.005e+03 | -4.259e+05 | -1.909e-01 | -8.826e-05 | +1.740e-04 | 0.45809 |
| 39.400 | 1 | -1.068e+03 | +5.167e+03 | -3.942e+05 | -1.966e-01 | -8.892e-05 | +1.240e-04 | 0.47194 |
| 39.400 | 2 | -8.920e+02 | +9.673e+03 | -3.843e+05 | -1.978e-01 | -8.895e-05 | +1.292e-04 | 0.47482 |
| 39.400 | 3 | -6.418e+02 | +7.158e+03 | -2.767e+05 | -1.478e-01 | -6.554e-05 | +9.630e-05 | 0.35472 |
| 39.400 | 4 | -4.110e+02 | +5.688e+03 | -1.783e+05 | -1.250e-01 | -5.051e-05 | +8.019e-05 | 0.30000 |
| 39.400 | 5 | -3.533e+02 | +5.320e+03 | -1.537e+05 | -1.193e-01 | -4.675e-05 | +7.616e-05 | 0.28632 |
| 39.400 | 7 | -1.064e+03 | +6.835e+03 | -3.879e+05 | -1.978e-01 | -8.841e-05 | +1.256e-04 | 0.47465 |
| 39.400 | 8 | -8.965e+02 | +8.005e+03 | -3.906e+05 | -1.967e-01 | -8.947e-05 | +1.276e-04 | 0.47210 |
| 78.800 | 1 | -4.135e+02 | +5.167e+03 | -3.780e+05 | -2.006e-01 | -8.970e-05 | +8.012e-05 | 0.48149 |
| 78.800 | 2 | +4.548e+02 | +9.673e+03 | -3.752e+05 | -2.021e-01 | -9.041e-05 | +8.606e-05 | 0.48494 |
| 78.800 | 3 | +3.441e+02 | +7.158e+03 | -2.705e+05 | -1.510e-01 | -6.661e-05 | +6.521e-05 | 0.36230 |
| 78.800 | 4 | +3.138e+02 | +5.688e+03 | -1.761e+05 | -1.277e-01 | -5.136e-05 | +6.005e-05 | 0.30660 |
| 78.800 | 5 | +3.063e+02 | +5.320e+03 | -1.525e+05 | -1.220e-01 | -4.755e-05 | +5.876e-05 | 0.29268 |
| 78.800 | 7 | -4.026e+02 | +6.835e+03 | -3.721e+05 | -2.018e-01 | -8.944e-05 | +8.245e-05 | 0.48439 |
| 78.800 | 8 | +4.371e+02 | +8.005e+03 | -3.811e+05 | -2.008e-01 | -9.068e-05 | +8.374e-05 | 0.48204 |
| 118.200 | 1 | +9.542e+02 | +5.167e+03 | -3.883e+05 | -2.030e-01 | -9.048e-05 | +3.657e-05 | 0.48708 |
| 118.200 | 2 | +1.155e+03 | +9.673e+03 | -3.931e+05 | -2.046e-01 | -9.187e-05 | +4.240e-05 | 0.49111 |



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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 118.200 | 3 | +8.572e+02 | +7.158e+03 | -2.840e+05 | -1.530e-01 | -6.769e-05 | +3.370e-05 | 0.36708 |
| 118.200 | 4 | +6.953e+02 | +5.688e+03 | -1.885e+05 | -1.297e-01 | -5.222e-05 | +3.933e-05 | 0.31140 |
| 118.200 | 5 | +6.549e+02 | +5.320e+03 | -1.646e+05 | -1.239e-01 | -4.835e-05 | +4.074e-05 | 0.29746 |
| 118.200 | 7 | +9.794e+02 | +6.835e+03 | -3.832e+05 | -2.043e-01 | -9.046e-05 | +3.953e-05 | 0.49022 |
| 118.200 | 8 | +1.130e+03 | +8.005e+03 | -3.983e+05 | -2.033e-01 | -9.188e-05 | +3.945e-05 | 0.48797 |
| 157.600 | 1 | +1.648e+03 | +5.167e+03 | -4.259e+05 | -2.036e-01 | -9.126e-05 | -9.698e-06 | 0.48859 |
| 157.600 | 2 | +1.860e+03 | +9.673e+03 | -4.386e+05 | -2.055e-01 | -9.332e-05 | -4.859e-06 | 0.49320 |
| 157.600 | 3 | +1.375e+03 | +7.158e+03 | -3.178e+05 | -1.537e-01 | -6.877e-05 | -4.973e-07 | 0.36886 |
| 157.600 | 4 | +1.084e+03 | +5.688e+03 | -2.159e+05 | -1.309e-01 | -5.308e-05 | +1.635e-05 | 0.31421 |
| 157.600 | 5 | +1.011e+03 | +5.320e+03 | -1.904e+05 | -1.252e-01 | -4.915e-05 | +2.056e-05 | 0.30053 |
| 157.600 | 7 | +1.682e+03 | +6.835e+03 | -4.218e+05 | -2.050e-01 | -9.149e-05 | -6.211e-06 | 0.49205 |
| 157.600 | 8 | +1.826e+03 | +8.005e+03 | -4.428e+05 | -2.041e-01 | -9.309e-05 | -8.346e-06 | 0.48974 |
| 197.000 | 1 | -1.648e+03 | -5.167e+03 | +4.909e+05 | -2.023e-01 | -9.204e-05 | -6.180e-05 | 0.48562 |
| 197.000 | 2 | -1.860e+03 | -9.673e+03 | +5.119e+05 | -2.044e-01 | -9.478e-05 | -5.887e-05 | 0.49066 |
| 197.000 | 3 | -1.375e+03 | -7.158e+03 | +3.720e+05 | -1.531e-01 | -6.985e-05 | -3.969e-05 | 0.36732 |
| 197.000 | 4 | -1.084e+03 | -5.688e+03 | +2.586e+05 | -1.311e-01 | -5.393e-05 | -1.061e-05 | 0.31474 |
| 197.000 | 5 | -1.011e+03 | -5.320e+03 | +2.302e+05 | -1.257e-01 | -4.996e-05 | -3.335e-06 | 0.30161 |
| 197.000 | 7 | -1.682e+03 | -6.835e+03 | +4.880e+05 | -2.039e-01 | -9.252e-05 | -5.791e-05 | 0.48943 |
| 197.000 | 8 | -1.826e+03 | -8.005e+03 | +5.148e+05 | -2.028e-01 | -9.429e-05 | -6.276e-05 | 0.48684 |

**Trave numero: 10 - Lunghezza: 215.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -4.505e+03 | -2.929e+04 | -4.984e+05 | -2.023e-01 | -9.204e-05 | -6.180e-05 | 0.48562 |
| 0.000 | 2 | -4.308e+03 | -2.071e+04 | -5.122e+05 | -2.044e-01 | -9.478e-05 | -5.887e-05 | 0.49066 |
| 0.000 | 3 | -3.143e+03 | -1.509e+04 | -3.721e+05 | -1.531e-01 | -6.985e-05 | -3.969e-05 | 0.36732 |
| 0.000 | 4 | -2.253e+03 | -1.073e+04 | -2.585e+05 | -1.311e-01 | -5.393e-05 | -1.061e-05 | 0.31474 |
| 0.000 | 5 | -2.031e+03 | -9.636e+03 | -2.301e+05 | -1.257e-01 | -4.996e-05 | -3.335e-06 | 0.30161 |
| 0.000 | 7 | -4.489e+03 | -2.355e+04 | -4.955e+05 | -2.039e-01 | -9.252e-05 | -5.791e-05 | 0.48943 |
| 0.000 | 8 | -4.324e+03 | -2.645e+04 | -5.151e+05 | -2.028e-01 | -9.429e-05 | -6.276e-05 | 0.48684 |
| 43.000 | 1 | -4.505e+03 | -2.929e+04 | -3.047e+05 | -1.981e-01 | -8.722e-05 | -1.116e-04 | 0.47539 |
| 43.000 | 2 | -4.308e+03 | -2.071e+04 | -3.269e+05 | -2.003e-01 | -9.138e-05 | -1.109e-04 | 0.48067 |
| 43.000 | 3 | -3.143e+03 | -1.509e+04 | -2.370e+05 | -1.502e-01 | -6.737e-05 | -7.747e-05 | 0.36038 |
| 43.000 | 4 | -2.253e+03 | -1.073e+04 | -1.616e+05 | -1.299e-01 | -5.217e-05 | -3.666e-05 | 0.31166 |
| 43.000 | 5 | -2.031e+03 | -9.636e+03 | -1.428e+05 | -1.248e-01 | -4.837e-05 | -2.646e-05 | 0.29950 |
| 43.000 | 7 | -4.489e+03 | -2.355e+04 | -3.025e+05 | -1.998e-01 | -8.865e-05 | -1.074e-04 | 0.47964 |
| 43.000 | 8 | -4.324e+03 | -2.645e+04 | -3.292e+05 | -1.985e-01 | -8.995e-05 | -1.151e-04 | 0.47642 |
| 86.000 | 1 | -3.781e+03 | -2.929e+04 | -1.421e+05 | -1.922e-01 | -8.241e-05 | -1.393e-04 | 0.46135 |
| 86.000 | 2 | -3.571e+03 | -2.071e+04 | -1.734e+05 | -1.944e-01 | -8.797e-05 | -1.419e-04 | 0.46658 |
| 86.000 | 3 | -2.600e+03 | -1.509e+04 | -1.252e+05 | -1.460e-01 | -6.489e-05 | -9.993e-05 | 0.35047 |
| 86.000 | 4 | -1.836e+03 | -1.073e+04 | -8.266e+04 | -1.277e-01 | -5.041e-05 | -5.181e-05 | 0.30658 |
| 86.000 | 5 | -1.645e+03 | -9.636e+03 | -7.203e+04 | -1.232e-01 | -4.679e-05 | -3.978e-05 | 0.29561 |
| 86.000 | 7 | -3.754e+03 | -2.355e+04 | -1.410e+05 | -1.942e-01 | -8.478e-05 | -1.349e-04 | 0.46606 |
| 86.000 | 8 | -3.598e+03 | -2.645e+04 | -1.745e+05 | -1.925e-01 | -8.560e-05 | -1.464e-04 | 0.46190 |
| 129.000 | 1 | -3.094e+03 | -2.929e+04 | -9.078e+03 | -1.857e-01 | -7.759e-05 | -1.487e-04 | 0.44561 |
| 129.000 | 2 | -2.871e+03 | -2.071e+04 | -4.992e+04 | -1.877e-01 | -8.457e-05 | -1.558e-04 | 0.45041 |
| 129.000 | 3 | -2.083e+03 | -1.509e+04 | -3.561e+04 | -1.413e-01 | -6.241e-05 | -1.099e-04 | 0.33905 |
| 129.000 | 4 | -1.432e+03 | -1.073e+04 | -2.108e+04 | -1.252e-01 | -4.864e-05 | -5.824e-05 | 0.30048 |
| 129.000 | 5 | -1.269e+03 | -9.636e+03 | -1.745e+04 | -1.212e-01 | -4.520e-05 | -4.533e-05 | 0.29086 |
| 129.000 | 7 | -3.055e+03 | -2.355e+04 | -9.648e+03 | -1.878e-01 | -8.091e-05 | -1.442e-04 | 0.45077 |
| 129.000 | 8 | -2.910e+03 | -2.645e+04 | -4.935e+04 | -1.855e-01 | -8.125e-05 | -1.602e-04 | 0.44525 |
| 172.000 | 1 | -2.447e+03 | -2.929e+04 | +9.616e+04 | -1.791e-01 | -7.277e-05 | -1.433e-04 | 0.42984 |
| 172.000 | 2 | -2.212e+03 | -2.071e+04 | +4.518e+04 | -1.807e-01 | -8.116e-05 | -1.561e-04 | 0.43368 |
| 172.000 | 3 | -1.595e+03 | -1.509e+04 | +3.299e+04 | -1.364e-01 | -5.993e-05 | -1.101e-04 | 0.32724 |
| 172.000 | 4 | -1.044e+03 | -1.073e+04 | +2.380e+04 | -1.226e-01 | -4.688e-05 | -5.807e-05 | 0.29419 |
| 172.000 | 5 | -9.058e+02 | -9.636e+03 | +2.150e+04 | -1.191e-01 | -4.362e-05 | -4.508e-05 | 0.28591 |
| 172.000 | 7 | -2.395e+03 | -2.355e+04 | +9.334e+04 | -1.814e-01 | -7.704e-05 | -1.390e-04 | 0.43548 |
| 172.000 | 8 | -2.264e+03 | -2.645e+04 | +4.799e+04 | -1.784e-01 | -7.690e-05 | -1.603e-04 | 0.42806 |
| 215.000 | 1 | +1.841e+03 | +2.929e+04 | -1.753e+05 | -1.731e-01 | -6.796e-05 | -1.265e-04 | 0.41542 |
| 215.000 | 2 | +1.596e+03 | +2.071e+04 | -1.138e+05 | -1.740e-01 | -7.776e-05 | -1.462e-04 | 0.41762 |
| 215.000 | 3 | +1.138e+03 | +1.509e+04 | -8.192e+04 | -1.316e-01 | -5.744e-05 | -1.029e-04 | 0.31594 |
| 215.000 | 4 | +6.717e+02 | +1.073e+04 | -5.268e+04 | -1.201e-01 | -4.512e-05 | -5.333e-05 | 0.28824 |
| 215.000 | 5 | +5.552e+02 | +9.636e+03 | -4.537e+04 | -1.172e-01 | -4.203e-05 | -4.093e-05 | 0.28133 |
| 215.000 | 7 | +1.775e+03 | +2.355e+04 | -1.697e+05 | -1.756e-01 | -7.316e-05 | -1.227e-04 | 0.42146 |
| 215.000 | 8 | +1.663e+03 | +2.645e+04 | -1.195e+05 | -1.715e-01 | -7.255e-05 | -1.499e-04 | 0.41158 |

**Trave numero: 11 - Lunghezza: 175.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -1.345e+03 | -3.958e+04 | -9.339e+04 | -1.250e-01 | -1.984e-05 | +1.195e-04 | 0.29998 |
| 0.000 | 2 | -1.284e+03 | -4.017e+04 | -7.747e+04 | -1.298e-01 | -1.141e-05 | +8.582e-05 | 0.31154 |
| 0.000 | 3 | -9.671e+02 | -2.992e+04 | -5.917e+04 | -9.879e-02 | -8.951e-06 | +5.789e-05 | 0.23711 |
| 0.000 | 4 | -8.595e+02 | -2.482e+04 | -5.698e+04 | -9.330e-02 | -9.846e-06 | +1.565e-05 | 0.22391 |
| 0.000 | 5 | -8.326e+02 | -2.355e+04 | -5.643e+04 | -9.192e-02 | -1.007e-05 | +5.092e-06 | 0.22062 |
| 0.000 | 7 | -1.433e+03 | -3.861e+04 | -1.027e+05 | -1.272e-01 | -1.180e-05 | +1.139e-04 | 0.30523 |
| 0.000 | 8 | -1.197e+03 | -4.115e+04 | -6.817e+04 | -1.276e-01 | -1.945e-05 | +9.139e-05 | 0.30626 |
| 35.000 | 1 | -1.345e+03 | -3.958e+04 | -4.631e+04 | -1.289e-01 | -1.454e-05 | +1.124e-04 | 0.30943 |
| 35.000 | 2 | -1.284e+03 | -4.017e+04 | -3.252e+04 | -1.326e-01 | -6.036e-06 | +8.026e-05 | 0.31822 |
| 35.000 | 3 | -9.671e+02 | -2.992e+04 | -2.532e+04 | -1.007e-01 | -4.947e-06 | +5.363e-05 | 0.24158 |
| 35.000 | 4 | -8.595e+02 | -2.482e+04 | -2.690e+04 | -9.369e-02 | -6.525e-06 | +1.142e-05 | 0.22486 |
| 35.000 | 5 | -8.326e+02 | -2.355e+04 | -2.729e+04 | -9.195e-02 | -6.919e-06 | +8.659e-07 | 0.22068 |



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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 35.000 | 7 | -1.433e+03 | -3.861e+04 | -5.255e+04 | -1.309e-01 | -6.638e-06 | +1.061e-04 | 0.31416 |
| 35.000 | 8 | -1.197e+03 | -4.115e+04 | -2.629e+04 | -1.306e-01 | -1.394e-05 | +8.662e-05 | 0.31349 |
| 70.000 | 1 | -1.105e+03 | -3.958e+04 | -7.646e+03 | -1.327e-01 | -9.245e-06 | +1.097e-04 | 0.31853 |
| 70.000 | 2 | -1.025e+03 | -4.017e+04 | +3.367e+03 | -1.353e-01 | -6.605e-07 | +7.879e-05 | 0.32467 |
| 70.000 | 3 | -7.748e+02 | -2.992e+04 | +1.799e+03 | -1.024e-01 | -9.428e-07 | +5.244e-05 | 0.24586 |
| 70.000 | 4 | -7.023e+02 | -2.482e+04 | -2.317e+03 | -9.400e-02 | -3.203e-06 | +9.943e-06 | 0.22560 |
| 70.000 | 5 | -6.842e+02 | -2.355e+04 | -3.346e+03 | -9.189e-02 | -3.768e-06 | -6.806e-07 | 0.22054 |
| 70.000 | 7 | -1.182e+03 | -3.861e+04 | -1.116e+04 | -1.345e-01 | -1.471e-06 | +1.029e-04 | 0.32268 |
| 70.000 | 8 | -9.478e+02 | -4.115e+04 | +6.881e+03 | -1.336e-01 | -8.435e-06 | +8.564e-05 | 0.32052 |
| 105.000 | 1 | -8.454e+02 | -3.958e+04 | +2.194e+04 | -1.365e-01 | -3.948e-06 | +1.104e-04 | 0.32758 |
| 105.000 | 2 | -7.531e+02 | -4.017e+04 | +2.973e+04 | -1.380e-01 | +4.715e-06 | +8.046e-05 | 0.33120 |
| 105.000 | 3 | -5.735e+02 | -2.992e+04 | +2.187e+04 | -1.042e-01 | +3.061e-06 | +5.363e-05 | 0.25018 |
| 105.000 | 4 | -5.435e+02 | -2.482e+04 | +1.671e+04 | -9.431e-02 | +1.184e-07 | +1.067e-05 | 0.22635 |
| 105.000 | 5 | -5.360e+02 | -2.355e+04 | +1.541e+04 | -9.183e-02 | -6.173e-07 | -7.146e-08 | 0.22039 |
| 105.000 | 7 | -9.143e+02 | -3.861e+04 | +2.084e+04 | -1.380e-01 | +3.696e-06 | +1.034e-04 | 0.33115 |
| 105.000 | 8 | -6.842e+02 | -4.115e+04 | +3.083e+04 | -1.365e-01 | -2.929e-06 | +8.754e-05 | 0.32765 |
| 140.000 | 1 | -5.670e+02 | -3.958e+04 | +4.179e+04 | -1.404e-01 | +1.349e-06 | +1.137e-04 | 0.33686 |
| 140.000 | 2 | -4.671e+02 | -4.017e+04 | +4.607e+04 | -1.408e-01 | +1.009e-05 | +8.429e-05 | 0.33802 |
| 140.000 | 3 | -3.631e+02 | -2.992e+04 | +3.458e+04 | -1.061e-01 | +7.065e-06 | +5.648e-05 | 0.25474 |
| 140.000 | 4 | -3.832e+02 | -2.482e+04 | +3.012e+04 | -9.469e-02 | +3.440e-06 | +1.303e-05 | 0.22726 |
| 140.000 | 5 | -3.882e+02 | -2.355e+04 | +2.900e+04 | -9.183e-02 | +2.534e-06 | +2.171e-06 | 0.22039 |
| 140.000 | 7 | -6.284e+02 | -3.861e+04 | +4.284e+04 | -1.416e-01 | +8.863e-06 | +1.066e-04 | 0.33982 |
| 140.000 | 8 | -4.057e+02 | -4.115e+04 | +4.503e+04 | -1.396e-01 | +2.578e-06 | +9.137e-05 | 0.33506 |
| 175.000 | 1 | +2.691e+02 | +3.958e+04 | -5.121e+04 | -1.444e-01 | +6.646e-06 | +1.184e-04 | 0.34656 |
| 175.000 | 2 | +1.667e+02 | +4.017e+04 | -5.191e+04 | -1.439e-01 | +1.547e-05 | +8.923e-05 | 0.34526 |
| 175.000 | 3 | +1.432e+02 | +2.992e+04 | -3.959e+04 | -1.082e-01 | +1.107e-05 | +6.023e-05 | 0.25961 |
| 175.000 | 4 | +2.209e+02 | +2.482e+04 | -3.785e+04 | -9.519e-02 | +6.762e-06 | +1.646e-05 | 0.22845 |
| 175.000 | 5 | +2.404e+02 | +2.355e+04 | -3.741e+04 | -9.194e-02 | +5.685e-06 | +5.523e-06 | 0.22066 |
| 175.000 | 7 | +3.243e+02 | +3.861e+04 | -5.419e+04 | -1.454e-01 | +1.403e-05 | +1.115e-04 | 0.34891 |
| 175.000 | 8 | +1.115e+02 | +4.115e+04 | -4.893e+04 | -1.429e-01 | +8.084e-06 | +9.612e-05 | 0.34291 |

**Trave numero: 12 - Lunghezza: 175.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -6.955e+02 | -4.012e+04 | +1.055e+05 | -1.323e-01 | +2.614e-06 | +1.678e-04 | 0.31750 |
| 0.000 | 2 | -4.475e+02 | -3.912e+04 | +1.593e+05 | -1.324e-01 | +1.178e-05 | +1.493e-04 | 0.31783 |
| 0.000 | 3 | -3.536e+02 | -2.846e+04 | +1.184e+05 | -1.008e-01 | +8.676e-06 | +1.063e-04 | 0.24197 |
| 0.000 | 4 | -4.030e+02 | -1.995e+04 | +9.677e+04 | -9.535e-02 | +6.679e-06 | +6.175e-05 | 0.22884 |
| 0.000 | 5 | -4.152e+02 | -1.782e+04 | +9.136e+04 | -9.398e-02 | +6.179e-06 | +5.062e-05 | 0.22556 |
| 0.000 | 7 | -5.683e+02 | -4.091e+04 | +1.146e+05 | -1.301e-01 | +1.130e-05 | +1.723e-04 | 0.31217 |
| 0.000 | 8 | -5.747e+02 | -3.833e+04 | +1.502e+05 | -1.347e-01 | +3.096e-06 | +1.447e-04 | 0.32316 |
| 35.000 | 1 | -6.955e+02 | -4.012e+04 | +1.298e+05 | -1.383e-01 | +7.983e-06 | +1.797e-04 | 0.33192 |
| 35.000 | 2 | -4.474e+02 | -3.912e+04 | +1.750e+05 | -1.379e-01 | +1.701e-05 | +1.661e-04 | 0.33098 |
| 35.000 | 3 | -3.536e+02 | -2.846e+04 | +1.308e+05 | -1.047e-01 | +1.248e-05 | +1.188e-04 | 0.25135 |
| 35.000 | 4 | -4.030e+02 | -1.995e+04 | +1.109e+05 | -9.766e-02 | +9.348e-06 | +7.223e-05 | 0.23438 |
| 35.000 | 5 | -4.152e+02 | -1.782e+04 | +1.059e+05 | -9.589e-02 | +8.565e-06 | +6.058e-05 | 0.23014 |
| 35.000 | 7 | -5.682e+02 | -4.091e+04 | +1.345e+05 | -1.363e-01 | +1.677e-05 | +1.849e-04 | 0.32705 |
| 35.000 | 8 | -5.747e+02 | -3.833e+04 | +1.703e+05 | -1.400e-01 | +8.224e-06 | +1.609e-04 | 0.33588 |
| 70.000 | 1 | -6.127e+02 | -4.012e+04 | +1.513e+05 | -1.448e-01 | +1.335e-05 | +1.939e-04 | 0.34747 |
| 70.000 | 2 | -3.666e+02 | -3.912e+04 | +1.878e+05 | -1.440e-01 | +2.225e-05 | +1.844e-04 | 0.34562 |
| 70.000 | 3 | -2.984e+02 | -2.846e+04 | +1.412e+05 | -1.091e-01 | +1.629e-05 | +1.326e-04 | 0.26184 |
| 70.000 | 4 | -3.832e+02 | -1.995e+04 | +1.243e+05 | -1.004e-01 | +1.202e-05 | +8.410e-05 | 0.24086 |
| 70.000 | 5 | -4.045e+02 | -1.782e+04 | +1.200e+05 | -9.817e-02 | +1.095e-05 | +7.198e-05 | 0.23562 |
| 70.000 | 7 | -4.957e+02 | -4.091e+04 | +1.519e+05 | -1.429e-01 | +2.225e-05 | +1.994e-04 | 0.34308 |
| 70.000 | 8 | -4.836e+02 | -3.833e+04 | +1.872e+05 | -1.459e-01 | +1.335e-05 | +1.789e-04 | 0.35004 |
| 105.000 | 1 | -4.972e+02 | -4.012e+04 | +1.687e+05 | -1.518e-01 | +1.872e-05 | +2.100e-04 | 0.36432 |
| 105.000 | 2 | -2.550e+02 | -3.912e+04 | +1.967e+05 | -1.508e-01 | +2.748e-05 | +2.039e-04 | 0.36190 |
| 105.000 | 3 | -2.210e+02 | -2.846e+04 | +1.490e+05 | -1.140e-01 | +2.010e-05 | +1.472e-04 | 0.27355 |
| 105.000 | 4 | -3.500e+02 | -1.995e+04 | +1.365e+05 | -1.035e-01 | +1.469e-05 | +9.726e-05 | 0.24840 |
| 105.000 | 5 | -3.821e+02 | -1.782e+04 | +1.334e+05 | -1.009e-01 | +1.334e-05 | +8.478e-05 | 0.24211 |
| 105.000 | 7 | -3.895e+02 | -4.091e+04 | +1.655e+05 | -1.502e-01 | +2.772e-05 | +2.154e-04 | 0.36041 |
| 105.000 | 8 | -3.628e+02 | -3.833e+04 | +1.999e+05 | -1.524e-01 | +1.848e-05 | +1.985e-04 | 0.36581 |
| 140.000 | 1 | -3.464e+02 | -4.012e+04 | +1.808e+05 | -1.594e-01 | +2.409e-05 | +2.277e-04 | 0.38263 |
| 140.000 | 2 | -1.093e+02 | -3.912e+04 | +2.006e+05 | -1.583e-01 | +3.272e-05 | +2.239e-04 | 0.37982 |
| 140.000 | 3 | -1.191e+02 | -2.846e+04 | +1.531e+05 | -1.194e-01 | +2.391e-05 | +1.625e-04 | 0.28651 |
| 140.000 | 4 | -3.008e+02 | -1.995e+04 | +1.471e+05 | -1.071e-01 | +1.736e-05 | +1.116e-04 | 0.25711 |
| 140.000 | 5 | -3.462e+02 | -1.782e+04 | +1.455e+05 | -1.041e-01 | +1.572e-05 | +9.886e-05 | 0.24977 |
| 140.000 | 7 | -2.469e+02 | -4.091e+04 | +1.742e+05 | -1.580e-01 | +3.320e-05 | +2.325e-04 | 0.37918 |
| 140.000 | 8 | -2.088e+02 | -3.833e+04 | +2.072e+05 | -1.597e-01 | +2.361e-05 | +2.190e-04 | 0.38330 |
| 175.000 | 1 | +1.571e+02 | +4.012e+04 | -1.863e+05 | -1.677e-01 | +2.946e-05 | +2.462e-04 | 0.40250 |
| 175.000 | 2 | -7.407e+01 | +3.912e+04 | -1.980e+05 | -1.665e-01 | +3.795e-05 | +2.440e-04 | 0.39950 |
| 175.000 | 3 | -1.015e+01 | +2.846e+04 | -1.528e+05 | -1.253e-01 | +2.771e-05 | +1.779e-04 | 0.30082 |
| 175.000 | 4 | +2.334e+02 | +1.995e+04 | -1.552e+05 | -1.113e-01 | +2.003e-05 | +1.268e-04 | 0.26707 |
| 175.000 | 5 | +2.942e+02 | +1.782e+04 | -1.558e+05 | -1.078e-01 | +1.810e-05 | +1.141e-04 | 0.25862 |
| 175.000 | 7 | +6.493e+01 | +4.091e+04 | -1.764e+05 | -1.664e-01 | +3.867e-05 | +2.502e-04 | 0.39943 |
| 175.000 | 8 | +1.812e+01 | +3.833e+04 | -2.078e+05 | -1.677e-01 | +2.874e-05 | +2.400e-04 | 0.40258 |

**Trave numero: 13 - Lunghezza: 180.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | +3.498e+03 | -3.346e+04 | +2.411e+05 | -1.677e-01 | +2.946e-05 | +2.462e-04 | 0.40250 |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 2 | +3.678e+03 | -4.038e+04 | +2.665e+05 | -1.665e-01 | +3.795e-05 | +2.440e-04 | 0.39950 |
| 0.000 | 3 | +2.740e+03 | -2.965e+04 | +2.037e+05 | -1.253e-01 | +2.771e-05 | +1.779e-04 | 0.30082 |
| 0.000 | 4 | +2.278e+03 | -2.231e+04 | +1.973e+05 | -1.113e-01 | +2.003e-05 | +1.268e-04 | 0.26707 |
| 0.000 | 5 | +2.163e+03 | -2.047e+04 | +1.957e+05 | -1.078e-01 | +1.810e-05 | +1.141e-04 | 0.25862 |
| 0.000 | 7 | +3.506e+03 | -3.784e+04 | +2.334e+05 | -1.664e-01 | +3.867e-05 | +2.502e-04 | 0.39943 |
| 0.000 | 8 | +3.670e+03 | -3.600e+04 | +2.741e+05 | -1.677e-01 | +2.874e-05 | +2.400e-04 | 0.40258 |
| 36.000 | 1 | +3.785e+03 | -3.346e+04 | +1.151e+05 | -1.772e-01 | +3.406e-05 | +2.647e-04 | 0.42538 |
| 36.000 | 2 | +3.959e+03 | -4.038e+04 | +1.340e+05 | -1.760e-01 | +4.351e-05 | +2.648e-04 | 0.42233 |
| 36.000 | 3 | +2.940e+03 | -2.965e+04 | +1.051e+05 | -1.323e-01 | +3.179e-05 | +1.939e-04 | 0.31750 |
| 36.000 | 4 | +2.396e+03 | -2.231e+04 | +1.153e+05 | -1.164e-01 | +2.310e-05 | +1.431e-04 | 0.27924 |
| 36.000 | 5 | +2.259e+03 | -2.047e+04 | +1.179e+05 | -1.124e-01 | +2.092e-05 | +1.304e-04 | 0.26969 |
| 36.000 | 7 | +3.787e+03 | -3.784e+04 | +1.072e+05 | -1.761e-01 | +4.388e-05 | +2.679e-04 | 0.42262 |
| 36.000 | 8 | +3.957e+03 | -3.600e+04 | +1.420e+05 | -1.771e-01 | +3.369e-05 | +2.616e-04 | 0.42509 |
| 72.000 | 1 | +4.124e+03 | -3.346e+04 | -2.112e+04 | -1.872e-01 | +3.867e-05 | +2.695e-04 | 0.44930 |
| 72.000 | 2 | +4.291e+03 | -4.038e+04 | -8.462e+03 | -1.860e-01 | +4.907e-05 | +2.714e-04 | 0.44640 |
| 72.000 | 3 | +3.178e+03 | -2.965e+04 | -7.712e+02 | -1.397e-01 | +3.588e-05 | +1.994e-04 | 0.33516 |
| 72.000 | 4 | +2.541e+03 | -2.231e+04 | +2.907e+04 | -1.219e-01 | +2.617e-05 | +1.506e-04 | 0.29249 |
| 72.000 | 5 | +2.382e+03 | -2.047e+04 | +3.653e+04 | -1.174e-01 | +2.374e-05 | +1.384e-04 | 0.28181 |
| 72.000 | 7 | +4.121e+03 | -3.784e+04 | -2.918e+04 | -1.862e-01 | +4.909e-05 | +2.720e-04 | 0.44681 |
| 72.000 | 8 | +4.294e+03 | -3.600e+04 | -4.052e+02 | -1.870e-01 | +3.865e-05 | +2.689e-04 | 0.44890 |
| 108.000 | 1 | +4.514e+03 | -3.346e+04 | -1.696e+05 | -1.971e-01 | +4.328e-05 | +2.596e-04 | 0.47311 |
| 108.000 | 2 | +4.676e+03 | -4.038e+04 | -1.629e+05 | -1.960e-01 | +5.462e-05 | +2.625e-04 | 0.47042 |
| 108.000 | 3 | +3.454e+03 | -2.965e+04 | -1.152e+05 | -1.470e-01 | +3.996e-05 | +1.933e-04 | 0.35285 |
| 108.000 | 4 | +2.716e+03 | -2.231e+04 | -6.242e+04 | -1.275e-01 | +2.924e-05 | +1.488e-04 | 0.30600 |
| 108.000 | 5 | +2.532e+03 | -2.047e+04 | -4.923e+04 | -1.226e-01 | +2.656e-05 | +1.377e-04 | 0.29429 |
| 108.000 | 7 | +4.506e+03 | -3.784e+04 | -1.775e+05 | -1.962e-01 | +5.430e-05 | +2.612e-04 | 0.47076 |
| 108.000 | 8 | +4.684e+03 | -3.600e+04 | -1.550e+05 | -1.970e-01 | +4.360e-05 | +2.609e-04 | 0.47278 |
| 144.000 | 1 | +4.952e+03 | -3.346e+04 | -3.321e+05 | -2.064e-01 | +4.788e-05 | +2.336e-04 | 0.49546 |
| 144.000 | 2 | +5.109e+03 | -4.038e+04 | -3.312e+05 | -2.054e-01 | +6.018e-05 | +2.368e-04 | 0.49306 |
| 144.000 | 3 | +3.767e+03 | -2.965e+04 | -2.395e+05 | -1.540e-01 | +4.404e-05 | +1.749e-04 | 0.36955 |
| 144.000 | 4 | +2.919e+03 | -2.231e+04 | -1.602e+05 | -1.329e-01 | +3.231e-05 | +1.373e-04 | 0.31898 |
| 144.000 | 5 | +2.707e+03 | -2.047e+04 | -1.404e+05 | -1.276e-01 | +2.938e-05 | +1.279e-04 | 0.30634 |
| 144.000 | 7 | +4.939e+03 | -3.784e+04 | -3.397e+05 | -2.055e-01 | +5.951e-05 | +2.344e-04 | 0.49320 |
| 144.000 | 8 | +5.122e+03 | -3.600e+04 | -3.236e+05 | -2.064e-01 | +4.856e-05 | +2.360e-04 | 0.49531 |
| 180.000 | 1 | -4.952e+03 | +3.346e+04 | +5.103e+05 | -2.145e-01 | +5.249e-05 | +1.899e-04 | 0.51487 |
| 180.000 | 2 | -5.108e+03 | +4.038e+04 | +5.152e+05 | -2.137e-01 | +6.574e-05 | +1.928e-04 | 0.51278 |
| 180.000 | 3 | -3.767e+03 | +2.965e+04 | +3.751e+05 | -1.601e-01 | +4.812e-05 | +1.430e-04 | 0.38414 |
| 180.000 | 4 | -2.919e+03 | +2.231e+04 | +2.653e+05 | -1.377e-01 | +3.538e-05 | +1.152e-04 | 0.33055 |
| 180.000 | 5 | -2.707e+03 | +2.047e+04 | +2.378e+05 | -1.321e-01 | +3.219e-05 | +1.082e-04 | 0.31714 |
| 180.000 | 7 | -4.939e+03 | +3.784e+04 | +5.175e+05 | -2.136e-01 | +6.471e-05 | +1.899e-04 | 0.51266 |
| 180.000 | 8 | -5.121e+03 | +3.600e+04 | +5.080e+05 | -2.146e-01 | +5.351e-05 | +1.928e-04 | 0.51499 |

**Trave numero: 14 - Lunghezza: 197.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -9.116e+02 | -9.405e+03 | -5.130e+05 | -2.145e-01 | +5.249e-05 | +1.899e-04 | 0.51487 |
| 0.000 | 2 | -7.479e+02 | -1.235e+04 | -5.104e+05 | -2.137e-01 | +6.574e-05 | +1.928e-04 | 0.51278 |
| 0.000 | 3 | -5.292e+02 | -9.104e+03 | -3.716e+05 | -1.601e-01 | +4.812e-05 | +1.430e-04 | 0.38414 |
| 0.000 | 4 | -2.894e+02 | -7.065e+03 | -2.627e+05 | -1.377e-01 | +3.538e-05 | +1.152e-04 | 0.33055 |
| 0.000 | 5 | -2.294e+02 | -6.556e+03 | -2.354e+05 | -1.321e-01 | +3.219e-05 | +1.082e-04 | 0.31714 |
| 0.000 | 7 | -9.153e+02 | -1.009e+04 | -5.202e+05 | -2.136e-01 | +6.471e-05 | +1.899e-04 | 0.51266 |
| 0.000 | 8 | -7.442e+02 | -1.166e+04 | -5.032e+05 | -2.146e-01 | +5.351e-05 | +1.928e-04 | 0.51499 |
| 39.400 | 1 | -9.118e+02 | -9.405e+03 | -4.771e+05 | -2.208e-01 | +5.390e-05 | +1.336e-04 | 0.52992 |
| 39.400 | 2 | -7.480e+02 | -1.235e+04 | -4.809e+05 | -2.201e-01 | +6.760e-05 | +1.365e-04 | 0.52817 |
| 39.400 | 3 | -5.292e+02 | -9.104e+03 | -3.508e+05 | -1.648e-01 | +4.949e-05 | +1.019e-04 | 0.39559 |
| 39.400 | 4 | -2.894e+02 | -7.065e+03 | -2.513e+05 | -1.417e-01 | +3.644e-05 | +8.598e-05 | 0.33998 |
| 39.400 | 5 | -2.294e+02 | -6.556e+03 | -2.264e+05 | -1.359e-01 | +3.318e-05 | +8.199e-05 | 0.32609 |
| 39.400 | 7 | -9.158e+02 | -1.009e+04 | -4.841e+05 | -2.199e-01 | +6.623e-05 | +1.328e-04 | 0.52769 |
| 39.400 | 8 | -7.443e+02 | -1.166e+04 | -4.739e+05 | -2.210e-01 | +5.527e-05 | +1.373e-04 | 0.53042 |
| 78.800 | 1 | -3.504e+02 | -9.405e+03 | -4.633e+05 | -2.250e-01 | +5.532e-05 | +8.016e-05 | 0.53995 |
| 78.800 | 2 | +3.907e+02 | -1.235e+04 | -4.734e+05 | -2.244e-01 | +6.946e-05 | +8.230e-05 | 0.53846 |
| 78.800 | 3 | +2.956e+02 | -9.104e+03 | -3.458e+05 | -1.681e-01 | +5.086e-05 | +6.236e-05 | 0.40332 |
| 78.800 | 4 | +2.704e+02 | -7.065e+03 | -2.506e+05 | -1.445e-01 | +3.751e-05 | +5.746e-05 | 0.34675 |
| 78.800 | 5 | +2.641e+02 | -6.556e+03 | -2.268e+05 | -1.386e-01 | +3.417e-05 | +5.624e-05 | 0.33262 |
| 78.800 | 7 | -3.594e+02 | -1.009e+04 | -4.700e+05 | -2.240e-01 | +6.775e-05 | +7.858e-05 | 0.53758 |
| 78.800 | 8 | +4.053e+02 | -1.166e+04 | -4.667e+05 | -2.254e-01 | +5.703e-05 | +8.387e-05 | 0.54084 |
| 118.200 | 1 | +8.317e+02 | -9.405e+03 | -4.725e+05 | -2.271e-01 | +5.674e-05 | +2.699e-05 | 0.54506 |
| 118.200 | 2 | +9.848e+02 | -1.235e+04 | -4.888e+05 | -2.266e-01 | +7.132e-05 | +2.762e-05 | 0.54377 |
| 118.200 | 3 | +7.268e+02 | -9.104e+03 | -3.575e+05 | -1.698e-01 | +5.223e-05 | +2.240e-05 | 0.40740 |
| 118.200 | 4 | +5.679e+02 | -7.065e+03 | -2.612e+05 | -1.462e-01 | +3.857e-05 | +2.838e-05 | 0.35088 |
| 118.200 | 5 | +5.281e+02 | -6.556e+03 | -2.372e+05 | -1.403e-01 | +3.516e-05 | +2.988e-05 | 0.33677 |
| 118.200 | 7 | +8.111e+02 | -1.009e+04 | -4.786e+05 | -2.261e-01 | +6.927e-05 | +2.468e-05 | 0.54252 |
| 118.200 | 8 | +1.006e+03 | -1.166e+04 | -4.827e+05 | -2.276e-01 | +5.878e-05 | +2.993e-05 | 0.54631 |
| 157.600 | 1 | +1.429e+03 | -9.405e+03 | -5.053e+05 | -2.272e-01 | +5.815e-05 | -2.858e-05 | 0.54521 |
| 157.600 | 2 | +1.579e+03 | -1.235e+04 | -5.276e+05 | -2.266e-01 | +7.318e-05 | -3.014e-05 | 0.54389 |
| 157.600 | 3 | +1.158e+03 | -9.104e+03 | -3.861e+05 | -1.699e-01 | +5.360e-05 | -1.986e-05 | 0.40771 |
| 157.600 | 4 | +8.688e+02 | -7.065e+03 | -2.836e+05 | -1.468e-01 | +3.964e-05 | -2.577e-06 | 0.35225 |
| 157.600 | 5 | +7.962e+02 | -6.556e+03 | -2.580e+05 | -1.410e-01 | +3.615e-05 | +1.743e-06 | 0.33838 |
| 157.600 | 7 | +1.402e+03 | -1.009e+04 | -5.106e+05 | -2.260e-01 | +7.079e-05 | -3.153e-05 | 0.54240 |



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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 157.600 | 8 | +1.606e+03 | -1.166e+04 | -5.223e+05 | -2.278e-01 | +6.054e-05 | -2.718e-05 | 0.54670 |
| 197.000 | 1 | -1.429e+03 | +9.405e+03 | +5.616e+05 | -2.250e-01 | +5.957e-05 | -8.921e-05 | 0.54000 |
| 197.000 | 2 | -1.579e+03 | +1.235e+04 | +5.898e+05 | -2.244e-01 | +7.504e-05 | -9.363e-05 | 0.53844 |
| 197.000 | 3 | -1.159e+03 | +9.104e+03 | +4.318e+05 | -1.683e-01 | +5.498e-05 | -6.634e-05 | 0.40394 |
| 197.000 | 4 | -8.688e+02 | +7.065e+03 | +3.178e+05 | -1.461e-01 | +4.070e-05 | -3.675e-05 | 0.35062 |
| 197.000 | 5 | -7.962e+02 | +6.556e+03 | +2.893e+05 | -1.405e-01 | +3.713e-05 | -2.936e-05 | 0.33730 |
| 197.000 | 7 | -1.402e+03 | +1.009e+04 | +5.658e+05 | -2.237e-01 | +7.231e-05 | -9.270e-05 | 0.53688 |
| 197.000 | 8 | -1.606e+03 | +1.166e+04 | +5.856e+05 | -2.256e-01 | +6.230e-05 | -9.014e-05 | 0.54156 |
| **Trave numero:** | **15 - Lunghezza:** | **215.00** | | | | | | |
| **Dist.** | **c.c.** | **Fy** | **Mx** | **Mz** | **Spost.Z** | **Rotaz.X** | **Rotaz.Y** | **Press. Suolo** |
| 0.000 | 1 | -4.878e+03 | +1.705e+04 | -5.701e+05 | -2.250e-01 | +5.957e-05 | -8.921e-05 | 0.54000 |
| 0.000 | 2 | -4.718e+03 | +1.780e+04 | -5.908e+05 | -2.244e-01 | +7.504e-05 | -9.363e-05 | 0.53844 |
| 0.000 | 3 | -3.456e+03 | +1.297e+04 | -4.325e+05 | -1.683e-01 | +5.498e-05 | -6.634e-05 | 0.40394 |
| 0.000 | 4 | -2.557e+03 | +9.215e+03 | -3.183e+05 | -1.461e-01 | +4.070e-05 | -3.675e-05 | 0.35062 |
| 0.000 | 5 | -2.332e+03 | +8.276e+03 | -2.897e+05 | -1.405e-01 | +3.713e-05 | -2.936e-05 | 0.33730 |
| 0.000 | 7 | -4.898e+03 | +1.999e+04 | -5.744e+05 | -2.237e-01 | +7.231e-05 | -9.270e-05 | 0.53688 |
| 0.000 | 8 | -4.698e+03 | +1.486e+04 | -5.865e+05 | -2.256e-01 | +6.230e-05 | -9.014e-05 | 0.54156 |
| 43.000 | 1 | -4.877e+03 | +1.705e+04 | -3.604e+05 | -2.193e-01 | +5.677e-05 | -1.469e-04 | 0.52642 |
| 43.000 | 2 | -4.717e+03 | +1.780e+04 | -3.879e+05 | -2.185e-01 | +7.211e-05 | -1.543e-04 | 0.52430 |
| 43.000 | 3 | -3.456e+03 | +1.297e+04 | -2.839e+05 | -1.641e-01 | +5.284e-05 | -1.108e-04 | 0.39382 |
| 43.000 | 4 | -2.556e+03 | +9.215e+03 | -2.083e+05 | -1.435e-01 | +3.919e-05 | -6.941e-05 | 0.34440 |
| 43.000 | 5 | -2.332e+03 | +8.276e+03 | -1.894e+05 | -1.384e-01 | +3.577e-05 | -5.907e-05 | 0.33206 |
| 43.000 | 7 | -4.897e+03 | +1.999e+04 | -3.638e+05 | -2.179e-01 | +6.903e-05 | -1.509e-04 | 0.52291 |
| 43.000 | 8 | -4.697e+03 | +1.486e+04 | -3.845e+05 | -2.199e-01 | +5.985e-05 | -1.504e-04 | 0.52781 |
| 86.000 | 1 | -4.274e+03 | +1.705e+04 | -1.766e+05 | -2.118e-01 | +5.396e-05 | -1.802e-04 | 0.50832 |
| 86.000 | 2 | -4.119e+03 | +1.780e+04 | -2.108e+05 | -2.105e-01 | +6.918e-05 | -1.915e-04 | 0.50527 |
| 86.000 | 3 | -3.020e+03 | +1.297e+04 | -1.540e+05 | -1.584e-01 | +5.071e-05 | -1.379e-04 | 0.38011 |
| 86.000 | 4 | -2.248e+03 | +9.215e+03 | -1.116e+05 | -1.398e-01 | +3.767e-05 | -8.926e-05 | 0.33557 |
| 86.000 | 5 | -2.055e+03 | +8.276e+03 | -1.011e+05 | -1.352e-01 | +3.441e-05 | -7.709e-05 | 0.32443 |
| 86.000 | 7 | -4.303e+03 | +1.999e+04 | -1.788e+05 | -2.102e-01 | +6.574e-05 | -1.845e-04 | 0.50438 |
| 86.000 | 8 | -4.090e+03 | +1.486e+04 | -2.086e+05 | -2.122e-01 | +5.741e-05 | -1.871e-04 | 0.50923 |
| 129.000 | 1 | -3.717e+03 | +1.705e+04 | -1.677e+04 | -2.033e-01 | +5.116e-05 | -1.922e-04 | 0.48804 |
| 129.000 | 2 | -3.570e+03 | +1.780e+04 | -5.727e+04 | -2.015e-01 | +6.626e-05 | -2.081e-04 | 0.48365 |
| 129.000 | 3 | -2.620e+03 | +1.297e+04 | -4.134e+04 | -1.519e-01 | +4.858e-05 | -1.500e-04 | 0.36451 |
| 129.000 | 4 | -1.963e+03 | +9.215e+03 | -2.722e+04 | -1.356e-01 | +3.616e-05 | -9.787e-05 | 0.32537 |
| 129.000 | 5 | -1.799e+03 | +8.276e+03 | -2.369e+04 | -1.315e-01 | +3.305e-05 | -8.482e-05 | 0.31558 |
| 129.000 | 7 | -3.756e+03 | +1.999e+04 | -1.725e+04 | -2.015e-01 | +6.245e-05 | -1.967e-04 | 0.48365 |
| 129.000 | 8 | -3.531e+03 | +1.486e+04 | -5.679e+04 | -2.034e-01 | +5.497e-05 | -2.036e-04 | 0.48806 |
| 172.000 | 1 | -3.212e+03 | +1.705e+04 | +1.214e+05 | -1.948e-01 | +4.836e-05 | -1.857e-04 | 0.46762 |
| 172.000 | 2 | -3.077e+03 | +1.780e+04 | +7.505e+04 | -1.922e-01 | +6.333e-05 | -2.070e-04 | 0.46135 |
| 172.000 | 3 | -2.260e+03 | +1.297e+04 | +5.585e+04 | -1.452e-01 | +4.645e-05 | -1.491e-04 | 0.34843 |
| 172.000 | 4 | -1.704e+03 | +9.215e+03 | +4.607e+04 | -1.312e-01 | +3.464e-05 | -9.670e-05 | 0.31483 |
| 172.000 | 5 | -1.565e+03 | +8.276e+03 | +4.363e+04 | -1.277e-01 | +3.169e-05 | -8.359e-05 | 0.30643 |
| 172.000 | 7 | -3.263e+03 | +1.999e+04 | +1.231e+05 | -1.928e-01 | +5.917e-05 | -1.901e-04 | 0.46274 |
| 172.000 | 8 | -3.026e+03 | +1.486e+04 | +7.336e+04 | -1.943e-01 | +5.252e-05 | -2.026e-04 | 0.46622 |
| 215.000 | 1 | +2.761e+03 | -1.705e+04 | -2.401e+05 | -1.870e-01 | +4.556e-05 | -1.633e-04 | 0.44882 |
| 215.000 | 2 | +2.641e+03 | -1.780e+04 | -1.886e+05 | -1.834e-01 | +6.040e-05 | -1.906e-04 | 0.44006 |
| 215.000 | 3 | +1.942e+03 | -1.297e+04 | -1.394e+05 | -1.388e-01 | +4.431e-05 | -1.370e-04 | 0.33310 |
| 215.000 | 4 | +1.472e+03 | -9.215e+03 | -1.094e+05 | -1.270e-01 | +3.313e-05 | -8.706e-05 | 0.30492 |
| 215.000 | 5 | +1.355e+03 | -8.276e+03 | -1.019e+05 | -1.241e-01 | +3.033e-05 | -7.456e-05 | 0.29789 |
| 215.000 | 7 | +2.824e+03 | -1.999e+04 | -2.445e+05 | -1.848e-01 | +5.588e-05 | -1.673e-04 | 0.44350 |
| 215.000 | 8 | +2.578e+03 | -1.486e+04 | -1.842e+05 | -1.856e-01 | +5.008e-05 | -1.866e-04 | 0.44542 |
| **Trave numero:** | **16 - Lunghezza:** | **175.00** | | | | | | |
| **Dist.** | **c.c.** | **Fy** | **Mx** | **Mz** | **Spost.Z** | **Rotaz.X** | **Rotaz.Y** | **Press. Suolo** |
| 0.000 | 1 | -1.830e+03 | -1.747e+04 | -1.802e+05 | -1.249e-01 | +9.744e-06 | +2.060e-05 | 0.29983 |
| 0.000 | 2 | -1.688e+03 | -2.274e+04 | -1.441e+05 | -1.264e-01 | +2.564e-06 | +7.754e-06 | 0.30336 |
| 0.000 | 3 | -1.295e+03 | -1.671e+04 | -1.071e+05 | -9.630e-02 | +1.635e-06 | +2.387e-06 | 0.23113 |
| 0.000 | 4 | -1.278e+03 | -1.264e+04 | -8.723e+04 | -9.147e-02 | -1.170e-07 | -1.622e-05 | 0.21954 |
| 0.000 | 5 | -1.273e+03 | -1.163e+04 | -8.227e+04 | -9.026e-02 | -5.551e-07 | -2.087e-05 | 0.21664 |
| 0.000 | 7 | -1.796e+03 | -1.921e+04 | -1.803e+05 | -1.238e-01 | +5.078e-06 | +2.458e-05 | 0.29700 |
| 0.000 | 8 | -1.722e+03 | -2.100e+04 | -1.440e+05 | -1.276e-01 | +7.230e-06 | +3.774e-06 | 0.30619 |
| 35.000 | 1 | -1.830e+03 | -1.747e+04 | -1.161e+05 | -1.252e-01 | +1.208e-05 | +5.638e-06 | 0.30053 |
| 35.000 | 2 | -1.688e+03 | -2.274e+04 | -8.507e+04 | -1.263e-01 | +5.607e-06 | -3.815e-06 | 0.30317 |
| 35.000 | 3 | -1.295e+03 | -1.671e+04 | -6.174e+04 | -9.612e-02 | +3.871e-06 | -6.134e-06 | 0.23069 |
| 35.000 | 4 | -1.278e+03 | -1.264e+04 | -4.251e+04 | -9.067e-02 | +1.575e-06 | -2.277e-05 | 0.21762 |
| 35.000 | 5 | -1.273e+03 | -1.163e+04 | -3.770e+04 | -8.931e-02 | +1.001e-06 | -2.692e-05 | 0.21435 |
| 35.000 | 7 | -1.796e+03 | -1.921e+04 | -1.174e+05 | -1.242e-01 | +7.648e-06 | +9.549e-06 | 0.29803 |
| 35.000 | 8 | -1.722e+03 | -2.100e+04 | -8.378e+04 | -1.274e-01 | +1.004e-05 | -7.727e-06 | 0.30566 |
| 70.000 | 1 | -1.609e+03 | -1.747e+04 | -5.983e+04 | -1.251e-01 | +1.442e-05 | -3.244e-06 | 0.30029 |
| 70.000 | 2 | -1.461e+03 | -2.274e+04 | -3.395e+04 | -1.259e-01 | +8.649e-06 | -9.823e-06 | 0.30228 |
| 70.000 | 3 | -1.125e+03 | -1.671e+04 | -2.235e+04 | -9.573e-02 | +6.107e-06 | -1.038e-05 | 0.22975 |
| 70.000 | 4 | -1.136e+03 | -1.264e+04 | -2.755e+03 | -8.973e-02 | +3.267e-06 | -2.505e-05 | 0.21536 |
| 70.000 | 5 | -1.138e+03 | -1.163e+04 | +2.143e+03 | -8.823e-02 | +2.557e-06 | -2.872e-05 | 0.21176 |
| 70.000 | 7 | -1.580e+03 | -1.921e+04 | -6.212e+04 | -1.242e-01 | +1.022e-05 | +4.866e-07 | 0.29813 |
| 70.000 | 8 | -1.489e+03 | -2.100e+04 | -3.166e+04 | -1.268e-01 | +1.285e-05 | -1.355e-05 | 0.30444 |
| 105.000 | 1 | -1.387e+03 | -1.747e+04 | -1.127e+04 | -1.248e-01 | +1.676e-05 | -6.833e-06 | 0.29954 |
| 105.000 | 2 | -1.235e+03 | -2.274e+04 | +9.288e+03 | -1.255e-01 | +1.169e-05 | -1.107e-05 | 0.30113 |



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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 105.000 | 3 | -9.580e+02 | -1.671e+04 | +1.118e+04 | -9.527e-02 | +8.343e-06 | -1.094e-05 | 0.22864 |
| 105.000 | 4 | -9.985e+02 | -1.264e+04 | +3.219e+04 | -8.879e-02 | +4.959e-06 | -2.357e-05 | 0.21310 |
| 105.000 | 5 | -1.009e+03 | -1.163e+04 | +3.744e+04 | -8.717e-02 | +4.113e-06 | -2.672e-05 | 0.20921 |
| 105.000 | 7 | -1.363e+03 | -1.921e+04 | -1.441e+04 | -1.240e-01 | +1.279e-05 | -3.376e-06 | 0.29770 |
| 105.000 | 8 | -1.260e+03 | -2.100e+04 | +1.243e+04 | -1.262e-01 | +1.566e-05 | -1.452e-05 | 0.30298 |
| 140.000 | 1 | -1.168e+03 | -1.747e+04 | +2.961e+04 | -1.245e-01 | +1.910e-05 | -5.907e-06 | 0.29875 |
| 140.000 | 2 | -1.012e+03 | -2.274e+04 | +4.472e+04 | -1.250e-01 | +1.473e-05 | -8.342e-06 | 0.30007 |
| 140.000 | 3 | -7.929e+02 | -1.671e+04 | +3.893e+04 | -9.486e-02 | +1.058e-05 | -8.411e-06 | 0.22765 |
| 140.000 | 4 | -8.660e+02 | -1.264e+04 | +6.250e+04 | -8.797e-02 | +6.651e-06 | -1.879e-05 | 0.21113 |
| 140.000 | 5 | -8.843e+02 | -1.163e+04 | +6.839e+04 | -8.625e-02 | +5.669e-06 | -2.138e-05 | 0.20700 |
| 140.000 | 7 | -1.148e+03 | -1.921e+04 | +2.575e+04 | -1.238e-01 | +1.536e-05 | -2.804e-06 | 0.29719 |
| 140.000 | 8 | -1.033e+03 | -2.100e+04 | +4.858e+04 | -1.257e-01 | +1.847e-05 | -1.145e-05 | 0.30166 |
| 175.000 | 1 | +9.500e+02 | +1.747e+04 | -6.286e+04 | -1.243e-01 | +2.144e-05 | -1.240e-06 | 0.29825 |
| 175.000 | 2 | +7.918e+02 | +2.274e+04 | -7.243e+04 | -1.248e-01 | +1.778e-05 | -2.428e-06 | 0.29945 |
| 175.000 | 3 | +6.298e+02 | +1.671e+04 | -6.098e+04 | -9.459e-02 | +1.282e-05 | -3.368e-06 | 0.22702 |
| 175.000 | 4 | +7.376e+02 | +1.264e+04 | -8.832e+04 | -8.738e-02 | +8.343e-06 | -1.117e-05 | 0.20970 |
| 175.000 | 5 | +7.646e+02 | +1.163e+04 | -9.515e+04 | -8.557e-02 | +7.225e-06 | -1.312e-05 | 0.20538 |
| 175.000 | 7 | +9.329e+02 | +1.921e+04 | -5.841e+04 | -1.237e-01 | +1.793e-05 | +1.445e-06 | 0.29693 |
| 175.000 | 8 | +8.088e+02 | +2.100e+04 | -7.689e+04 | -1.253e-01 | +2.128e-05 | -5.112e-06 | 0.30079 |

**Trave numero: 17 - Lunghezza: 592.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -6.935e+02 | +9.182e+03 | +4.014e+03 | -1.243e-01 | +2.144e-05 | -1.240e-06 | 0.24854 |
| 0.000 | 2 | -5.322e+02 | -3.087e+03 | +2.096e+04 | -1.248e-01 | +1.778e-05 | -2.428e-06 | 0.24954 |
| 0.000 | 3 | -3.687e+02 | -2.291e+03 | +2.291e+04 | -9.459e-02 | +1.282e-05 | -3.368e-06 | 0.18918 |
| 0.000 | 4 | -1.572e+02 | -1.856e+03 | +5.820e+04 | -8.738e-02 | +8.343e-06 | -1.117e-05 | 0.17475 |
| 0.000 | 5 | -1.043e+02 | -1.748e+03 | +6.703e+04 | -8.557e-02 | +7.225e-06 | -1.312e-05 | 0.17115 |
| 0.000 | 7 | -6.907e+02 | +1.021e+04 | -5.881e+02 | -1.237e-01 | +1.793e-05 | +1.445e-06 | 0.24744 |
| 0.000 | 8 | -5.350e+02 | -4.114e+03 | +2.557e+04 | -1.253e-01 | +2.128e-05 | -5.112e-06 | 0.25066 |
| 118.400 | 1 | -6.935e+02 | +9.182e+03 | +8.613e+04 | -1.246e-01 | +1.728e-05 | +1.415e-05 | 0.24914 |
| 118.400 | 2 | -5.322e+02 | -3.087e+03 | +8.398e+04 | -1.252e-01 | +1.917e-05 | +1.549e-05 | 0.25038 |
| 118.400 | 3 | -3.687e+02 | -2.291e+03 | +6.657e+04 | -9.485e-02 | +1.385e-05 | +1.191e-05 | 0.18970 |
| 118.400 | 4 | -1.572e+02 | -1.856e+03 | +7.681e+04 | -8.731e-02 | +9.183e-06 | +1.188e-05 | 0.17463 |
| 118.400 | 5 | -1.043e+02 | -1.748e+03 | +7.937e+04 | -8.543e-02 | +8.016e-06 | +1.188e-05 | 0.17086 |
| 118.400 | 7 | -6.907e+02 | +1.021e+04 | +8.119e+04 | -1.242e-01 | +1.331e-05 | +1.521e-05 | 0.24848 |
| 118.400 | 8 | -5.350e+02 | -4.114e+03 | +8.891e+04 | -1.255e-01 | +2.315e-05 | +1.444e-05 | 0.25104 |
| 236.800 | 1 | -3.089e+02 | +9.182e+03 | +1.227e+05 | -1.282e-01 | +1.312e-05 | +4.981e-05 | 0.25630 |
| 236.800 | 2 | +3.058e+02 | -3.087e+03 | +1.004e+05 | -1.288e-01 | +2.057e-05 | +4.698e-05 | 0.25758 |
| 236.800 | 3 | +2.351e+02 | -2.291e+03 | +7.683e+04 | -9.765e-02 | +1.489e-05 | +3.640e-05 | 0.19530 |
| 236.800 | 4 | +2.347e+02 | -1.856e+03 | +7.470e+04 | -9.026e-02 | +1.002e-05 | +3.776e-05 | 0.18053 |
| 236.800 | 5 | +2.346e+02 | -1.748e+03 | +7.417e+04 | -8.842e-02 | +8.807e-06 | +3.810e-05 | 0.17684 |
| 236.800 | 7 | -3.108e+02 | +1.021e+04 | +1.180e+05 | -1.278e-01 | +8.686e-06 | +4.922e-05 | 0.25568 |
| 236.800 | 8 | +3.120e+02 | -4.114e+03 | +1.051e+05 | -1.291e-01 | +2.501e-05 | +4.757e-05 | 0.25820 |
| 355.200 | 1 | +6.801e+02 | +9.182e+03 | +1.077e+05 | -1.365e-01 | +8.966e-06 | +8.916e-05 | 0.27292 |
| 355.200 | 2 | +8.560e+02 | -3.087e+03 | +6.420e+04 | -1.362e-01 | +2.197e-05 | +7.509e-05 | 0.27246 |
| 355.200 | 3 | +6.385e+02 | -2.291e+03 | +4.899e+04 | -1.034e-01 | +1.593e-05 | +5.788e-05 | 0.20678 |
| 355.200 | 4 | +5.348e+02 | -1.856e+03 | +4.692e+04 | -9.612e-02 | +1.086e-05 | +5.853e-05 | 0.19225 |
| 355.200 | 5 | +5.088e+02 | -1.748e+03 | +4.640e+04 | -9.431e-02 | +9.598e-06 | +5.869e-05 | 0.18861 |
| 355.200 | 7 | +6.672e+02 | +1.021e+04 | +1.037e+05 | -1.360e-01 | +4.065e-06 | +8.708e-05 | 0.27198 |
| 355.200 | 8 | +8.689e+02 | -4.114e+03 | +6.818e+04 | -1.367e-01 | +2.687e-05 | +7.716e-05 | 0.27338 |
| 473.600 | 1 | +1.409e+03 | +9.182e+03 | +2.720e+04 | -1.488e-01 | +4.810e-06 | +1.122e-04 | 0.29768 |
| 473.600 | 2 | +1.545e+03 | -3.087e+03 | -3.715e+04 | -1.460e-01 | +2.337e-05 | +7.971e-05 | 0.29194 |
| 473.600 | 3 | +1.149e+03 | -2.291e+03 | -2.661e+04 | -1.109e-01 | +1.696e-05 | +6.171e-05 | 0.22180 |
| 473.600 | 4 | +9.428e+02 | -1.856e+03 | -1.640e+04 | -1.037e-01 | +1.170e-05 | +6.374e-05 | 0.20744 |
| 473.600 | 5 | +8.914e+02 | -1.748e+03 | -1.384e+04 | -1.019e-01 | +1.039e-05 | +6.425e-05 | 0.20386 |
| 473.600 | 7 | +1.385e+03 | +1.021e+04 | +2.475e+04 | -1.480e-01 | -5.565e-07 | +1.090e-04 | 0.29610 |
| 473.600 | 8 | +1.569e+03 | -4.114e+03 | -3.470e+04 | -1.468e-01 | +2.873e-05 | +8.288e-05 | 0.29350 |
| 592.000 | 1 | -1.409e+03 | -9.182e+03 | +1.397e+05 | -1.619e-01 | +6.539e-07 | +9.299e-05 | 0.32388 |
| 592.000 | 2 | -1.545e+03 | +3.087e+03 | +2.200e+05 | -1.539e-01 | +2.476e-05 | +3.579e-05 | 0.30770 |
| 592.000 | 3 | -1.149e+03 | +2.291e+03 | +1.626e+05 | -1.171e-01 | +1.800e-05 | +2.939e-05 | 0.23414 |
| 592.000 | 4 | -9.428e+02 | +1.856e+03 | +1.280e+05 | -1.104e-01 | +1.254e-05 | +3.907e-05 | 0.22088 |
| 592.000 | 5 | -8.914e+02 | +1.748e+03 | +1.194e+05 | -1.088e-01 | +1.118e-05 | +4.150e-05 | 0.21758 |
| 592.000 | 7 | -1.385e+03 | -1.021e+04 | +1.393e+05 | -1.607e-01 | -5.178e-06 | +8.947e-05 | 0.32148 |
| 592.000 | 8 | -1.569e+03 | +4.114e+03 | +2.204e+05 | -1.550e-01 | +3.060e-05 | +3.931e-05 | 0.31008 |

**Trave numero: 18 - Lunghezza: 175.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -7.666e+02 | +1.527e+05 | +1.205e+03 | -1.424e-01 | -1.228e-04 | +5.747e-05 | 0.34164 |
| 0.000 | 2 | -5.886e+02 | +1.311e+05 | +4.596e+04 | -1.455e-01 | -1.189e-04 | +6.893e-05 | 0.34913 |
| 0.000 | 3 | -4.460e+02 | +9.775e+04 | +3.485e+04 | -1.107e-01 | -8.900e-05 | +4.892e-05 | 0.26575 |
| 0.000 | 4 | -4.108e+02 | +8.171e+04 | +3.221e+04 | -1.046e-01 | -7.634e-05 | +2.761e-05 | 0.25109 |
| 0.000 | 5 | -4.020e+02 | +7.771e+04 | +3.155e+04 | -1.031e-01 | -7.317e-05 | +2.228e-05 | 0.24742 |
| 0.000 | 7 | -7.391e+02 | +1.389e+05 | +1.036e+03 | -1.409e-01 | -1.129e-04 | +6.111e-05 | 0.33806 |
| 0.000 | 8 | -6.161e+02 | +1.449e+05 | +4.613e+04 | -1.470e-01 | -1.288e-04 | +6.528e-05 | 0.35273 |
| 35.000 | 1 | -7.666e+02 | +1.527e+05 | +2.804e+04 | -1.443e-01 | -1.433e-04 | +5.895e-05 | 0.34637 |
| 35.000 | 2 | -5.886e+02 | +1.311e+05 | +6.656e+04 | -1.479e-01 | -1.364e-04 | +7.461e-05 | 0.35503 |
| 35.000 | 3 | -4.460e+02 | +9.775e+04 | +5.046e+04 | -1.125e-01 | -1.021e-04 | +5.323e-05 | 0.26993 |
| 35.000 | 4 | -4.108e+02 | +8.171e+04 | +4.659e+04 | -1.056e-01 | -8.727e-05 | +3.159e-05 | 0.25346 |



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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 35.000 | 5 | -4.020e+02 | +7.771e+04 | +4.562e+04 | -1.039e-01 | -8.357e-05 | +2.618e-05 | 0.24936 |
| 35.000 | 7 | -7.391e+02 | +1.389e+05 | +2.690e+04 | -1.429e-01 | -1.315e-04 | +6.252e-05 | 0.34308 |
| 35.000 | 8 | -6.161e+02 | +1.449e+05 | +6.769e+04 | -1.493e-01 | -1.482e-04 | +7.103e-05 | 0.35832 |
| 70.000 | 1 | -6.534e+02 | +1.527e+05 | +5.091e+04 | -1.464e-01 | -1.637e-04 | +6.293e-05 | 0.35134 |
| 70.000 | 2 | -4.573e+02 | +1.311e+05 | +8.257e+04 | -1.506e-01 | -1.539e-04 | +8.213e-05 | 0.36151 |
| 70.000 | 3 | -3.516e+02 | +9.775e+04 | +6.276e+04 | -1.144e-01 | -1.152e-04 | +5.894e-05 | 0.27456 |
| 70.000 | 4 | -3.510e+02 | +8.171e+04 | +5.887e+04 | -1.068e-01 | -9.821e-05 | +3.691e-05 | 0.25627 |
| 70.000 | 5 | -3.508e+02 | +7.771e+04 | +5.789e+04 | -1.049e-01 | -9.397e-05 | +3.141e-05 | 0.25169 |
| 70.000 | 7 | -6.328e+02 | +1.389e+05 | +4.905e+04 | -1.452e-01 | -1.501e-04 | +6.636e-05 | 0.34836 |
| 70.000 | 8 | -4.779e+02 | +1.449e+05 | +8.442e+04 | -1.519e-01 | -1.676e-04 | +7.871e-05 | 0.36449 |
| 105.000 | 1 | -5.299e+02 | +1.527e+05 | +6.945e+04 | -1.487e-01 | -1.842e-04 | +6.901e-05 | 0.35676 |
| 105.000 | 2 | -3.123e+02 | +1.311e+05 | +9.350e+04 | -1.536e-01 | -1.715e-04 | +9.102e-05 | 0.36871 |
| 105.000 | 3 | -2.475e+02 | +9.775e+04 | +7.143e+04 | -1.166e-01 | -1.282e-04 | +6.572e-05 | 0.27974 |
| 105.000 | 4 | -2.852e+02 | +8.171e+04 | +6.885e+04 | -1.082e-01 | -1.091e-04 | +4.336e-05 | 0.25958 |
| 105.000 | 5 | -2.948e+02 | +7.771e+04 | +6.821e+04 | -1.061e-01 | -1.044e-04 | +3.777e-05 | 0.25454 |
| 105.000 | 7 | -5.155e+02 | +1.389e+05 | +6.710e+04 | -1.475e-01 | -1.687e-04 | +7.222e-05 | 0.35407 |
| 105.000 | 8 | -3.267e+02 | +1.449e+05 | +9.586e+04 | -1.548e-01 | -1.870e-04 | +8.781e-05 | 0.37142 |
| 140.000 | 1 | -3.949e+02 | +1.527e+05 | +8.328e+04 | -1.512e-01 | -2.046e-04 | +7.672e-05 | 0.36281 |
| 140.000 | 2 | -1.523e+02 | +1.311e+05 | +9.883e+04 | -1.570e-01 | -1.890e-04 | +1.007e-04 | 0.37673 |
| 140.000 | 3 | -1.326e+02 | +9.775e+04 | +7.607e+04 | -1.190e-01 | -1.413e-04 | +7.316e-05 | 0.28555 |
| 140.000 | 4 | -2.126e+02 | +8.171e+04 | +7.630e+04 | -1.098e-01 | -1.201e-04 | +5.069e-05 | 0.26350 |
| 140.000 | 5 | -2.326e+02 | +7.771e+04 | +7.635e+04 | -1.075e-01 | -1.148e-04 | +4.507e-05 | 0.25798 |
| 140.000 | 7 | -3.862e+02 | +1.389e+05 | +8.062e+04 | -1.502e-01 | -1.872e-04 | +7.968e-05 | 0.36036 |
| 140.000 | 8 | -1.610e+02 | +1.449e+05 | +1.015e+05 | -1.580e-01 | -2.064e-04 | +9.777e-05 | 0.37918 |
| 175.000 | 1 | +2.473e+02 | -1.527e+05 | -9.193e+04 | -1.540e-01 | -2.250e-04 | +8.556e-05 | 0.36955 |
| 175.000 | 2 | -2.458e+01 | -1.311e+05 | -9.797e+04 | -1.607e-01 | -2.066e-04 | +1.107e-04 | 0.38563 |
| 175.000 | 3 | +5.400e+00 | -9.775e+04 | -7.626e+04 | -1.217e-01 | -1.544e-04 | +8.085e-05 | 0.29203 |
| 175.000 | 4 | +1.319e+02 | -8.171e+04 | -8.091e+04 | -1.117e-01 | -1.310e-04 | +5.862e-05 | 0.26806 |
| 175.000 | 5 | +1.634e+02 | -7.771e+04 | -8.207e+04 | -1.092e-01 | -1.252e-04 | +5.306e-05 | 0.26206 |
| 175.000 | 7 | +2.437e+02 | -1.389e+05 | -8.915e+04 | -1.531e-01 | -2.058e-04 | +8.825e-05 | 0.36737 |
| 175.000 | 8 | -2.103e+01 | -1.449e+05 | -1.008e+05 | -1.616e-01 | -2.258e-04 | +1.080e-04 | 0.38782 |

**Trave numero: 19 - Lunghezza: 180.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | +7.746e+02 | +6.461e+04 | +9.961e+04 | -1.540e-01 | -2.250e-04 | +8.556e-05 | 0.36955 |
| 0.000 | 2 | +1.323e+03 | +2.878e+04 | +1.175e+05 | -1.607e-01 | -2.066e-04 | +1.107e-04 | 0.38563 |
| 0.000 | 3 | +9.930e+02 | +2.020e+04 | +9.072e+04 | -1.217e-01 | -1.544e-04 | +8.085e-05 | 0.29203 |
| 0.000 | 4 | +8.703e+02 | +1.010e+04 | +9.254e+04 | -1.117e-01 | -1.310e-04 | +5.862e-05 | 0.26806 |
| 0.000 | 5 | +8.395e+02 | +7.581e+03 | +9.299e+04 | -1.092e-01 | -1.252e-04 | +5.306e-05 | 0.26206 |
| 0.000 | 7 | +7.916e+02 | +5.512e+04 | +9.688e+04 | -1.531e-01 | -2.058e-04 | +8.825e-05 | 0.36737 |
| 0.000 | 8 | +1.306e+03 | +3.827e+04 | +1.202e+05 | -1.616e-01 | -2.258e-04 | +1.080e-04 | 0.38782 |
| 36.000 | 1 | +9.587e+02 | +6.461e+04 | +7.172e+04 | -1.573e-01 | -2.339e-04 | +9.446e-05 | 0.37752 |
| 36.000 | 2 | +1.546e+03 | +2.878e+04 | +6.987e+04 | -1.650e-01 | -2.105e-04 | +1.204e-04 | 0.39590 |
| 36.000 | 3 | +1.155e+03 | +2.020e+04 | +5.495e+04 | -1.248e-01 | -1.572e-04 | +8.842e-05 | 0.29957 |
| 36.000 | 4 | +9.750e+02 | +1.010e+04 | +6.121e+04 | -1.140e-01 | -1.324e-04 | +6.660e-05 | 0.27365 |
| 36.000 | 5 | +9.310e+02 | +7.581e+03 | +6.277e+04 | -1.113e-01 | -1.262e-04 | +6.115e-05 | 0.26717 |
| 36.000 | 7 | +9.707e+02 | +5.512e+04 | +6.839e+04 | -1.565e-01 | -2.134e-04 | +9.683e-05 | 0.37553 |
| 36.000 | 8 | +1.533e+03 | +3.827e+04 | +7.321e+04 | -1.658e-01 | -2.310e-04 | +1.180e-04 | 0.39787 |
| 72.000 | 1 | +1.161e+03 | +6.461e+04 | +3.723e+04 | -1.609e-01 | -2.428e-04 | +1.001e-04 | 0.38614 |
| 72.000 | 2 | +1.793e+03 | +2.878e+04 | +1.423e+04 | -1.695e-01 | -2.145e-04 | +1.248e-04 | 0.40685 |
| 72.000 | 3 | +1.333e+03 | +2.020e+04 | +1.339e+04 | -1.282e-01 | -1.600e-04 | +9.196e-05 | 0.30761 |
| 72.000 | 4 | +1.094e+03 | +1.010e+04 | +2.609e+04 | -1.166e-01 | -1.338e-04 | +7.114e-05 | 0.27982 |
| 72.000 | 5 | +1.034e+03 | +7.581e+03 | +2.927e+04 | -1.137e-01 | -1.272e-04 | +6.593e-05 | 0.27288 |
| 72.000 | 7 | +1.170e+03 | +5.512e+04 | +3.343e+04 | -1.602e-01 | -2.210e-04 | +1.021e-04 | 0.38436 |
| 72.000 | 8 | +1.784e+03 | +3.827e+04 | +1.803e+04 | -1.703e-01 | -2.363e-04 | +1.228e-04 | 0.40862 |
| 108.000 | 1 | +1.382e+03 | +6.461e+04 | -4.549e+03 | -1.646e-01 | -2.517e-04 | +1.018e-04 | 0.39514 |
| 108.000 | 2 | +2.064e+03 | +2.878e+04 | -5.031e+04 | -1.742e-01 | -2.185e-04 | +1.229e-04 | 0.41796 |
| 108.000 | 3 | +1.529e+03 | +2.020e+04 | -3.460e+04 | -1.316e-01 | -1.627e-04 | +9.086e-05 | 0.31582 |
| 108.000 | 4 | +1.226e+03 | +1.010e+04 | -1.329e+04 | -1.193e-01 | -1.352e-04 | +7.180e-05 | 0.28625 |
| 108.000 | 5 | +1.150e+03 | +7.581e+03 | -7.960e+03 | -1.162e-01 | -1.283e-04 | +6.704e-05 | 0.27886 |
| 108.000 | 7 | +1.388e+03 | +5.512e+04 | -8.662e+03 | -1.640e-01 | -2.286e-04 | +1.034e-04 | 0.39350 |
| 108.000 | 8 | +2.059e+03 | +3.827e+04 | -4.619e+04 | -1.748e-01 | -2.416e-04 | +1.213e-04 | 0.41959 |
| 144.000 | 1 | +1.624e+03 | +6.461e+04 | -5.431e+04 | -1.684e-01 | -2.606e-04 | +9.876e-05 | 0.40411 |
| 144.000 | 2 | +2.358e+03 | +2.878e+04 | -1.246e+05 | -1.786e-01 | -2.224e-04 | +1.138e-04 | 0.42864 |
| 144.000 | 3 | +1.742e+03 | +2.020e+04 | -8.965e+04 | -1.349e-01 | -1.655e-04 | +8.441e-05 | 0.32374 |
| 144.000 | 4 | +1.372e+03 | +1.010e+04 | -5.743e+04 | -1.219e-01 | -1.366e-04 | +6.813e-05 | 0.29258 |
| 144.000 | 5 | +1.280e+03 | +7.581e+03 | -4.937e+04 | -1.187e-01 | -1.293e-04 | +6.406e-05 | 0.28478 |
| 144.000 | 7 | +1.626e+03 | +5.512e+04 | -5.861e+04 | -1.678e-01 | -2.362e-04 | +9.991e-05 | 0.40260 |
| 144.000 | 8 | +2.356e+03 | +3.827e+04 | -1.203e+05 | -1.792e-01 | -2.468e-04 | +1.126e-04 | 0.43015 |
| 180.000 | 1 | -1.623e+03 | -6.461e+04 | +1.127e+05 | -1.719e-01 | -2.695e-04 | +9.008e-05 | 0.41263 |
| 180.000 | 2 | -2.357e+03 | -2.878e+04 | +2.095e+05 | -1.826e-01 | -2.264e-04 | +9.646e-05 | 0.43826 |
| 180.000 | 3 | -1.742e+03 | -2.020e+04 | +1.524e+05 | -1.379e-01 | -1.683e-04 | +7.185e-05 | 0.33089 |
| 180.000 | 4 | -1.372e+03 | -1.010e+04 | +1.068e+05 | -1.243e-01 | -1.380e-04 | +5.960e-05 | 0.29842 |
| 180.000 | 5 | -1.280e+03 | -7.581e+03 | +9.544e+04 | -1.209e-01 | -1.304e-04 | +5.654e-05 | 0.29028 |
| 180.000 | 7 | -1.625e+03 | -5.512e+04 | +1.171e+05 | -1.713e-01 | -2.438e-04 | +9.078e-05 | 0.41122 |
| 180.000 | 8 | -2.355e+03 | -3.827e+04 | +2.051e+05 | -1.832e-01 | -2.521e-04 | +9.576e-05 | 0.43970 |

**Trave numero: 20 - Lunghezza: 197.00**



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| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -1.426e+03 | +7.807e+03 | -1.166e+05 | -1.719e-01 | -2.695e-04 | +9.008e-05 | 0.41263 |
| 0.000 | 2 | -6.339e+02 | -1.601e+04 | -2.067e+05 | -1.826e-01 | -2.264e-04 | +9.646e-05 | 0.43826 |
| 0.000 | 3 | -4.562e+02 | -1.246e+04 | -1.503e+05 | -1.379e-01 | -1.683e-04 | +7.185e-05 | 0.33089 |
| 0.000 | 4 | -2.930e+02 | -1.317e+04 | -1.053e+05 | -1.243e-01 | -1.380e-04 | +5.960e-05 | 0.29842 |
| 0.000 | 5 | -2.522e+02 | -1.335e+04 | -9.406e+04 | -1.209e-01 | -1.304e-04 | +5.654e-05 | 0.29028 |
| 0.000 | 7 | -1.430e+03 | +1.084e+04 | -1.210e+05 | -1.713e-01 | -2.438e-04 | +9.078e-05 | 0.41122 |
| 0.000 | 8 | -6.299e+02 | -1.905e+04 | -2.023e+05 | -1.832e-01 | -2.521e-04 | +9.576e-05 | 0.43970 |
| 39.400 | 1 | -1.426e+03 | +7.807e+03 | -6.045e+04 | -1.751e-01 | -2.707e-04 | +8.002e-05 | 0.42031 |
| 39.400 | 2 | -6.340e+02 | -1.601e+04 | -1.817e+05 | -1.859e-01 | -2.240e-04 | +7.439e-05 | 0.44618 |
| 39.400 | 3 | -4.563e+02 | -1.246e+04 | -1.323e+05 | -1.403e-01 | -1.664e-04 | +5.578e-05 | 0.33679 |
| 39.400 | 4 | -2.931e+02 | -1.317e+04 | -9.376e+04 | -1.264e-01 | -1.360e-04 | +4.829e-05 | 0.30343 |
| 39.400 | 5 | -2.522e+02 | -1.335e+04 | -8.412e+04 | -1.230e-01 | -1.284e-04 | +4.642e-05 | 0.29508 |
| 39.400 | 7 | -1.430e+03 | +1.084e+04 | -6.466e+04 | -1.745e-01 | -2.454e-04 | +8.023e-05 | 0.41892 |
| 39.400 | 8 | -6.300e+02 | -1.905e+04 | -1.775e+05 | -1.865e-01 | -2.492e-04 | +7.418e-05 | 0.44758 |
| 78.800 | 1 | -1.124e+03 | +7.807e+03 | -1.616e+04 | -1.781e-01 | -2.718e-04 | +7.566e-05 | 0.42739 |
| 78.800 | 2 | -2.707e+02 | -1.601e+04 | -1.710e+05 | -1.884e-01 | -2.215e-04 | +5.435e-05 | 0.45221 |
| 78.800 | 3 | -1.920e+02 | -1.246e+04 | -1.248e+05 | -1.422e-01 | -1.645e-04 | +4.118e-05 | 0.34133 |
| 78.800 | 4 | -1.077e+02 | -1.317e+04 | -8.952e+04 | -1.281e-01 | -1.340e-04 | +3.788e-05 | 0.30749 |
| 78.800 | 5 | +8.835e+01 | -1.335e+04 | -8.071e+04 | -1.246e-01 | -1.264e-04 | +3.705e-05 | 0.29902 |
| 78.800 | 7 | -1.131e+03 | +1.084e+04 | -2.008e+04 | -1.775e-01 | -2.470e-04 | +7.542e-05 | 0.42600 |
| 78.800 | 8 | -2.634e+02 | -1.905e+04 | -1.671e+05 | -1.890e-01 | -2.464e-04 | +5.460e-05 | 0.45360 |
| 118.200 | 1 | -8.052e+02 | +7.807e+03 | +1.556e+04 | -1.810e-01 | -2.730e-04 | +7.563e-05 | 0.43433 |
| 118.200 | 2 | +4.945e+02 | -1.601e+04 | -1.752e+05 | -1.902e-01 | -2.191e-04 | +3.468e-05 | 0.45643 |
| 118.200 | 3 | +3.658e+02 | -1.246e+04 | -1.280e+05 | -1.436e-01 | -1.627e-04 | +2.681e-05 | 0.34457 |
| 118.200 | 4 | +2.896e+02 | -1.317e+04 | -9.296e+04 | -1.294e-01 | -1.320e-04 | +2.751e-05 | 0.31058 |
| 118.200 | 5 | +2.706e+02 | -1.335e+04 | -8.419e+04 | -1.259e-01 | -1.244e-04 | +2.768e-05 | 0.30209 |
| 118.200 | 7 | -8.157e+02 | +1.084e+04 | +1.205e+04 | -1.804e-01 | -2.487e-04 | +7.496e-05 | 0.43289 |
| 118.200 | 8 | +5.084e+02 | -1.905e+04 | -1.717e+05 | -1.908e-01 | -2.435e-04 | +3.535e-05 | 0.45787 |
| 157.600 | 1 | -4.699e+02 | +7.807e+03 | +3.407e+04 | -1.840e-01 | -2.742e-04 | +7.845e-05 | 0.44150 |
| 157.600 | 2 | +8.878e+02 | -1.601e+04 | -1.947e+05 | -1.912e-01 | -2.167e-04 | +1.365e-05 | 0.45886 |
| 157.600 | 3 | +6.528e+02 | -1.246e+04 | -1.425e+05 | -1.444e-01 | -1.608e-04 | +1.144e-05 | 0.34649 |
| 157.600 | 4 | +4.971e+02 | -1.317e+04 | -1.044e+05 | -1.303e-01 | -1.300e-04 | +1.629e-05 | 0.31274 |
| 157.600 | 5 | +4.581e+02 | -1.335e+04 | -9.485e+04 | -1.268e-01 | -1.223e-04 | +1.751e-05 | 0.30430 |
| 157.600 | 7 | -4.838e+02 | +1.084e+04 | +3.111e+04 | -1.833e-01 | -2.503e-04 | +7.742e-05 | 0.43997 |
| 157.600 | 8 | +9.048e+02 | -1.905e+04 | -1.918e+05 | -1.918e-01 | -2.406e-04 | +1.469e-05 | 0.46037 |
| 197.000 | 1 | +1.177e+02 | -7.807e+03 | -3.870e+04 | -1.871e-01 | -2.754e-04 | +8.259e-05 | 0.44909 |
| 197.000 | 2 | -8.877e+02 | +1.601e+04 | +2.297e+05 | -1.913e-01 | -2.143e-04 | -1.046e-05 | 0.45924 |
| 197.000 | 3 | -6.529e+02 | +1.246e+04 | +1.682e+05 | -1.445e-01 | -1.589e-04 | -6.214e-06 | 0.34690 |
| 197.000 | 4 | -4.970e+02 | +1.317e+04 | +1.240e+05 | -1.308e-01 | -1.280e-04 | +3.317e-06 | 0.31380 |
| 197.000 | 5 | -4.581e+02 | +1.335e+04 | +1.129e+05 | -1.273e-01 | -1.203e-04 | +5.700e-06 | 0.30552 |
| 197.000 | 7 | +1.352e+02 | -1.084e+04 | -3.644e+04 | -1.864e-01 | -2.519e-04 | +8.125e-05 | 0.44746 |
| 197.000 | 8 | -9.052e+02 | +1.905e+04 | +2.274e+05 | -1.920e-01 | -2.378e-04 | -9.129e-06 | 0.46087 |

**Trave numero: 21 - Lunghezza: 215.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -7.265e+02 | -5.441e+04 | +3.450e+04 | -1.871e-01 | -2.754e-04 | +8.259e-05 | 0.44909 |
| 0.000 | 2 | -2.147e+03 | -6.648e+04 | -2.290e+05 | -1.913e-01 | -2.143e-04 | -1.046e-05 | 0.45924 |
| 0.000 | 3 | -1.577e+03 | -4.929e+04 | -1.677e+05 | -1.445e-01 | -1.589e-04 | -6.214e-06 | 0.34690 |
| 0.000 | 4 | -1.191e+03 | -3.967e+04 | -1.236e+05 | -1.308e-01 | -1.280e-04 | +3.317e-06 | 0.31380 |
| 0.000 | 5 | -1.094e+03 | -3.726e+04 | -1.126e+05 | -1.273e-01 | -1.203e-04 | +5.700e-06 | 0.30552 |
| 0.000 | 7 | -7.238e+02 | -3.784e+04 | +3.221e+04 | -1.864e-01 | -2.519e-04 | +8.125e-05 | 0.44746 |
| 0.000 | 8 | -2.149e+03 | -8.306e+04 | -2.267e+05 | -1.920e-01 | -2.378e-04 | -9.129e-06 | 0.46087 |
| 43.000 | 1 | -7.265e+02 | -5.441e+04 | +6.573e+04 | -1.907e-01 | -2.664e-04 | +8.880e-05 | 0.45773 |
| 43.000 | 2 | -2.146e+03 | -6.648e+04 | -1.367e+05 | -1.901e-01 | -2.034e-04 | -3.314e-05 | 0.45636 |
| 43.000 | 3 | -1.577e+03 | -4.929e+04 | -9.989e+04 | -1.437e-01 | -1.508e-04 | -2.281e-05 | 0.34495 |
| 43.000 | 4 | -1.191e+03 | -3.967e+04 | -7.239e+04 | -1.305e-01 | -1.215e-04 | -8.837e-06 | 0.31318 |
| 43.000 | 5 | -1.094e+03 | -3.726e+04 | -6.552e+04 | -1.272e-01 | -1.142e-04 | -5.344e-06 | 0.30523 |
| 43.000 | 7 | -7.238e+02 | -3.784e+04 | +6.333e+04 | -1.900e-01 | -2.457e-04 | +8.718e-05 | 0.45593 |
| 43.000 | 8 | -2.149e+03 | -8.306e+04 | -1.343e+05 | -1.909e-01 | -2.241e-04 | -3.152e-05 | 0.45816 |
| 86.000 | 1 | -3.002e+02 | -5.441e+04 | +7.864e+04 | -1.947e-01 | -2.575e-04 | +9.776e-05 | 0.46726 |
| 86.000 | 2 | -1.724e+03 | -6.648e+04 | -6.261e+04 | -1.883e-01 | -1.924e-04 | -4.551e-05 | 0.45182 |
| 86.000 | 3 | -1.267e+03 | -4.929e+04 | -4.539e+04 | -1.424e-01 | -1.427e-04 | -3.182e-05 | 0.34176 |
| 86.000 | 4 | -9.632e+02 | -3.967e+04 | -3.097e+04 | -1.299e-01 | -1.150e-04 | -1.525e-05 | 0.31164 |
| 86.000 | 5 | -8.872e+02 | -3.726e+04 | -2.737e+04 | -1.267e-01 | -1.081e-04 | -1.111e-05 | 0.30413 |
| 86.000 | 7 | -3.021e+02 | -3.784e+04 | +7.632e+04 | -1.939e-01 | -2.395e-04 | +9.584e-05 | 0.46529 |
| 86.000 | 8 | -1.722e+03 | -8.306e+04 | -6.029e+04 | -1.891e-01 | -2.104e-04 | -4.359e-05 | 0.45379 |
| 129.000 | 1 | +6.289e+02 | -5.441e+04 | +7.217e+04 | -1.991e-01 | -2.485e-04 | +1.071e-04 | 0.47786 |
| 129.000 | 2 | -1.312e+03 | -6.648e+04 | -6.161e+03 | -1.860e-01 | -1.815e-04 | -4.977e-05 | 0.44652 |
| 129.000 | 3 | -9.662e+02 | -4.929e+04 | -3.840e+03 | -1.408e-01 | -1.346e-04 | -3.487e-05 | 0.33804 |
| 129.000 | 4 | -7.398e+02 | -3.967e+04 | +8.390e+02 | -1.291e-01 | -1.085e-04 | -1.712e-05 | 0.30977 |
| 129.000 | 5 | -6.832e+02 | -3.726e+04 | +2.009e+03 | -1.261e-01 | -1.019e-04 | -1.268e-05 | 0.30269 |
| 129.000 | 7 | +6.162e+02 | -3.784e+04 | +7.015e+04 | -1.982e-01 | -2.333e-04 | +1.049e-04 | 0.47568 |
| 129.000 | 8 | -1.305e+03 | -8.306e+04 | -4.143e+03 | -1.870e-01 | -1.968e-04 | -4.759e-05 | 0.44870 |
| 172.000 | 1 | +1.137e+03 | -5.441e+04 | +4.512e+04 | -2.040e-01 | -2.396e-04 | +1.144e-04 | 0.48948 |
| 172.000 | 2 | -9.152e+02 | -6.648e+04 | +3.320e+04 | -1.838e-01 | -1.706e-04 | -4.810e-05 | 0.44122 |
| 172.000 | 3 | -6.745e+02 | -4.929e+04 | +2.517e+04 | -1.393e-01 | -1.265e-04 | -3.355e-05 | 0.33432 |
| 172.000 | 4 | -5.210e+02 | -3.967e+04 | +2.324e+04 | -1.283e-01 | -1.020e-04 | -1.562e-05 | 0.30792 |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 172.000 | 5 | -4.827e+02 | -3.726e+04 | +2.276e+04 | -1.256e-01 | -9.582e-05 | -1.114e-05 | 0.30132 |
| 172.000 | 7 | +1.118e+03 | -3.784e+04 | +4.365e+04 | -2.029e-01 | -2.270e-04 | +1.120e-04 | 0.48706 |
| 172.000 | 8 | -9.022e+02 | -8.306e+04 | +3.467e+04 | -1.849e-01 | -1.831e-04 | -4.569e-05 | 0.44364 |
| 215.000 | 1 | -1.137e+03 | +5.441e+04 | +3.775e+03 | -2.091e-01 | -2.306e-04 | +1.170e-04 | 0.50174 |
| 215.000 | 2 | +5.316e+02 | +6.648e+04 | -5.606e+04 | -1.818e-01 | -1.597e-04 | -4.256e-05 | 0.43639 |
| 215.000 | 3 | +3.925e+02 | +4.929e+04 | -4.205e+04 | -1.379e-01 | -1.184e-04 | -2.938e-05 | 0.33096 |
| 215.000 | 4 | +3.070e+02 | +3.967e+04 | -3.645e+04 | -1.277e-01 | -9.544e-05 | -1.192e-05 | 0.30643 |
| 215.000 | 5 | +2.858e+02 | +3.726e+04 | -3.505e+04 | -1.251e-01 | -8.970e-05 | -7.556e-06 | 0.30029 |
| 215.000 | 7 | -1.118e+03 | +3.784e+04 | +4.436e+03 | -2.079e-01 | -2.208e-04 | +1.144e-04 | 0.49906 |
| 215.000 | 8 | +5.127e+02 | +8.306e+04 | -5.672e+04 | -1.829e-01 | -1.695e-04 | -4.003e-05 | 0.43906 |
| **Trave numero:** | **22 - Lunghezza:** | **365.00** | | | | | | |
| **Dist.** | **c.c.** | **Fy** | **Mx** | **Mz** | **Spost.Z** | **Rotaz.X** | **Rotaz.Y** | **Press. Suolo** |
| 0.000 | 1 | +2.675e+00 | +3.063e+04 | +1.010e+05 | -1.399e-01 | +9.866e-05 | +6.264e-05 | 0.33574 |
| 0.000 | 2 | -4.732e+01 | +4.559e+04 | +1.273e+05 | -1.470e-01 | +1.247e-04 | +6.407e-05 | 0.35285 |
| 0.000 | 3 | -2.715e+01 | +3.470e+04 | +9.471e+04 | -1.119e-01 | +9.338e-05 | +4.521e-05 | 0.26854 |
| 0.000 | 4 | +2.075e+01 | +3.277e+04 | +7.810e+04 | -1.057e-01 | +8.038e-05 | +2.402e-05 | 0.25358 |
| 0.000 | 5 | +3.265e+01 | +3.229e+04 | +7.395e+04 | -1.041e-01 | +7.712e-05 | +1.872e-05 | 0.24984 |
| 0.000 | 7 | +7.427e+01 | +2.873e+04 | +1.359e+05 | -1.419e-01 | +1.174e-04 | +5.804e-05 | 0.34066 |
| 0.000 | 8 | -1.189e+02 | +4.750e+04 | +9.239e+04 | -1.450e-01 | +1.059e-04 | +6.866e-05 | 0.34793 |
| 73.000 | 1 | +1.245e+02 | +3.063e+04 | +1.008e+05 | -1.335e-01 | +7.742e-05 | +5.409e-05 | 0.32030 |
| 73.000 | 2 | +1.317e+02 | +4.559e+04 | +1.307e+05 | -1.389e-01 | +9.748e-05 | +5.134e-05 | 0.33336 |
| 73.000 | 3 | +9.955e+01 | +3.470e+04 | +9.669e+04 | -1.058e-01 | +7.323e-05 | +3.552e-05 | 0.25392 |
| 73.000 | 4 | +9.045e+01 | +3.277e+04 | +7.659e+04 | -1.004e-01 | +6.409e-05 | +1.487e-05 | 0.24094 |
| 73.000 | 5 | +8.825e+01 | +3.229e+04 | +7.156e+04 | -9.903e-02 | +6.181e-05 | +9.712e-06 | 0.23768 |
| 73.000 | 7 | +2.060e+02 | +2.873e+04 | +1.304e+05 | -1.344e-01 | +8.941e-05 | +5.003e-05 | 0.32258 |
| 73.000 | 8 | -1.189e+02 | +4.750e+04 | +1.011e+05 | -1.380e-01 | +8.550e-05 | +5.541e-05 | 0.33108 |
| 146.000 | 1 | +1.950e+02 | +3.063e+04 | +9.168e+04 | -1.286e-01 | +5.716e-05 | +4.554e-05 | 0.30859 |
| 146.000 | 2 | +2.464e+02 | +4.559e+04 | +1.211e+05 | -1.328e-01 | +7.097e-05 | +3.862e-05 | 0.31870 |
| 146.000 | 3 | +1.779e+02 | +3.470e+04 | +8.943e+04 | -1.012e-01 | +5.363e-05 | +2.584e-05 | 0.24288 |
| 146.000 | 4 | +1.172e+02 | +3.277e+04 | +6.998e+04 | -9.630e-02 | +4.866e-05 | +5.729e-06 | 0.23111 |
| 146.000 | 5 | +1.021e+02 | +3.229e+04 | +6.512e+04 | -9.507e-02 | +4.741e-05 | +7.007e-07 | 0.22817 |
| 146.000 | 7 | +2.797e+02 | +2.873e+04 | +1.154e+05 | -1.289e-01 | +6.353e-05 | +4.201e-05 | 0.30931 |
| 146.000 | 8 | +1.617e+02 | +4.750e+04 | +9.741e+04 | -1.325e-01 | +6.460e-05 | +4.215e-05 | 0.31798 |
| 219.000 | 1 | +2.290e+02 | +3.063e+04 | +7.745e+04 | -1.251e-01 | +3.935e-05 | +3.699e-05 | 0.30026 |
| 219.000 | 2 | +3.164e+02 | +4.559e+04 | +1.031e+05 | -1.285e-01 | +4.736e-05 | +2.589e-05 | 0.30847 |
| 219.000 | 3 | +2.222e+02 | +3.470e+04 | +7.645e+04 | -9.797e-02 | +3.617e-05 | +1.615e-05 | 0.23513 |
| 219.000 | 4 | +1.173e+02 | +3.277e+04 | +6.142e+04 | -9.328e-02 | +3.482e-05 | -3.418e-06 | 0.22387 |
| 219.000 | 5 | +1.021e+02 | +3.229e+04 | +5.767e+04 | -9.211e-02 | +3.449e-05 | -8.311e-06 | 0.22106 |
| 219.000 | 7 | +3.138e+02 | +2.873e+04 | +9.498e+04 | -1.251e-01 | +4.138e-05 | +3.399e-05 | 0.30029 |
| 219.000 | 8 | +2.316e+02 | +4.750e+04 | +8.560e+04 | -1.285e-01 | +4.533e-05 | +2.889e-05 | 0.30845 |
| 292.000 | 1 | +2.391e+02 | +3.063e+04 | +6.073e+04 | -1.228e-01 | +2.480e-05 | +2.844e-05 | 0.29479 |
| 292.000 | 2 | +3.583e+02 | +4.559e+04 | +8.004e+04 | -1.259e-01 | +2.807e-05 | +1.317e-05 | 0.30206 |
| 292.000 | 3 | +2.450e+02 | +3.470e+04 | +6.022e+04 | -9.591e-02 | +2.178e-05 | +6.470e-06 | 0.23019 |
| 292.000 | 4 | +1.123e+02 | +3.277e+04 | +5.322e+04 | -9.121e-02 | +2.275e-05 | -1.256e-05 | 0.21890 |
| 292.000 | 5 | +8.485e+01 | +3.229e+04 | +5.147e+04 | -9.003e-02 | +2.300e-05 | -1.732e-05 | 0.21608 |
| 292.000 | 7 | +3.238e+02 | +2.873e+04 | +7.208e+04 | -1.228e-01 | +2.379e-05 | +2.597e-05 | 0.29479 |
| 292.000 | 8 | +2.735e+02 | +4.750e+04 | +6.870e+04 | -1.259e-01 | +2.909e-05 | +1.564e-05 | 0.30206 |
| 365.000 | 1 | -2.391e+02 | -3.063e+04 | -4.328e+04 | -1.215e-01 | +1.385e-05 | +1.989e-05 | 0.29155 |
| 365.000 | 2 | -3.582e+02 | -4.559e+04 | -5.389e+04 | -1.244e-01 | +1.397e-05 | +4.443e-07 | 0.29861 |
| 365.000 | 3 | -2.449e+02 | -3.470e+04 | -4.234e+04 | -9.478e-02 | +1.098e-05 | -3.215e-06 | 0.22747 |
| 365.000 | 4 | -8.560e+01 | -3.277e+04 | -4.698e+04 | -8.996e-02 | +1.220e-05 | -2.171e-05 | 0.21589 |
| 365.000 | 5 | -4.575e+01 | -3.229e+04 | -4.813e+04 | -8.875e-02 | +1.251e-05 | -2.633e-05 | 0.21300 |
| 365.000 | 7 | -3.238e+02 | -2.873e+04 | -4.844e+04 | -1.216e-01 | +1.110e-05 | +1.795e-05 | 0.29194 |
| 365.000 | 8 | -2.735e+02 | -4.750e+04 | -4.873e+04 | -1.243e-01 | +1.673e-05 | +2.381e-06 | 0.29822 |
| **Trave numero:** | **23 - Lunghezza:** | **365.00** | | | | | | |
| **Dist.** | **c.c.** | **Fy** | **Mx** | **Mz** | **Spost.Z** | **Rotaz.X** | **Rotaz.Y** | **Press. Suolo** |
| 0.000 | 1 | -4.052e+01 | -8.198e+04 | +2.074e+04 | -1.215e-01 | +1.385e-05 | +1.989e-05 | 0.29155 |
| 0.000 | 2 | -4.142e+01 | -7.556e+04 | +3.245e+04 | -1.244e-01 | +1.397e-05 | +4.443e-07 | 0.29861 |
| 0.000 | 3 | -9.350e+00 | -5.471e+04 | +2.659e+04 | -9.478e-02 | +1.098e-05 | -3.215e-06 | 0.22747 |
| 0.000 | 4 | +1.080e+02 | -3.695e+04 | +3.509e+04 | -8.996e-02 | +1.220e-05 | -2.171e-05 | 0.21589 |
| 0.000 | 5 | +1.372e+02 | -3.251e+04 | +3.721e+04 | -8.875e-02 | +1.251e-05 | -2.633e-05 | 0.21300 |
| 0.000 | 7 | -5.250e-01 | -7.966e+04 | +3.087e+04 | -1.216e-01 | +1.110e-05 | +1.795e-05 | 0.29194 |
| 0.000 | 8 | -8.142e+01 | -7.788e+04 | +2.232e+04 | -1.243e-01 | +1.673e-05 | +2.381e-06 | 0.29822 |
| 73.000 | 1 | -5.362e+01 | -8.198e+04 | +2.370e+04 | -1.206e-01 | +9.174e-06 | +4.277e-05 | 0.28951 |
| 73.000 | 2 | -4.148e+01 | -7.556e+04 | +3.547e+04 | -1.236e-01 | +6.820e-06 | +2.153e-05 | 0.29676 |
| 73.000 | 3 | -9.350e+00 | -5.471e+04 | +2.727e+04 | -9.418e-02 | +5.310e-06 | +1.205e-05 | 0.22604 |
| 73.000 | 4 | +1.080e+02 | -3.695e+04 | +2.721e+04 | -8.933e-02 | +5.644e-06 | -1.140e-05 | 0.21440 |
| 73.000 | 5 | +1.373e+02 | -3.251e+04 | +2.719e+04 | -8.812e-02 | +5.727e-06 | -1.726e-05 | 0.21149 |
| 73.000 | 7 | -9.025e+00 | -7.966e+04 | +3.091e+04 | -1.211e-01 | +4.595e-06 | +4.019e-05 | 0.29057 |
| 73.000 | 8 | -8.148e+01 | -7.788e+04 | +2.827e+04 | -1.232e-01 | +1.140e-05 | +2.412e-05 | 0.29573 |
| 146.000 | 1 | -7.182e+01 | -8.198e+04 | +2.761e+04 | -1.201e-01 | +3.771e-06 | +6.565e-05 | 0.28834 |
| 146.000 | 2 | -2.278e+01 | -7.556e+04 | +3.713e+04 | -1.234e-01 | -8.243e-07 | +4.262e-05 | 0.29623 |
| 146.000 | 3 | -4.750e+00 | -5.471e+04 | +2.762e+04 | -9.401e-02 | -4.693e-07 | +2.732e-05 | 0.22561 |
| 146.000 | 4 | +6.155e+01 | -3.695e+04 | +2.272e+04 | -8.913e-02 | +3.878e-07 | -1.086e-06 | 0.21391 |
| 146.000 | 5 | +7.810e+01 | -3.251e+04 | +2.149e+04 | -8.791e-02 | +6.021e-07 | -8.189e-06 | 0.21098 |
| 146.000 | 7 | -1.852e+01 | -7.966e+04 | +3.157e+04 | -1.210e-01 | -1.982e-06 | +6.242e-05 | 0.29033 |
| 146.000 | 8 | -6.738e+01 | -7.788e+04 | +3.318e+04 | -1.226e-01 | +4.929e-06 | +4.585e-05 | 0.29424 |



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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 219.000 | 1 | -9.062e+01 | -8.198e+04 | +3.285e+04 | -1.201e-01 | -2.595e-06 | +8.853e-05 | 0.28819 |
| 219.000 | 2 | +1.358e+01 | -7.556e+04 | +3.760e+04 | -1.238e-01 | -8.693e-06 | +6.371e-05 | 0.29705 |
| 219.000 | 3 | +3.250e+00 | -5.471e+04 | +2.777e+04 | -9.425e-02 | -6.301e-06 | +4.259e-05 | 0.22621 |
| 219.000 | 4 | -3.415e+01 | -3.695e+04 | +2.177e+04 | -8.927e-02 | -4.296e-06 | +9.225e-06 | 0.21426 |
| 219.000 | 5 | -4.345e+01 | -3.251e+04 | +2.027e+04 | -8.803e-02 | -3.795e-06 | +8.833e-07 | 0.21127 |
| 219.000 | 7 | -2.392e+01 | -7.966e+04 | +3.292e+04 | -1.214e-01 | -8.771e-06 | +8.466e-05 | 0.29126 |
| 219.000 | 8 | -5.968e+01 | -7.788e+04 | +3.754e+04 | -1.225e-01 | -2.516e-06 | +6.759e-05 | 0.29400 |
| 292.000 | 1 | -1.048e+02 | -8.198e+04 | +3.947e+04 | -1.205e-01 | -1.021e-05 | +1.114e-04 | 0.28927 |
| 292.000 | 2 | +4.318e+01 | -7.556e+04 | +3.661e+04 | -1.247e-01 | -1.651e-05 | +8.480e-05 | 0.29928 |
| 292.000 | 3 | +1.555e+01 | -5.471e+04 | +2.754e+04 | -9.493e-02 | -1.212e-05 | +5.786e-05 | 0.22782 |
| 292.000 | 4 | -7.610e+01 | -3.695e+04 | +2.426e+04 | -8.975e-02 | -9.142e-06 | +1.954e-05 | 0.21541 |
| 292.000 | 5 | -9.903e+01 | -3.251e+04 | +2.344e+04 | -8.846e-02 | -8.397e-06 | +9.956e-06 | 0.21231 |
| 292.000 | 7 | -2.398e+01 | -7.966e+04 | +3.466e+04 | -1.222e-01 | -1.589e-05 | +1.069e-04 | 0.29340 |
| 292.000 | 8 | -5.318e+01 | -7.788e+04 | +4.142e+04 | -1.230e-01 | -1.083e-05 | +8.933e-05 | 0.29513 |
| 365.000 | 1 | +1.048e+02 | +8.198e+04 | -4.712e+04 | -1.216e-01 | -1.933e-05 | +1.343e-04 | 0.29179 |
| 365.000 | 2 | -4.322e+01 | +7.556e+04 | -3.346e+04 | -1.262e-01 | -2.388e-05 | +1.059e-04 | 0.30283 |
| 365.000 | 3 | -1.555e+01 | +5.471e+04 | -2.640e+04 | -9.602e-02 | -1.780e-05 | +7.313e-05 | 0.23046 |
| 365.000 | 4 | +7.615e+01 | +3.695e+04 | -2.982e+04 | -9.061e-02 | -1.484e-05 | +2.985e-05 | 0.21747 |
| 365.000 | 5 | +9.905e+01 | +3.251e+04 | -3.067e+04 | -8.926e-02 | -1.409e-05 | +1.903e-05 | 0.21422 |
| 365.000 | 7 | +1.998e+01 | +7.966e+04 | -3.612e+04 | -1.237e-01 | -2.334e-05 | +1.291e-04 | 0.29683 |
| 365.000 | 8 | +4.168e+01 | +7.788e+04 | -4.446e+04 | -1.241e-01 | -1.987e-05 | +1.111e-04 | 0.29779 |

**Trave numero: 24 - Lunghezza: 205.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -2.460e+02 | +1.887e+04 | -2.373e+04 | -1.216e-01 | -1.933e-05 | +1.343e-04 | 0.29179 |
| 0.000 | 2 | -6.754e+01 | +2.562e+04 | -2.384e+04 | -1.262e-01 | -2.388e-05 | +1.059e-04 | 0.30283 |
| 0.000 | 3 | -2.976e+01 | +1.945e+04 | -1.558e+04 | -9.602e-02 | -1.780e-05 | +7.313e-05 | 0.23046 |
| 0.000 | 4 | +8.565e+01 | +1.811e+04 | -1.218e+03 | -9.061e-02 | -1.484e-05 | +2.985e-05 | 0.21747 |
| 0.000 | 5 | +1.146e+02 | +1.778e+04 | +2.372e+03 | -8.926e-02 | -1.409e-05 | +1.903e-05 | 0.21422 |
| 0.000 | 7 | -7.701e+01 | +1.938e+04 | -2.508e+04 | -1.237e-01 | -2.334e-05 | +1.291e-04 | 0.29683 |
| 0.000 | 8 | -2.365e+02 | +2.510e+04 | -2.249e+04 | -1.241e-01 | -1.987e-05 | +1.111e-04 | 0.29779 |
| 41.000 | 1 | -2.461e+02 | +1.887e+04 | -1.364e+04 | -1.223e-01 | -1.712e-05 | +1.313e-04 | 0.29352 |
| 41.000 | 2 | -6.757e+01 | +2.562e+04 | -2.107e+04 | -1.271e-01 | -2.123e-05 | +1.019e-04 | 0.30504 |
| 41.000 | 3 | -2.975e+01 | +1.945e+04 | -1.436e+04 | -9.671e-02 | -1.603e-05 | +7.008e-05 | 0.23211 |
| 41.000 | 4 | +8.565e+01 | +1.811e+04 | -4.730e+03 | -9.122e-02 | -1.448e-05 | +2.701e-05 | 0.21893 |
| 41.000 | 5 | +1.145e+02 | +1.778e+04 | -2.323e+03 | -8.985e-02 | -1.410e-05 | +1.624e-05 | 0.21564 |
| 41.000 | 7 | -7.697e+01 | +1.938e+04 | -2.192e+04 | -1.246e-01 | -2.056e-05 | +1.261e-04 | 0.29897 |
| 41.000 | 8 | -2.366e+02 | +2.510e+04 | -1.279e+04 | -1.248e-01 | -1.778e-05 | +1.071e-04 | 0.29959 |
| 82.000 | 1 | -2.436e+02 | +1.887e+04 | -3.658e+03 | -1.230e-01 | -1.609e-05 | +1.284e-04 | 0.29508 |
| 82.000 | 2 | -3.668e+01 | +2.562e+04 | -1.957e+04 | -1.279e-01 | -1.883e-05 | +9.786e-05 | 0.30701 |
| 82.000 | 3 | -1.225e+01 | +1.945e+04 | -1.385e+04 | -9.734e-02 | -1.436e-05 | +6.703e-05 | 0.23360 |
| 82.000 | 4 | +7.072e+01 | +1.811e+04 | -7.629e+03 | -9.181e-02 | -1.375e-05 | +2.417e-05 | 0.22034 |
| 82.000 | 5 | +9.147e+01 | +1.778e+04 | -6.073e+03 | -9.043e-02 | -1.360e-05 | +1.345e-05 | 0.21702 |
| 82.000 | 7 | -6.107e+01 | +1.938e+04 | -1.942e+04 | -1.254e-01 | -1.812e-05 | +1.231e-04 | 0.30086 |
| 82.000 | 8 | -2.192e+02 | +2.510e+04 | -3.809e+03 | -1.255e-01 | -1.680e-05 | +1.032e-04 | 0.30122 |
| 123.000 | 1 | -2.372e+02 | +1.887e+04 | +6.067e+03 | -1.236e-01 | -1.624e-05 | +1.254e-04 | 0.29662 |
| 123.000 | 2 | +3.888e+01 | +2.562e+04 | -1.952e+04 | -1.286e-01 | -1.651e-05 | +9.385e-05 | 0.30874 |
| 123.000 | 3 | +3.335e+01 | +1.945e+04 | -1.422e+04 | -9.789e-02 | -1.270e-05 | +6.399e-05 | 0.23494 |
| 123.000 | 4 | +5.926e+01 | +1.811e+04 | -1.006e+04 | -9.236e-02 | -1.271e-05 | +2.133e-05 | 0.22166 |
| 123.000 | 5 | +7.185e+01 | +1.778e+04 | -9.019e+03 | -9.097e-02 | -1.271e-05 | +1.067e-05 | 0.21834 |
| 123.000 | 7 | -4.057e+01 | +1.938e+04 | -1.775e+04 | -1.260e-01 | -1.592e-05 | +1.200e-04 | 0.30252 |
| 123.000 | 8 | -1.977e+02 | +2.510e+04 | +4.296e+03 | -1.262e-01 | -1.683e-05 | +9.926e-05 | 0.30283 |
| 164.000 | 1 | -2.271e+02 | +1.887e+04 | +1.538e+04 | -1.243e-01 | -1.750e-05 | +1.225e-04 | 0.29820 |
| 164.000 | 2 | +8.257e+01 | +2.562e+04 | -2.112e+04 | -1.293e-01 | -1.411e-05 | +8.983e-05 | 0.31025 |
| 164.000 | 3 | +6.065e+01 | +1.945e+04 | -1.559e+04 | -9.838e-02 | -1.094e-05 | +6.094e-05 | 0.23611 |
| 164.000 | 4 | +5.103e+01 | +1.811e+04 | -1.215e+04 | -9.286e-02 | -1.139e-05 | +1.849e-05 | 0.22286 |
| 164.000 | 5 | +5.546e+01 | +1.778e+04 | -1.129e+04 | -9.148e-02 | -1.151e-05 | +7.879e-06 | 0.21954 |
| 164.000 | 7 | -1.588e+01 | +1.938e+04 | -1.710e+04 | -1.267e-01 | -1.386e-05 | +1.170e-04 | 0.30398 |
| 164.000 | 8 | -1.723e+02 | +2.510e+04 | +1.136e+04 | -1.269e-01 | -1.776e-05 | +9.532e-05 | 0.30449 |
| 205.000 | 1 | +2.131e+02 | -1.887e+04 | -2.411e+04 | -1.250e-01 | -1.984e-05 | +1.195e-04 | 0.29998 |
| 205.000 | 2 | -8.260e+01 | -2.562e+04 | +2.451e+04 | -1.298e-01 | -1.141e-05 | +8.582e-05 | 0.31154 |
| 205.000 | 3 | -6.067e+01 | -1.945e+04 | +1.807e+04 | -9.879e-02 | -8.951e-06 | +5.789e-05 | 0.23711 |
| 205.000 | 4 | -4.576e+01 | -1.811e+04 | +1.403e+04 | -9.330e-02 | -9.846e-06 | +1.565e-05 | 0.22391 |
| 205.000 | 5 | -4.203e+01 | -1.778e+04 | +1.302e+04 | -9.192e-02 | -1.007e-05 | +5.092e-06 | 0.22062 |
| 205.000 | 7 | -1.233e+01 | -1.938e+04 | +1.761e+04 | -1.272e-01 | -1.180e-05 | +1.139e-04 | 0.30523 |
| 205.000 | 8 | +1.428e+02 | -2.510e+04 | -1.721e+04 | -1.276e-01 | -1.945e-05 | +9.139e-05 | 0.30626 |

**Trave numero: 25 - Lunghezza: 305.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | +5.100e+02 | -4.140e+04 | +6.176e+04 | -1.250e-01 | -1.984e-05 | +1.195e-04 | 0.29998 |
| 0.000 | 2 | +1.912e+02 | -5.441e+04 | +1.771e+04 | -1.298e-01 | -1.141e-05 | +8.582e-05 | 0.31154 |
| 0.000 | 3 | +1.550e+02 | -4.148e+04 | +1.337e+04 | -9.879e-02 | -8.951e-06 | +5.789e-05 | 0.23711 |
| 0.000 | 4 | +1.958e+02 | -3.953e+04 | +1.208e+04 | -9.330e-02 | -9.846e-06 | +1.565e-05 | 0.22391 |
| 0.000 | 5 | +2.059e+02 | -3.904e+04 | +1.176e+04 | -9.192e-02 | -1.007e-05 | +5.092e-06 | 0.22062 |
| 0.000 | 7 | +2.515e+02 | -5.008e+04 | +2.295e+04 | -1.272e-01 | -1.180e-05 | +1.139e-04 | 0.30523 |
| 0.000 | 8 | +4.497e+02 | -4.573e+04 | +5.651e+04 | -1.276e-01 | -1.945e-05 | +9.139e-05 | 0.30626 |
| 61.000 | 1 | +5.511e+02 | -4.140e+04 | +3.065e+04 | -1.266e-01 | -2.797e-05 | +1.292e-04 | 0.30372 |
| 61.000 | 2 | +2.679e+02 | -5.441e+04 | +6.041e+03 | -1.306e-01 | -1.350e-05 | +9.851e-05 | 0.31344 |
| 61.000 | 3 | +2.048e+02 | -4.148e+04 | +3.921e+03 | -9.942e-02 | -1.047e-05 | +6.756e-05 | 0.23860 |



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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 61.000 | 4 | +1.976e+02 | -3.953e+04 | +1.430e+02 | -9.397e-02 | -1.092e-05 | +2.487e-05 | 0.22553 |
| 61.000 | 5 | +2.059e+02 | -3.904e+04 | -8.013e+02 | -9.261e-02 | -1.103e-05 | +1.420e-05 | 0.22226 |
| 61.000 | 7 | +3.057e+02 | -5.008e+04 | +7.605e+03 | -1.280e-01 | -1.449e-05 | +1.256e-04 | 0.30730 |
| 61.000 | 8 | +5.133e+02 | -4.573e+04 | +2.908e+04 | -1.291e-01 | -2.698e-05 | +1.020e-04 | 0.30989 |
| 122.000 | 1 | +6.087e+02 | -4.140e+04 | -2.965e+03 | -1.284e-01 | -3.040e-05 | +1.388e-04 | 0.30826 |
| 122.000 | 2 | +3.522e+02 | -5.441e+04 | -1.030e+04 | -1.315e-01 | -1.313e-05 | +1.112e-04 | 0.31553 |
| 122.000 | 3 | +2.604e+02 | -4.148e+04 | -8.566e+03 | -1.001e-01 | -1.006e-05 | +7.724e-05 | 0.24019 |
| 122.000 | 4 | +2.055e+02 | -3.953e+04 | -1.191e+04 | -9.464e-02 | -9.886e-06 | +3.409e-05 | 0.22714 |
| 122.000 | 5 | +1.959e+02 | -3.904e+04 | -1.275e+04 | -9.328e-02 | -9.842e-06 | +2.330e-05 | 0.22388 |
| 122.000 | 7 | +3.680e+02 | -5.008e+04 | -1.104e+04 | -1.290e-01 | -1.419e-05 | +1.373e-04 | 0.30953 |
| 122.000 | 8 | +5.929e+02 | -4.573e+04 | -2.226e+03 | -1.309e-01 | -2.934e-05 | +1.127e-04 | 0.31426 |
| 183.000 | 1 | +6.827e+02 | -4.140e+04 | -4.010e+04 | -1.303e-01 | -2.662e-05 | +1.485e-04 | 0.31272 |
| 183.000 | 2 | +4.431e+02 | -5.441e+04 | -3.178e+04 | -1.322e-01 | -9.425e-06 | +1.239e-04 | 0.31733 |
| 183.000 | 3 | +3.210e+02 | -4.148e+04 | -2.445e+04 | -1.007e-01 | -7.159e-06 | +8.691e-05 | 0.24158 |
| 183.000 | 4 | +2.181e+02 | -3.953e+04 | -2.445e+04 | -9.519e-02 | -6.687e-06 | +4.331e-05 | 0.22845 |
| 183.000 | 5 | +1.924e+02 | -3.904e+04 | -2.445e+04 | -9.382e-02 | -6.570e-06 | +3.241e-05 | 0.22517 |
| 183.000 | 7 | +4.375e+02 | -5.008e+04 | -3.348e+04 | -1.298e-01 | -1.027e-05 | +1.490e-04 | 0.31150 |
| 183.000 | 8 | +6.883e+02 | -4.573e+04 | -3.839e+04 | -1.327e-01 | -2.577e-05 | +1.234e-04 | 0.31855 |
| 244.000 | 1 | +7.693e+02 | -4.140e+04 | -8.174e+04 | -1.317e-01 | -1.590e-05 | +1.581e-04 | 0.31615 |
| 244.000 | 2 | +5.377e+02 | -5.441e+04 | -5.881e+04 | -1.326e-01 | -1.455e-06 | +1.366e-04 | 0.31834 |
| 244.000 | 3 | +3.845e+02 | -4.148e+04 | -4.403e+04 | -1.010e-01 | -1.135e-06 | +9.658e-05 | 0.24235 |
| 244.000 | 4 | +2.332e+02 | -3.953e+04 | -3.775e+04 | -9.547e-02 | -1.215e-06 | +5.253e-05 | 0.22914 |
| 244.000 | 5 | +1.955e+02 | -3.904e+04 | -3.618e+04 | -9.410e-02 | -1.236e-06 | +4.151e-05 | 0.22583 |
| 244.000 | 7 | +5.111e+02 | -5.008e+04 | -6.017e+04 | -1.303e-01 | -2.034e-06 | +1.607e-04 | 0.31260 |
| 244.000 | 8 | +7.959e+02 | -4.573e+04 | -8.038e+04 | -1.341e-01 | -1.532e-05 | +1.341e-04 | 0.32189 |
| 305.000 | 1 | -7.692e+02 | +4.140e+04 | +1.287e+05 | -1.323e-01 | +2.614e-06 | +1.678e-04 | 0.31750 |
| 305.000 | 2 | -5.376e+02 | +5.441e+04 | +9.160e+04 | -1.324e-01 | +1.178e-05 | +1.493e-04 | 0.31783 |
| 305.000 | 3 | -3.845e+02 | +4.148e+04 | +6.748e+04 | -1.008e-01 | +8.676e-06 | +1.063e-04 | 0.24197 |
| 305.000 | 4 | -2.332e+02 | +3.953e+04 | +5.198e+04 | -9.535e-02 | +6.679e-06 | +6.175e-05 | 0.22884 |
| 305.000 | 5 | -1.954e+02 | +3.904e+04 | +4.810e+04 | -9.398e-02 | +6.179e-06 | +5.062e-05 | 0.22556 |
| 305.000 | 7 | -5.110e+02 | +5.008e+04 | +9.134e+04 | -1.301e-01 | +1.130e-05 | +1.723e-04 | 0.31217 |
| 305.000 | 8 | -7.958e+02 | +4.573e+04 | +1.289e+05 | -1.347e-01 | +3.096e-06 | +1.447e-04 | 0.32316 |

**Trave numero: 26 - Lunghezza: 365.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -5.758e+02 | +1.055e+05 | -9.261e+04 | -1.323e-01 | +2.614e-06 | +1.678e-04 | 0.31750 |
| 0.000 | 2 | -4.407e+02 | +1.014e+05 | -5.262e+04 | -1.324e-01 | +1.178e-05 | +1.493e-04 | 0.31783 |
| 0.000 | 3 | -3.190e+02 | +7.443e+04 | -3.915e+04 | -1.008e-01 | +8.676e-06 | +1.063e-04 | 0.24197 |
| 0.000 | 4 | -2.148e+02 | +5.587e+04 | -3.225e+04 | -9.535e-02 | +6.679e-06 | +6.175e-05 | 0.22884 |
| 0.000 | 5 | -1.887e+02 | +5.123e+04 | -3.052e+04 | -9.398e-02 | +6.179e-06 | +5.062e-05 | 0.22556 |
| 0.000 | 7 | -3.850e+02 | +1.059e+05 | -5.065e+04 | -1.301e-01 | +1.130e-05 | +1.723e-04 | 0.31217 |
| 0.000 | 8 | -6.315e+02 | +1.010e+05 | -9.458e+04 | -1.347e-01 | +3.096e-06 | +1.447e-04 | 0.32316 |
| 73.000 | 1 | -5.758e+02 | +1.055e+05 | -5.058e+04 | -1.314e-01 | +1.769e-05 | +1.384e-04 | 0.31534 |
| 73.000 | 2 | -4.408e+02 | +1.014e+05 | -2.045e+04 | -1.312e-01 | +1.947e-05 | +1.210e-04 | 0.31483 |
| 73.000 | 3 | -3.190e+02 | +7.443e+04 | -1.586e+04 | -9.989e-02 | +1.447e-05 | +8.548e-05 | 0.23974 |
| 73.000 | 4 | -2.148e+02 | +5.587e+04 | -1.657e+04 | -9.462e-02 | +1.182e-05 | +4.616e-05 | 0.22709 |
| 73.000 | 5 | -1.934e+02 | +5.123e+04 | -1.675e+04 | -9.330e-02 | +1.116e-05 | +3.632e-05 | 0.22392 |
| 73.000 | 7 | -3.851e+02 | +1.059e+05 | -2.254e+04 | -1.289e-01 | +1.900e-05 | +1.428e-04 | 0.30926 |
| 73.000 | 8 | -6.315e+02 | +1.010e+05 | -4.848e+04 | -1.337e-01 | +1.816e-05 | +1.165e-04 | 0.32090 |
| 146.000 | 1 | -4.758e+02 | +1.055e+05 | -1.584e+04 | -1.297e-01 | +2.468e-05 | +1.089e-04 | 0.31133 |
| 146.000 | 2 | -3.430e+02 | +1.014e+05 | +4.588e+03 | -1.296e-01 | +2.114e-05 | +9.266e-05 | 0.31106 |
| 146.000 | 3 | -2.545e+02 | +7.443e+04 | +2.708e+03 | -9.872e-02 | +1.585e-05 | +6.471e-05 | 0.23692 |
| 146.000 | 4 | -2.069e+02 | +5.587e+04 | -1.559e+03 | -9.363e-02 | +1.373e-05 | +3.056e-05 | 0.22472 |
| 146.000 | 5 | -2.080e+02 | +5.123e+04 | -2.625e+03 | -9.236e-02 | +1.320e-05 | +2.202e-05 | 0.22167 |
| 146.000 | 7 | -3.117e+02 | +1.059e+05 | +2.093e+02 | -1.273e-01 | +2.135e-05 | +1.132e-04 | 0.30554 |
| 146.000 | 8 | -5.071e+02 | +1.010e+05 | -1.147e+04 | -1.320e-01 | +2.447e-05 | +8.834e-05 | 0.31685 |
| 219.000 | 1 | -3.933e+02 | +1.055e+05 | +1.286e+04 | -1.278e-01 | +2.500e-05 | +7.947e-05 | 0.30672 |
| 219.000 | 2 | -2.617e+02 | +1.014e+05 | +2.369e+04 | -1.281e-01 | +1.816e-05 | +6.436e-05 | 0.30744 |
| 219.000 | 3 | -2.021e+02 | +7.443e+04 | +1.747e+04 | -9.759e-02 | +1.373e-05 | +4.394e-05 | 0.23421 |
| 219.000 | 4 | -2.187e+02 | +5.587e+04 | +1.354e+04 | -9.262e-02 | +1.246e-05 | +1.497e-05 | 0.22230 |
| 219.000 | 5 | -2.329e+02 | +5.123e+04 | +1.256e+04 | -9.138e-02 | +1.215e-05 | +7.727e-06 | 0.21932 |
| 219.000 | 7 | -2.546e+02 | +1.059e+05 | +1.879e+04 | -1.258e-01 | +1.935e-05 | +8.368e-05 | 0.30180 |
| 219.000 | 8 | -4.005e+02 | +1.010e+05 | +1.776e+04 | -1.302e-01 | +2.381e-05 | +6.015e-05 | 0.31236 |
| 292.000 | 1 | -3.310e+02 | +1.055e+05 | +3.702e+04 | -1.261e-01 | +1.974e-05 | +5.003e-05 | 0.30259 |
| 292.000 | 2 | -1.963e+02 | +1.014e+05 | +3.802e+04 | -1.270e-01 | +1.167e-05 | +3.606e-05 | 0.30470 |
| 292.000 | 3 | -1.619e+02 | +7.443e+04 | +2.929e+04 | -9.672e-02 | +8.806e-06 | +2.316e-05 | 0.23213 |
| 292.000 | 4 | -2.390e+02 | +5.587e+04 | +2.951e+04 | -9.182e-02 | +7.933e-06 | -6.247e-07 | 0.22037 |
| 292.000 | 5 | -2.660e+02 | +5.123e+04 | +2.956e+04 | -9.060e-02 | +7.715e-06 | -6.571e-06 | 0.21743 |
| 292.000 | 7 | -2.138e+02 | +1.059e+05 | +3.440e+04 | -1.245e-01 | +1.375e-05 | +5.413e-05 | 0.29878 |
| 292.000 | 8 | -3.134e+02 | +1.010e+05 | +4.064e+04 | -1.286e-01 | +1.766e-05 | +3.196e-05 | 0.30854 |
| 365.000 | 1 | +2.867e+02 | -1.055e+05 | -5.795e+04 | -1.249e-01 | +9.744e-06 | +2.060e-05 | 0.29983 |
| 365.000 | 2 | +1.428e+02 | -1.014e+05 | -4.844e+04 | -1.264e-01 | +2.564e-06 | +7.754e-06 | 0.30336 |
| 365.000 | 3 | +1.306e+02 | -7.443e+04 | -3.882e+04 | -9.630e-02 | +1.635e-06 | +2.387e-06 | 0.23113 |
| 365.000 | 4 | +2.390e+02 | -5.587e+04 | -4.695e+04 | -9.147e-02 | -1.170e-07 | -1.622e-05 | 0.21954 |
| 365.000 | 5 | +2.660e+02 | -5.123e+04 | -4.898e+04 | -9.026e-02 | -5.551e-07 | -2.087e-05 | 0.21664 |
| 365.000 | 7 | +1.863e+02 | -1.059e+05 | -4.800e+04 | -1.238e-01 | +5.078e-06 | +2.458e-05 | 0.29700 |
| 365.000 | 8 | +2.432e+02 | -1.010e+05 | -5.839e+04 | -1.276e-01 | +7.230e-06 | +3.774e-06 | 0.30619 |

**Trave numero: 27 - Lunghezza: 365.00**



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| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -3.551e+02 | -2.643e+04 | +7.085e+04 | -1.249e-01 | +9.744e-06 | +2.060e-05 | 0.29983 |
| 0.000 | 2 | -3.205e+02 | -4.384e+04 | +7.189e+04 | -1.264e-01 | +2.564e-06 | +7.754e-06 | 0.30336 |
| 0.000 | 3 | -2.166e+02 | -3.335e+04 | +5.606e+04 | -9.630e-02 | +1.635e-06 | +2.387e-06 | 0.23113 |
| 0.000 | 4 | -6.045e+01 | -3.141e+04 | +6.003e+04 | -9.147e-02 | -1.170e-07 | -1.622e-05 | 0.21954 |
| 0.000 | 5 | -2.145e+01 | -3.092e+04 | +6.102e+04 | -9.026e-02 | -5.551e-07 | -2.087e-05 | 0.21664 |
| 0.000 | 7 | -2.872e+02 | -2.618e+04 | +6.756e+04 | -1.238e-01 | +5.078e-06 | +2.458e-05 | 0.29700 |
| 0.000 | 8 | -3.884e+02 | -4.408e+04 | +7.518e+04 | -1.276e-01 | +7.230e-06 | +3.774e-06 | 0.30619 |
| 73.000 | 1 | -3.551e+02 | -2.643e+04 | +9.677e+04 | -1.248e-01 | -7.905e-06 | +2.797e-05 | 0.29945 |
| 73.000 | 2 | -3.206e+02 | -4.384e+04 | +9.529e+04 | -1.268e-01 | -1.504e-05 | +1.999e-05 | 0.30427 |
| 73.000 | 3 | -2.165e+02 | -3.335e+04 | +7.187e+04 | -9.662e-02 | -1.183e-05 | +1.169e-05 | 0.23189 |
| 73.000 | 4 | -7.948e+01 | -3.141e+04 | +6.445e+04 | -9.194e-02 | -1.322e-05 | -7.452e-06 | 0.22067 |
| 73.000 | 5 | -5.275e+01 | -3.092e+04 | +6.259e+04 | -9.077e-02 | -1.357e-05 | -1.224e-05 | 0.21786 |
| 73.000 | 7 | -2.872e+02 | -2.618e+04 | +8.853e+04 | -1.239e-01 | -1.136e-05 | +3.188e-05 | 0.29738 |
| 73.000 | 8 | -3.884e+02 | -4.408e+04 | +1.035e+05 | -1.276e-01 | -1.159e-05 | +1.608e-05 | 0.30634 |
| 146.000 | 1 | -3.247e+02 | -2.643e+04 | +1.205e+05 | -1.261e-01 | -3.078e-05 | +3.535e-05 | 0.30264 |
| 146.000 | 2 | -2.691e+02 | -4.384e+04 | +1.149e+05 | -1.286e-01 | -3.717e-05 | +3.222e-05 | 0.30866 |
| 146.000 | 3 | -1.864e+02 | -3.335e+04 | +8.548e+04 | -9.804e-02 | -2.840e-05 | +2.100e-05 | 0.23530 |
| 146.000 | 4 | -8.310e+01 | -3.141e+04 | +7.025e+04 | -9.341e-02 | -2.740e-05 | +1.314e-06 | 0.22417 |
| 146.000 | 5 | -6.854e+01 | -3.092e+04 | +6.644e+04 | -9.225e-02 | -2.715e-05 | -3.608e-06 | 0.22139 |
| 146.000 | 7 | -2.659e+02 | -2.618e+04 | +1.079e+05 | -1.254e-01 | -3.204e-05 | +3.919e-05 | 0.30101 |
| 146.000 | 8 | -3.278e+02 | -4.408e+04 | +1.275e+05 | -1.293e-01 | -3.591e-05 | +2.838e-05 | 0.31030 |
| 219.000 | 1 | -2.803e+02 | -2.643e+04 | +1.409e+05 | -1.293e-01 | -5.830e-05 | +4.272e-05 | 0.31027 |
| 219.000 | 2 | -1.983e+02 | -4.384e+04 | +1.294e+05 | -1.322e-01 | -6.289e-05 | +4.446e-05 | 0.31730 |
| 219.000 | 3 | -1.414e+02 | -3.335e+04 | +9.579e+04 | -1.008e-01 | -4.749e-05 | +3.031e-05 | 0.24185 |
| 219.000 | 4 | -8.305e+01 | -3.141e+04 | +7.631e+04 | -9.595e-02 | -4.283e-05 | +1.008e-05 | 0.23027 |
| 219.000 | 5 | -6.855e+01 | -3.092e+04 | +7.144e+04 | -9.474e-02 | -4.167e-05 | +5.023e-06 | 0.22738 |
| 219.000 | 7 | -2.286e+02 | -2.618e+04 | +1.246e+05 | -1.286e-01 | -5.653e-05 | +4.650e-05 | 0.30862 |
| 219.000 | 8 | -2.499e+02 | -4.408e+04 | +1.457e+05 | -1.329e-01 | -6.467e-05 | +4.068e-05 | 0.31894 |
| 292.000 | 1 | -2.025e+02 | -2.643e+04 | +1.557e+05 | -1.346e-01 | -8.953e-05 | +5.010e-05 | 0.32309 |
| 292.000 | 2 | -8.958e+01 | -4.384e+04 | +1.359e+05 | -1.378e-01 | -9.083e-05 | +5.669e-05 | 0.33072 |
| 292.000 | 3 | -6.745e+01 | -3.335e+04 | +1.007e+05 | -1.050e-01 | -6.818e-05 | +3.962e-05 | 0.25195 |
| 292.000 | 4 | -5.995e+01 | -3.141e+04 | +8.069e+04 | -9.966e-02 | -5.936e-05 | +1.885e-05 | 0.23919 |
| 292.000 | 5 | -5.815e+01 | -3.092e+04 | +7.569e+04 | -9.833e-02 | -5.716e-05 | +1.365e-05 | 0.23600 |
| 292.000 | 7 | -1.580e+02 | -2.618e+04 | +1.362e+05 | -1.337e-01 | -8.398e-05 | +5.381e-05 | 0.32083 |
| 292.000 | 8 | -1.341e+02 | -4.408e+04 | +1.555e+05 | -1.387e-01 | -9.638e-05 | +5.298e-05 | 0.33298 |
| 365.000 | 1 | +6.848e+01 | +2.643e+04 | -1.607e+05 | -1.424e-01 | -1.228e-04 | +5.747e-05 | 0.34164 |
| 365.000 | 2 | -7.772e+01 | +4.384e+04 | -1.303e+05 | -1.455e-01 | -1.189e-04 | +6.893e-05 | 0.34913 |
| 365.000 | 3 | -5.055e+01 | +3.335e+04 | -9.703e+04 | -1.107e-01 | -8.900e-05 | +4.892e-05 | 0.26575 |
| 365.000 | 4 | -2.150e+00 | +3.141e+04 | -8.054e+04 | -1.046e-01 | -7.634e-05 | +2.761e-05 | 0.25109 |
| 365.000 | 5 | +9.950e+00 | +3.092e+04 | -7.641e+04 | -1.031e-01 | -7.317e-05 | +2.228e-05 | 0.24742 |
| 365.000 | 7 | +3.398e+01 | +2.618e+04 | -1.386e+05 | -1.409e-01 | -1.129e-04 | +6.111e-05 | 0.33806 |
| 365.000 | 8 | -4.322e+01 | +4.408e+04 | -1.523e+05 | -1.470e-01 | -1.288e-04 | +6.528e-05 | 0.35273 |

**Trave numero: 28 - Lunghezza: 365.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -1.775e+03 | +1.311e+04 | -1.039e+05 | -1.524e-01 | +1.754e-04 | +9.040e-05 | 0.36588 |
| 0.000 | 2 | -1.888e+03 | +1.629e+04 | -1.090e+05 | -1.615e-01 | +2.111e-04 | +1.070e-04 | 0.38755 |
| 0.000 | 3 | -1.424e+03 | +1.213e+04 | -8.267e+04 | -1.223e-01 | +1.578e-04 | +7.806e-05 | 0.29345 |
| 0.000 | 4 | -1.280e+03 | +1.005e+04 | -7.663e+04 | -1.122e-01 | +1.341e-04 | +5.599e-05 | 0.26923 |
| 0.000 | 5 | -1.244e+03 | +9.533e+03 | -7.512e+04 | -1.097e-01 | +1.281e-04 | +5.047e-05 | 0.26316 |
| 0.000 | 7 | -1.714e+03 | +1.267e+04 | -8.994e+04 | -1.537e-01 | +2.094e-04 | +8.649e-05 | 0.36888 |
| 0.000 | 8 | -1.949e+03 | +1.674e+04 | -1.229e+05 | -1.602e-01 | +1.771e-04 | +1.109e-04 | 0.38455 |
| 73.000 | 1 | -1.775e+03 | +1.311e+04 | +2.570e+04 | -1.353e-01 | +2.412e-04 | +7.239e-05 | 0.32474 |
| 73.000 | 2 | -1.888e+03 | +1.629e+04 | +2.883e+04 | -1.416e-01 | +2.786e-04 | +8.461e-05 | 0.33972 |
| 73.000 | 3 | -1.424e+03 | +1.213e+04 | +2.131e+04 | -1.073e-01 | +2.095e-04 | +6.139e-05 | 0.25757 |
| 73.000 | 4 | -1.280e+03 | +1.005e+04 | +1.682e+04 | -9.916e-02 | +1.844e-04 | +4.217e-05 | 0.23798 |
| 73.000 | 5 | -1.244e+03 | +9.533e+03 | +1.569e+04 | -9.712e-02 | +1.782e-04 | +3.737e-05 | 0.23309 |
| 73.000 | 7 | -1.714e+03 | +1.267e+04 | +3.521e+04 | -1.349e-01 | +2.555e-04 | +6.908e-05 | 0.32369 |
| 73.000 | 8 | -1.949e+03 | +1.674e+04 | +1.932e+04 | -1.420e-01 | +2.644e-04 | +8.791e-05 | 0.34078 |
| 146.000 | 1 | -7.798e+02 | +1.311e+04 | +8.262e+04 | -1.202e-01 | +1.500e-04 | +5.437e-05 | 0.28843 |
| 146.000 | 2 | -8.269e+02 | +1.629e+04 | +8.920e+04 | -1.239e-01 | +1.792e-04 | +6.223e-05 | 0.29746 |
| 146.000 | 3 | -6.248e+02 | +1.213e+04 | +6.692e+04 | -9.405e-02 | +1.352e-04 | +4.472e-05 | 0.22573 |
| 146.000 | 4 | -5.663e+02 | +1.005e+04 | +5.815e+04 | -8.738e-02 | +1.213e-04 | +2.836e-05 | 0.20972 |
| 146.000 | 5 | -5.516e+02 | +9.533e+03 | +5.596e+04 | -8.572e-02 | +1.178e-04 | +2.427e-05 | 0.20572 |
| 146.000 | 7 | -7.237e+02 | +1.267e+04 | +8.803e+04 | -1.192e-01 | +1.517e-04 | +5.168e-05 | 0.28613 |
| 146.000 | 8 | -8.830e+02 | +1.674e+04 | +8.378e+04 | -1.249e-01 | +1.776e-04 | +6.492e-05 | 0.29976 |
| 219.000 | 1 | +8.304e+02 | +1.311e+04 | +7.850e+04 | -1.142e-01 | +1.430e-05 | +3.635e-05 | 0.27420 |
| 219.000 | 2 | +8.442e+02 | +1.629e+04 | +8.562e+04 | -1.163e-01 | +3.198e-05 | +3.984e-05 | 0.27907 |
| 219.000 | 3 | +6.347e+02 | +1.213e+04 | +6.434e+04 | -8.826e-02 | +2.463e-05 | +2.805e-05 | 0.21182 |
| 219.000 | 4 | +5.581e+02 | +1.005e+04 | +5.641e+04 | -8.208e-02 | +2.480e-05 | +1.455e-05 | 0.19699 |
| 219.000 | 5 | +5.390e+02 | +9.533e+03 | +5.443e+04 | -8.053e-02 | +2.484e-05 | +1.118e-05 | 0.19328 |
| 219.000 | 7 | +8.680e+02 | +1.267e+04 | +8.055e+04 | -1.134e-01 | +9.681e-06 | +3.427e-05 | 0.27226 |
| 219.000 | 8 | +8.066e+02 | +1.674e+04 | +8.357e+04 | -1.171e-01 | +3.659e-05 | +4.192e-05 | 0.28102 |
| 292.000 | 1 | +1.634e+03 | +1.311e+04 | +1.788e+04 | -1.171e-01 | -6.689e-05 | +1.833e-05 | 0.28097 |
| 292.000 | 2 | +1.660e+03 | +1.629e+04 | +2.400e+04 | -1.182e-01 | -6.035e-05 | +1.746e-05 | 0.28378 |
| 292.000 | 3 | +1.249e+03 | +1.213e+04 | +1.801e+04 | -8.968e-02 | -4.473e-05 | +1.138e-05 | 0.21524 |
| 292.000 | 4 | +1.103e+03 | +1.005e+04 | +1.567e+04 | -8.309e-02 | -3.591e-05 | +7.415e-07 | 0.19942 |



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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 292.000 | 5 | +1.067e+03 | +9.533e+03 | +1.508e+04 | -8.144e-02 | -3.371e-05 | -1.919e-06 | 0.19547 |
| 292.000 | 7 | +1.667e+03 | +1.267e+04 | +1.719e+04 | -1.167e-01 | -7.264e-05 | +1.686e-05 | 0.28003 |
| 292.000 | 8 | +1.627e+03 | +1.674e+04 | +2.469e+04 | -1.186e-01 | -5.459e-05 | +1.893e-05 | 0.28469 |
| 365.000 | 1 | -1.634e+03 | -1.311e+04 | +1.014e+05 | -1.212e-01 | +3.453e-06 | +3.175e-07 | 0.29078 |
| 365.000 | 2 | -1.660e+03 | -1.629e+04 | +9.719e+04 | -1.222e-01 | +1.298e-06 | -4.926e-06 | 0.29328 |
| 365.000 | 3 | -1.249e+03 | -1.213e+04 | +7.316e+04 | -9.261e-02 | +1.727e-06 | -5.286e-06 | 0.22227 |
| 365.000 | 4 | -1.103e+03 | -1.005e+04 | +6.486e+04 | -8.540e-02 | +5.516e-06 | -1.307e-05 | 0.20496 |
| 365.000 | 5 | -1.067e+03 | -9.533e+03 | +6.278e+04 | -8.360e-02 | +6.463e-06 | -1.501e-05 | 0.20064 |
| 365.000 | 7 | -1.667e+03 | -1.267e+04 | +1.045e+05 | -1.211e-01 | +9.264e-07 | -5.465e-07 | 0.29066 |
| 365.000 | 8 | -1.627e+03 | -1.674e+04 | +9.405e+04 | -1.222e-01 | +3.825e-06 | -4.062e-06 | 0.29338 |

**Trave numero: 29 - Lunghezza: 365.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -1.468e+03 | -3.000e+04 | -7.974e+04 | -1.212e-01 | +3.453e-06 | +3.175e-07 | 0.29078 |
| 0.000 | 2 | -1.491e+03 | -2.924e+04 | -8.178e+04 | -1.222e-01 | +1.298e-06 | -4.926e-06 | 0.29328 |
| 0.000 | 3 | -1.122e+03 | -2.131e+04 | -6.202e+04 | -9.261e-02 | +1.727e-06 | -5.286e-06 | 0.22227 |
| 0.000 | 4 | -9.910e+02 | -1.516e+04 | -5.740e+04 | -8.540e-02 | +5.516e-06 | -1.307e-05 | 0.20496 |
| 0.000 | 5 | -9.584e+02 | -1.362e+04 | -5.624e+04 | -8.360e-02 | +6.463e-06 | -1.501e-05 | 0.20064 |
| 0.000 | 7 | -1.469e+03 | -2.965e+04 | -7.935e+04 | -1.211e-01 | +9.264e-07 | -5.465e-07 | 0.29066 |
| 0.000 | 8 | -1.489e+03 | -2.959e+04 | -8.218e+04 | -1.222e-01 | +3.825e-06 | -4.062e-06 | 0.29338 |
| 73.000 | 1 | -1.468e+03 | -3.000e+04 | +2.739e+04 | -1.177e-01 | +4.755e-05 | +4.153e-05 | 0.28248 |
| 73.000 | 2 | -1.491e+03 | -2.924e+04 | +2.703e+04 | -1.188e-01 | +4.741e-05 | +3.525e-05 | 0.28512 |
| 73.000 | 3 | -1.122e+03 | -2.131e+04 | +1.985e+04 | -8.997e-02 | +3.724e-05 | +2.399e-05 | 0.21593 |
| 73.000 | 4 | -9.910e+02 | -1.516e+04 | +1.495e+04 | -8.262e-02 | +4.127e-05 | +7.754e-06 | 0.19828 |
| 73.000 | 5 | -9.584e+02 | -1.362e+04 | +1.372e+04 | -8.078e-02 | +4.228e-05 | +3.695e-06 | 0.19386 |
| 73.000 | 7 | -1.469e+03 | -2.965e+04 | +2.788e+04 | -1.179e-01 | +4.428e-05 | +4.019e-05 | 0.28289 |
| 73.000 | 8 | -1.489e+03 | -2.959e+04 | +2.655e+04 | -1.186e-01 | +5.068e-05 | +3.659e-05 | 0.28471 |
| 146.000 | 1 | -6.574e+02 | -3.000e+04 | +7.538e+04 | -1.167e-01 | -3.901e-05 | +8.275e-05 | 0.28003 |
| 146.000 | 2 | -6.689e+02 | -2.924e+04 | +7.586e+04 | -1.178e-01 | -3.925e-05 | +7.542e-05 | 0.28265 |
| 146.000 | 3 | -5.043e+02 | -2.131e+04 | +5.666e+04 | -8.905e-02 | -2.720e-05 | +5.327e-05 | 0.21373 |
| 146.000 | 4 | -4.511e+02 | -1.516e+04 | +4.787e+04 | -8.104e-02 | -1.164e-05 | +2.858e-05 | 0.19450 |
| 146.000 | 5 | -4.378e+02 | -1.362e+04 | +4.568e+04 | -7.904e-02 | -7.752e-06 | +2.240e-05 | 0.18970 |
| 146.000 | 7 | -6.568e+02 | -2.965e+04 | +7.582e+04 | -1.171e-01 | -4.306e-05 | +8.092e-05 | 0.28106 |
| 146.000 | 8 | -6.694e+02 | -2.959e+04 | +7.542e+04 | -1.173e-01 | -3.520e-05 | +7.725e-05 | 0.28162 |
| 219.000 | 1 | +1.018e+03 | -3.000e+04 | +6.500e+04 | -1.240e-01 | -1.573e-04 | +1.240e-04 | 0.29758 |
| 219.000 | 2 | +1.031e+03 | -2.924e+04 | +6.549e+04 | -1.251e-01 | -1.583e-04 | +1.156e-04 | 0.30034 |
| 219.000 | 3 | +7.672e+02 | -2.131e+04 | +4.912e+04 | -9.440e-02 | -1.163e-04 | +8.254e-05 | 0.22657 |
| 219.000 | 4 | +6.348e+02 | -1.516e+04 | +4.259e+04 | -8.475e-02 | -8.784e-05 | +4.940e-05 | 0.20341 |
| 219.000 | 5 | +6.017e+02 | -1.362e+04 | +4.096e+04 | -8.234e-02 | -8.072e-05 | +4.111e-05 | 0.19762 |
| 219.000 | 7 | +1.031e+03 | -2.965e+04 | +6.508e+04 | -1.247e-01 | -1.617e-04 | +1.217e-04 | 0.29938 |
| 219.000 | 8 | +1.018e+03 | -2.959e+04 | +6.541e+04 | -1.244e-01 | -1.538e-04 | +1.179e-04 | 0.29854 |
| 292.000 | 1 | +2.045e+03 | -3.000e+04 | -9.345e+03 | -1.383e-01 | -2.041e-04 | +1.652e-04 | 0.33190 |
| 292.000 | 2 | +2.070e+03 | -2.924e+04 | -9.739e+03 | -1.395e-01 | -2.053e-04 | +1.558e-04 | 0.33487 |
| 292.000 | 3 | +1.543e+03 | -2.131e+04 | -6.888e+03 | -1.050e-01 | -1.519e-04 | +1.118e-04 | 0.25207 |
| 292.000 | 4 | +1.284e+03 | -1.516e+04 | -3.748e+03 | -9.305e-02 | -1.206e-04 | +7.022e-05 | 0.22332 |
| 292.000 | 5 | +1.220e+03 | -1.362e+04 | -2.963e+03 | -9.006e-02 | -1.127e-04 | +5.983e-05 | 0.21613 |
| 292.000 | 7 | +2.069e+03 | -2.965e+04 | -1.021e+04 | -1.394e-01 | -2.080e-04 | +1.624e-04 | 0.33446 |
| 292.000 | 8 | +2.046e+03 | -2.959e+04 | -8.873e+03 | -1.385e-01 | -2.014e-04 | +1.585e-04 | 0.33230 |
| 365.000 | 1 | -2.045e+03 | +3.000e+04 | +1.586e+05 | -1.503e-01 | -6.264e-05 | +2.064e-04 | 0.36062 |
| 365.000 | 2 | -2.070e+03 | +2.924e+04 | +1.609e+05 | -1.515e-01 | -6.157e-05 | +1.959e-04 | 0.36365 |
| 365.000 | 3 | -1.543e+03 | +2.131e+04 | +1.195e+05 | -1.139e-01 | -4.541e-05 | +1.411e-04 | 0.27338 |
| 365.000 | 4 | -1.284e+03 | +1.516e+04 | +9.751e+04 | -1.001e-01 | -3.527e-05 | +9.105e-05 | 0.24031 |
| 365.000 | 5 | -1.220e+03 | +1.362e+04 | +9.201e+04 | -9.669e-02 | -3.273e-05 | +7.853e-05 | 0.23206 |
| 365.000 | 7 | -2.069e+03 | +2.965e+04 | +1.613e+05 | -1.515e-01 | -6.353e-05 | +2.031e-04 | 0.36365 |
| 365.000 | 8 | -2.046e+03 | +2.959e+04 | +1.582e+05 | -1.503e-01 | -6.069e-05 | +1.992e-04 | 0.36062 |

**Trave numero: 30 - Lunghezza: 205.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -1.937e+03 | +2.282e+04 | -1.345e+05 | -1.503e-01 | -6.264e-05 | +2.064e-04 | 0.36062 |
| 0.000 | 2 | -1.991e+03 | +2.766e+04 | -1.411e+05 | -1.515e-01 | -6.157e-05 | +1.959e-04 | 0.36365 |
| 0.000 | 3 | -1.485e+03 | +2.096e+04 | -1.051e+05 | -1.139e-01 | -4.541e-05 | +1.411e-04 | 0.27338 |
| 0.000 | 4 | -1.245e+03 | +1.933e+04 | -8.734e+04 | -1.001e-01 | -3.527e-05 | +9.105e-05 | 0.24031 |
| 0.000 | 5 | -1.185e+03 | +1.892e+04 | -8.290e+04 | -9.669e-02 | -3.273e-05 | +7.853e-05 | 0.23206 |
| 0.000 | 7 | -1.930e+03 | +2.375e+04 | -1.346e+05 | -1.515e-01 | -6.353e-05 | +2.031e-04 | 0.36365 |
| 0.000 | 8 | -1.998e+03 | +2.672e+04 | -1.410e+05 | -1.503e-01 | -6.069e-05 | +1.992e-04 | 0.36062 |
| 41.000 | 1 | -1.937e+03 | +2.282e+04 | -5.510e+04 | -1.504e-01 | +2.706e-05 | +1.888e-04 | 0.36086 |
| 41.000 | 2 | -1.991e+03 | +2.766e+04 | -5.944e+04 | -1.515e-01 | +3.329e-05 | +1.746e-04 | 0.36350 |
| 41.000 | 3 | -1.485e+03 | +2.096e+04 | -4.421e+04 | -1.138e-01 | +2.522e-05 | +1.249e-04 | 0.27322 |
| 41.000 | 4 | -1.245e+03 | +1.933e+04 | -3.630e+04 | -9.998e-02 | +2.323e-05 | +7.613e-05 | 0.23995 |
| 41.000 | 5 | -1.185e+03 | +1.892e+04 | -3.433e+04 | -9.651e-02 | +2.273e-05 | +6.393e-05 | 0.23163 |
| 41.000 | 7 | -1.930e+03 | +2.375e+04 | -5.549e+04 | -1.517e-01 | +2.642e-05 | +1.848e-04 | 0.36398 |
| 41.000 | 8 | -1.998e+03 | +2.672e+04 | -5.905e+04 | -1.502e-01 | +3.393e-05 | +1.786e-04 | 0.36038 |
| 82.000 | 1 | -1.289e+03 | +2.282e+04 | -2.238e+03 | -1.483e-01 | +5.418e-05 | +1.712e-04 | 0.35587 |
| 82.000 | 2 | -1.337e+03 | +2.766e+04 | -4.631e+03 | -1.490e-01 | +6.360e-05 | +1.533e-04 | 0.35770 |
| 82.000 | 3 | -9.978e+02 | +2.096e+04 | -3.295e+03 | -1.120e-01 | +4.770e-05 | +1.087e-04 | 0.26885 |
| 82.000 | 4 | -8.391e+02 | +1.933e+04 | -1.903e+03 | -9.838e-02 | +4.130e-05 | +6.121e-05 | 0.23612 |
| 82.000 | 5 | -7.994e+02 | +1.892e+04 | -1.555e+03 | -9.498e-02 | +3.970e-05 | +4.933e-05 | 0.22794 |
| 82.000 | 7 | -1.275e+03 | +2.375e+04 | -3.220e+03 | -1.496e-01 | +5.419e-05 | +1.665e-04 | 0.35902 |
| 82.000 | 8 | -1.351e+03 | +2.672e+04 | -3.649e+03 | -1.477e-01 | +6.359e-05 | +1.580e-04 | 0.35453 |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 123.000 | 1 | -6.537e+02 | +2.282e+04 | +2.456e+04 | -1.461e-01 | +4.362e-05 | +1.536e-04 | 0.35054 |
| 123.000 | 2 | -6.968e+02 | +2.766e+04 | +2.394e+04 | -1.464e-01 | +5.447e-05 | +1.319e-04 | 0.35134 |
| 123.000 | 3 | -5.210e+02 | +2.096e+04 | +1.806e+04 | -1.100e-01 | +4.071e-05 | +9.257e-05 | 0.26410 |
| 123.000 | 4 | -4.427e+02 | +1.933e+04 | +1.625e+04 | -9.669e-02 | +3.451e-05 | +4.630e-05 | 0.23205 |
| 123.000 | 5 | -4.232e+02 | +1.892e+04 | +1.579e+04 | -9.335e-02 | +3.296e-05 | +3.473e-05 | 0.22404 |
| 123.000 | 7 | -6.316e+02 | +2.375e+04 | +2.268e+04 | -1.473e-01 | +4.499e-05 | +1.481e-04 | 0.35364 |
| 123.000 | 8 | -7.189e+02 | +2.672e+04 | +2.582e+04 | -1.451e-01 | +5.310e-05 | +1.373e-04 | 0.34824 |
| 164.000 | 1 | +5.836e+02 | +2.282e+04 | +2.584e+04 | -1.447e-01 | +1.977e-05 | +1.360e-04 | 0.34740 |
| 164.000 | 2 | +5.417e+02 | +2.766e+04 | +2.691e+04 | -1.446e-01 | +3.042e-05 | +1.106e-04 | 0.34711 |
| 164.000 | 3 | +4.016e+02 | +2.096e+04 | +2.035e+04 | -1.087e-01 | +2.253e-05 | +7.640e-05 | 0.26095 |
| 164.000 | 4 | +3.235e+02 | +1.933e+04 | +1.856e+04 | -9.559e-02 | +1.805e-05 | +3.138e-05 | 0.22942 |
| 164.000 | 5 | +3.040e+02 | +1.892e+04 | +1.811e+04 | -9.231e-02 | +1.692e-05 | +2.013e-05 | 0.22154 |
| 164.000 | 7 | +6.204e+02 | +2.375e+04 | +2.274e+04 | -1.460e-01 | +2.351e-05 | +1.298e-04 | 0.35028 |
| 164.000 | 8 | +5.049e+02 | +2.672e+04 | +3.001e+04 | -1.434e-01 | +2.668e-05 | +1.167e-04 | 0.34423 |
| 205.000 | 1 | -5.836e+02 | -2.282e+04 | -1.912e+03 | -1.444e-01 | +6.646e-06 | +1.184e-04 | 0.34656 |
| 205.000 | 2 | -5.417e+02 | -2.766e+04 | -4.697e+03 | -1.439e-01 | +1.547e-05 | +8.923e-05 | 0.34526 |
| 205.000 | 3 | -4.016e+02 | -2.096e+04 | -3.884e+03 | -1.082e-01 | +1.107e-05 | +6.023e-05 | 0.25961 |
| 205.000 | 4 | -3.235e+02 | -1.933e+04 | -5.296e+03 | -9.519e-02 | +6.762e-06 | +1.646e-05 | 0.22845 |
| 205.000 | 5 | -3.040e+02 | -1.892e+04 | -5.649e+03 | -9.194e-02 | +5.685e-06 | +5.523e-06 | 0.22066 |
| 205.000 | 7 | -6.204e+02 | -2.375e+04 | +2.699e+03 | -1.454e-01 | +1.403e-05 | +1.115e-04 | 0.34891 |
| 205.000 | 8 | -5.049e+02 | -2.672e+04 | -9.308e+03 | -1.429e-01 | +8.084e-06 | +9.612e-05 | 0.34291 |

**Trave numero: 31 - Lunghezza: 305.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -1.342e+03 | -2.227e+04 | -3.931e+04 | -1.444e-01 | +6.646e-06 | +1.184e-04 | 0.34656 |
| 0.000 | 2 | -1.293e+03 | -2.697e+04 | -3.311e+04 | -1.439e-01 | +1.547e-05 | +8.923e-05 | 0.34526 |
| 0.000 | 3 | -9.617e+02 | -2.050e+04 | -2.429e+04 | -1.082e-01 | +1.107e-05 | +6.023e-05 | 0.25961 |
| 0.000 | 4 | -7.917e+02 | -1.923e+04 | -1.814e+04 | -9.519e-02 | +6.762e-06 | +1.646e-05 | 0.22845 |
| 0.000 | 5 | -7.492e+02 | -1.891e+04 | -1.660e+04 | -9.194e-02 | +5.685e-06 | +5.523e-06 | 0.22066 |
| 0.000 | 7 | -1.341e+03 | -2.417e+04 | -3.893e+04 | -1.454e-01 | +1.403e-05 | +1.115e-04 | 0.34891 |
| 0.000 | 8 | -1.294e+03 | -2.506e+04 | -3.348e+04 | -1.429e-01 | +8.084e-06 | +9.612e-05 | 0.34291 |
| 61.000 | 1 | -1.342e+03 | -2.227e+04 | +4.255e+04 | -1.431e-01 | +4.364e-06 | +1.439e-04 | 0.34344 |
| 61.000 | 2 | -1.293e+03 | -2.697e+04 | +4.574e+04 | -1.423e-01 | +6.575e-06 | +1.202e-04 | 0.34142 |
| 61.000 | 3 | -9.617e+02 | -2.050e+04 | +3.438e+04 | -1.070e-01 | +3.968e-06 | +8.376e-05 | 0.25685 |
| 61.000 | 4 | -7.917e+02 | -1.923e+04 | +3.015e+04 | -9.446e-02 | -1.696e-06 | +3.854e-05 | 0.22671 |
| 61.000 | 5 | -7.492e+02 | -1.891e+04 | +2.910e+04 | -9.132e-02 | -3.113e-06 | +2.723e-05 | 0.21918 |
| 61.000 | 7 | -1.341e+03 | -2.417e+04 | +4.284e+04 | -1.436e-01 | +1.128e-05 | +1.392e-04 | 0.34474 |
| 61.000 | 8 | -1.294e+03 | -2.506e+04 | +4.545e+04 | -1.417e-01 | -3.420e-07 | +1.249e-04 | 0.34010 |
| 122.000 | 1 | +4.743e+02 | -2.227e+04 | +6.950e+04 | -1.449e-01 | -7.450e-05 | +1.695e-04 | 0.34781 |
| 122.000 | 2 | +5.087e+02 | -2.697e+04 | +7.014e+04 | -1.441e-01 | -7.498e-05 | +1.512e-04 | 0.34574 |
| 122.000 | 3 | +3.818e+02 | -2.050e+04 | +5.244e+04 | -1.084e-01 | -5.713e-05 | +1.073e-04 | 0.26021 |
| 122.000 | 4 | +3.324e+02 | -1.923e+04 | +4.457e+04 | -9.600e-02 | -5.429e-05 | +6.061e-05 | 0.23040 |
| 122.000 | 5 | +3.200e+02 | -1.891e+04 | +4.261e+04 | -9.290e-02 | -5.358e-05 | +4.894e-05 | 0.22295 |
| 122.000 | 7 | +4.816e+02 | -2.417e+04 | +6.942e+04 | -1.451e-01 | -6.773e-05 | +1.670e-04 | 0.34812 |
| 122.000 | 8 | +5.014e+02 | -2.506e+04 | +7.022e+04 | -1.439e-01 | -8.175e-05 | +1.537e-04 | 0.34541 |
| 183.000 | 1 | +1.454e+03 | -2.227e+04 | +4.056e+04 | -1.522e-01 | -1.520e-04 | +1.951e-04 | 0.36518 |
| 183.000 | 2 | +1.481e+03 | -2.697e+04 | +3.911e+04 | -1.513e-01 | -1.519e-04 | +1.821e-04 | 0.36322 |
| 183.000 | 3 | +1.108e+03 | -2.050e+04 | +2.915e+04 | -1.139e-01 | -1.146e-04 | +1.308e-04 | 0.27346 |
| 183.000 | 4 | +9.453e+02 | -1.923e+04 | +2.430e+04 | -1.010e-01 | -1.028e-04 | +8.269e-05 | 0.24247 |
| 183.000 | 5 | +9.046e+02 | -1.891e+04 | +2.309e+04 | -9.780e-02 | -9.982e-05 | +7.065e-05 | 0.23473 |
| 183.000 | 7 | +1.459e+03 | -2.417e+04 | +4.004e+04 | -1.519e-01 | -1.448e-04 | +1.947e-04 | 0.36451 |
| 183.000 | 8 | +1.476e+03 | -2.506e+04 | +3.963e+04 | -1.516e-01 | -1.591e-04 | +1.824e-04 | 0.36391 |
| 244.000 | 1 | +2.523e+03 | -2.227e+04 | -4.814e+04 | -1.623e-01 | -1.466e-04 | +2.206e-04 | 0.38957 |
| 244.000 | 2 | +2.542e+03 | -2.697e+04 | -5.125e+04 | -1.614e-01 | -1.433e-04 | +2.131e-04 | 0.38738 |
| 244.000 | 3 | +1.901e+03 | -2.050e+04 | -3.844e+04 | -1.215e-01 | -1.080e-04 | +1.544e-04 | 0.29165 |
| 244.000 | 4 | +1.618e+03 | -1.923e+04 | -3.336e+04 | -1.078e-01 | -9.639e-05 | +1.048e-04 | 0.25870 |
| 244.000 | 5 | +1.547e+03 | -1.891e+04 | -3.210e+04 | -1.044e-01 | -9.348e-05 | +9.236e-05 | 0.25044 |
| 244.000 | 7 | +2.521e+03 | -2.417e+04 | -4.895e+04 | -1.616e-01 | -1.385e-04 | +2.225e-04 | 0.38777 |
| 244.000 | 8 | +2.544e+03 | -2.506e+04 | -5.043e+04 | -1.622e-01 | -1.515e-04 | +2.112e-04 | 0.38918 |
| 305.000 | 1 | -2.523e+03 | +2.227e+04 | +2.020e+05 | -1.677e-01 | +2.946e-05 | +2.462e-04 | 0.40250 |
| 305.000 | 2 | -2.542e+03 | +2.697e+04 | +2.063e+05 | -1.665e-01 | +3.795e-05 | +2.440e-04 | 0.39950 |
| 305.000 | 3 | -1.901e+03 | +2.050e+04 | +1.544e+05 | -1.253e-01 | +2.771e-05 | +1.779e-04 | 0.30082 |
| 305.000 | 4 | -1.618e+03 | +1.923e+04 | +1.320e+05 | -1.113e-01 | +2.003e-05 | +1.268e-04 | 0.26707 |
| 305.000 | 5 | -1.547e+03 | +1.891e+04 | +1.264e+05 | -1.078e-01 | +1.810e-05 | +1.141e-04 | 0.25862 |
| 305.000 | 7 | -2.521e+03 | +2.417e+04 | +2.028e+05 | -1.664e-01 | +3.867e-05 | +2.502e-04 | 0.39943 |
| 305.000 | 8 | -2.544e+03 | +2.506e+04 | +2.056e+05 | -1.677e-01 | +2.874e-05 | +2.400e-04 | 0.40258 |

**Trave numero: 32 - Lunghezza: 365.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -2.500e+03 | +3.602e+04 | -2.155e+05 | -1.677e-01 | +2.946e-05 | +2.462e-04 | 0.40250 |
| 0.000 | 2 | -2.450e+03 | +3.588e+04 | -2.075e+05 | -1.665e-01 | +3.795e-05 | +2.440e-04 | 0.39950 |
| 0.000 | 3 | -1.832e+03 | +2.639e+04 | -1.550e+05 | -1.253e-01 | +2.771e-05 | +1.779e-04 | 0.30082 |
| 0.000 | 4 | -1.561e+03 | +2.009e+04 | -1.311e+05 | -1.113e-01 | +2.003e-05 | +1.268e-04 | 0.26707 |
| 0.000 | 5 | -1.494e+03 | +1.852e+04 | -1.251e+05 | -1.078e-01 | +1.810e-05 | +1.141e-04 | 0.25862 |
| 0.000 | 7 | -2.452e+03 | +3.622e+04 | -2.085e+05 | -1.664e-01 | +3.867e-05 | +2.502e-04 | 0.39943 |
| 0.000 | 8 | -2.498e+03 | +3.568e+04 | -2.145e+05 | -1.677e-01 | +2.874e-05 | +2.400e-04 | 0.40258 |
| 73.000 | 1 | -2.500e+03 | +3.602e+04 | -3.298e+04 | -1.552e-01 | +2.387e-04 | +1.967e-04 | 0.37248 |
| 73.000 | 2 | -2.450e+03 | +3.588e+04 | -2.869e+04 | -1.538e-01 | +2.369e-04 | +1.947e-04 | 0.36902 |
| 73.000 | 3 | -1.832e+03 | +2.639e+04 | -2.127e+04 | -1.159e-01 | +1.762e-04 | +1.417e-04 | 0.27818 |



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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 73.000 | 4 | -1.561e+03 | +2.009e+04 | -1.709e+04 | -1.036e-01 | +1.448e-04 | +9.924e-05 | 0.24854 |
| 73.000 | 5 | -1.494e+03 | +1.852e+04 | -1.604e+04 | -1.005e-01 | +1.370e-04 | +8.863e-05 | 0.24115 |
| 73.000 | 7 | -2.452e+03 | +3.622e+04 | -2.953e+04 | -1.536e-01 | +2.392e-04 | +2.005e-04 | 0.36869 |
| 73.000 | 8 | -2.498e+03 | +3.568e+04 | -3.215e+04 | -1.553e-01 | +2.365e-04 | +1.910e-04 | 0.37282 |
| 146.000 | 1 | -1.296e+03 | +3.602e+04 | +6.162e+04 | -1.372e-01 | +2.146e-04 | +1.472e-04 | 0.32938 |
| 146.000 | 2 | -1.261e+03 | +3.588e+04 | +6.334e+04 | -1.362e-01 | +2.077e-04 | +1.455e-04 | 0.32678 |
| 146.000 | 3 | -9.426e+02 | +2.639e+04 | +4.754e+04 | -1.028e-01 | +1.541e-04 | +1.054e-04 | 0.24677 |
| 146.000 | 4 | -8.013e+02 | +2.009e+04 | +4.141e+04 | -9.287e-02 | +1.243e-04 | +7.163e-05 | 0.22289 |
| 146.000 | 5 | -7.660e+02 | +1.852e+04 | +3.987e+04 | -9.038e-02 | +1.169e-04 | +6.319e-05 | 0.21691 |
| 146.000 | 7 | -1.264e+03 | +3.622e+04 | +6.276e+04 | -1.358e-01 | +2.112e-04 | +1.507e-04 | 0.32594 |
| 146.000 | 8 | -1.292e+03 | +3.568e+04 | +6.220e+04 | -1.376e-01 | +2.112e-04 | +1.419e-04 | 0.33024 |
| 219.000 | 1 | +6.139e+02 | +3.602e+04 | +8.208e+04 | -1.257e-01 | +9.360e-05 | +9.773e-05 | 0.30166 |
| 219.000 | 2 | +6.325e+02 | +3.588e+04 | +8.206e+04 | -1.252e-01 | +8.527e-05 | +9.616e-05 | 0.30046 |
| 219.000 | 3 | +4.770e+02 | +2.639e+04 | +6.143e+04 | -9.472e-02 | +6.229e-05 | +6.914e-05 | 0.22733 |
| 219.000 | 4 | +4.274e+02 | +2.009e+04 | +5.262e+04 | -8.652e-02 | +4.513e-05 | +4.403e-05 | 0.20764 |
| 219.000 | 5 | +4.150e+02 | +1.852e+04 | +5.042e+04 | -8.447e-02 | +4.084e-05 | +3.775e-05 | 0.20272 |
| 219.000 | 7 | +6.186e+02 | +3.622e+04 | +8.201e+04 | -1.246e-01 | +8.924e-05 | +1.010e-04 | 0.29894 |
| 219.000 | 8 | +6.278e+02 | +3.568e+04 | +8.213e+04 | -1.263e-01 | +8.963e-05 | +9.293e-05 | 0.30317 |
| 292.000 | 1 | +1.482e+03 | +3.602e+04 | +3.726e+04 | -1.232e-01 | -6.913e-06 | +4.824e-05 | 0.29566 |
| 292.000 | 2 | +1.501e+03 | +3.588e+04 | +3.589e+04 | -1.233e-01 | -1.407e-05 | +4.687e-05 | 0.29587 |
| 292.000 | 3 | +1.130e+03 | +2.639e+04 | +2.661e+04 | -9.340e-02 | -1.186e-05 | +3.289e-05 | 0.22416 |
| 292.000 | 4 | +1.003e+03 | +2.009e+04 | +2.142e+04 | -8.596e-02 | -1.722e-05 | +1.643e-05 | 0.20631 |
| 292.000 | 5 | +9.706e+02 | +1.852e+04 | +2.012e+04 | -8.410e-02 | -1.856e-05 | +1.232e-05 | 0.20185 |
| 292.000 | 7 | +1.478e+03 | +3.622e+04 | +3.685e+04 | -1.224e-01 | -1.087e-05 | +5.120e-05 | 0.29369 |
| 292.000 | 8 | +1.505e+03 | +3.568e+04 | +3.630e+04 | -1.241e-01 | -1.012e-05 | +4.391e-05 | 0.29784 |
| 365.000 | 1 | -1.482e+03 | -3.602e+04 | +7.092e+04 | -1.243e-01 | +2.144e-05 | -1.240e-06 | 0.29825 |
| 365.000 | 2 | -1.501e+03 | -3.588e+04 | +7.370e+04 | -1.248e-01 | +1.778e-05 | -2.428e-06 | 0.29945 |
| 365.000 | 3 | -1.130e+03 | -2.639e+04 | +5.590e+04 | -9.459e-02 | +1.282e-05 | -3.368e-06 | 0.22702 |
| 365.000 | 4 | -1.003e+03 | -2.009e+04 | +5.177e+04 | -8.738e-02 | +8.343e-06 | -1.117e-05 | 0.20970 |
| 365.000 | 5 | -9.706e+02 | -1.852e+04 | +5.074e+04 | -8.557e-02 | +7.225e-06 | -1.312e-05 | 0.20538 |
| 365.000 | 7 | -1.478e+03 | -3.622e+04 | +7.104e+04 | -1.237e-01 | +1.793e-05 | +1.445e-06 | 0.29693 |
| 365.000 | 8 | -1.505e+03 | -3.568e+04 | +7.358e+04 | -1.253e-01 | +2.128e-05 | -5.112e-06 | 0.30079 |

**Trave numero: 33 - Lunghezza: 365.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -1.701e+03 | -1.264e+04 | -1.040e+05 | -1.243e-01 | +2.144e-05 | -1.240e-06 | 0.29825 |
| 0.000 | 2 | -1.666e+03 | -1.646e+04 | -9.452e+04 | -1.248e-01 | +1.778e-05 | -2.428e-06 | 0.29945 |
| 0.000 | 3 | -1.253e+03 | -1.226e+04 | -7.116e+04 | -9.459e-02 | +1.282e-05 | -3.368e-06 | 0.22702 |
| 0.000 | 4 | -1.109e+03 | -1.016e+04 | -6.313e+04 | -8.738e-02 | +8.343e-06 | -1.117e-05 | 0.20970 |
| 0.000 | 5 | -1.074e+03 | -9.635e+03 | -6.112e+04 | -8.557e-02 | +7.225e-06 | -1.312e-05 | 0.20538 |
| 0.000 | 7 | -1.675e+03 | -1.264e+04 | -1.020e+05 | -1.237e-01 | +1.793e-05 | +1.445e-06 | 0.29693 |
| 0.000 | 8 | -1.691e+03 | -1.646e+04 | -9.651e+04 | -1.253e-01 | +2.128e-05 | -5.112e-06 | 0.30079 |
| 73.000 | 1 | -1.701e+03 | -1.264e+04 | +2.015e+04 | -1.183e-01 | +9.206e-05 | +1.612e-05 | 0.28387 |
| 73.000 | 2 | -1.666e+03 | -1.646e+04 | +2.706e+04 | -1.196e-01 | +7.459e-05 | +2.019e-05 | 0.28702 |
| 73.000 | 3 | -1.253e+03 | -1.226e+04 | +2.034e+04 | -9.073e-02 | +5.562e-05 | +1.348e-05 | 0.21775 |
| 73.000 | 4 | -1.109e+03 | -1.016e+04 | +1.786e+04 | -8.417e-02 | +4.647e-05 | +2.787e-06 | 0.20201 |
| 73.000 | 5 | -1.074e+03 | -9.635e+03 | +1.724e+04 | -8.253e-02 | +4.418e-05 | +1.146e-07 | 0.19807 |
| 73.000 | 7 | -1.675e+03 | -1.264e+04 | +2.025e+04 | -1.181e-01 | +8.679e-05 | +1.880e-05 | 0.28337 |
| 73.000 | 8 | -1.691e+03 | -1.646e+04 | +2.696e+04 | -1.198e-01 | +7.986e-05 | +1.751e-05 | 0.28752 |
| 146.000 | 1 | -8.844e+02 | -1.264e+04 | +8.472e+04 | -1.138e-01 | +3.727e-06 | +3.348e-05 | 0.27317 |
| 146.000 | 2 | -8.354e+02 | -1.646e+04 | +8.805e+04 | -1.168e-01 | -2.237e-05 | +4.281e-05 | 0.28027 |
| 146.000 | 3 | -6.282e+02 | -1.226e+04 | +6.620e+04 | -8.865e-02 | -1.728e-05 | +3.032e-05 | 0.21276 |
| 146.000 | 4 | -5.532e+02 | -1.016e+04 | +5.825e+04 | -8.252e-02 | -1.763e-05 | +1.675e-05 | 0.19804 |
| 146.000 | 5 | -5.344e+02 | -9.635e+03 | +5.626e+04 | -8.098e-02 | -1.772e-05 | +1.335e-05 | 0.19436 |
| 146.000 | 7 | -8.607e+02 | -1.264e+04 | +8.308e+04 | -1.140e-01 | -2.497e-07 | +3.617e-05 | 0.27355 |
| 146.000 | 8 | -8.592e+02 | -1.646e+04 | +8.969e+04 | -1.166e-01 | -1.839e-05 | +4.012e-05 | 0.27989 |
| 219.000 | 1 | +7.078e+02 | -1.264e+04 | +9.311e+04 | -1.189e-01 | -1.461e-04 | +5.084e-05 | 0.28534 |
| 219.000 | 2 | +8.400e+02 | -1.646e+04 | +9.060e+04 | -1.239e-01 | -1.728e-04 | +6.543e-05 | 0.29726 |
| 219.000 | 3 | +6.349e+02 | -1.226e+04 | +6.802e+04 | -9.401e-02 | -1.303e-04 | +4.716e-05 | 0.22562 |
| 219.000 | 4 | +5.760e+02 | -1.016e+04 | +5.929e+04 | -8.740e-02 | -1.166e-04 | +3.070e-05 | 0.20976 |
| 219.000 | 5 | +5.612e+02 | -9.635e+03 | +5.711e+04 | -8.575e-02 | -1.132e-04 | +2.659e-05 | 0.20580 |
| 219.000 | 7 | +7.365e+02 | -1.264e+04 | +8.962e+04 | -1.192e-01 | -1.457e-04 | +5.353e-05 | 0.28610 |
| 219.000 | 8 | +8.113e+02 | -1.646e+04 | +9.409e+04 | -1.235e-01 | -1.732e-04 | +6.274e-05 | 0.29652 |
| 292.000 | 1 | +1.694e+03 | -1.264e+04 | +4.144e+04 | -1.345e-01 | -2.594e-04 | +6.820e-05 | 0.32270 |
| 292.000 | 2 | +1.896e+03 | -1.646e+04 | +2.928e+04 | -1.411e-01 | -2.738e-04 | +8.805e-05 | 0.33859 |
| 292.000 | 3 | +1.431e+03 | -1.226e+04 | +2.167e+04 | -1.070e-01 | -2.059e-04 | +6.401e-05 | 0.25673 |
| 292.000 | 4 | +1.287e+03 | -1.016e+04 | +1.725e+04 | -9.889e-02 | -1.811e-04 | +4.466e-05 | 0.23735 |
| 292.000 | 5 | +1.251e+03 | -9.635e+03 | +1.614e+04 | -9.688e-02 | -1.749e-04 | +3.983e-05 | 0.23250 |
| 292.000 | 7 | +1.723e+03 | -1.264e+04 | +3.585e+04 | -1.345e-01 | -2.514e-04 | +7.089e-05 | 0.32280 |
| 292.000 | 8 | +1.867e+03 | -1.646e+04 | +3.487e+04 | -1.410e-01 | -2.818e-04 | +8.536e-05 | 0.33850 |
| 365.000 | 1 | -1.694e+03 | +1.264e+04 | +8.223e+04 | -1.540e-01 | -2.250e-04 | +8.556e-05 | 0.36955 |
| 365.000 | 2 | -1.896e+03 | +1.646e+04 | +1.091e+05 | -1.607e-01 | -2.066e-04 | +1.107e-04 | 0.38563 |
| 365.000 | 3 | -1.431e+03 | +1.226e+04 | +8.278e+04 | -1.217e-01 | -1.544e-04 | +8.085e-05 | 0.29203 |
| 365.000 | 4 | -1.287e+03 | +1.016e+04 | +7.671e+04 | -1.117e-01 | -1.310e-04 | +5.862e-05 | 0.26806 |
| 365.000 | 5 | -1.251e+03 | +9.635e+03 | +7.519e+04 | -1.092e-01 | -1.252e-04 | +5.306e-05 | 0.26206 |
| 365.000 | 7 | -1.723e+03 | +1.264e+04 | +8.995e+04 | -1.531e-01 | -2.058e-04 | +8.825e-05 | 0.36737 |
| 365.000 | 8 | -1.867e+03 | +1.646e+04 | +1.014e+05 | -1.616e-01 | -2.258e-04 | +1.080e-04 | 0.38782 |



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**Trave numero: 34 - Lunghezza: 365.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -1.783e+03 | +1.392e+04 | -1.511e+04 | -2.069e-01 | +2.076e-04 | +1.115e-04 | 0.49661 |
| 0.000 | 2 | -1.102e+03 | -5.776e+04 | +6.025e+04 | -1.823e-01 | +1.667e-04 | -4.069e-05 | 0.43754 |
| 0.000 | 3 | -8.110e+02 | -4.334e+04 | +4.444e+04 | -1.383e-01 | +1.238e-04 | -2.786e-05 | 0.33187 |
| 0.000 | 4 | -6.202e+02 | -3.765e+04 | +3.451e+04 | -1.281e-01 | +1.006e-04 | -9.971e-06 | 0.30744 |
| 0.000 | 5 | -5.725e+02 | -3.623e+04 | +3.203e+04 | -1.256e-01 | +9.483e-05 | -5.499e-06 | 0.30132 |
| 0.000 | 7 | -1.686e+03 | +1.537e+04 | +2.611e+04 | -2.085e-01 | +2.278e-04 | +1.149e-04 | 0.50040 |
| 0.000 | 8 | -1.199e+03 | -5.922e+04 | +1.902e+04 | -1.807e-01 | +1.466e-04 | -4.413e-05 | 0.43378 |
| 73.000 | 1 | -1.782e+03 | +1.392e+04 | +1.150e+05 | -1.917e-01 | +1.971e-04 | +1.076e-04 | 0.46003 |
| 73.000 | 2 | -1.101e+03 | -5.776e+04 | +1.407e+05 | -1.706e-01 | +1.456e-04 | -2.457e-05 | 0.40949 |
| 73.000 | 3 | -8.110e+02 | -4.334e+04 | +1.036e+05 | -1.296e-01 | +1.082e-04 | -1.576e-05 | 0.31104 |
| 73.000 | 4 | -6.202e+02 | -3.765e+04 | +7.979e+04 | -1.210e-01 | +8.859e-05 | +5.378e-07 | 0.29047 |
| 73.000 | 5 | -5.725e+02 | -3.623e+04 | +7.383e+04 | -1.189e-01 | +8.369e-05 | +4.613e-06 | 0.28534 |
| 73.000 | 7 | -1.686e+03 | +1.537e+04 | +1.492e+05 | -1.921e-01 | +2.093e-04 | +1.106e-04 | 0.46104 |
| 73.000 | 8 | -1.198e+03 | -5.922e+04 | +1.065e+05 | -1.702e-01 | +1.333e-04 | -2.760e-05 | 0.40850 |
| 146.000 | 1 | -1.049e+03 | +1.392e+04 | +1.916e+05 | -1.782e-01 | +1.648e-04 | +1.037e-04 | 0.42766 |
| 146.000 | 2 | -5.895e+02 | -5.776e+04 | +1.837e+05 | -1.611e-01 | +1.114e-04 | -8.446e-06 | 0.38662 |
| 146.000 | 3 | -4.342e+02 | -4.334e+04 | +1.353e+05 | -1.225e-01 | +8.303e-05 | -3.667e-06 | 0.29402 |
| 146.000 | 4 | -3.335e+02 | -3.765e+04 | +1.041e+05 | -1.152e-01 | +6.923e-05 | +1.105e-05 | 0.27643 |
| 146.000 | 5 | -3.084e+02 | -3.623e+04 | +9.633e+04 | -1.133e-01 | +6.577e-05 | +1.473e-05 | 0.27204 |
| 146.000 | 7 | -9.475e+02 | +1.537e+04 | +2.184e+05 | -1.780e-01 | +1.706e-04 | +1.063e-04 | 0.42715 |
| 146.000 | 8 | -6.908e+02 | -5.922e+04 | +1.570e+05 | -1.613e-01 | +1.056e-04 | -1.107e-05 | 0.38712 |
| 219.000 | 1 | -4.571e+02 | +1.392e+04 | +2.250e+05 | -1.676e-01 | +1.210e-04 | +9.981e-05 | 0.40234 |
| 219.000 | 2 | -1.773e+02 | -5.776e+04 | +1.967e+05 | -1.544e-01 | +7.134e-05 | +7.676e-06 | 0.37049 |
| 219.000 | 3 | -1.319e+02 | -4.334e+04 | +1.450e+05 | -1.175e-01 | +5.352e-05 | +8.429e-06 | 0.28198 |
| 219.000 | 4 | -1.081e+02 | -3.765e+04 | +1.120e+05 | -1.109e-01 | +4.647e-05 | +2.156e-05 | 0.26623 |
| 219.000 | 5 | -1.022e+02 | -3.623e+04 | +1.038e+05 | -1.093e-01 | +4.470e-05 | +2.484e-05 | 0.26230 |
| 219.000 | 7 | -3.581e+02 | +1.537e+04 | +2.445e+05 | -1.672e-01 | +1.219e-04 | +1.020e-04 | 0.40130 |
| 219.000 | 8 | -2.763e+02 | -5.922e+04 | +1.771e+05 | -1.548e-01 | +7.042e-05 | +5.454e-06 | 0.37154 |
| 292.000 | 1 | +4.305e+02 | +1.392e+04 | +2.232e+05 | -1.605e-01 | +7.377e-05 | +9.593e-05 | 0.38530 |
| 292.000 | 2 | +4.671e+02 | -5.776e+04 | +1.847e+05 | -1.507e-01 | +3.119e-05 | +2.380e-05 | 0.36161 |
| 292.000 | 3 | +3.379e+02 | -4.334e+04 | +1.364e+05 | -1.147e-01 | +2.391e-05 | +2.052e-05 | 0.27526 |
| 292.000 | 4 | +2.264e+02 | -3.765e+04 | +1.067e+05 | -1.084e-01 | +2.343e-05 | +3.206e-05 | 0.26016 |
| 292.000 | 5 | +1.985e+02 | -3.623e+04 | +9.934e+04 | -1.068e-01 | +2.332e-05 | +3.495e-05 | 0.25637 |
| 292.000 | 7 | +5.213e+02 | +1.537e+04 | +2.359e+05 | -1.602e-01 | +7.131e-05 | +9.774e-05 | 0.38446 |
| 292.000 | 8 | +3.763e+02 | -5.922e+04 | +1.720e+05 | -1.510e-01 | +3.366e-05 | +2.198e-05 | 0.36247 |
| 365.000 | 1 | -4.305e+02 | -1.392e+04 | -1.918e+05 | -1.569e-01 | +3.007e-05 | +9.204e-05 | 0.37646 |
| 365.000 | 2 | -4.671e+02 | +5.776e+04 | -1.506e+05 | -1.498e-01 | -4.102e-06 | +3.992e-05 | 0.35954 |
| 365.000 | 3 | -3.379e+02 | +4.334e+04 | -1.117e+05 | -1.140e-01 | -2.212e-06 | +3.262e-05 | 0.27358 |
| 365.000 | 4 | -2.264e+02 | +3.765e+04 | -9.022e+04 | -1.075e-01 | +2.697e-06 | +4.257e-05 | 0.25800 |
| 365.000 | 5 | -1.985e+02 | +3.623e+04 | -8.485e+04 | -1.059e-01 | +3.925e-06 | +4.506e-05 | 0.25411 |
| 365.000 | 7 | -5.212e+02 | -1.537e+04 | -1.978e+05 | -1.568e-01 | +2.565e-05 | +9.345e-05 | 0.37630 |
| 365.000 | 8 | -3.763e+02 | +5.922e+04 | -1.446e+05 | -1.499e-01 | +3.242e-07 | +3.851e-05 | 0.35974 |

**Trave numero: 35 - Lunghezza: 365.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -2.192e+01 | +1.566e+05 | +1.715e+05 | -1.569e-01 | +3.007e-05 | +9.204e-05 | 0.37646 |
| 0.000 | 2 | +4.158e+01 | +1.334e+05 | +1.519e+05 | -1.498e-01 | -4.102e-06 | +3.992e-05 | 0.35954 |
| 0.000 | 3 | +3.455e+01 | +9.714e+04 | +1.126e+05 | -1.140e-01 | -2.212e-06 | +3.262e-05 | 0.27358 |
| 0.000 | 4 | +4.795e+01 | +6.872e+04 | +9.034e+04 | -1.075e-01 | +2.697e-06 | +4.257e-05 | 0.25800 |
| 0.000 | 5 | +5.135e+01 | +6.162e+04 | +8.478e+04 | -1.059e-01 | +3.925e-06 | +4.506e-05 | 0.25411 |
| 0.000 | 7 | +2.838e+01 | +1.549e+05 | +1.831e+05 | -1.568e-01 | +2.565e-05 | +9.345e-05 | 0.37630 |
| 0.000 | 8 | -8.725e+00 | +1.350e+05 | +1.404e+05 | -1.499e-01 | +3.242e-07 | +3.851e-05 | 0.35974 |
| 73.000 | 1 | +3.367e+02 | +1.566e+05 | +1.731e+05 | -1.560e-01 | -6.217e-06 | +4.834e-05 | 0.37438 |
| 73.000 | 2 | +3.507e+02 | +1.334e+05 | +1.489e+05 | -1.513e-01 | -3.578e-05 | +2.692e-06 | 0.36307 |
| 73.000 | 3 | +2.581e+02 | +9.714e+04 | +1.101e+05 | -1.150e-01 | -2.566e-05 | +5.510e-06 | 0.27605 |
| 73.000 | 4 | +1.978e+02 | +6.872e+04 | +8.684e+04 | -1.080e-01 | -1.596e-05 | +2.339e-05 | 0.25920 |
| 73.000 | 5 | +1.826e+02 | +6.162e+04 | +8.103e+04 | -1.062e-01 | -1.353e-05 | +2.786e-05 | 0.25498 |
| 73.000 | 7 | +3.905e+02 | +1.549e+05 | +1.810e+05 | -1.563e-01 | -1.269e-05 | +5.021e-05 | 0.37517 |
| 73.000 | 8 | +2.969e+02 | +1.350e+05 | +1.410e+05 | -1.509e-01 | -2.931e-05 | +8.201e-07 | 0.36226 |
| 146.000 | 1 | +7.140e+02 | +1.566e+05 | +1.486e+05 | -1.578e-01 | -4.009e-05 | +4.644e-06 | 0.37865 |
| 146.000 | 2 | +6.991e+02 | +1.334e+05 | +1.233e+05 | -1.550e-01 | -6.444e-05 | -3.454e-05 | 0.37207 |
| 146.000 | 3 | +5.102e+02 | +9.714e+04 | +9.123e+04 | -1.177e-01 | -4.685e-05 | -2.160e-05 | 0.28255 |
| 146.000 | 4 | +3.668e+02 | +6.872e+04 | +7.241e+04 | -1.098e-01 | -3.272e-05 | +4.211e-06 | 0.26359 |
| 146.000 | 5 | +3.309e+02 | +6.162e+04 | +6.770e+04 | -1.079e-01 | -2.919e-05 | +1.067e-05 | 0.25884 |
| 146.000 | 7 | +7.769e+02 | +1.549e+05 | +1.525e+05 | -1.586e-01 | -4.780e-05 | +6.977e-06 | 0.38071 |
| 146.000 | 8 | +6.363e+02 | +1.350e+05 | +1.194e+05 | -1.542e-01 | -5.673e-05 | -3.687e-05 | 0.36998 |
| 219.000 | 1 | +1.133e+03 | +1.566e+05 | +9.643e+04 | -1.618e-01 | -6.588e-05 | -3.906e-05 | 0.38837 |
| 219.000 | 2 | +1.106e+03 | +1.334e+05 | +7.228e+04 | -1.607e-01 | -8.503e-05 | -7.176e-05 | 0.38561 |
| 219.000 | 3 | +8.055e+02 | +9.714e+04 | +5.399e+04 | -1.218e-01 | -6.214e-05 | -4.871e-05 | 0.29242 |
| 219.000 | 4 | +5.667e+02 | +6.872e+04 | +4.563e+04 | -1.128e-01 | -4.515e-05 | -1.497e-05 | 0.27065 |
| 219.000 | 5 | +5.070e+02 | +6.162e+04 | +4.354e+04 | -1.105e-01 | -4.090e-05 | -6.533e-06 | 0.26520 |
| 219.000 | 7 | +1.212e+03 | +1.549e+05 | +9.578e+04 | -1.633e-01 | -7.393e-05 | -3.626e-05 | 0.39187 |
| 219.000 | 8 | +1.028e+03 | +1.350e+05 | +7.293e+04 | -1.592e-01 | -7.698e-05 | -7.456e-05 | 0.38210 |
| 292.000 | 1 | +1.612e+03 | +1.566e+05 | +1.366e+04 | -1.673e-01 | -7.747e-05 | -8.275e-05 | 0.40164 |
| 292.000 | 2 | +1.585e+03 | +1.334e+05 | -8.527e+03 | -1.674e-01 | -9.174e-05 | -1.090e-04 | 0.40178 |
| 292.000 | 3 | +1.153e+03 | +9.714e+04 | -4.813e+03 | -1.268e-01 | -6.732e-05 | -7.583e-05 | 0.30427 |



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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 292.000 | 4 | +8.048e+02 | +6.872e+04 | +4.265e+03 | -1.164e-01 | -5.040e-05 | -3.415e-05 | 0.27936 |
| 292.000 | 5 | +7.178e+02 | +6.162e+04 | +6.535e+03 | -1.138e-01 | -4.617e-05 | -2.373e-05 | 0.27314 |
| 292.000 | 7 | +1.711e+03 | +1.549e+05 | +7.288e+03 | -1.694e-01 | -8.479e-05 | -7.950e-05 | 0.40654 |
| 292.000 | 8 | +1.485e+03 | +1.350e+05 | -2.159e+03 | -1.654e-01 | -8.443e-05 | -1.123e-04 | 0.39689 |
| 365.000 | 1 | -1.612e+03 | -1.566e+05 | +1.040e+05 | -1.731e-01 | -6.796e-05 | -1.265e-04 | 0.41542 |
| 365.000 | 2 | -1.586e+03 | -1.334e+05 | +1.243e+05 | -1.740e-01 | -7.776e-05 | -1.462e-04 | 0.41762 |
| 365.000 | 3 | -1.153e+03 | -9.714e+04 | +8.896e+04 | -1.316e-01 | -5.744e-05 | -1.029e-04 | 0.31594 |
| 365.000 | 4 | -8.048e+02 | -6.872e+04 | +5.449e+04 | -1.201e-01 | -4.512e-05 | -5.333e-05 | 0.28824 |
| 365.000 | 5 | -7.178e+02 | -6.162e+04 | +4.587e+04 | -1.172e-01 | -4.203e-05 | -4.093e-05 | 0.28133 |
| 365.000 | 7 | -1.712e+03 | -1.549e+05 | +1.177e+05 | -1.756e-01 | -7.316e-05 | -1.227e-04 | 0.42146 |
| 365.000 | 8 | -1.486e+03 | -1.350e+05 | +1.106e+05 | -1.715e-01 | -7.255e-05 | -1.499e-04 | 0.41158 |
| **Trave numero:** | **36 - Lunghezza:** | **205.00** | | | | | | |
| **Dist.** | **c.c.** | **Fy** | **Mx** | **Mz** | **Spost.Z** | **Rotaz.X** | **Rotaz.Y** | **Press. Suolo** |
| 0.000 | 1 | -1.166e+03 | +4.660e+03 | -1.358e+05 | -1.731e-01 | -6.796e-05 | -1.265e-04 | 0.41542 |
| 0.000 | 2 | -9.548e+02 | +2.149e+04 | -1.420e+05 | -1.740e-01 | -7.776e-05 | -1.462e-04 | 0.41762 |
| 0.000 | 3 | -6.825e+02 | +1.657e+04 | -1.019e+05 | -1.316e-01 | -5.744e-05 | -1.029e-04 | 0.31594 |
| 0.000 | 4 | -4.118e+02 | +1.676e+04 | -6.354e+04 | -1.201e-01 | -4.512e-05 | -5.333e-05 | 0.28824 |
| 0.000 | 5 | -3.441e+02 | +1.681e+04 | -5.395e+04 | -1.172e-01 | -4.203e-05 | -4.093e-05 | 0.28133 |
| 0.000 | 7 | -9.834e+02 | +8.637e+03 | -1.387e+05 | -1.756e-01 | -7.316e-05 | -1.227e-04 | 0.42146 |
| 0.000 | 8 | -1.137e+03 | +1.751e+04 | -1.392e+05 | -1.715e-01 | -7.255e-05 | -1.499e-04 | 0.41158 |
| 41.000 | 1 | -1.166e+03 | +4.660e+03 | -8.802e+04 | -1.755e-01 | -5.472e-05 | -1.272e-04 | 0.42113 |
| 41.000 | 2 | -9.551e+02 | +2.149e+04 | -1.029e+05 | -1.768e-01 | -6.328e-05 | -1.496e-04 | 0.42432 |
| 41.000 | 3 | -6.825e+02 | +1.657e+04 | -7.391e+04 | -1.337e-01 | -4.705e-05 | -1.055e-04 | 0.32088 |
| 41.000 | 4 | -4.118e+02 | +1.676e+04 | -4.665e+04 | -1.218e-01 | -3.860e-05 | -5.596e-05 | 0.29225 |
| 41.000 | 5 | -3.441e+02 | +1.681e+04 | -3.984e+04 | -1.188e-01 | -3.649e-05 | -4.356e-05 | 0.28510 |
| 41.000 | 7 | -9.831e+02 | +8.637e+03 | -9.838e+04 | -1.782e-01 | -5.915e-05 | -1.241e-04 | 0.42770 |
| 41.000 | 8 | -1.137e+03 | +1.751e+04 | -9.254e+04 | -1.741e-01 | -5.885e-05 | -1.527e-04 | 0.41774 |
| 82.000 | 1 | -8.495e+02 | +4.660e+03 | -5.319e+04 | -1.775e-01 | -4.637e-05 | -1.279e-04 | 0.42588 |
| 82.000 | 2 | -6.306e+02 | +2.149e+04 | -7.705e+04 | -1.791e-01 | -5.264e-05 | -1.530e-04 | 0.42984 |
| 82.000 | 3 | -4.465e+02 | +1.657e+04 | -5.560e+04 | -1.354e-01 | -3.939e-05 | -1.081e-04 | 0.32503 |
| 82.000 | 4 | -2.464e+02 | +1.676e+04 | -3.655e+04 | -1.232e-01 | -3.368e-05 | -5.859e-05 | 0.29575 |
| 82.000 | 5 | -1.964e+02 | +1.681e+04 | -3.179e+04 | -1.202e-01 | -3.225e-05 | -4.620e-05 | 0.28843 |
| 82.000 | 7 | -6.509e+02 | +8.637e+03 | -7.169e+04 | -1.804e-01 | -4.909e-05 | -1.254e-04 | 0.43286 |
| 82.000 | 8 | -8.292e+02 | +1.751e+04 | -5.855e+04 | -1.762e-01 | -4.992e-05 | -1.554e-04 | 0.42286 |
| 123.000 | 1 | -5.214e+02 | +4.660e+03 | -3.182e+04 | -1.792e-01 | -4.134e-05 | -1.286e-04 | 0.43006 |
| 123.000 | 2 | -2.927e+02 | +2.149e+04 | -6.505e+04 | -1.811e-01 | -4.423e-05 | -1.563e-04 | 0.43454 |
| 123.000 | 3 | -2.005e+02 | +1.657e+04 | -4.738e+04 | -1.369e-01 | -3.330e-05 | -1.107e-04 | 0.32854 |
| 123.000 | 4 | +1.094e+02 | +1.676e+04 | -3.359e+04 | -1.245e-01 | -2.953e-05 | -6.121e-05 | 0.29882 |
| 123.000 | 5 | +1.231e+02 | +1.681e+04 | -3.014e+04 | -1.214e-01 | -2.859e-05 | -4.884e-05 | 0.29141 |
| 123.000 | 7 | -3.056e+02 | +8.637e+03 | -5.917e+04 | -1.822e-01 | -4.135e-05 | -1.268e-04 | 0.43723 |
| 123.000 | 8 | -5.085e+02 | +1.751e+04 | -3.770e+04 | -1.781e-01 | -4.422e-05 | -1.582e-04 | 0.42737 |
| 164.000 | 1 | -1.830e+02 | +4.660e+03 | -2.432e+04 | -1.808e-01 | -3.802e-05 | -1.294e-04 | 0.43390 |
| 164.000 | 2 | +4.160e+02 | +2.149e+04 | -6.738e+04 | -1.827e-01 | -3.640e-05 | -1.597e-04 | 0.43853 |
| 164.000 | 3 | +3.164e+02 | +1.657e+04 | -4.961e+04 | -1.382e-01 | -2.756e-05 | -1.133e-04 | 0.33156 |
| 164.000 | 4 | +2.976e+02 | +1.676e+04 | -3.807e+04 | -1.257e-01 | -2.530e-05 | -6.384e-05 | 0.30156 |
| 164.000 | 5 | +2.930e+02 | +1.681e+04 | -3.519e+04 | -1.225e-01 | -2.473e-05 | -5.147e-05 | 0.29407 |
| 164.000 | 7 | +4.157e+02 | +8.637e+03 | -6.123e+04 | -1.837e-01 | -3.423e-05 | -1.282e-04 | 0.44095 |
| 164.000 | 8 | -1.767e+02 | +1.751e+04 | -3.046e+04 | -1.798e-01 | -4.019e-05 | -1.609e-04 | 0.43147 |
| 205.000 | 1 | -1.649e+02 | -4.660e+03 | +3.108e+04 | -1.823e-01 | -3.475e-05 | -1.301e-04 | 0.43752 |
| 205.000 | 2 | -4.159e+02 | -2.149e+04 | +8.443e+04 | -1.841e-01 | -2.742e-05 | -1.631e-04 | 0.44177 |
| 205.000 | 3 | -3.164e+02 | -1.657e+04 | +6.258e+04 | -1.392e-01 | -2.093e-05 | -1.159e-04 | 0.33403 |
| 205.000 | 4 | -2.976e+02 | -1.676e+04 | +5.027e+04 | -1.266e-01 | -2.007e-05 | -6.647e-05 | 0.30386 |
| 205.000 | 5 | -2.930e+02 | -1.681e+04 | +4.720e+04 | -1.235e-01 | -1.986e-05 | -5.411e-05 | 0.29633 |
| 205.000 | 7 | -4.156e+02 | -8.637e+03 | +7.828e+04 | -1.850e-01 | -2.598e-05 | -1.295e-04 | 0.44402 |
| 205.000 | 8 | -1.652e+02 | -1.751e+04 | +3.723e+04 | -1.814e-01 | -3.619e-05 | -1.637e-04 | 0.43526 |
| **Trave numero:** | **37 - Lunghezza:** | **305.00** | | | | | | |
| **Dist.** | **c.c.** | **Fy** | **Mx** | **Mz** | **Spost.Z** | **Rotaz.X** | **Rotaz.Y** | **Press. Suolo** |
| 0.000 | 1 | -2.761e+02 | +2.847e+04 | -3.134e+04 | -1.823e-01 | -3.475e-05 | -1.301e-04 | 0.43752 |
| 0.000 | 2 | -5.473e+02 | +2.364e+04 | -8.079e+04 | -1.841e-01 | -2.742e-05 | -1.631e-04 | 0.44177 |
| 0.000 | 3 | -3.980e+02 | +1.810e+04 | -5.987e+04 | -1.392e-01 | -2.093e-05 | -1.159e-04 | 0.33403 |
| 0.000 | 4 | -2.785e+02 | +1.765e+04 | -4.803e+04 | -1.266e-01 | -2.007e-05 | -6.647e-05 | 0.30386 |
| 0.000 | 5 | -2.486e+02 | +1.754e+04 | -4.507e+04 | -1.235e-01 | -1.986e-05 | -5.411e-05 | 0.29633 |
| 0.000 | 7 | -5.620e+02 | +3.244e+04 | -7.476e+04 | -1.850e-01 | -2.598e-05 | -1.295e-04 | 0.44402 |
| 0.000 | 8 | -2.615e+02 | +1.967e+04 | -3.736e+04 | -1.814e-01 | -3.619e-05 | -1.637e-04 | 0.43526 |
| 61.000 | 1 | -2.761e+02 | +2.847e+04 | -1.450e+04 | -1.842e-01 | -3.072e-05 | -1.367e-04 | 0.44220 |
| 61.000 | 2 | -5.474e+02 | +2.364e+04 | -4.740e+04 | -1.853e-01 | -1.615e-05 | -1.686e-04 | 0.44470 |
| 61.000 | 3 | -3.980e+02 | +1.810e+04 | -3.559e+04 | -1.401e-01 | -1.253e-05 | -1.201e-04 | 0.33629 |
| 61.000 | 4 | -2.785e+02 | +1.765e+04 | -3.104e+04 | -1.276e-01 | -1.312e-05 | -7.059e-05 | 0.30617 |
| 61.000 | 5 | -2.486e+02 | +1.754e+04 | -2.990e+04 | -1.244e-01 | -1.326e-05 | -5.820e-05 | 0.29863 |
| 61.000 | 7 | -5.620e+02 | +3.244e+04 | -4.048e+04 | -1.862e-01 | -1.584e-05 | -1.371e-04 | 0.44683 |
| 61.000 | 8 | +2.786e+02 | +1.967e+04 | -2.141e+04 | -1.834e-01 | -3.102e-05 | -1.683e-04 | 0.44006 |
| 122.000 | 1 | +8.356e+02 | +2.847e+04 | -3.107e+04 | -1.860e-01 | -2.671e-05 | -1.434e-04 | 0.44652 |
| 122.000 | 2 | +5.732e+02 | +2.364e+04 | -4.799e+04 | -1.860e-01 | -7.756e-06 | -1.741e-04 | 0.44645 |
| 122.000 | 3 | +4.217e+02 | +1.810e+04 | -3.615e+04 | -1.407e-01 | -6.222e-06 | -1.244e-04 | 0.33766 |
| 122.000 | 4 | +3.212e+02 | +1.765e+04 | -3.217e+04 | -1.282e-01 | -7.554e-06 | -7.470e-05 | 0.30770 |
| 122.000 | 5 | +2.961e+02 | +1.754e+04 | -3.118e+04 | -1.251e-01 | -7.886e-06 | -6.229e-05 | 0.30019 |
| 122.000 | 7 | +5.743e+02 | +3.244e+04 | -4.066e+04 | -1.869e-01 | -8.704e-06 | -1.446e-04 | 0.44863 |



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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 122.000 | 8 | +8.346e+02 | +1.967e+04 | -3.841e+04 | -1.851e-01 | -2.576e-05 | -1.728e-04 | 0.44436 |
| 183.000 | 1 | +1.413e+03 | +2.847e+04 | -8.204e+04 | -1.875e-01 | -1.676e-05 | -1.500e-04 | 0.45010 |
| 183.000 | 2 | +1.139e+03 | +2.364e+04 | -8.295e+04 | -1.863e-01 | +3.763e-06 | -1.796e-04 | 0.44702 |
| 183.000 | 3 | +8.358e+02 | +1.810e+04 | -6.187e+04 | -1.409e-01 | +2.401e-06 | -1.286e-04 | 0.33814 |
| 183.000 | 4 | +6.265e+02 | +1.765e+04 | -5.177e+04 | -1.285e-01 | -1.683e-07 | -7.882e-05 | 0.30840 |
| 183.000 | 5 | +5.742e+02 | +1.754e+04 | -4.925e+04 | -1.254e-01 | -8.106e-07 | -6.638e-05 | 0.30098 |
| 183.000 | 7 | +1.149e+03 | +3.244e+04 | -7.569e+04 | -1.873e-01 | +1.532e-06 | -1.522e-04 | 0.44942 |
| 183.000 | 8 | +1.403e+03 | +1.967e+04 | -8.931e+04 | -1.865e-01 | -1.452e-05 | -1.774e-04 | 0.44770 |
| 244.000 | 1 | +1.995e+03 | +2.847e+04 | -1.682e+05 | -1.882e-01 | +5.259e-06 | -1.567e-04 | 0.45161 |
| 244.000 | 2 | +1.699e+03 | +2.364e+04 | -1.524e+05 | -1.856e-01 | +2.447e-05 | -1.851e-04 | 0.44549 |
| 244.000 | 3 | +1.246e+03 | +1.810e+04 | -1.128e+05 | -1.404e-01 | +1.777e-05 | -1.328e-04 | 0.33706 |
| 244.000 | 4 | +9.298e+02 | +1.765e+04 | -8.999e+04 | -1.283e-01 | +1.230e-05 | -8.294e-05 | 0.30782 |
| 244.000 | 5 | +8.505e+02 | +1.754e+04 | -8.427e+04 | -1.252e-01 | +1.094e-05 | -7.047e-05 | 0.30050 |
| 244.000 | 7 | +1.719e+03 | +3.244e+04 | -1.457e+05 | -1.868e-01 | +2.101e-05 | -1.598e-04 | 0.44832 |
| 244.000 | 8 | +1.975e+03 | +1.967e+04 | -1.749e+05 | -1.870e-01 | +8.716e-06 | -1.820e-04 | 0.44878 |
| 305.000 | 1 | -1.994e+03 | -2.847e+04 | +2.899e+05 | -1.870e-01 | +4.556e-05 | -1.633e-04 | 0.44882 |
| 305.000 | 2 | -1.698e+03 | -2.364e+04 | +2.560e+05 | -1.834e-01 | +6.040e-05 | -1.906e-04 | 0.44006 |
| 305.000 | 3 | -1.246e+03 | -1.810e+04 | +1.888e+05 | -1.388e-01 | +4.431e-05 | -1.370e-04 | 0.33310 |
| 305.000 | 4 | -9.297e+02 | -1.765e+04 | +1.467e+05 | -1.270e-01 | +3.313e-05 | -8.706e-05 | 0.30492 |
| 305.000 | 5 | -8.505e+02 | -1.754e+04 | +1.362e+05 | -1.241e-01 | +3.033e-05 | -7.456e-05 | 0.29789 |
| 305.000 | 7 | -1.718e+03 | -3.244e+04 | +2.506e+05 | -1.848e-01 | +5.588e-05 | -1.673e-04 | 0.44350 |
| 305.000 | 8 | -1.974e+03 | -1.967e+04 | +2.953e+05 | -1.856e-01 | +5.008e-05 | -1.866e-04 | 0.44542 |

**Trave numero: 38 - Lunghezza: 365.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -2.464e+03 | -1.837e+05 | -2.799e+05 | -1.870e-01 | +4.556e-05 | -1.633e-04 | 0.44882 |
| 0.000 | 2 | -2.147e+03 | -1.623e+05 | -2.420e+05 | -1.834e-01 | +6.040e-05 | -1.906e-04 | 0.44006 |
| 0.000 | 3 | -1.581e+03 | -1.193e+05 | -1.787e+05 | -1.388e-01 | +4.431e-05 | -1.370e-04 | 0.33310 |
| 0.000 | 4 | -1.214e+03 | -9.038e+04 | -1.397e+05 | -1.270e-01 | +3.313e-05 | -8.706e-05 | 0.30492 |
| 0.000 | 5 | -1.122e+03 | -8.317e+04 | -1.300e+05 | -1.241e-01 | +3.033e-05 | -7.456e-05 | 0.29789 |
| 0.000 | 7 | -2.265e+03 | -1.840e+05 | -2.340e+05 | -1.848e-01 | +5.588e-05 | -1.673e-04 | 0.44350 |
| 0.000 | 8 | -2.346e+03 | -1.619e+05 | -2.879e+05 | -1.856e-01 | +5.008e-05 | -1.866e-04 | 0.44542 |
| 73.000 | 1 | -2.464e+03 | -1.837e+05 | -1.001e+05 | -1.816e-01 | +8.556e-05 | -1.121e-04 | 0.43579 |
| 73.000 | 2 | -2.147e+03 | -1.623e+05 | -8.530e+04 | -1.771e-01 | +9.487e-05 | -1.453e-04 | 0.42511 |
| 73.000 | 3 | -1.581e+03 | -1.193e+05 | -6.328e+04 | -1.342e-01 | +6.979e-05 | -1.037e-04 | 0.32210 |
| 73.000 | 4 | -1.214e+03 | -9.038e+04 | -5.109e+04 | -1.236e-01 | +5.322e-05 | -6.183e-05 | 0.29659 |
| 73.000 | 5 | -1.123e+03 | -8.317e+04 | -4.804e+04 | -1.209e-01 | +4.907e-05 | -5.135e-05 | 0.29023 |
| 73.000 | 7 | -2.265e+03 | -1.840e+05 | -6.870e+04 | -1.789e-01 | +8.776e-05 | -1.160e-04 | 0.42948 |
| 73.000 | 8 | -2.346e+03 | -1.619e+05 | -1.167e+05 | -1.798e-01 | +9.267e-05 | -1.414e-04 | 0.43142 |
| 146.000 | 1 | -1.836e+03 | -1.837e+05 | +3.401e+04 | -1.746e-01 | +9.252e-05 | -6.079e-05 | 0.41902 |
| 146.000 | 2 | -1.566e+03 | -1.623e+05 | +2.903e+04 | -1.696e-01 | +1.008e-04 | -1.001e-04 | 0.40699 |
| 146.000 | 3 | -1.156e+03 | -1.193e+05 | +2.109e+04 | -1.286e-01 | +7.423e-05 | -7.046e-05 | 0.30876 |
| 146.000 | 4 | -9.008e+02 | -9.038e+04 | +1.465e+04 | -1.193e-01 | +5.705e-05 | -3.660e-05 | 0.28637 |
| 146.000 | 5 | -8.368e+02 | -8.317e+04 | +1.304e+04 | -1.170e-01 | +5.276e-05 | -2.814e-05 | 0.28078 |
| 146.000 | 7 | -1.665e+03 | -1.840e+05 | +5.285e+04 | -1.720e-01 | +8.943e-05 | -6.461e-05 | 0.41290 |
| 146.000 | 8 | -1.737e+03 | -1.619e+05 | +1.018e+04 | -1.721e-01 | +1.039e-04 | -9.624e-05 | 0.41311 |
| 219.000 | 1 | -1.282e+03 | -1.837e+05 | +1.276e+05 | -1.681e-01 | +7.550e-05 | -9.529e-06 | 0.40349 |
| 219.000 | 2 | -1.064e+03 | -1.623e+05 | +1.067e+05 | -1.625e-01 | +8.650e-05 | -5.478e-05 | 0.38990 |
| 219.000 | 3 | -7.888e+02 | -1.193e+05 | +7.867e+04 | -1.234e-01 | +6.373e-05 | -3.717e-05 | 0.29618 |
| 219.000 | 4 | -6.318e+02 | -9.038e+04 | +6.077e+04 | -1.153e-01 | +4.911e-05 | -1.138e-05 | 0.27667 |
| 219.000 | 5 | -5.925e+02 | -8.317e+04 | +5.629e+04 | -1.133e-01 | +4.546e-05 | -4.928e-06 | 0.27180 |
| 219.000 | 7 | -1.137e+03 | -1.840e+05 | +1.359e+05 | -1.659e-01 | +6.955e-05 | -1.325e-05 | 0.39826 |
| 219.000 | 8 | -1.209e+03 | -1.619e+05 | +9.846e+04 | -1.646e-01 | +9.244e-05 | -5.105e-05 | 0.39514 |
| 292.000 | 1 | -7.965e+02 | -1.837e+05 | +1.857e+05 | -1.636e-01 | +4.251e-05 | +4.173e-05 | 0.39266 |
| 292.000 | 2 | -6.381e+02 | -1.623e+05 | +1.533e+05 | -1.570e-01 | +5.912e-05 | -9.491e-06 | 0.37675 |
| 292.000 | 3 | -4.770e+02 | -1.193e+05 | +1.135e+05 | -1.194e-01 | +4.350e-05 | -3.890e-06 | 0.28649 |
| 292.000 | 4 | -4.055e+02 | -9.038e+04 | +9.036e+04 | -1.122e-01 | +3.320e-05 | +1.385e-05 | 0.26921 |
| 292.000 | 5 | -3.875e+02 | -8.317e+04 | +8.458e+04 | -1.104e-01 | +3.063e-05 | +1.828e-05 | 0.26489 |
| 292.000 | 7 | -6.745e+02 | -1.840e+05 | +1.851e+05 | -1.619e-01 | +3.575e-05 | +3.811e-05 | 0.38861 |
| 292.000 | 8 | -7.597e+02 | -1.619e+05 | +1.539e+05 | -1.587e-01 | +6.587e-05 | -5.872e-06 | 0.38078 |
| 365.000 | 1 | +3.574e+02 | +1.837e+05 | -2.118e+05 | -1.619e-01 | +6.539e-07 | +9.299e-05 | 0.38866 |
| 365.000 | 2 | +2.691e+02 | +1.623e+05 | -1.730e+05 | -1.539e-01 | +2.476e-05 | +3.579e-05 | 0.36924 |
| 365.000 | 3 | +2.078e+02 | +1.193e+05 | -1.287e+05 | -1.171e-01 | +1.800e-05 | +2.939e-05 | 0.28097 |
| 365.000 | 4 | +2.118e+02 | +9.038e+04 | -1.058e+05 | -1.104e-01 | +1.254e-05 | +3.907e-05 | 0.26506 |
| 365.000 | 5 | +2.128e+02 | +8.317e+04 | -1.001e+05 | -1.088e-01 | +1.118e-05 | +4.150e-05 | 0.26110 |
| 365.000 | 7 | +2.535e+02 | +1.840e+05 | -2.036e+05 | -1.607e-01 | -5.178e-06 | +8.947e-05 | 0.38578 |
| 365.000 | 8 | +3.730e+02 | +1.619e+05 | -1.811e+05 | -1.550e-01 | +3.060e-05 | +3.931e-05 | 0.37210 |

**Trave numero: 39 - Lunghezza: 365.00**

| Dist. | c.c. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. Suolo |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1 | -5.958e+02 | -1.717e+04 | +2.178e+05 | -1.619e-01 | +6.539e-07 | +9.299e-05 | 0.38866 |
| 0.000 | 2 | -4.629e+02 | +5.615e+04 | +1.689e+05 | -1.539e-01 | +2.476e-05 | +3.579e-05 | 0.36924 |
| 0.000 | 3 | -3.350e+02 | +4.212e+04 | +1.256e+05 | -1.171e-01 | +1.800e-05 | +2.939e-05 | 0.28097 |
| 0.000 | 4 | -2.247e+02 | +3.654e+04 | +1.034e+05 | -1.104e-01 | +1.254e-05 | +3.907e-05 | 0.26506 |
| 0.000 | 5 | -1.971e+02 | +3.515e+04 | +9.780e+04 | -1.088e-01 | +1.118e-05 | +4.150e-05 | 0.26110 |
| 0.000 | 7 | -5.182e+02 | -1.787e+04 | +2.156e+05 | -1.607e-01 | -5.178e-06 | +8.947e-05 | 0.38578 |
| 0.000 | 8 | -5.404e+02 | +5.685e+04 | +1.711e+05 | -1.550e-01 | +3.060e-05 | +3.931e-05 | 0.37210 |
| 73.000 | 1 | -5.958e+02 | -1.717e+04 | +2.613e+05 | -1.636e-01 | -4.979e-05 | +9.778e-05 | 0.39257 |
| 73.000 | 2 | -4.630e+02 | +5.615e+04 | +2.027e+05 | -1.533e-01 | -1.435e-05 | +2.012e-05 | 0.36802 |



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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 73.000 | 3 | -3.350e+02 | +4.212e+04 | +1.501e+05 | -1.167e-01 | -1.102e-05 | +1.764e-05 | 0.28015 |
| 73.000 | 4 | -2.246e+02 | +3.654e+04 | +1.198e+05 | -1.103e-01 | -1.095e-05 | +2.888e-05 | 0.26479 |
| 73.000 | 5 | -1.971e+02 | +3.515e+04 | +1.122e+05 | -1.087e-01 | -1.093e-05 | +3.168e-05 | 0.26095 |
| 73.000 | 7 | -5.183e+02 | -1.787e+04 | +2.535e+05 | -1.628e-01 | -5.457e-05 | +9.446e-05 | 0.39067 |
| 73.000 | 8 | -5.405e+02 | +5.685e+04 | +2.105e+05 | -1.541e-01 | -9.580e-06 | +2.344e-05 | 0.36994 |
| 146.000 | 1 | +3.403e+02 | -1.717e+04 | +2.728e+05 | -1.692e-01 | -1.060e-04 | +1.026e-04 | 0.40613 |
| 146.000 | 2 | +2.261e+02 | +5.615e+04 | +2.123e+05 | -1.559e-01 | -5.804e-05 | +4.453e-06 | 0.37428 |
| 146.000 | 3 | +1.688e+02 | +4.212e+04 | +1.569e+05 | -1.187e-01 | -4.334e-05 | +5.885e-06 | 0.28486 |
| 146.000 | 4 | +1.419e+02 | +3.654e+04 | +1.234e+05 | -1.120e-01 | -3.655e-05 | +1.868e-05 | 0.26892 |
| 146.000 | 5 | +1.351e+02 | +3.515e+04 | +1.151e+05 | -1.104e-01 | -3.486e-05 | +2.187e-05 | 0.26494 |
| 146.000 | 7 | +4.042e+02 | -1.787e+04 | +2.599e+05 | -1.687e-01 | -1.086e-04 | +9.945e-05 | 0.40490 |
| 146.000 | 8 | -2.014e+02 | +5.685e+04 | +2.252e+05 | -1.565e-01 | -5.546e-05 | +7.576e-06 | 0.37550 |
| 219.000 | 1 | +9.415e+02 | -1.717e+04 | +2.480e+05 | -1.790e-01 | -1.609e-04 | +1.074e-04 | 0.42972 |
| 219.000 | 2 | +6.460e+02 | +5.615e+04 | +1.958e+05 | -1.618e-01 | -1.010e-04 | -1.122e-05 | 0.38837 |
| 219.000 | 3 | +4.768e+02 | +4.212e+04 | +1.446e+05 | -1.230e-01 | -7.508e-05 | -5.870e-06 | 0.29532 |
| 219.000 | 4 | +3.722e+02 | +3.654e+04 | +1.131e+05 | -1.157e-01 | -6.146e-05 | +8.478e-06 | 0.27758 |
| 219.000 | 5 | +3.460e+02 | +3.515e+04 | +1.052e+05 | -1.138e-01 | -5.805e-05 | +1.207e-05 | 0.27314 |
| 219.000 | 7 | +1.000e+03 | -1.787e+04 | +2.304e+05 | -1.786e-01 | -1.602e-04 | +1.044e-04 | 0.42871 |
| 219.000 | 8 | +5.864e+02 | +5.685e+04 | +2.134e+05 | -1.622e-01 | -1.016e-04 | -8.291e-06 | 0.38935 |
| 292.000 | 1 | +1.685e+03 | -1.717e+04 | +1.793e+05 | -1.927e-01 | -2.058e-04 | +1.122e-04 | 0.46243 |
| 292.000 | 2 | +1.159e+03 | +5.615e+04 | +1.486e+05 | -1.707e-01 | -1.373e-04 | -2.689e-05 | 0.40963 |
| 292.000 | 3 | +8.538e+02 | +4.212e+04 | +1.098e+05 | -1.296e-01 | -1.018e-04 | -1.762e-05 | 0.31114 |
| 292.000 | 4 | +6.588e+02 | +3.654e+04 | +8.592e+04 | -1.210e-01 | -8.241e-05 | -1.721e-06 | 0.29042 |
| 292.000 | 5 | +6.100e+02 | +3.515e+04 | +7.996e+04 | -1.189e-01 | -7.755e-05 | +2.254e-06 | 0.28524 |
| 292.000 | 7 | +1.738e+03 | -1.787e+04 | +1.573e+05 | -1.921e-01 | -2.011e-04 | +1.094e-04 | 0.46099 |
| 292.000 | 8 | +1.105e+03 | +5.685e+04 | +1.706e+05 | -1.713e-01 | -1.421e-04 | -2.416e-05 | 0.41107 |
| 365.000 | 1 | -1.686e+03 | +1.717e+04 | -5.622e+04 | -2.091e-01 | -2.306e-04 | +1.170e-04 | 0.50174 |
| 365.000 | 2 | -1.159e+03 | -5.615e+04 | -6.403e+04 | -1.818e-01 | -1.597e-04 | -4.256e-05 | 0.43639 |
| 365.000 | 3 | -8.540e+02 | -4.212e+04 | -4.741e+04 | -1.379e-01 | -1.184e-04 | -2.938e-05 | 0.33096 |
| 365.000 | 4 | -6.588e+02 | -3.654e+04 | -3.782e+04 | -1.277e-01 | -9.544e-05 | -1.192e-05 | 0.30643 |
| 365.000 | 5 | -6.100e+02 | -3.515e+04 | -3.543e+04 | -1.251e-01 | -8.970e-05 | -7.556e-06 | 0.30029 |
| 365.000 | 7 | -1.739e+03 | +1.787e+04 | -3.041e+04 | -2.079e-01 | -2.208e-04 | +1.144e-04 | 0.49906 |
| 365.000 | 8 | -1.106e+03 | -5.685e+04 | -8.985e+04 | -1.829e-01 | -1.695e-04 | -4.003e-05 | 0.43906 |

**Pressione massima nel gruppo**

| Numero trave | Pressione | Distanza |
|---|---|---|
| 14 | 0.547 | 157.600 |



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## 2c) FREQUENZE

### Traslazione centro delle masse: +eX

| Numero | Pulsazione (Rad/sec) | Frequenza (Hz) | Periodo (sec) | Precisione |
|---|---|---|---|---|
| 1 | 3.037e+01 | 4.833e+00 | 2.069e-01 | 1.097e-26 |
| 2 | 4.813e+01 | 7.660e+00 | 1.305e-01 | 9.117e-23 |
| 3 | 5.100e+01 | 8.117e+00 | 1.232e-01 | 4.055e-20 |
| 4 | 5.714e+01 | 9.095e+00 | 1.100e-01 | 1.645e-17 |
| 5 | 6.010e+01 | 9.565e+00 | 1.045e-01 | 6.684e-13 |
| 6 | 6.011e+01 | 9.566e+00 | 1.045e-01 | 2.943e-13 |

### Traslazione centro delle masse: -eX

| Numero | Pulsazione (Rad/sec) | Frequenza (Hz) | Periodo (sec) | Precisione |
|---|---|---|---|---|
| 1 | 3.037e+01 | 4.833e+00 | 2.069e-01 | 9.044e-26 |
| 2 | 4.859e+01 | 7.734e+00 | 1.293e-01 | 1.949e-20 |
| 3 | 5.051e+01 | 8.039e+00 | 1.244e-01 | 6.649e-21 |
| 4 | 5.714e+01 | 9.095e+00 | 1.100e-01 | 2.137e-17 |
| 5 | 6.010e+01 | 9.566e+00 | 1.045e-01 | 1.275e-13 |
| 6 | 6.013e+01 | 9.570e+00 | 1.045e-01 | 1.016e-12 |

### Traslazione centro delle masse: +eY

| Numero | Pulsazione (Rad/sec) | Frequenza (Hz) | Periodo (sec) | Precisione |
|---|---|---|---|---|
| 1 | 3.017e+01 | 4.801e+00 | 2.083e-01 | 2.391e-26 |
| 2 | 4.937e+01 | 7.857e+00 | 1.273e-01 | 3.641e-21 |
| 3 | 4.988e+01 | 7.939e+00 | 1.260e-01 | 1.786e-20 |
| 4 | 5.714e+01 | 9.095e+00 | 1.100e-01 | 1.464e-17 |
| 5 | 6.010e+01 | 9.566e+00 | 1.045e-01 | 2.742e-13 |
| 6 | 6.011e+01 | 9.567e+00 | 1.045e-01 | 1.059e-12 |

### Traslazione centro delle masse: -eY

| Numero | Pulsazione (Rad/sec) | Frequenza (Hz) | Periodo (sec) | Precisione |
|---|---|---|---|---|
| 1 | 3.025e+01 | 4.814e+00 | 2.077e-01 | 9.632e-26 |
| 2 | 4.933e+01 | 7.851e+00 | 1.274e-01 | 2.041e-21 |
| 3 | 4.984e+01 | 7.932e+00 | 1.261e-01 | 2.097e-20 |
| 4 | 5.714e+01 | 9.095e+00 | 1.100e-01 | 1.129e-17 |
| 5 | 6.010e+01 | 9.565e+00 | 1.045e-01 | 1.223e-13 |
| 6 | 6.012e+01 | 9.568e+00 | 1.045e-01 | 1.706e-13 |



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## 2d) RISPOSTA SPETTRALE

**TABELLA FREQUENZE, COEFF. MODALI E RISPOSTA SPETTRALE**

**COMBINAZIONE QUADRATICA COMPLETA (CQC) - SISMA LUNGO X**

| Nodo | Tralaz. X | Tralaz.Y | Tralaz.Z | Rotaz.X | Rotaz.Y | Rotaz.Z |
|---|---|---|---|---|---|---|
| 1 | +6.71e-07 | +4.43e-08 | +2.10e-07 | +6.65e-06 | +1.35e-04 | +2.04e-09 |
| 2 | +2.05e-06 | +5.31e-09 | +1.71e-06 | +1.48e-06 | +3.22e-04 | +1.68e-09 |
| 3 | +1.68e+00 | +1.36e-02 | +3.82e-01 | +5.49e-03 | +5.83e-04 | +5.25e-05 |
| 4 | +1.69e+00 | +6.67e-03 | +7.76e-01 | +6.07e-03 | +5.09e-03 | +5.25e-05 |
| 5 | +1.69e+00 | +1.36e-02 | +8.89e-01 | +7.20e-03 | +5.10e-03 | +5.25e-05 |
| 6 | +1.85e-06 | +7.48e-07 | +2.11e-06 | +1.51e-06 | +3.01e-04 | +5.40e-09 |
| 7 | +1.85e-06 | +1.04e-06 | +3.37e-06 | +1.53e-06 | +3.01e-04 | +4.41e-09 |
| 8 | +1.68e+00 | +6.67e-03 | +2.61e-02 | +5.93e-03 | +4.20e-06 | +5.25e-05 |
| 9 | +1.68e+00 | +1.36e-02 | +1.48e-03 | +7.04e-03 | +9.57e-05 | +5.25e-05 |
| 10 | +1.67e+00 | +3.54e-02 | +8.13e-03 | +1.57e-04 | +1.58e-03 | +5.25e-05 |
| 11 | +1.67e+00 | +3.54e-02 | +5.80e-03 | +1.58e-04 | +1.57e-03 | +5.25e-05 |
| 12 | +1.67e+00 | +6.67e-03 | +1.10e-02 | +5.17e-03 | +9.94e-05 | +5.25e-05 |
| 13 | +1.68e+00 | +2.46e-02 | +3.53e-03 | +1.62e-04 | +6.88e-04 | +5.25e-05 |
| 14 | +1.68e+00 | +3.54e-02 | +6.50e-03 | +1.62e-04 | +6.64e-04 | +5.25e-05 |
| 15 | +1.69e+00 | +3.54e-02 | +1.36e-02 | +1.62e-04 | +5.03e-03 | +5.25e-05 |
| 16 | +1.69e+00 | +2.46e-02 | +2.31e-02 | +1.68e-04 | +4.75e-03 | +5.25e-05 |
| 17 | +1.69e+00 | +8.10e-03 | +6.97e-04 | +2.32e-05 | +5.18e-03 | +5.25e-05 |
| 18 | +1.68e+00 | +2.68e-02 | +1.23e-02 | +1.14e-04 | +1.29e-05 | +5.25e-05 |
| 19 | +1.69e+00 | +2.26e-02 | +6.86e-04 | +3.87e-05 | +5.22e-03 | +5.25e-05 |
| 20 | +1.68e+00 | +3.11e-02 | +1.65e-02 | +1.69e-04 | +1.95e-04 | +5.25e-05 |
| 21 | +1.23e-06 | +2.73e-08 | +8.83e-07 | +3.49e-06 | +1.92e-04 | +2.04e-09 |
| 22 | +1.67e+00 | +2.26e-02 | +2.88e-03 | +1.68e-04 | +2.97e-04 | +5.25e-05 |
| 23 | +1.24e-06 | +2.29e-08 | +4.39e-07 | +2.98e-06 | +1.92e-04 | +2.04e-09 |
| 24 | +1.67e+00 | +8.10e-03 | +1.43e-03 | +8.55e-05 | +2.84e-04 | +5.25e-05 |
| 25 | +1.26e-06 | +3.76e-08 | +1.49e-06 | +6.01e-06 | +1.96e-04 | +2.04e-09 |
| 26 | +1.68e+00 | +2.26e-02 | +4.86e-03 | +2.44e-05 | +1.15e-04 | +5.25e-05 |
| 27 | +1.68e+00 | +8.10e-03 | +2.59e-03 | +9.89e-06 | +3.50e-04 | +5.25e-05 |
| 28 | +1.24e-06 | +1.30e-08 | +7.94e-07 | +2.11e-06 | +1.93e-04 | +2.04e-09 |
| 29 | +1.26e-06 | +2.07e-08 | +5.42e-07 | +2.79e-06 | +1.95e-04 | +2.04e-09 |
| 30 | +1.67e+00 | +8.10e-03 | +1.77e-03 | +6.84e-05 | +3.11e-05 | +5.25e-05 |
| 31 | +1.67e+00 | +2.26e-02 | +3.59e-03 | +1.21e-04 | +3.51e-04 | +5.25e-05 |
| 32 | +1.67e+00 | +1.36e-02 | +2.70e-02 | +6.22e-03 | +5.31e-06 | +5.25e-05 |
| 33 | +1.67e+00 | +6.67e-03 | +1.05e-02 | +4.69e-03 | +3.26e-05 | +5.25e-05 |
| 34 | +1.67e+00 | +1.36e-02 | +9.94e-03 | +5.67e-03 | +5.10e-05 | +5.25e-05 |
| 35 | +1.67e+00 | +1.36e-02 | +3.33e-03 | +5.49e-03 | +6.83e-05 | +5.25e-05 |
| 36 | +1.67e+00 | +6.67e-03 | +1.47e-02 | +4.57e-03 | +8.27e-06 | +5.25e-05 |
| 37 | +1.67e+00 | +2.26e-02 | +3.45e-03 | +2.05e-04 | +1.88e-04 | +5.25e-05 |
| 38 | +1.69e+00 | +1.68e-02 | +1.45e-02 | +8.43e-05 | +4.88e-03 | +5.25e-05 |
| 39 | +1.68e+00 | +1.68e-02 | +4.37e-03 | +8.27e-05 | +6.91e-04 | +5.25e-05 |
| 40 | +1.67e+00 | +3.54e-02 | +5.46e-03 | +1.56e-04 | +1.38e-03 | +5.25e-05 |
| 41 | +1.67e+00 | +1.68e-02 | +6.15e-02 | +7.64e-05 | +1.77e-04 | +5.25e-05 |
| 42 | +1.67e+00 | +1.68e-02 | +2.75e-03 | +7.43e-05 | +5.84e-04 | +5.25e-05 |
| 43 | +1.67e+00 | +8.10e-03 | +1.44e-03 | +9.01e-05 | +3.09e-04 | +5.25e-05 |
| 44 | +1.67e+00 | +3.18e-02 | +6.14e-03 | +1.46e-04 | +1.19e-03 | +5.25e-05 |
| 45 | +1.67e+00 | +1.68e-02 | +3.06e-03 | +7.44e-05 | +5.45e-04 | +5.25e-05 |
| 46 | +1.69e+00 | +3.11e-02 | +3.69e-02 | +1.71e-04 | +5.06e-03 | +5.25e-05 |
| 47 | +1.23e-06 | +1.99e-08 | +1.10e-06 | +3.12e-06 | +1.91e-04 | +2.04e-09 |
| 48 | +2.05e-06 | +3.40e-09 | +7.22e-07 | +7.70e-07 | +3.21e-04 | +1.68e-09 |
| 49 | +1.69e+00 | +2.68e-02 | +2.58e-02 | +1.15e-04 | +5.12e-03 | +5.25e-05 |
| 50 | +2.05e-06 | +3.59e-09 | +1.15e-06 | +7.44e-07 | +3.21e-04 | +1.68e-09 |
| 51 | +2.05e-06 | +1.17e-08 | +9.28e-07 | +1.59e-06 | +3.22e-04 | +1.68e-09 |
| 52 | +1.69e+00 | +3.18e-02 | +2.35e-02 | +1.47e-04 | +4.70e-03 | +5.25e-05 |
| 53 | +1.67e+00 | +2.46e-02 | +2.52e-02 | +1.59e-04 | +1.78e-05 | +5.25e-05 |
| 54 | +1.67e+00 | +2.46e-02 | +2.82e-02 | +1.58e-04 | +7.13e-05 | +5.25e-05 |
| 55 | +1.67e+00 | +2.46e-02 | +7.51e-02 | +1.57e-04 | +2.56e-04 | +5.25e-05 |
| 56 | +1.25e-06 | +3.69e-08 | +1.06e-06 | +4.38e-06 | +1.94e-04 | +2.04e-09 |
| 57 | +2.07e-06 | +3.29e-09 | +8.05e-07 | +7.62e-07 | +3.23e-04 | +1.68e-09 |
| 58 | +1.90e-06 | +5.89e-09 | +1.43e-06 | +1.54e-06 | +3.06e-04 | +1.68e-09 |
| 59 | +1.24e-06 | +2.35e-08 | +4.40e-07 | +3.03e-06 | +1.92e-04 | +2.04e-09 |
| 60 | +1.94e-06 | +4.71e-09 | +1.61e-06 | +1.33e-06 | +3.10e-04 | +1.68e-09 |
| 61 | +1.68e+00 | +3.18e-02 | +1.19e-02 | +1.47e-04 | +1.20e-03 | +5.25e-05 |
| 62 | +1.67e+00 | +3.18e-02 | +5.82e-03 | +1.45e-04 | +1.04e-03 | +5.25e-05 |
| 63 | +1.67e+00 | +3.18e-02 | +5.85e-03 | +1.45e-04 | +1.28e-03 | +5.25e-05 |
| 64 | +1.91e-06 | +4.75e-09 | +1.54e-06 | +1.33e-06 | +3.07e-04 | +1.68e-09 |
| 65 | +1.96e-06 | +1.14e-06 | +2.89e-06 | +1.34e-06 | +3.12e-04 | +3.35e-09 |
| 66 | +1.94e-06 | +7.25e-07 | +3.78e-06 | +1.32e-06 | +3.11e-04 | +3.87e-09 |
| 67 | +1.68e+00 | +3.18e-02 | +1.62e-02 | +1.46e-04 | +3.29e-04 | +5.25e-05 |
| 68 | +1.68e+00 | +2.26e-02 | +1.10e-02 | +2.05e-04 | +9.94e-05 | +5.25e-05 |
| 69 | +1.68e+00 | +6.67e-03 | +3.06e-01 | +4.57e-03 | +5.84e-04 | +5.25e-05 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| 70 | +1.68e+00 | +1.68e-02 | +6.54e-03 | +7.44e-05 | +5.56e-04 | +5.25e-05 |
| 71 | +1.68e+00 | +8.10e-03 | +4.99e-03 | +9.11e-05 | +5.74e-04 | +5.25e-05 |
| 72 | +1.67e+00 | +1.95e-02 | +9.29e-03 | +9.12e-04 | +6.45e-05 | +5.25e-05 |
| 73 | +1.68e+00 | +3.23e-02 | +5.39e-02 | +1.73e-04 | +8.85e-05 | +5.25e-05 |
| 74 | +1.67e+00 | +3.23e-02 | +4.58e-02 | +1.72e-04 | +6.64e-04 | +5.25e-05 |
| 75 | +1.68e+00 | +1.95e-02 | +5.51e-02 | +9.14e-04 | +5.74e-04 | +5.25e-05 |
| 76 | +1.67e+00 | +2.60e-02 | +2.82e-02 | +1.61e-04 | +9.62e-05 | +5.25e-05 |
| 77 | +1.67e+00 | +2.30e-02 | +1.95e-02 | +1.62e-04 | +6.27e-05 | +5.25e-05 |
| 78 | +1.68e+00 | +2.30e-02 | +2.61e-02 | +1.62e-04 | +5.52e-04 | +5.25e-05 |
| 79 | +1.68e+00 | +2.60e-02 | +3.44e-02 | +1.61e-04 | +3.14e-04 | +5.25e-05 |
| 80 | +6.73e-07 | +1.56e-08 | +2.14e-07 | +2.28e-06 | +1.36e-04 | +2.04e-09 |

| Tralaz. X/Nodo | Tralaz.Y/Nodo | Tralaz.Z/Nodo | Rotaz.X/Nodo | Rotaz.Y/Nodo | Rotaz.Z/Nodo | DL max/Nodo |
|---|---|---|---|---|---|---|
| +1.69e+00 | +3.54e-02 | +8.89e-01 | +7.20e-03 | +5.22e-03 | +5.25e-05 | +1.91e+00 |
| 4 | 10 | 5 | 5 | 19 | 3 | 5 |

**COMBINAZIONE QUADRATICA COMPLETA (CQC) - SISMA LUNGO Y**

| Nodo | Tralaz. X | Tralaz.Y | Tralaz.Z | Rotaz.X | Rotaz.Y | Rotaz.Z |
|---|---|---|---|---|---|---|
| 1 | +3.78e-07 | +3.11e-07 | +8.40e-07 | +5.04e-05 | +3.88e-05 | +2.73e-09 |
| 2 | +2.43e-08 | +4.92e-08 | +1.16e-07 | +1.01e-05 | +3.92e-06 | +2.25e-09 |
| 3 | +3.11e-02 | +1.84e-01 | +5.23e-01 | +7.15e-03 | +7.28e-05 | +7.02e-05 |
| 4 | +3.00e-02 | +1.75e-01 | +6.70e-01 | +5.62e-03 | +2.49e-03 | +7.02e-05 |
| 5 | +3.00e-02 | +1.84e-01 | +7.87e-01 | +6.51e-03 | +2.42e-03 | +7.02e-05 |
| 6 | +1.90e-08 | +5.18e-06 | +1.23e-05 | +1.05e-05 | +2.14e-06 | +2.33e-09 |
| 7 | +2.81e-08 | +5.18e-06 | +1.23e-05 | +1.06e-05 | +3.60e-06 | +2.35e-09 |
| 8 | +2.15e-02 | +1.75e-01 | +2.69e-02 | +5.69e-03 | +8.65e-05 | +7.02e-05 |
| 9 | +2.15e-02 | +1.84e-01 | +2.85e-02 | +6.53e-03 | +6.67e-05 | +7.02e-05 |
| 10 | +1.60e-02 | +2.06e-01 | +2.34e-02 | +7.17e-04 | +6.71e-05 | +7.02e-05 |
| 11 | +5.28e-03 | +2.06e-01 | +2.34e-02 | +7.41e-04 | +7.38e-05 | +7.02e-05 |
| 12 | +5.28e-03 | +1.75e-01 | +3.37e-03 | +6.24e-03 | +9.96e-06 | +7.02e-05 |
| 13 | +2.15e-02 | +2.08e-01 | +1.52e-03 | +2.96e-03 | +7.80e-05 | +7.02e-05 |
| 14 | +2.15e-02 | +2.06e-01 | +4.42e-04 | +8.59e-04 | +2.53e-05 | +7.02e-05 |
| 15 | +3.00e-02 | +2.06e-01 | +1.07e-01 | +8.67e-04 | +3.06e-03 | +7.02e-05 |
| 16 | +3.00e-02 | +2.08e-01 | +3.85e-01 | +3.11e-03 | +3.04e-03 | +7.02e-05 |
| 17 | +3.00e-02 | +1.83e-01 | +2.72e-03 | +1.67e-04 | +3.16e-03 | +7.02e-05 |
| 18 | +2.15e-02 | +1.97e-01 | +3.07e-03 | +2.11e-03 | +1.96e-05 | +7.02e-05 |
| 19 | +3.00e-02 | +1.93e-01 | +2.74e-03 | +1.83e-04 | +3.13e-03 | +7.02e-05 |
| 20 | +2.15e-02 | +2.02e-01 | +2.66e-03 | +2.34e-03 | +1.21e-05 | +7.02e-05 |
| 21 | +1.32e-08 | +1.76e-07 | +6.77e-08 | +3.73e-05 | +1.81e-06 | +2.73e-09 |
| 22 | +1.60e-02 | +1.93e-01 | +2.21e-04 | +6.46e-04 | +3.78e-05 | +7.02e-05 |
| 23 | +1.27e-08 | +1.64e-07 | +4.57e-08 | +3.52e-05 | +1.93e-06 | +2.73e-09 |
| 24 | +1.60e-02 | +1.83e-01 | +1.49e-04 | +6.17e-04 | +1.23e-05 | +7.02e-05 |
| 25 | +2.29e-08 | +3.04e-07 | +2.64e-07 | +4.98e-05 | +3.17e-06 | +2.73e-09 |
| 26 | +2.15e-02 | +1.93e-01 | +8.60e-04 | +2.09e-04 | +7.22e-05 | +7.02e-05 |
| 27 | +2.15e-02 | +1.83e-01 | +9.73e-04 | +1.82e-04 | +1.12e-04 | +7.02e-05 |
| 28 | +2.48e-08 | +2.93e-07 | +2.98e-07 | +4.77e-05 | +3.16e-06 | +2.73e-09 |
| 29 | +5.82e-09 | +2.03e-07 | +1.23e-07 | +3.90e-05 | +7.71e-07 | +2.73e-09 |
| 30 | +5.28e-03 | +1.83e-01 | +4.01e-04 | +4.85e-04 | +4.56e-05 | +7.02e-05 |
| 31 | +5.28e-03 | +1.93e-01 | +3.22e-04 | +5.23e-04 | +2.87e-05 | +7.02e-05 |
| 32 | +5.28e-03 | +1.84e-01 | +2.43e-03 | +6.78e-03 | +7.88e-06 | +7.02e-05 |
| 33 | +1.60e-02 | +1.75e-01 | +2.77e-03 | +6.75e-03 | +9.57e-06 | +7.02e-05 |
| 34 | +1.60e-02 | +1.84e-01 | +3.59e-03 | +7.00e-03 | +8.64e-06 | +7.02e-05 |
| 35 | +2.63e-02 | +1.84e-01 | +2.67e-02 | +7.11e-03 | +7.41e-05 | +7.02e-05 |
| 36 | +2.63e-02 | +1.75e-01 | +2.71e-02 | +7.05e-03 | +7.57e-05 | +7.02e-05 |
| 37 | +2.63e-02 | +1.93e-01 | +1.38e-03 | +6.77e-04 | +1.07e-04 | +7.02e-05 |
| 38 | +3.00e-02 | +1.97e-01 | +3.93e-02 | +3.16e-04 | +3.08e-03 | +7.02e-05 |
| 39 | +2.15e-02 | +1.97e-01 | +8.18e-04 | +2.97e-04 | +1.24e-05 | +7.02e-05 |
| 40 | +2.63e-02 | +2.06e-01 | +4.97e-04 | +7.29e-04 | +2.99e-05 | +7.02e-05 |
| 41 | +5.28e-03 | +1.97e-01 | +1.67e-02 | +2.79e-04 | +5.85e-05 | +7.02e-05 |
| 42 | +1.60e-02 | +1.97e-01 | +4.56e-05 | +2.24e-04 | +4.19e-06 | +7.02e-05 |
| 43 | +2.63e-02 | +1.83e-01 | +1.56e-03 | +6.63e-04 | +1.08e-04 | +7.02e-05 |
| 44 | +2.63e-02 | +2.17e-01 | +2.46e-04 | +7.91e-04 | +2.69e-05 | +7.02e-05 |
| 45 | +2.63e-02 | +1.97e-01 | +2.23e-04 | +2.64e-04 | +1.70e-05 | +7.02e-05 |
| 46 | +3.00e-02 | +2.02e-01 | +2.94e-01 | +2.38e-03 | +3.07e-03 | +7.02e-05 |
| 47 | +6.22e-09 | +2.11e-07 | +9.89e-08 | +4.07e-05 | +8.12e-07 | +2.73e-09 |
| 48 | +2.00e-08 | +9.14e-08 | +1.20e-08 | +1.46e-05 | +3.11e-06 | +2.25e-09 |
| 49 | +3.00e-02 | +1.97e-01 | +2.65e-01 | +2.14e-03 | +3.09e-03 | +7.02e-05 |
| 50 | +2.86e-08 | +1.02e-07 | +2.15e-07 | +1.56e-05 | +4.35e-06 | +2.25e-09 |
| 51 | +4.30e-08 | +3.04e-07 | +3.98e-07 | +3.53e-05 | +5.76e-06 | +2.25e-09 |
| 52 | +3.00e-02 | +2.17e-01 | +1.38e-01 | +9.22e-04 | +3.02e-03 | +7.02e-05 |
| 53 | +2.63e-02 | +2.08e-01 | +3.37e-03 | +3.47e-03 | +2.03e-06 | +7.02e-05 |
| 54 | +1.60e-02 | +2.08e-01 | +3.27e-04 | +3.38e-03 | +4.12e-07 | +7.02e-05 |
| 55 | +5.28e-03 | +2.08e-01 | +2.37e-02 | +3.17e-03 | +2.92e-05 | +7.02e-05 |
| 56 | +2.13e-08 | +1.72e-07 | +4.25e-07 | +3.68e-05 | +2.89e-06 | +2.73e-09 |
| 57 | +3.18e-08 | +8.58e-08 | +5.85e-08 | +1.40e-05 | +5.00e-06 | +2.25e-09 |
| 58 | +3.06e-08 | +5.17e-08 | +1.30e-07 | +1.06e-05 | +4.87e-06 | +2.25e-09 |
| 59 | +2.54e-08 | +1.51e-07 | +4.80e-07 | +3.40e-05 | +3.56e-06 | +2.73e-09 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| 60 | +3.25e-08 | +4.99e-08 | +6.46e-08 | +1.08e-05 | +5.07e-06 | +2.25e-09 |
| 61 | +2.15e-02 | +2.17e-01 | +2.43e-02 | +9.04e-04 | +1.30e-04 | +7.02e-05 |
| 62 | +5.28e-03 | +2.17e-01 | +2.51e-02 | +7.94e-04 | +1.55e-05 | +7.02e-05 |
| 63 | +1.60e-02 | +2.17e-01 | +4.24e-05 | +7.86e-04 | +1.17e-05 | +7.02e-05 |
| 64 | +1.84e-08 | +5.01e-08 | +1.11e-08 | +1.09e-05 | +2.96e-06 | +2.25e-09 |
| 65 | +7.68e-09 | +5.50e-06 | +1.31e-05 | +1.08e-05 | +1.09e-06 | +2.82e-09 |
| 66 | +5.31e-08 | +5.46e-06 | +1.28e-05 | +9.96e-06 | +6.73e-06 | +2.49e-09 |
| 67 | +3.11e-02 | +2.17e-01 | +5.53e-02 | +7.89e-04 | +3.18e-05 | +7.02e-05 |
| 68 | +3.11e-02 | +1.93e-01 | +4.73e-02 | +6.76e-04 | +6.98e-05 | +7.02e-05 |
| 69 | +3.11e-02 | +1.75e-01 | +5.22e-01 | +7.10e-03 | +7.43e-05 | +7.02e-05 |
| 70 | +3.11e-02 | +1.97e-01 | +1.87e-02 | +2.62e-04 | +7.37e-05 | +7.02e-05 |
| 71 | +3.11e-02 | +1.83e-01 | +4.61e-02 | +6.60e-04 | +7.49e-05 | +7.02e-05 |
| 72 | +2.63e-02 | +1.90e-01 | +9.84e-03 | +1.01e-03 | +1.23e-04 | +7.02e-05 |
| 73 | +3.11e-02 | +2.03e-01 | +1.62e-01 | +2.28e-03 | +6.77e-05 | +7.02e-05 |
| 74 | +2.63e-02 | +2.03e-01 | +2.52e-03 | +2.26e-03 | +1.70e-05 | +7.02e-05 |
| 75 | +3.11e-02 | +1.90e-01 | +7.89e-02 | +1.01e-03 | +7.17e-05 | +7.02e-05 |
| 76 | +2.63e-02 | +2.10e-01 | +3.21e-03 | +3.56e-03 | +8.97e-06 | +7.02e-05 |
| 77 | +2.63e-02 | +2.06e-01 | +3.29e-03 | +3.64e-03 | +7.01e-06 | +7.02e-05 |
| 78 | +3.11e-02 | +2.06e-01 | +2.59e-01 | +3.65e-03 | +7.27e-05 | +7.02e-05 |
| 79 | +3.11e-02 | +2.10e-01 | +2.53e-01 | +3.57e-03 | +3.19e-05 | +7.02e-05 |
| 80 | +3.75e-07 | +2.97e-07 | +8.35e-07 | +4.81e-05 | +3.81e-05 | +2.73e-09 |

| Tralaz. X/Nodo | Tralaz.Y/Nodo | Tralaz.Z/Nodo | Rotaz.X/Nodo | Rotaz.Y/Nodo | Rotaz.Z/Nodo | DL max/Nodo |
|---|---|---|---|---|---|---|
| +3.11e-02 | +2.17e-01 | +7.87e-01 | +7.15e-03 | +3.16e-03 | +7.02e-05 | +8.08e-01 |
| 3 | 44 | 5 | 3 | 17 | 3 | 5 |

**FORZE/MOMENTI ELEMENTO FINITO TRAVE - SISMA LUNGO X**
**Gruppo numero: 1 - Descrizione: MONTANTI**

| **Elemento: 1** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 4 | 1 | 4 | 1 |
| Modo nodo J | 1 | 1 | 4 | 1 | 4 | 1 |
| Massimo - I | 7.945e+02 | 1.237e+03 | 1.230e+01 | 2.038e+00 | 1.968e+03 | 1.927e+05 |
| Massimo - J | 7.945e+02 | 1.237e+03 | 1.230e+01 | 2.038e+00 | 1.848e+03 | 1.907e+05 |
| Risultante - I | 7.945e+02 | 1.237e+03 | 1.300e+01 | 2.038e+00 | 2.109e+03 | 1.927e+05 |
| Risultante - J | 7.945e+02 | 1.237e+03 | 1.300e+01 | 2.038e+00 | 1.922e+03 | 1.907e+05 |

| **Elemento: 2** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 1.491e+03 | 1.265e+03 | 3.646e+01 | 2.038e+00 | 5.825e+03 | 1.955e+05 |
| Massimo - J | 1.491e+03 | 1.265e+03 | 3.646e+01 | 2.038e+00 | 5.476e+03 | 1.965e+05 |
| Risultante - I | 1.491e+03 | 1.265e+03 | 3.761e+01 | 2.038e+00 | 6.014e+03 | 1.955e+05 |
| Risultante - J | 1.491e+03 | 1.265e+03 | 3.761e+01 | 2.038e+00 | 5.646e+03 | 1.965e+05 |

| **Elemento: 3** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 4 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 5.416e+02 | 1.264e+03 | 1.951e+01 | 2.038e+00 | 2.494e+03 | 1.949e+05 |
| Massimo - J | 5.416e+02 | 1.264e+03 | 1.951e+01 | 2.038e+00 | 3.554e+03 | 1.970e+05 |
| Risultante - I | 5.416e+02 | 1.264e+03 | 2.072e+01 | 2.038e+00 | 2.793e+03 | 1.949e+05 |
| Risultante - J | 5.416e+02 | 1.264e+03 | 2.072e+01 | 2.038e+00 | 3.673e+03 | 1.970e+05 |

| **Elemento: 4** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 4 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 4 | 1 | 4 | 1 |
| Massimo - I | 1.514e+03 | 1.851e+03 | 5.360e+00 | 1.682e+00 | 1.480e+03 | 3.012e+05 |
| Massimo - J | 1.514e+03 | 1.851e+03 | 5.360e+00 | 1.682e+00 | 1.814e+02 | 2.726e+05 |
| Risultante - I | 1.523e+03 | 1.851e+03 | 5.569e+00 | 1.682e+00 | 1.511e+03 | 3.012e+05 |
| Risultante - J | 1.523e+03 | 1.851e+03 | 5.569e+00 | 1.682e+00 | 2.574e+02 | 2.726e+05 |

| **Elemento: 5** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 4.386e+02 | 1.236e+03 | 2.209e+01 | 2.038e+00 | 2.742e+03 | 1.921e+05 |
| Massimo - J | 4.386e+02 | 1.236e+03 | 2.209e+01 | 2.038e+00 | 4.106e+03 | 1.910e+05 |
| Risultante - I | 4.386e+02 | 1.236e+03 | 2.289e+01 | 2.038e+00 | 2.976e+03 | 1.921e+05 |
| Risultante - J | 4.386e+02 | 1.236e+03 | 2.289e+01 | 2.038e+00 | 4.174e+03 | 1.910e+05 |

| **Elemento: 6** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 3 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 8.830e+02 | 1.235e+03 | 2.661e+01 | 2.038e+00 | 3.300e+03 | 1.920e+05 |
| Massimo - J | 8.830e+02 | 1.235e+03 | 2.661e+01 | 2.038e+00 | 4.947e+03 | 1.908e+05 |
| Risultante - I | 8.830e+02 | 1.235e+03 | 2.734e+01 | 2.038e+00 | 3.488e+03 | 1.920e+05 |
| Risultante - J | 8.830e+02 | 1.235e+03 | 2.734e+01 | 2.038e+00 | 5.041e+03 | 1.908e+05 |

| **Elemento: 7** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 4 | 1 | 1 | 1 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| Modo nodo J | 1 | 1 | 4 | 1 | 4 | 1 |
| Massimo - I | 2.128e+03 | 1.849e+03 | 5.477e+00 | 1.682e+00 | 1.492e+03 | 3.012e+05 |
| Massimo - J | 2.128e+03 | 1.849e+03 | 5.477e+00 | 1.682e+00 | 2.059e+02 | 2.722e+05 |
| Risultante - I | 2.135e+03 | 1.849e+03 | 5.737e+00 | 1.683e+00 | 1.525e+03 | 3.012e+05 |
| Risultante - J | 2.135e+03 | 1.849e+03 | 5.737e+00 | 1.683e+00 | 3.125e+02 | 2.722e+05 |
| **Elemento: 8** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 1 | 1 | 4 | 1 | 4 | 1 |
| Modo nodo J | 1 | 1 | 4 | 1 | 4 | 1 |
| Massimo - I | 1.538e+03 | 1.911e+03 | 4.582e+00 | 1.682e+00 | 1.303e+03 | 3.072e+05 |
| Massimo - J | 1.538e+03 | 1.911e+03 | 4.582e+00 | 1.682e+00 | 3.750e+02 | 2.852e+05 |
| Risultante - I | 1.538e+03 | 1.911e+03 | 4.751e+00 | 1.683e+00 | 1.331e+03 | 3.073e+05 |
| Risultante - J | 1.538e+03 | 1.911e+03 | 4.751e+00 | 1.683e+00 | 1.830e+02 | 2.852e+05 |
| **Elemento: 9** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 1 | 1 | 4 | 1 | 4 | 1 |
| Modo nodo J | 1 | 1 | 4 | 1 | 4 | 1 |
| Massimo - I | 1.519e+03 | 1.957e+03 | 4.627e+00 | 1.682e+00 | 1.308e+03 | 3.117e+05 |
| Massimo - J | 1.519e+03 | 1.957e+03 | 4.627e+00 | 1.682e+00 | 3.963e+02 | 2.952e+05 |
| Risultante - I | 1.529e+03 | 1.957e+03 | 4.794e+00 | 1.683e+00 | 1.336e+03 | 3.117e+05 |
| Risultante - J | 1.529e+03 | 1.957e+03 | 4.794e+00 | 1.683e+00 | 1.946e+02 | 2.952e+05 |
| **Elemento: 10** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 1 | 1 | 4 | 1 | 4 | 1 |
| Modo nodo J | 1 | 1 | 4 | 1 | 4 | 1 |
| Massimo - I | 3.126e+03 | 1.944e+03 | 4.495e+00 | 1.682e+00 | 1.294e+03 | 3.113e+05 |
| Massimo - J | 3.126e+03 | 1.944e+03 | 4.495e+00 | 1.682e+00 | 3.229e+02 | 2.914e+05 |
| Risultante - I | 3.131e+03 | 1.944e+03 | 4.615e+00 | 1.683e+00 | 1.318e+03 | 3.113e+05 |
| Risultante - J | 3.131e+03 | 1.944e+03 | 4.615e+00 | 1.683e+00 | 1.627e+02 | 2.914e+05 |
| **Elemento: 11** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 1 | 1 | 3 | 1 | 3 | 1 |
| Modo nodo J | 1 | 1 | 3 | 1 | 1 | 1 |
| Massimo - I | 1.100e+03 | 1.227e+03 | 1.885e+01 | 2.038e+00 | 2.859e+03 | 1.912e+05 |
| Massimo - J | 1.100e+03 | 1.227e+03 | 1.885e+01 | 2.038e+00 | 3.289e+03 | 1.893e+05 |
| Risultante - I | 1.100e+03 | 1.227e+03 | 1.994e+01 | 2.038e+00 | 3.117e+03 | 1.912e+05 |
| Risultante - J | 1.100e+03 | 1.227e+03 | 1.994e+01 | 2.038e+00 | 3.405e+03 | 1.893e+05 |
| **Elemento: 12** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 1 | 1 | 4 | 1 | 4 | 1 |
| Modo nodo J | 1 | 1 | 4 | 1 | 4 | 1 |
| Massimo - I | 1.147e+03 | 2.046e+03 | 7.032e+00 | 1.682e+00 | 9.315e+02 | 3.213e+05 |
| Massimo - J | 1.147e+03 | 2.046e+03 | 7.032e+00 | 1.682e+00 | 1.248e+03 | 3.130e+05 |
| Risultante - I | 1.147e+03 | 2.046e+03 | 3.591e+00 | 1.683e+00 | 7.438e+02 | 3.213e+05 |
| Risultante - J | 1.147e+03 | 2.046e+03 | 3.591e+00 | 1.683e+00 | 5.441e+02 | 3.130e+05 |
| **Elemento: 13** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 1 | 1 | 4 | 1 | 4 | 1 |
| Modo nodo J | 1 | 1 | 4 | 1 | 4 | 1 |
| Massimo - I | 7.222e+02 | 2.053e+03 | 5.556e+00 | 1.682e+00 | 7.809e+02 | 3.212e+05 |
| Massimo - J | 7.222e+02 | 2.053e+03 | 5.556e+00 | 1.682e+00 | 9.414e+02 | 3.152e+05 |
| Risultante - I | 7.222e+02 | 2.053e+03 | 3.400e+00 | 1.683e+00 | 7.703e+02 | 3.212e+05 |
| Risultante - J | 7.222e+02 | 2.053e+03 | 3.400e+00 | 1.683e+00 | 4.200e+02 | 3.152e+05 |
| **Elemento: 14** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 1 | 1 | 4 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 4 | 1 | 2 | 1 |
| Massimo - I | 1.709e+03 | 2.052e+03 | 5.135e+00 | 1.682e+00 | 1.457e+03 | 3.219e+05 |
| Massimo - J | 1.709e+03 | 2.052e+03 | 5.135e+00 | 1.682e+00 | 1.391e+02 | 3.142e+05 |
| Risultante - I | 1.709e+03 | 2.052e+03 | 5.307e+00 | 1.683e+00 | 1.484e+03 | 3.219e+05 |
| Risultante - J | 1.709e+03 | 2.052e+03 | 5.307e+00 | 1.683e+00 | 2.077e+02 | 3.142e+05 |
| **Elemento: 15** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 1.059e+03 | 1.250e+03 | 3.611e+01 | 2.038e+00 | 4.215e+03 | 1.937e+05 |
| Massimo - J | 1.059e+03 | 1.250e+03 | 3.611e+01 | 2.038e+00 | 6.978e+03 | 1.938e+05 |
| Risultante - I | 1.059e+03 | 1.250e+03 | 3.688e+01 | 2.038e+00 | 4.378e+03 | 1.937e+05 |
| Risultante - J | 1.059e+03 | 1.250e+03 | 3.688e+01 | 2.038e+00 | 7.106e+03 | 1.938e+05 |
| **Elemento: 16** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 1 | 1 | 4 | 1 | 4 | 1 |
| Modo nodo J | 1 | 1 | 4 | 1 | 4 | 1 |
| Massimo - I | 1.615e+03 | 1.935e+03 | 4.545e+00 | 1.682e+00 | 1.299e+03 | 3.099e+05 |
| Massimo - J | 1.615e+03 | 1.935e+03 | 4.545e+00 | 1.682e+00 | 3.781e+02 | 2.900e+05 |
| Risultante - I | 1.615e+03 | 1.935e+03 | 4.714e+00 | 1.683e+00 | 1.328e+03 | 3.099e+05 |
| Risultante - J | 1.615e+03 | 1.935e+03 | 4.714e+00 | 1.683e+00 | 1.788e+02 | 2.900e+05 |
| **Elemento: 17** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 1 | 1 | 4 | 1 | 4 | 1 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| Modo nodo J | 1 | 1 | 4 | 1 | 4 | 1 |
| Massimo - I | 8.051e+02 | 2.066e+03 | 5.207e+00 | 1.682e+00 | 7.452e+02 | 3.227e+05 |
| Massimo - J | 8.051e+02 | 2.066e+03 | 5.207e+00 | 1.682e+00 | 8.688e+02 | 3.177e+05 |
| Risultante - I | 8.051e+02 | 2.066e+03 | 3.291e+00 | 1.683e+00 | 7.625e+02 | 3.227e+05 |
| Risultante - J | 8.051e+02 | 2.066e+03 | 3.291e+00 | 1.683e+00 | 3.864e+02 | 3.177e+05 |

| **Elemento: 18** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 4.398e+02 | 1.236e+03 | 2.284e+01 | 2.038e+00 | 2.814e+03 | 1.923e+05 |
| Massimo - J | 4.398e+02 | 1.236e+03 | 2.284e+01 | 2.038e+00 | 4.267e+03 | 1.908e+05 |
| Risultante - I | 4.403e+02 | 1.236e+03 | 2.354e+01 | 2.038e+00 | 3.031e+03 | 1.923e+05 |
| Risultante - J | 4.403e+02 | 1.236e+03 | 2.354e+01 | 2.038e+00 | 4.325e+03 | 1.908e+05 |

| **Elemento: 19** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 4 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 4 | 1 | 4 | 1 |
| Massimo - I | 1.434e+03 | 1.896e+03 | 5.564e+00 | 1.682e+00 | 1.501e+03 | 3.060e+05 |
| Massimo - J | 1.434e+03 | 1.896e+03 | 5.564e+00 | 1.682e+00 | 2.691e+02 | 2.818e+05 |
| Risultante - I | 1.435e+03 | 1.896e+03 | 5.886e+00 | 1.683e+00 | 1.537e+03 | 3.060e+05 |
| Risultante - J | 1.435e+03 | 1.896e+03 | 5.886e+00 | 1.683e+00 | 3.700e+02 | 2.818e+05 |

| **Elemento: 20** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 4 | 1 | 4 | 1 |
| Modo nodo J | 1 | 1 | 4 | 1 | 4 | 1 |
| Massimo - I | 9.281e+02 | 2.049e+03 | 2.724e+01 | 1.682e+00 | 3.006e+03 | 3.216e+05 |
| Massimo - J | 9.281e+02 | 2.049e+03 | 2.724e+01 | 1.682e+00 | 5.457e+03 | 3.135e+05 |
| Risultante - I | 9.283e+02 | 2.049e+03 | 1.166e+01 | 1.683e+00 | 1.588e+03 | 3.216e+05 |
| Risultante - J | 9.283e+02 | 2.049e+03 | 1.166e+01 | 1.683e+00 | 2.354e+03 | 3.135e+05 |

| **Elemento: 21** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 1.749e+02 | 6.669e+02 | 4.327e+01 | 2.038e+00 | 6.481e+03 | 1.351e+05 |
| Massimo - J | 1.749e+02 | 6.669e+02 | 4.327e+01 | 2.038e+00 | 6.933e+03 | 7.165e+04 |
| Risultante - I | 2.105e+02 | 6.715e+02 | 4.427e+01 | 2.038e+00 | 6.655e+03 | 1.354e+05 |
| Risultante - J | 2.105e+02 | 6.715e+02 | 4.427e+01 | 2.038e+00 | 7.072e+03 | 7.328e+04 |

| **Elemento: 22** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 4 | 1 | 4 | 1 |
| Modo nodo J | 1 | 1 | 4 | 1 | 4 | 1 |
| Massimo - I | 2.044e+02 | 6.703e+02 | 1.244e+01 | 2.038e+00 | 1.958e+03 | 1.354e+05 |
| Massimo - J | 2.044e+02 | 6.703e+02 | 1.244e+01 | 2.038e+00 | 2.145e+03 | 7.235e+04 |
| Risultante - I | 2.137e+02 | 6.731e+02 | 1.557e+01 | 2.038e+00 | 2.278e+03 | 1.356e+05 |
| Risultante - J | 2.137e+02 | 6.731e+02 | 1.557e+01 | 2.038e+00 | 2.561e+03 | 7.334e+04 |

**FORZE/MOMENTI ELEMENTO FINITO TRAVE - SISMA LUNGO X**
**Gruppo numero: 2 - Descrizione: TRAVI DI COPERTURA**

| **Elemento: 1** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 4 | 4 | 4 | 1 |
| Modo nodo J | 1 | 1 | 4 | 4 | 4 | 0 |
| Massimo - I | 3.317e+02 | 1.092e-12 | 4.599e-16 | 2.408e+01 | 4.509e-14 | 1.388e-10 |
| Massimo - J | 3.317e+02 | 1.092e-12 | 4.599e-16 | 2.408e+01 | 5.677e-14 | 0.000e+00 |
| Risultante - I | 3.320e+02 | 1.095e-12 | 3.801e-16 | 1.045e+01 | 4.626e-14 | 1.391e-10 |
| Risultante - J | 3.320e+02 | 1.095e-12 | 3.801e-16 | 1.045e+01 | 2.448e-14 | 0.000e+00 |

| **Elemento: 2** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 4 | 4 | 4 | 4 | 0 |
| Modo nodo J | 1 | 4 | 4 | 4 | 0 | 1 |
| Massimo - I | 8.394e+02 | 5.983e-14 | 5.461e-16 | 1.809e+01 | 8.186e-14 | 0.000e+00 |
| Massimo - J | 8.394e+02 | 5.983e-14 | 5.461e-16 | 1.809e+01 | 0.000e+00 | 1.450e-10 |
| Risultante - I | 8.397e+02 | 2.632e-14 | 2.577e-16 | 7.930e+00 | 8.747e-14 | 0.000e+00 |
| Risultante - J | 8.397e+02 | 2.632e-14 | 2.577e-16 | 7.930e+00 | 0.000e+00 | 1.454e-10 |

| **Elemento: 3** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 5 | 0 | 0 |
| Modo nodo J | 1 | 1 | 1 | 5 | 1 | 0 |
| Massimo - I | 1.419e+03 | 1.976e-14 | 2.731e-15 | 4.411e+00 | 0.000e+00 | 0.000e+00 |
| Massimo - J | 1.419e+03 | 1.976e-14 | 2.731e-15 | 4.411e+00 | 2.533e-14 | 0.000e+00 |
| Risultante - I | 1.420e+03 | 2.052e-14 | 2.734e-15 | 4.664e+00 | 0.000e+00 | 0.000e+00 |
| Risultante - J | 1.420e+03 | 2.052e-14 | 2.734e-15 | 4.664e+00 | 2.547e-14 | 0.000e+00 |

| **Elemento: 4** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 0 | 1 |
| Massimo - I | 5.725e+02 | 2.592e+02 | 3.262e+01 | 3.987e+02 | 5.165e+03 | 4.104e+04 |
| Massimo - J | 5.725e+02 | 2.592e+02 | 3.262e+01 | 3.987e+02 | 0.000e+00 | 1.800e-10 |
| Risultante - I | 7.172e+02 | 2.687e+02 | 3.276e+01 | 4.004e+02 | 5.187e+03 | 4.254e+04 |
| Risultante - J | 7.172e+02 | 2.687e+02 | 3.276e+01 | 4.004e+02 | 0.000e+00 | 1.807e-10 |



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| **Elemento: 5** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 3 | 1 | 1 | 1 | 1 | 0 |
| Modo nodo J | 3 | 1 | 1 | 1 | 1 | 0 |
| Massimo - I | 5.148e+02 | 4.511e-12 | 2.719e-14 | 8.157e+02 | 1.444e-12 | 0.000e+00 |
| Massimo - J | 5.148e+02 | 4.511e-12 | 2.719e-14 | 8.157e+02 | 1.158e-12 | 0.000e+00 |
| Risultante - I | 4.365e+02 | 4.538e-12 | 2.736e-14 | 8.207e+02 | 1.453e-12 | 0.000e+00 |
| Risultante - J | 4.365e+02 | 4.538e-12 | 2.736e-14 | 8.207e+02 | 1.165e-12 | 0.000e+00 |

| **Elemento: 6** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 6.397e+02 | 2.394e+02 | 2.561e+01 | 4.101e+02 | 9.777e-14 | 1.663e-10 |
| Massimo - J | 6.397e+02 | 2.394e+02 | 2.561e+01 | 4.101e+02 | 4.645e+03 | 4.342e+04 |
| Risultante - I | 7.761e+02 | 2.648e+02 | 2.584e+01 | 4.138e+02 | 9.780e-14 | 1.681e-10 |
| Risultante - J | 7.761e+02 | 2.648e+02 | 2.584e+01 | 4.138e+02 | 4.686e+03 | 4.802e+04 |

| **Elemento: 7** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 0 | 1 | 1 | 2 | 1 |
| Modo nodo J | 1 | 0 | 1 | 1 | 2 | 0 |
| Massimo - I | 1.184e+03 | 0.000e+00 | 1.142e-15 | 1.408e+01 | 6.758e-14 | 1.549e-10 |
| Massimo - J | 1.184e+03 | 0.000e+00 | 1.142e-15 | 1.408e+01 | 8.799e-14 | 0.000e+00 |
| Risultante - I | 1.185e+03 | 0.000e+00 | 1.254e-15 | 1.510e+01 | 6.912e-14 | 1.556e-10 |
| Risultante - J | 1.185e+03 | 0.000e+00 | 1.254e-15 | 1.510e+01 | 9.000e-14 | 0.000e+00 |

| **Elemento: 8** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 4 | 4 | 4 | 1 |
| Modo nodo J | 1 | 1 | 4 | 4 | 4 | 1 |
| Massimo - I | 3.603e+03 | 3.062e+03 | 9.334e+00 | 2.303e+01 | 6.581e+02 | 2.455e+05 |
| Massimo - J | 3.603e+03 | 3.062e+03 | 9.334e+00 | 2.303e+01 | 6.581e+02 | 1.862e+05 |
| Risultante - I | 3.603e+03 | 3.062e+03 | 4.045e+00 | 9.978e+00 | 2.852e+02 | 2.454e+05 |
| Risultante - J | 3.603e+03 | 3.062e+03 | 4.045e+00 | 9.978e+00 | 2.852e+02 | 1.862e+05 |

| **Elemento: 9** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 4 | 4 | 4 | 1 |
| Modo nodo J | 1 | 1 | 4 | 4 | 4 | 1 |
| Massimo - I | 7.447e+01 | 2.138e+03 | 5.986e+00 | 1.733e+01 | 4.579e+02 | 1.633e+05 |
| Massimo - J | 7.447e+01 | 2.138e+03 | 5.986e+00 | 1.733e+01 | 4.579e+02 | 1.642e+05 |
| Risultante - I | 7.547e+01 | 2.138e+03 | 2.619e+00 | 7.583e+00 | 2.004e+02 | 1.633e+05 |
| Risultante - J | 7.547e+01 | 2.138e+03 | 2.619e+00 | 7.583e+00 | 2.004e+02 | 1.642e+05 |

| **Elemento: 10** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 5 | 5 | 5 | 1 |
| Modo nodo J | 1 | 1 | 5 | 5 | 5 | 1 |
| Massimo - I | 1.603e+03 | 1.001e+03 | 6.326e-01 | 3.419e+00 | 6.642e+01 | 1.184e+05 |
| Massimo - J | 1.603e+03 | 1.001e+03 | 6.326e-01 | 3.419e+00 | 6.642e+01 | 9.178e+04 |
| Risultante - I | 1.603e+03 | 1.001e+03 | 6.847e-01 | 3.701e+00 | 7.190e+01 | 1.184e+05 |
| Risultante - J | 1.603e+03 | 1.001e+03 | 6.847e-01 | 3.701e+00 | 7.190e+01 | 9.178e+04 |

| **Elemento: 11** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 3.758e+03 | 1.440e+02 | 3.296e+02 | 6.070e+02 | 2.609e+04 | 5.031e+04 |
| Massimo - J | 3.758e+03 | 1.440e+02 | 3.296e+02 | 6.070e+02 | 2.609e+04 | 2.752e+04 |
| Risultante - I | 3.758e+03 | 1.452e+02 | 3.310e+02 | 6.097e+02 | 2.621e+04 | 5.034e+04 |
| Risultante - J | 3.758e+03 | 1.452e+02 | 3.310e+02 | 6.097e+02 | 2.621e+04 | 2.755e+04 |

| **Elemento: 12** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 9.494e+02 | 5.742e+02 | 6.013e+02 | 1.248e+03 | 5.061e+04 | 5.816e+04 |
| Massimo - J | 9.494e+02 | 5.742e+02 | 6.013e+02 | 1.248e+03 | 5.061e+04 | 3.850e+04 |
| Risultante - I | 9.513e+02 | 5.743e+02 | 6.052e+02 | 1.256e+03 | 5.093e+04 | 5.816e+04 |
| Risultante - J | 9.513e+02 | 5.743e+02 | 6.052e+02 | 1.256e+03 | 5.093e+04 | 3.852e+04 |

| **Elemento: 13** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 1.965e+03 | 1.464e+02 | 2.609e+02 | 6.263e+02 | 2.366e+04 | 7.209e+03 |
| Massimo - J | 1.965e+03 | 1.464e+02 | 2.609e+02 | 6.263e+02 | 2.366e+04 | 3.349e+04 |
| Risultante - I | 1.965e+03 | 1.478e+02 | 2.634e+02 | 6.321e+02 | 2.388e+04 | 7.459e+03 |
| Risultante - J | 1.965e+03 | 1.478e+02 | 2.634e+02 | 6.321e+02 | 2.388e+04 | 3.354e+04 |

| **Elemento: 14** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 2.090e+03 | 1.723e+03 | 3.185e+01 | 1.741e+01 | 1.327e+03 | 9.343e+04 |
| Massimo - J | 2.090e+03 | 1.723e+03 | 3.185e+01 | 1.741e+01 | 1.327e+03 | 5.016e+04 |
| Risultante - I | 2.090e+03 | 1.723e+03 | 3.537e+01 | 1.933e+01 | 1.474e+03 | 9.343e+04 |
| Risultante - J | 2.090e+03 | 1.723e+03 | 3.537e+01 | 1.933e+01 | 1.474e+03 | 5.015e+04 |



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| **Elemento: 15** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 4 | 4 | 4 | 1 |
| Modo nodo J | 1 | 1 | 4 | 4 | 4 | 1 |
| Massimo - I | 9.421e+03 | 6.751e+02 | 2.557e+01 | 3.762e+01 | 1.803e+03 | 1.451e+05 |
| Massimo - J | 9.421e+03 | 6.751e+02 | 2.557e+01 | 3.762e+01 | 1.803e+03 | 4.998e+04 |
| Risultante - I | 9.421e+03 | 6.751e+02 | 1.103e+01 | 1.623e+01 | 7.776e+02 | 1.451e+05 |
| Risultante - J | 9.421e+03 | 6.751e+02 | 1.103e+01 | 1.623e+01 | 7.776e+02 | 4.998e+04 |

| **Elemento: 16** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 4 | 4 | 4 | 1 |
| Modo nodo J | 1 | 1 | 4 | 4 | 4 | 1 |
| Massimo - I | 4.665e+03 | 7.266e+02 | 1.681e+01 | 2.896e+01 | 1.286e+03 | 1.038e+05 |
| Massimo - J | 4.665e+03 | 7.266e+02 | 1.681e+01 | 2.896e+01 | 1.286e+03 | 7.365e+03 |
| Risultante - I | 4.665e+03 | 7.267e+02 | 7.277e+00 | 1.254e+01 | 5.567e+02 | 1.038e+05 |
| Risultante - J | 4.665e+03 | 7.267e+02 | 7.277e+00 | 1.254e+01 | 5.567e+02 | 7.366e+03 |

| **Elemento: 17** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 4 | 4 | 4 | 1 |
| Modo nodo J | 1 | 1 | 4 | 4 | 4 | 1 |
| Massimo - I | 1.610e+03 | 7.800e+02 | 1.780e+00 | 5.698e+00 | 1.869e+02 | 6.523e+04 |
| Massimo - J | 1.610e+03 | 7.800e+02 | 1.780e+00 | 5.698e+00 | 1.869e+02 | 9.857e+04 |
| Risultante - I | 1.610e+03 | 7.800e+02 | 1.855e+00 | 5.938e+00 | 1.947e+02 | 6.523e+04 |
| Risultante - J | 1.610e+03 | 7.800e+02 | 1.855e+00 | 5.938e+00 | 1.947e+02 | 9.857e+04 |

| **Elemento: 18** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 1.362e+03 | 2.400e+02 | 2.837e+02 | 5.226e+02 | 2.246e+04 | 3.300e+04 |
| Massimo - J | 1.362e+03 | 2.400e+02 | 2.837e+02 | 5.226e+02 | 2.246e+04 | 5.447e+03 |
| Risultante - I | 1.362e+03 | 2.400e+02 | 2.853e+02 | 5.255e+02 | 2.259e+04 | 3.300e+04 |
| Risultante - J | 1.362e+03 | 2.400e+02 | 2.853e+02 | 5.255e+02 | 2.259e+04 | 5.447e+03 |

| **Elemento: 19** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 9.731e+02 | 2.314e+02 | 5.274e+02 | 1.094e+03 | 4.439e+04 | 9.955e+03 |
| Massimo - J | 9.731e+02 | 2.314e+02 | 5.274e+02 | 1.094e+03 | 4.439e+04 | 2.955e+04 |
| Risultante - I | 9.731e+02 | 2.314e+02 | 5.313e+02 | 1.103e+03 | 4.472e+04 | 9.956e+03 |
| Risultante - J | 9.731e+02 | 2.314e+02 | 5.313e+02 | 1.103e+03 | 4.472e+04 | 2.955e+04 |

| **Elemento: 20** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 3.304e+03 | 2.091e+02 | 2.262e+02 | 5.429e+02 | 2.051e+04 | 1.528e+04 |
| Massimo - J | 3.304e+03 | 2.091e+02 | 2.262e+02 | 5.429e+02 | 2.051e+04 | 5.314e+04 |
| Risultante - I | 3.304e+03 | 2.091e+02 | 2.288e+02 | 5.491e+02 | 2.074e+04 | 1.528e+04 |
| Risultante - J | 3.304e+03 | 2.091e+02 | 2.288e+02 | 5.491e+02 | 2.074e+04 | 5.314e+04 |

| **Elemento: 21** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 4.822e+03 | 1.306e+03 | 4.219e-01 | 3.222e+00 | 5.273e+01 | 1.234e+05 |
| Massimo - J | 4.822e+03 | 1.306e+03 | 4.219e-01 | 3.222e+00 | 5.273e+01 | 2.031e+05 |
| Risultante - I | 4.822e+03 | 1.306e+03 | 4.273e-01 | 3.263e+00 | 5.341e+01 | 1.234e+05 |
| Risultante - J | 4.822e+03 | 1.306e+03 | 4.273e-01 | 3.263e+00 | 5.341e+01 | 2.031e+05 |

| **Elemento: 22** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 4 | 4 | 4 | 1 |
| Modo nodo J | 1 | 1 | 4 | 4 | 4 | 1 |
| Massimo - I | 8.439e+03 | 1.537e+03 | 1.031e+01 | 2.543e+01 | 7.266e+02 | 1.783e+05 |
| Massimo - J | 8.439e+03 | 1.537e+03 | 1.031e+01 | 2.543e+01 | 7.266e+02 | 3.833e+04 |
| Risultante - I | 8.439e+03 | 1.537e+03 | 4.462e+00 | 1.101e+01 | 3.146e+02 | 1.783e+05 |
| Risultante - J | 8.439e+03 | 1.537e+03 | 4.462e+00 | 1.101e+01 | 3.146e+02 | 3.833e+04 |

| **Elemento: 23** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 4 | 4 | 4 | 1 |
| Modo nodo J | 1 | 1 | 4 | 4 | 4 | 1 |
| Massimo - I | 3.300e+03 | 1.552e+03 | 7.218e+00 | 2.089e+01 | 5.522e+02 | 9.138e+04 |
| Massimo - J | 3.300e+03 | 1.552e+03 | 7.218e+00 | 2.089e+01 | 5.522e+02 | 1.461e+05 |
| Risultante - I | 3.300e+03 | 1.552e+03 | 3.093e+00 | 8.953e+00 | 2.366e+02 | 9.138e+04 |
| Risultante - J | 3.300e+03 | 1.552e+03 | 3.093e+00 | 8.953e+00 | 2.366e+02 | 1.461e+05 |

| **Elemento: 24** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 1.406e+03 | 8.320e+02 | 7.723e-01 | 4.174e+00 | 8.110e+01 | 9.902e+04 |
| Massimo - J | 1.406e+03 | 8.320e+02 | 7.723e-01 | 4.174e+00 | 8.109e+01 | 7.570e+04 |
| Risultante - I | 1.406e+03 | 8.320e+02 | 7.861e-01 | 4.249e+00 | 8.254e+01 | 9.902e+04 |
| Risultante - J | 1.406e+03 | 8.320e+02 | 7.861e-01 | 4.249e+00 | 8.254e+01 | 7.570e+04 |



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| **Elemento: 25** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 3.374e+03 | 3.960e+02 | 2.562e+02 | 4.718e+02 | 2.028e+04 | 6.616e+04 |
| Massimo - J | 3.374e+03 | 3.960e+02 | 2.562e+02 | 4.718e+02 | 2.028e+04 | 3.714e+03 |
| Risultante - I | 3.374e+03 | 3.960e+02 | 2.580e+02 | 4.751e+02 | 2.042e+04 | 6.616e+04 |
| Risultante - J | 3.374e+03 | 3.960e+02 | 2.580e+02 | 4.751e+02 | 2.042e+04 | 3.715e+03 |

| **Elemento: 26** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 2.002e+02 | 4.022e+02 | 4.790e+02 | 9.941e+02 | 4.032e+04 | 3.582e+04 |
| Massimo - J | 2.002e+02 | 4.022e+02 | 4.790e+02 | 9.941e+02 | 4.032e+04 | 3.214e+04 |
| Risultante - I | 2.002e+02 | 4.022e+02 | 4.832e+02 | 1.003e+03 | 4.067e+04 | 3.582e+04 |
| Risultante - J | 2.002e+02 | 4.022e+02 | 4.832e+02 | 1.003e+03 | 4.067e+04 | 3.214e+04 |

| **Elemento: 27** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 3.230e+03 | 3.956e+02 | 2.042e+02 | 4.900e+02 | 1.851e+04 | 2.700e+03 |
| Massimo - J | 3.230e+03 | 3.956e+02 | 2.042e+02 | 4.900e+02 | 1.851e+04 | 6.931e+04 |
| Risultante - I | 3.230e+03 | 3.956e+02 | 2.069e+02 | 4.966e+02 | 1.876e+04 | 2.701e+03 |
| Risultante - J | 3.230e+03 | 3.956e+02 | 2.069e+02 | 4.966e+02 | 1.876e+04 | 6.931e+04 |

| **Elemento: 28** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 5.087e+03 | 1.275e+03 | 5.810e-01 | 4.437e+00 | 7.262e+01 | 1.172e+05 |
| Massimo - J | 5.087e+03 | 1.275e+03 | 5.810e-01 | 4.437e+00 | 7.263e+01 | 2.016e+05 |
| Risultante - I | 5.087e+03 | 1.275e+03 | 5.877e-01 | 4.488e+00 | 7.347e+01 | 1.172e+05 |
| Risultante - J | 5.087e+03 | 1.275e+03 | 5.877e-01 | 4.488e+00 | 7.347e+01 | 2.016e+05 |

| **Elemento: 29** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 4 | 4 | 4 | 1 |
| Modo nodo J | 1 | 1 | 4 | 4 | 4 | 1 |
| Massimo - I | 9.589e+03 | 1.614e+03 | 2.125e+01 | 3.350e+01 | 1.190e+03 | 1.699e+05 |
| Massimo - J | 9.589e+03 | 1.614e+03 | 2.125e+01 | 3.350e+01 | 1.190e+03 | 1.083e+04 |
| Risultante - I | 9.589e+03 | 1.614e+03 | 9.245e+00 | 1.458e+01 | 5.177e+02 | 1.699e+05 |
| Risultante - J | 9.589e+03 | 1.614e+03 | 9.245e+00 | 1.458e+01 | 5.177e+02 | 1.083e+04 |

| **Elemento: 30** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 4 | 4 | 4 | 1 |
| Modo nodo J | 1 | 1 | 4 | 4 | 4 | 1 |
| Massimo - I | 3.875e+03 | 1.619e+03 | 1.885e+01 | 2.958e+00 | 2.734e+02 | 5.562e+04 |
| Massimo - J | 3.875e+03 | 1.619e+03 | 1.885e+01 | 2.958e+00 | 2.734e+02 | 8.662e+03 |
| Risultante - I | 3.875e+03 | 1.619e+03 | 1.050e+01 | 1.647e+00 | 1.522e+02 | 5.562e+04 |
| Risultante - J | 3.875e+03 | 1.619e+03 | 1.050e+01 | 1.647e+00 | 1.522e+02 | 8.663e+03 |

| **Elemento: 31** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 4 | 4 | 4 | 1 |
| Modo nodo J | 1 | 1 | 4 | 4 | 4 | 1 |
| Massimo - I | 1.428e+03 | 1.620e+03 | 2.982e+01 | 5.113e+00 | 4.623e+02 | 3.696e+04 |
| Massimo - J | 1.428e+03 | 1.620e+03 | 2.982e+01 | 5.113e+00 | 4.623e+02 | 1.327e+04 |
| Risultante - I | 1.428e+03 | 1.620e+03 | 1.421e+01 | 2.436e+00 | 2.202e+02 | 3.696e+04 |
| Risultante - J | 1.428e+03 | 1.620e+03 | 1.421e+01 | 2.436e+00 | 2.202e+02 | 1.327e+04 |

| **Elemento: 32** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 4 | 4 | 4 | 1 |
| Modo nodo J | 1 | 1 | 4 | 4 | 4 | 1 |
| Massimo - I | 4.910e+03 | 1.625e+03 | 1.534e+01 | 2.854e+01 | 9.358e+02 | 5.837e+04 |
| Massimo - J | 4.910e+03 | 1.625e+03 | 1.534e+01 | 2.854e+01 | 9.358e+02 | 1.398e+05 |
| Risultante - I | 4.910e+03 | 1.625e+03 | 6.566e+00 | 1.222e+01 | 4.006e+02 | 5.837e+04 |
| Risultante - J | 4.910e+03 | 1.625e+03 | 6.566e+00 | 1.222e+01 | 4.006e+02 | 1.398e+05 |

| **Elemento: 33** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 1.110e+03 | 8.214e+02 | 8.052e-01 | 4.352e+00 | 8.455e+01 | 9.546e+04 |
| Massimo - J | 1.110e+03 | 8.214e+02 | 8.052e-01 | 4.352e+00 | 8.455e+01 | 7.704e+04 |
| Risultante - I | 1.111e+03 | 8.214e+02 | 8.168e-01 | 4.415e+00 | 8.577e+01 | 9.546e+04 |
| Risultante - J | 1.111e+03 | 8.214e+02 | 8.168e-01 | 4.415e+00 | 8.577e+01 | 7.704e+04 |

| **Elemento: 34** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 3.380e+03 | 3.820e+02 | 2.489e+02 | 4.584e+02 | 1.970e+04 | 6.524e+04 |
| Massimo - J | 3.380e+03 | 3.820e+02 | 2.489e+02 | 4.584e+02 | 1.970e+04 | 4.749e+03 |
| Risultante - I | 3.380e+03 | 3.823e+02 | 2.508e+02 | 4.619e+02 | 1.986e+04 | 6.524e+04 |
| Risultante - J | 3.380e+03 | 3.823e+02 | 2.508e+02 | 4.619e+02 | 1.986e+04 | 4.994e+03 |



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| **Elemento: 35** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 6.137e+02 | 3.501e+02 | 4.646e+02 | 9.641e+02 | 3.910e+04 | 3.583e+04 |
| Massimo - J | 6.137e+02 | 3.501e+02 | 4.646e+02 | 9.641e+02 | 3.910e+04 | 2.312e+04 |
| Risultante - I | 6.167e+02 | 3.511e+02 | 4.689e+02 | 9.731e+02 | 3.947e+04 | 3.588e+04 |
| Risultante - J | 6.167e+02 | 3.511e+02 | 4.689e+02 | 9.731e+02 | 3.947e+04 | 2.324e+04 |

| **Elemento: 36** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 1.849e+03 | 3.904e+02 | 5.526e+02 | 6.092e+02 | 3.353e+04 | 4.540e+03 |
| Massimo - J | 1.849e+03 | 3.904e+02 | 5.526e+02 | 6.092e+02 | 3.353e+04 | 4.282e+04 |
| Risultante - I | 1.851e+03 | 3.907e+02 | 5.605e+02 | 6.178e+02 | 3.400e+04 | 4.911e+03 |
| Risultante - J | 1.851e+03 | 3.907e+02 | 5.605e+02 | 6.178e+02 | 3.400e+04 | 4.282e+04 |

| **Elemento: 37** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 3.489e+03 | 3.910e+02 | 6.205e+02 | 1.909e+02 | 1.862e+04 | 2.440e+04 |
| Massimo - J | 3.489e+03 | 3.910e+02 | 6.205e+02 | 1.909e+02 | 1.862e+04 | 4.786e+04 |
| Risultante - I | 3.489e+03 | 3.915e+02 | 6.315e+02 | 1.943e+02 | 1.895e+04 | 2.441e+04 |
| Risultante - J | 3.489e+03 | 3.915e+02 | 6.315e+02 | 1.943e+02 | 1.895e+04 | 4.786e+04 |

| **Elemento: 38** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 2.469e+03 | 1.449e+03 | 2.281e+00 | 1.011e+01 | 2.167e+02 | 1.172e+05 |
| Massimo - J | 2.469e+03 | 1.449e+03 | 2.281e+00 | 1.011e+01 | 2.167e+02 | 1.581e+05 |
| Risultante - I | 2.469e+03 | 1.449e+03 | 2.646e+00 | 1.173e+01 | 2.514e+02 | 1.172e+05 |
| Risultante - J | 2.469e+03 | 1.449e+03 | 2.646e+00 | 1.173e+01 | 2.514e+02 | 1.581e+05 |

| **Elemento: 39** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 1.171e+04 | 1.434e+03 | 4.846e+01 | 2.382e+01 | 1.454e+03 | 5.413e+04 |
| Massimo - J | 1.171e+04 | 1.434e+03 | 4.846e+01 | 2.382e+01 | 1.454e+03 | 1.402e+05 |
| Risultante - I | 1.171e+04 | 1.434e+03 | 5.342e+01 | 2.626e+01 | 1.603e+03 | 5.413e+04 |
| Risultante - J | 1.171e+04 | 1.434e+03 | 5.342e+01 | 2.626e+01 | 1.603e+03 | 1.402e+05 |

| **Elemento: 40** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 0 | 4 | 4 | 1 | 0 |
| Modo nodo J | 1 | 0 | 4 | 4 | 4 | 0 |
| Massimo - I | 1.299e+02 | 0.000e+00 | 2.907e-15 | 3.356e+01 | 1.955e-13 | 0.000e+00 |
| Massimo - J | 1.299e+02 | 0.000e+00 | 2.907e-15 | 3.356e+01 | 1.244e-13 | 0.000e+00 |
| Risultante - I | 1.299e+02 | 0.000e+00 | 2.225e-15 | 1.460e+01 | 1.956e-13 | 0.000e+00 |
| Risultante - J | 1.299e+02 | 0.000e+00 | 2.225e-15 | 1.460e+01 | 6.907e-14 | 0.000e+00 |

| **Elemento: 41** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 4 | 4 | 4 | 4 | 0 |
| Modo nodo J | 1 | 4 | 4 | 4 | 1 | 0 |
| Massimo - I | 3.415e+01 | 2.164e-13 | 1.403e-15 | 2.858e+01 | 1.863e-13 | 0.000e+00 |
| Massimo - J | 3.415e+01 | 2.164e-13 | 1.403e-15 | 2.858e+01 | 9.777e-14 | 0.000e+00 |
| Risultante - I | 3.415e+01 | 1.821e-13 | 8.537e-16 | 1.223e+01 | 1.922e-13 | 0.000e+00 |
| Risultante - J | 3.415e+01 | 1.821e-13 | 8.537e-16 | 1.223e+01 | 9.780e-14 | 0.000e+00 |

| **Elemento: 42** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 0 | 0 |
| Modo nodo J | 1 | 1 | 1 | 1 | 4 | 0 |
| Massimo - I | 8.643e+01 | 1.067e-14 | 3.129e-15 | 4.406e+00 | 0.000e+00 | 0.000e+00 |
| Massimo - J | 8.643e+01 | 1.067e-14 | 3.129e-15 | 4.406e+00 | 1.616e-14 | 0.000e+00 |
| Risultante - I | 8.643e+01 | 1.076e-14 | 3.131e-15 | 4.469e+00 | 0.000e+00 | 0.000e+00 |
| Risultante - J | 8.643e+01 | 1.076e-14 | 3.131e-15 | 4.469e+00 | 1.621e-14 | 0.000e+00 |

| **Elemento: 43** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 0 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 0 |
| Massimo - I | 6.350e+01 | 1.410e-13 | 9.758e-15 | 2.928e+02 | 0.000e+00 | 6.956e-11 |
| Massimo - J | 6.350e+01 | 1.410e-13 | 9.758e-15 | 2.928e+02 | 8.001e-13 | 0.000e+00 |
| Risultante - I | 6.350e+01 | 1.462e-13 | 9.824e-15 | 2.951e+02 | 0.000e+00 | 7.019e-11 |
| Risultante - J | 6.350e+01 | 1.462e-13 | 9.824e-15 | 2.951e+02 | 8.060e-13 | 0.000e+00 |

| **Elemento: 44** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 0 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 0 |
| Massimo - I | 7.533e+00 | 1.855e-12 | 2.071e-14 | 6.159e+02 | 1.095e-12 | 0.000e+00 |
| Massimo - J | 7.533e+00 | 1.855e-12 | 2.071e-14 | 6.159e+02 | 8.817e-13 | 0.000e+00 |
| Risultante - I | 7.801e+00 | 1.874e-12 | 2.090e-14 | 6.217e+02 | 1.105e-12 | 0.000e+00 |
| Risultante - J | 7.801e+00 | 1.874e-12 | 2.090e-14 | 6.217e+02 | 8.897e-13 | 0.000e+00 |



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| **Elemento: 45** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 0 |
| Massimo - I | 7.073e+01 | 2.356e-12 | 1.860e-14 | 3.891e+02 | 1.761e-12 | 1.738e-11 |
| Massimo - J | 7.073e+01 | 2.356e-12 | 1.860e-14 | 3.891e+02 | 7.936e-13 | 0.000e+00 |
| Risultante - I | 7.077e+01 | 2.389e-12 | 1.886e-14 | 3.946e+02 | 1.781e-12 | 1.738e-11 |
| Risultante - J | 7.077e+01 | 2.389e-12 | 1.886e-14 | 3.946e+02 | 8.049e-13 | 0.000e+00 |

| **Elemento: 46** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 0 | 1 |
| Massimo - I | 5.621e+01 | 3.896e-15 | 2.969e-15 | 1.014e+01 | 1.534e-13 | 2.168e-12 |
| Massimo - J | 5.621e+01 | 3.896e-15 | 2.969e-15 | 1.014e+01 | 0.000e+00 | 1.319e-12 |
| Risultante - I | 5.621e+01 | 3.897e-15 | 3.024e-15 | 1.177e+01 | 1.539e-13 | 2.190e-12 |
| Risultante - J | 5.621e+01 | 3.897e-15 | 3.024e-15 | 1.177e+01 | 0.000e+00 | 1.319e-12 |

| **Elemento: 47** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 5 | 3 | 1 | 1 | 1 | 3 |
| Modo nodo J | 5 | 3 | 1 | 1 | 1 | 3 |
| Massimo - I | 5.427e+00 | 2.169e+00 | 1.568e+02 | 2.963e+02 | 9.640e+03 | 9.936e+01 |
| Massimo - J | 5.427e+00 | 2.169e+00 | 1.568e+02 | 2.963e+02 | 9.640e+03 | 1.763e+02 |
| Risultante - I | 6.835e+00 | 2.828e+00 | 1.576e+02 | 2.979e+02 | 9.692e+03 | 1.181e+02 |
| Risultante - J | 6.835e+00 | 2.828e+00 | 1.576e+02 | 2.979e+02 | 9.692e+03 | 2.302e+02 |

| **Elemento: 48** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 3 | 1 | 1 | 1 | 1 |
| Modo nodo J | 4 | 3 | 1 | 1 | 1 | 0 |
| Massimo - I | 1.684e+01 | 5.276e-15 | 3.334e-16 | 7.084e+00 | 4.372e-14 | 3.375e-13 |
| Massimo - J | 1.684e+01 | 5.276e-15 | 3.334e-16 | 7.084e+00 | 8.082e-15 | 0.000e+00 |
| Risultante - I | 1.626e+01 | 5.372e-15 | 3.335e-16 | 7.086e+00 | 4.373e-14 | 3.396e-13 |
| Risultante - J | 1.626e+01 | 5.372e-15 | 3.335e-16 | 7.086e+00 | 8.085e-15 | 0.000e+00 |

| **Elemento: 49** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 5 | 3 | 1 | 1 | 0 | 3 |
| Modo nodo J | 5 | 3 | 1 | 1 | 0 | 1 |
| Massimo - I | 6.967e+00 | 2.086e-14 | 4.640e-16 | 1.014e+01 | 0.000e+00 | 2.127e-12 |
| Massimo - J | 6.967e+00 | 2.086e-14 | 4.640e-16 | 1.014e+01 | 0.000e+00 | 3.338e-13 |
| Risultante - I | 4.717e+00 | 2.119e-14 | 4.641e-16 | 1.014e+01 | 0.000e+00 | 2.167e-12 |
| Risultante - J | 4.717e+00 | 2.119e-14 | 4.641e-16 | 1.014e+01 | 0.000e+00 | 3.360e-13 |

| **Elemento: 50** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 5 | 1 | 1 | 1 | 1 | 0 |
| Modo nodo J | 5 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 3.108e+00 | 1.697e-14 | 4.117e-15 | 6.967e+00 | 4.141e-14 | 0.000e+00 |
| Massimo - J | 3.108e+00 | 1.697e-14 | 4.117e-15 | 6.967e+00 | 5.427e-30 | 3.379e-14 |
| Risultante - I | 3.529e+00 | 1.720e-14 | 4.119e-15 | 6.968e+00 | 4.143e-14 | 0.000e+00 |
| Risultante - J | 3.529e+00 | 1.720e-14 | 4.119e-15 | 6.968e+00 | 5.429e-30 | 3.380e-14 |

| **Elemento: 51** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 1 | 1 | 1 | 1 | 5 |
| Modo nodo J | 4 | 1 | 1 | 1 | 1 | 4 |
| Massimo - I | 2.316e+00 | 7.448e-01 | 1.966e+02 | 1.276e+02 | 6.880e+03 | 2.736e+01 |
| Massimo - J | 2.316e+00 | 7.448e-01 | 1.966e+02 | 1.276e+02 | 6.880e+03 | 3.067e+01 |
| Risultante - I | 1.063e+00 | 8.655e-01 | 1.966e+02 | 1.276e+02 | 6.880e+03 | 3.223e+01 |
| Risultante - J | 1.063e+00 | 8.655e-01 | 1.966e+02 | 1.276e+02 | 6.880e+03 | 3.020e+01 |

| **Elemento: 52** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 4 | 1 | 1 | 1 | 4 |
| Modo nodo J | 4 | 4 | 1 | 1 | 1 | 4 |
| Massimo - I | 1.153e+02 | 3.675e+01 | 1.818e+02 | 3.436e+02 | 1.118e+04 | 1.338e+03 |
| Massimo - J | 1.153e+02 | 3.675e+01 | 1.818e+02 | 3.436e+02 | 1.118e+04 | 3.213e+03 |
| Risultante - I | 5.507e+01 | 1.812e+01 | 1.825e+02 | 3.449e+02 | 1.122e+04 | 6.656e+02 |
| Risultante - J | 5.507e+01 | 1.812e+01 | 1.825e+02 | 3.449e+02 | 1.122e+04 | 1.571e+03 |

| **Elemento: 53** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 4 | 1 | 1 | 1 | 1 | 0 |
| Massimo - I | 6.808e+01 | 1.821e-14 | 3.358e-16 | 1.780e+01 | 4.383e-14 | 2.060e-12 |
| Massimo - J | 6.808e+01 | 1.821e-14 | 3.358e-16 | 1.780e+01 | 1.976e-14 | 0.000e+00 |
| Risultante - I | 6.054e+01 | 1.854e-14 | 3.359e-16 | 1.780e+01 | 4.384e-14 | 2.060e-12 |
| Risultante - J | 6.054e+01 | 1.854e-14 | 3.359e-16 | 1.780e+01 | 1.976e-14 | 0.000e+00 |

| **Elemento: 54** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 4 | 1 | 1 | 0 | 4 |
| Modo nodo J | 4 | 4 | 1 | 1 | 0 | 1 |
| Massimo - I | 6.716e+01 | 4.599e-14 | 3.233e-16 | 7.443e+00 | 0.000e+00 | 5.046e-12 |
| Massimo - J | 6.716e+01 | 4.599e-14 | 3.233e-16 | 7.443e+00 | 0.000e+00 | 2.729e-12 |
| Risultante - I | 3.790e+01 | 3.570e-14 | 3.235e-16 | 7.443e+00 | 0.000e+00 | 5.376e-12 |
| Risultante - J | 3.790e+01 | 3.570e-14 | 3.235e-16 | 7.443e+00 | 0.000e+00 | 2.730e-12 |



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| **Elemento: 55** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 4 | 1 | 1 | 1 | 0 |
| Modo nodo J | 4 | 4 | 1 | 1 | 1 | 1 |
| Massimo - I | 5.278e+01 | 3.942e-14 | 4.200e-15 | 6.189e+00 | 4.231e-14 | 0.000e+00 |
| Massimo - J | 5.278e+01 | 3.942e-14 | 4.200e-15 | 6.189e+00 | 5.427e-30 | 3.711e-13 |
| Risultante - I | 2.553e+01 | 2.019e-14 | 4.202e-15 | 6.189e+00 | 4.233e-14 | 0.000e+00 |
| Risultante - J | 2.553e+01 | 2.019e-14 | 4.202e-15 | 6.189e+00 | 5.429e-30 | 3.716e-13 |

| **Elemento: 56** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 7 | 7 | 1 | 1 | 1 | 7 |
| Modo nodo J | 7 | 7 | 1 | 1 | 1 | 7 |
| Massimo - I | 3.584e+01 | 1.180e+01 | 1.871e+02 | 3.537e+02 | 1.151e+04 | 4.282e+02 |
| Massimo - J | 3.584e+01 | 1.180e+01 | 1.871e+02 | 3.537e+02 | 1.151e+04 | 1.023e+03 |
| Risultante - I | 1.725e+01 | 6.336e+00 | 1.878e+02 | 3.550e+02 | 1.155e+04 | 2.521e+02 |
| Risultante - J | 1.725e+01 | 6.336e+00 | 1.878e+02 | 3.550e+02 | 1.155e+04 | 5.302e+02 |

| **Elemento: 57** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 7 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 7 | 1 | 1 | 1 | 1 | 0 |
| Massimo - I | 5.299e+01 | 1.431e-14 | 4.774e-16 | 3.444e+01 | 6.223e-14 | 1.638e-12 |
| Massimo - J | 5.299e+01 | 1.431e-14 | 4.774e-16 | 3.444e+01 | 3.788e-14 | 0.000e+00 |
| Risultante - I | 3.241e+01 | 1.434e-14 | 4.775e-16 | 3.444e+01 | 6.224e-14 | 1.639e-12 |
| Risultante - J | 3.241e+01 | 1.434e-14 | 4.775e-16 | 3.444e+01 | 3.788e-14 | 0.000e+00 |

| **Elemento: 58** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 1 | 1 | 1 | 0 | 1 |
| Modo nodo J | 4 | 1 | 1 | 1 | 0 | 1 |
| Massimo - I | 7.002e+01 | 3.337e-14 | 6.401e-16 | 3.058e+01 | 0.000e+00 | 5.818e-12 |
| Massimo - J | 7.002e+01 | 3.337e-14 | 6.401e-16 | 3.058e+01 | 0.000e+00 | 3.422e-12 |
| Risultante - I | 3.082e+01 | 3.351e-14 | 6.401e-16 | 3.058e+01 | 0.000e+00 | 5.829e-12 |
| Risultante - J | 3.082e+01 | 3.351e-14 | 6.401e-16 | 3.058e+01 | 0.000e+00 | 3.422e-12 |

| **Elemento: 59** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 5 | 1 | 1 | 1 | 0 |
| Modo nodo J | 4 | 5 | 1 | 1 | 1 | 1 |
| Massimo - I | 2.888e+01 | 8.100e-15 | 4.516e-15 | 2.905e+00 | 4.577e-14 | 0.000e+00 |
| Massimo - J | 2.888e+01 | 8.100e-15 | 4.516e-15 | 2.905e+00 | 5.427e-30 | 3.671e-14 |
| Risultante - I | 1.467e+01 | 8.420e-15 | 4.518e-15 | 2.906e+00 | 4.578e-14 | 0.000e+00 |
| Risultante - J | 1.467e+01 | 8.420e-15 | 4.518e-15 | 2.906e+00 | 5.429e-30 | 3.679e-14 |

| **Elemento: 60** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 5 | 1 | 1 | 1 | 5 |
| Modo nodo J | 4 | 5 | 1 | 1 | 1 | 3 |
| Massimo - I | 5.677e+00 | 1.591e+00 | 2.524e+02 | 1.639e+02 | 8.833e+03 | 8.492e+01 |
| Massimo - J | 5.677e+00 | 1.591e+00 | 2.524e+02 | 1.639e+02 | 8.833e+03 | 3.497e+01 |
| Risultante - I | 2.514e+00 | 1.187e+00 | 2.524e+02 | 1.639e+02 | 8.833e+03 | 5.135e+01 |
| Risultante - J | 2.514e+00 | 1.187e+00 | 2.524e+02 | 1.639e+02 | 8.833e+03 | 4.002e+01 |

| **Elemento: 61** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 1.528e+02 | 9.799e+01 | 2.160e+02 | 4.082e+02 | 1.328e+04 | 4.759e+03 |
| Massimo - J | 1.528e+02 | 9.799e+01 | 2.160e+02 | 4.082e+02 | 1.328e+04 | 7.294e+03 |
| Risultante - I | 1.532e+02 | 1.003e+02 | 2.166e+02 | 4.094e+02 | 1.332e+04 | 4.933e+03 |
| Risultante - J | 1.532e+02 | 1.003e+02 | 2.166e+02 | 4.094e+02 | 1.332e+04 | 7.414e+03 |

| **Elemento: 62** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 3 | 4 | 1 | 4 | 1 |
| Modo nodo J | 1 | 3 | 4 | 1 | 1 | 0 |
| Massimo - I | 2.229e+02 | 3.931e-16 | 2.938e-16 | 1.286e+01 | 3.837e-14 | 2.363e-14 |
| Massimo - J | 2.229e+02 | 3.931e-16 | 2.938e-16 | 1.286e+01 | 1.438e-14 | 0.000e+00 |
| Risultante - I | 2.256e+02 | 4.265e-16 | 2.939e-16 | 1.286e+01 | 3.838e-14 | 2.363e-14 |
| Risultante - J | 2.256e+02 | 4.265e-16 | 2.939e-16 | 1.286e+01 | 1.438e-14 | 0.000e+00 |

| **Elemento: 63** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 0 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 0 | 1 |
| Massimo - I | 6.316e+01 | 1.055e-14 | 4.712e-16 | 1.051e+01 | 0.000e+00 | 9.640e-13 |
| Massimo - J | 6.316e+01 | 1.055e-14 | 4.712e-16 | 1.051e+01 | 0.000e+00 | 2.125e-14 |
| Risultante - I | 6.486e+01 | 1.081e-14 | 4.712e-16 | 1.051e+01 | 0.000e+00 | 9.889e-13 |
| Risultante - J | 6.486e+01 | 1.081e-14 | 4.712e-16 | 1.051e+01 | 0.000e+00 | 2.128e-14 |

| **Elemento: 64** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 0 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 3 |
| Massimo - I | 2.916e+01 | 1.022e-14 | 4.964e-15 | 1.693e+00 | 5.066e-14 | 0.000e+00 |
| Massimo - J | 2.916e+01 | 1.022e-14 | 4.964e-15 | 1.693e+00 | 5.427e-30 | 5.251e-15 |
| Risultante - I | 3.046e+01 | 1.047e-14 | 4.965e-15 | 1.715e+00 | 5.067e-14 | 0.000e+00 |
| Risultante - J | 3.046e+01 | 1.047e-14 | 4.965e-15 | 1.715e+00 | 5.429e-30 | 8.008e-15 |



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| **Elemento: 65** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 3 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 3 | 1 | 1 | 1 | 1 |
| Massimo - I | 1.523e+01 | 1.321e+00 | 2.023e+02 | 1.314e+02 | 7.082e+03 | 1.498e+02 |
| Massimo - J | 1.523e+01 | 1.321e+00 | 2.023e+02 | 1.314e+02 | 7.082e+03 | 1.166e+02 |
| Risultante - I | 1.553e+01 | 1.244e+00 | 2.024e+02 | 1.314e+02 | 7.082e+03 | 1.554e+02 |
| Risultante - J | 1.553e+01 | 1.244e+00 | 2.024e+02 | 1.314e+02 | 7.082e+03 | 1.256e+02 |

| **Elemento: 66** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 1.187e+03 | 4.149e+02 | 2.276e+02 | 4.302e+02 | 1.400e+04 | 1.567e+04 |
| Massimo - J | 1.187e+03 | 4.149e+02 | 2.276e+02 | 4.302e+02 | 1.400e+04 | 3.537e+04 |
| Risultante - I | 1.190e+03 | 4.157e+02 | 2.282e+02 | 4.314e+02 | 1.404e+04 | 1.570e+04 |
| Risultante - J | 1.190e+03 | 4.157e+02 | 2.282e+02 | 4.314e+02 | 1.404e+04 | 3.543e+04 |

| **Elemento: 67** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 0 |
| Massimo - I | 2.883e+03 | 1.772e-13 | 3.526e-16 | 3.887e+00 | 4.621e-14 | 1.050e-12 |
| Massimo - J | 2.883e+03 | 1.772e-13 | 3.526e-16 | 3.887e+00 | 4.597e-15 | 0.000e+00 |
| Risultante - I | 2.888e+03 | 1.779e-13 | 3.528e-16 | 3.889e+00 | 4.623e-14 | 1.050e-12 |
| Risultante - J | 2.888e+03 | 1.779e-13 | 3.528e-16 | 3.889e+00 | 4.600e-15 | 0.000e+00 |

| **Elemento: 68** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 0 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 0 | 1 |
| Massimo - I | 1.812e+03 | 7.308e-13 | 4.081e-16 | 2.746e+00 | 0.000e+00 | 7.831e-11 |
| Massimo - J | 1.812e+03 | 7.308e-13 | 4.081e-16 | 2.746e+00 | 0.000e+00 | 1.248e-12 |
| Risultante - I | 1.815e+03 | 7.350e-13 | 4.082e-16 | 2.746e+00 | 0.000e+00 | 7.872e-11 |
| Risultante - J | 1.815e+03 | 7.350e-13 | 4.082e-16 | 2.746e+00 | 0.000e+00 | 1.248e-12 |

| **Elemento: 69** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 0 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 8.267e+02 | 5.240e-13 | 4.976e-15 | 1.778e+00 | 5.079e-14 | 0.000e+00 |
| Massimo - J | 8.267e+02 | 5.240e-13 | 4.976e-15 | 1.778e+00 | 5.427e-30 | 5.204e-13 |
| Risultante - I | 8.323e+02 | 5.280e-13 | 4.977e-15 | 1.797e+00 | 5.080e-14 | 0.000e+00 |
| Risultante - J | 8.323e+02 | 5.280e-13 | 4.977e-15 | 1.797e+00 | 5.429e-30 | 5.363e-13 |

| **Elemento: 70** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 4 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 4.419e+01 | 3.793e+01 | 1.323e+02 | 8.591e+01 | 4.631e+03 | 1.534e+03 |
| Massimo - J | 4.419e+01 | 3.793e+01 | 1.323e+02 | 8.591e+01 | 4.631e+03 | 1.121e+03 |
| Risultante - I | 5.677e+01 | 4.857e+01 | 1.323e+02 | 8.590e+01 | 4.630e+03 | 2.135e+03 |
| Risultante - J | 5.677e+01 | 4.857e+01 | 1.323e+02 | 8.590e+01 | 4.630e+03 | 1.291e+03 |

| **Elemento: 71** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 1.233e+03 | 4.289e+02 | 2.319e+02 | 4.384e+02 | 1.426e+04 | 1.614e+04 |
| Massimo - J | 1.233e+03 | 4.289e+02 | 2.319e+02 | 4.384e+02 | 1.426e+04 | 3.661e+04 |
| Risultante - I | 1.236e+03 | 4.297e+02 | 2.327e+02 | 4.400e+02 | 1.431e+04 | 1.618e+04 |
| Risultante - J | 1.236e+03 | 4.297e+02 | 2.327e+02 | 4.400e+02 | 1.431e+04 | 3.668e+04 |

| **Elemento: 72** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 0 |
| Massimo - I | 3.121e+03 | 1.942e-13 | 4.158e-16 | 3.714e+00 | 5.442e-14 | 7.513e-13 |
| Massimo - J | 3.121e+03 | 1.942e-13 | 4.158e-16 | 3.714e+00 | 4.707e-15 | 0.000e+00 |
| Risultante - I | 3.126e+03 | 1.961e-13 | 4.159e-16 | 3.715e+00 | 5.443e-14 | 7.523e-13 |
| Risultante - J | 3.126e+03 | 1.961e-13 | 4.159e-16 | 3.715e+00 | 4.707e-15 | 0.000e+00 |

| **Elemento: 73** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 0 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 0 | 1 |
| Massimo - I | 2.125e+03 | 8.577e-13 | 3.715e-16 | 1.942e+00 | 0.000e+00 | 9.028e-11 |
| Massimo - J | 2.125e+03 | 8.577e-13 | 3.715e-16 | 1.942e+00 | 0.000e+00 | 1.028e-12 |
| Risultante - I | 2.127e+03 | 8.680e-13 | 3.716e-16 | 1.942e+00 | 0.000e+00 | 9.132e-11 |
| Risultante - J | 2.127e+03 | 8.680e-13 | 3.716e-16 | 1.942e+00 | 0.000e+00 | 1.028e-12 |

| **Elemento: 74** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 0 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 1.206e+03 | 6.363e-13 | 4.679e-15 | 1.245e+00 | 4.755e-14 | 0.000e+00 |
| Massimo - J | 1.206e+03 | 6.363e-13 | 4.679e-15 | 1.245e+00 | 5.428e-30 | 8.154e-13 |
| Risultante - I | 1.207e+03 | 6.453e-13 | 4.681e-15 | 1.263e+00 | 4.757e-14 | 0.000e+00 |
| Risultante - J | 1.207e+03 | 6.453e-13 | 4.681e-15 | 1.263e+00 | 5.429e-30 | 8.302e-13 |



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| **Elemento: 75** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 3 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 3 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 5.154e+01 | 4.191e+01 | 1.180e+02 | 7.664e+01 | 4.131e+03 | 1.685e+03 |
| Massimo - J | 5.154e+01 | 4.191e+01 | 1.180e+02 | 7.664e+01 | 4.131e+03 | 1.249e+03 |
| Risultante - I | 6.645e+01 | 5.597e+01 | 1.180e+02 | 7.664e+01 | 4.131e+03 | 2.471e+03 |
| Risultante - J | 6.645e+01 | 5.597e+01 | 1.180e+02 | 7.664e+01 | 4.131e+03 | 1.482e+03 |

| **Elemento: 76** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 1.833e+02 | 1.844e+02 | 2.278e+02 | 4.306e+02 | 1.401e+04 | 9.821e+03 |
| Massimo - J | 1.833e+02 | 1.844e+02 | 2.278e+02 | 4.306e+02 | 1.401e+04 | 1.286e+04 |
| Risultante - I | 1.839e+02 | 1.859e+02 | 2.288e+02 | 4.326e+02 | 1.407e+04 | 9.918e+03 |
| Risultante - J | 1.839e+02 | 1.859e+02 | 2.288e+02 | 4.326e+02 | 1.407e+04 | 1.295e+04 |

| **Elemento: 77** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 4 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 4 | 1 | 1 | 1 | 0 |
| Massimo - I | 3.921e+02 | 6.802e-16 | 4.625e-16 | 9.525e+00 | 6.049e-14 | 3.788e-14 |
| Massimo - J | 3.921e+02 | 6.802e-16 | 4.625e-16 | 9.525e+00 | 1.069e-14 | 0.000e+00 |
| Risultante - I | 3.940e+02 | 7.140e-16 | 4.626e-16 | 9.527e+00 | 6.050e-14 | 3.788e-14 |
| Risultante - J | 3.940e+02 | 7.140e-16 | 4.626e-16 | 9.527e+00 | 1.069e-14 | 0.000e+00 |

| **Elemento: 78** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 0 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 0 | 1 |
| Massimo - I | 1.788e+02 | 1.981e-14 | 3.709e-16 | 2.410e+00 | 0.000e+00 | 1.712e-12 |
| Massimo - J | 1.788e+02 | 1.981e-14 | 3.709e-16 | 2.410e+00 | 0.000e+00 | 4.593e-14 |
| Risultante - I | 1.801e+02 | 2.002e-14 | 3.710e-16 | 2.411e+00 | 0.000e+00 | 1.732e-12 |
| Risultante - J | 1.801e+02 | 2.002e-14 | 3.710e-16 | 2.411e+00 | 0.000e+00 | 4.595e-14 |

| **Elemento: 79** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 0 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 2.429e+02 | 2.315e-14 | 4.038e-15 | 7.777e+00 | 4.054e-14 | 0.000e+00 |
| Massimo - J | 2.429e+02 | 2.315e-14 | 4.038e-15 | 7.777e+00 | 5.427e-30 | 6.877e-14 |
| Risultante - I | 2.467e+02 | 2.338e-14 | 4.041e-15 | 7.782e+00 | 4.057e-14 | 0.000e+00 |
| Risultante - J | 2.467e+02 | 2.338e-14 | 4.041e-15 | 7.782e+00 | 5.429e-30 | 6.982e-14 |

| **Elemento: 80** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 3 | 4 | 1 | 1 | 1 | 4 |
| Modo nodo J | 3 | 4 | 1 | 1 | 1 | 4 |
| Massimo - I | 1.101e+00 | 1.078e+00 | 6.580e+01 | 4.273e+01 | 2.303e+03 | 3.708e+01 |
| Massimo - J | 1.101e+00 | 1.078e+00 | 6.580e+01 | 4.273e+01 | 2.303e+03 | 3.842e+01 |
| Risultante - I | 1.134e+00 | 1.175e+00 | 6.582e+01 | 4.274e+01 | 2.304e+03 | 4.592e+01 |
| Risultante - J | 1.134e+00 | 1.175e+00 | 6.582e+01 | 4.274e+01 | 2.304e+03 | 3.806e+01 |

| **Elemento: 81** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 4 | 1 | 1 | 1 | 4 |
| Modo nodo J | 4 | 4 | 1 | 1 | 1 | 4 |
| Massimo - I | 2.637e+00 | 1.343e+00 | 1.946e+02 | 3.679e+02 | 1.197e+04 | 6.074e+01 |
| Massimo - J | 2.637e+00 | 1.343e+00 | 1.946e+02 | 3.679e+02 | 1.197e+04 | 1.045e+02 |
| Risultante - I | 2.458e+00 | 1.175e+00 | 1.959e+02 | 3.703e+02 | 1.205e+04 | 5.429e+01 |
| Risultante - J | 2.458e+00 | 1.175e+00 | 1.959e+02 | 3.703e+02 | 1.205e+04 | 9.232e+01 |

| **Elemento: 82** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 4 | 1 | 1 | 1 | 1 |
| Modo nodo J | 4 | 4 | 1 | 1 | 1 | 0 |
| Massimo - I | 1.624e+01 | 3.178e-15 | 6.909e-16 | 3.682e+01 | 9.018e-14 | 1.770e-13 |
| Massimo - J | 1.624e+01 | 3.178e-15 | 6.909e-16 | 3.682e+01 | 3.993e-14 | 0.000e+00 |
| Risultante - I | 2.107e+01 | 3.223e-15 | 6.910e-16 | 3.682e+01 | 9.019e-14 | 1.780e-13 |
| Risultante - J | 2.107e+01 | 3.223e-15 | 6.910e-16 | 3.682e+01 | 3.993e-14 | 0.000e+00 |

| **Elemento: 83** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 0 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 0 | 1 |
| Massimo - I | 1.624e+01 | 1.929e-14 | 3.945e-16 | 9.506e-01 | 0.000e+00 | 1.659e-12 |
| Massimo - J | 1.624e+01 | 1.929e-14 | 3.945e-16 | 9.506e-01 | 0.000e+00 | 4.524e-13 |
| Risultante - I | 1.786e+01 | 1.946e-14 | 3.946e-16 | 9.658e-01 | 0.000e+00 | 1.673e-12 |
| Risultante - J | 1.786e+01 | 1.946e-14 | 3.946e-16 | 9.658e-01 | 0.000e+00 | 4.589e-13 |

| **Elemento: 84** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 0 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 4 |
| Massimo - I | 2.852e+01 | 1.551e-14 | 3.696e-15 | 1.598e+01 | 3.866e-14 | 0.000e+00 |
| Massimo - J | 2.852e+01 | 1.551e-14 | 3.696e-15 | 1.598e+01 | 5.427e-30 | 3.219e-13 |
| Risultante - I | 2.885e+01 | 1.569e-14 | 3.697e-15 | 1.599e+01 | 3.867e-14 | 0.000e+00 |
| Risultante - J | 2.885e+01 | 1.569e-14 | 3.697e-15 | 1.599e+01 | 5.429e-30 | 3.304e-13 |



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| **Elemento: 85** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 4 | 1 | 1 | 1 | 4 |
| Modo nodo J | 4 | 4 | 1 | 1 | 1 | 4 |
| Massimo - I | 1.025e+01 | 5.943e+00 | 4.990e+01 | 3.240e+01 | 1.747e+03 | 2.931e+02 |
| Massimo - J | 1.025e+01 | 5.943e+00 | 4.990e+01 | 3.240e+01 | 1.747e+03 | 1.230e+02 |
| Risultante - I | 5.005e+00 | 3.018e+00 | 4.990e+01 | 3.240e+01 | 1.747e+03 | 1.468e+02 |
| Risultante - J | 5.005e+00 | 3.018e+00 | 4.990e+01 | 3.240e+01 | 1.747e+03 | 6.479e+01 |

| **Elemento: 86** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 4 | 1 | 1 | 1 | 4 |
| Modo nodo J | 4 | 4 | 1 | 1 | 1 | 4 |
| Massimo - I | 1.167e+01 | 6.546e+00 | 1.120e+02 | 7.275e+01 | 3.922e+03 | 3.259e+02 |
| Massimo - J | 1.167e+01 | 6.546e+00 | 1.120e+02 | 7.275e+01 | 3.922e+03 | 1.324e+02 |
| Risultante - I | 5.368e+00 | 3.151e+00 | 1.121e+02 | 7.276e+01 | 3.922e+03 | 1.544e+02 |
| Risultante - J | 5.368e+00 | 3.151e+00 | 1.121e+02 | 7.276e+01 | 3.922e+03 | 6.667e+01 |

| **Elemento: 87** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 2.350e+01 | 2.676e+00 | 1.464e+02 | 9.504e+01 | 5.123e+03 | 2.884e+02 |
| Massimo - J | 2.350e+01 | 2.676e+00 | 1.464e+02 | 9.504e+01 | 5.123e+03 | 1.160e+02 |
| Risultante - I | 2.496e+01 | 3.888e+00 | 1.464e+02 | 9.506e+01 | 5.124e+03 | 3.335e+02 |
| Risultante - J | 2.496e+01 | 3.888e+00 | 1.464e+02 | 9.506e+01 | 5.124e+03 | 1.205e+02 |

| **Elemento: 88** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 1.428e+01 | 7.875e+00 | 1.724e+02 | 1.120e+02 | 6.036e+03 | 3.940e+02 |
| Massimo - J | 1.428e+01 | 7.875e+00 | 1.724e+02 | 1.120e+02 | 6.036e+03 | 1.572e+02 |
| Risultante - I | 1.529e+01 | 8.248e+00 | 1.724e+02 | 1.120e+02 | 6.036e+03 | 4.151e+02 |
| Risultante - J | 1.529e+01 | 8.248e+00 | 1.724e+02 | 1.120e+02 | 6.036e+03 | 1.628e+02 |

| **Elemento: 89** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 0 | 0 |
| Massimo - I | 7.453e+02 | 1.622e-13 | 2.857e-15 | 6.995e+00 | 2.783e-13 | 1.519e-10 |
| Massimo - J | 7.453e+02 | 1.622e-13 | 2.857e-15 | 6.995e+00 | 0.000e+00 | 0.000e+00 |
| Risultante - I | 7.464e+02 | 1.665e-13 | 2.858e-15 | 7.471e+00 | 2.784e-13 | 1.526e-10 |
| Risultante - J | 7.464e+02 | 1.665e-13 | 2.858e-15 | 7.471e+00 | 0.000e+00 | 0.000e+00 |

| **Elemento: 90** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 2 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 2 | 1 | 0 |
| Massimo - I | 3.198e+02 | 4.362e-13 | 1.657e-14 | 7.303e+00 | 2.558e-13 | 1.500e-10 |
| Massimo - J | 3.198e+02 | 4.362e-13 | 1.657e-14 | 7.303e+00 | 1.279e-13 | 0.000e+00 |
| Risultante - I | 3.206e+02 | 4.418e-13 | 1.661e-14 | 9.151e+00 | 2.571e-13 | 1.507e-10 |
| Risultante - J | 3.206e+02 | 4.418e-13 | 1.661e-14 | 9.151e+00 | 1.285e-13 | 0.000e+00 |

| **Elemento: 91** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 2 | 2 | 2 | 1 |
| Modo nodo J | 1 | 1 | 2 | 2 | 2 | 1 |
| Massimo - I | 9.529e+03 | 1.708e+03 | 2.059e+01 | 1.126e+01 | 8.580e+02 | 2.750e+04 |
| Massimo - J | 9.529e+03 | 1.708e+03 | 2.059e+01 | 1.126e+01 | 8.580e+02 | 1.698e+05 |
| Risultante - I | 9.529e+03 | 1.708e+03 | 2.579e+01 | 1.410e+01 | 1.074e+03 | 2.750e+04 |
| Risultante - J | 9.529e+03 | 1.708e+03 | 2.579e+01 | 1.410e+01 | 1.074e+03 | 1.698e+05 |

| **Elemento: 92** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 1 | 1 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 3.729e+03 | 1.717e+03 | 1.989e+01 | 1.087e+01 | 8.286e+02 | 3.292e+04 |
| Massimo - J | 3.729e+03 | 1.717e+03 | 1.989e+01 | 1.087e+01 | 8.286e+02 | 1.102e+05 |
| Risultante - I | 3.729e+03 | 1.717e+03 | 2.116e+01 | 1.156e+01 | 8.816e+02 | 3.292e+04 |
| Risultante - J | 3.729e+03 | 1.717e+03 | 2.116e+01 | 1.156e+01 | 8.815e+02 | 1.101e+05 |

| **Elemento: 93** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 4 | 1 | 1 | 1 | 4 |
| Modo nodo J | 1 | 4 | 1 | 1 | 1 | 4 |
| Massimo - I | 9.657e+00 | 3.903e+00 | 2.168e+02 | 4.099e+02 | 1.334e+04 | 1.599e+02 |
| Massimo - J | 9.657e+00 | 3.903e+00 | 2.168e+02 | 4.099e+02 | 1.334e+04 | 3.202e+02 |
| Risultante - I | 1.266e+01 | 5.037e+00 | 2.179e+02 | 4.120e+02 | 1.340e+04 | 2.054e+02 |
| Risultante - J | 1.266e+01 | 5.037e+00 | 2.179e+02 | 4.120e+02 | 1.340e+04 | 4.145e+02 |

| **Elemento: 94** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 2 | 1 | 1 | 1 | 1 | 4 |
| Modo nodo J | 2 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 6.276e+00 | 2.708e+00 | 2.279e+02 | 4.308e+02 | 1.402e+04 | 1.145e+02 |
| Massimo - J | 6.276e+00 | 2.708e+00 | 2.279e+02 | 4.308e+02 | 1.402e+04 | 2.186e+02 |
| Risultante - I | 8.649e+00 | 3.514e+00 | 2.289e+02 | 4.328e+02 | 1.408e+04 | 1.461e+02 |
| Risultante - J | 8.649e+00 | 3.514e+00 | 2.289e+02 | 4.328e+02 | 1.408e+04 | 2.870e+02 |



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**FORZE/MOMENTI ELEMENTO FINITO TRAVE - SISMA LUNGO X**
**Gruppo numero: 3 - Descrizione: DIAGONALI DI PARETE**

| **Elemento: 1** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 1 | 1 | 1 | 0 | 0 |
| Modo nodo J | 4 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 1.136e+03 | 5.965e-16 | 4.169e-15 | 4.849e+00 | 0.000e+00 | 0.000e+00 |
| Massimo - J | 1.136e+03 | 5.965e-16 | 4.169e-15 | 4.849e+00 | 3.796e-13 | 4.334e-14 |
| Risultante - I | 1.158e+03 | 6.028e-16 | 4.169e-15 | 4.849e+00 | 0.000e+00 | 0.000e+00 |
| Risultante - J | 1.158e+03 | 6.028e-16 | 4.169e-15 | 4.849e+00 | 3.797e-13 | 4.385e-14 |

| **Elemento: 2** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 1 | 1 | 1 | 0 | 0 |
| Modo nodo J | 1 | 1 | 1 | 1 | 1 | 1 |
| Massimo - I | 1.590e+03 | 5.210e-16 | 4.164e-15 | 4.694e+00 | 0.000e+00 | 0.000e+00 |
| Massimo - J | 1.590e+03 | 5.210e-16 | 4.164e-15 | 4.694e+00 | 3.792e-13 | 4.894e-14 |
| Risultante - I | 1.606e+03 | 5.283e-16 | 4.164e-15 | 4.694e+00 | 0.000e+00 | 0.000e+00 |
| Risultante - J | 1.606e+03 | 5.283e-16 | 4.164e-15 | 4.694e+00 | 3.792e-13 | 4.930e-14 |

| **Elemento: 3** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 1 | 3 | 1 | 1 | 0 | 0 |
| Modo nodo J | 1 | 3 | 1 | 1 | 0 | 1 |
| Massimo - I | 1.759e+03 | 4.126e-16 | 7.467e-16 | 3.326e+00 | 0.000e+00 | 0.000e+00 |
| Massimo - J | 1.759e+03 | 4.126e-16 | 7.467e-16 | 3.326e+00 | 0.000e+00 | 4.928e-14 |
| Risultante - I | 1.773e+03 | 4.227e-16 | 7.467e-16 | 3.326e+00 | 0.000e+00 | 0.000e+00 |
| Risultante - J | 1.773e+03 | 4.227e-16 | 7.467e-16 | 3.326e+00 | 0.000e+00 | 5.001e-14 |

| **Elemento: 4** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 1 | 1 | 1 | 0 | 0 |
| Modo nodo J | 4 | 1 | 1 | 1 | 0 | 1 |
| Massimo - I | 1.099e+03 | 5.234e-16 | 7.406e-16 | 2.850e+00 | 0.000e+00 | 0.000e+00 |
| Massimo - J | 1.099e+03 | 5.234e-16 | 7.406e-16 | 2.850e+00 | 0.000e+00 | 4.132e-14 |
| Risultante - I | 1.121e+03 | 5.309e-16 | 7.406e-16 | 2.850e+00 | 0.000e+00 | 0.000e+00 |
| Risultante - J | 1.121e+03 | 5.309e-16 | 7.406e-16 | 2.850e+00 | 0.000e+00 | 4.194e-14 |

**FORZE/MOMENTI ELEMENTO FINITO TRAVE - SISMA LUNGO Y**
**Gruppo numero: 1 - Descrizione: MONTANTI**

| **Elemento: 1** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 6 | 3 | 4 | 4 | 4 | 3 |
| Modo nodo J | 6 | 3 | 4 | 4 | 4 | 3 |
| Massimo - I | 2.317e+02 | 1.752e+01 | 1.469e+02 | 1.391e+00 | 2.344e+04 | 2.270e+03 |
| Massimo - J | 2.317e+02 | 1.752e+01 | 1.469e+02 | 1.391e+00 | 2.210e+04 | 3.161e+03 |
| Risultante - I | 2.984e+02 | 2.485e+01 | 2.931e+02 | 2.725e+00 | 4.767e+04 | 3.163e+03 |
| Risultante - J | 2.984e+02 | 2.485e+01 | 2.931e+02 | 2.725e+00 | 4.321e+04 | 4.547e+03 |

| **Elemento: 2** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 6 | 3 | 3 | 4 | 3 | 3 |
| Modo nodo J | 6 | 3 | 3 | 4 | 3 | 6 |
| Massimo - I | 2.074e+02 | 1.622e+01 | 1.532e+02 | 1.391e+00 | 2.443e+04 | 2.263e+03 |
| Massimo - J | 2.074e+02 | 1.622e+01 | 1.532e+02 | 1.391e+00 | 2.307e+04 | 2.765e+03 |
| Risultante - I | 2.637e+02 | 2.291e+01 | 3.045e+02 | 2.725e+00 | 4.979e+04 | 3.167e+03 |
| Risultante - J | 2.637e+02 | 2.291e+01 | 3.045e+02 | 2.725e+00 | 4.461e+04 | 3.946e+03 |

| **Elemento: 3** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 3 | 4 | 4 | 4 | 3 |
| Modo nodo J | 4 | 3 | 4 | 4 | 4 | 3 |
| Massimo - I | 5.739e+01 | 6.532e+00 | 1.112e+02 | 1.391e+00 | 2.000e+04 | 9.403e+02 |
| Massimo - J | 5.739e+01 | 6.532e+00 | 1.112e+02 | 1.391e+00 | 1.448e+04 | 1.085e+03 |
| Risultante - I | 1.230e+02 | 5.815e+00 | 2.032e+02 | 2.725e+00 | 3.900e+04 | 7.711e+02 |
| Risultante - J | 1.230e+02 | 5.815e+00 | 2.032e+02 | 2.725e+00 | 2.406e+04 | 1.065e+03 |

| **Elemento: 4** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 3 | 4 | 4 | 4 | 3 |
| Modo nodo J | 4 | 3 | 4 | 4 | 2 | 3 |
| Massimo - I | 3.027e+03 | 1.510e+01 | 2.291e+01 | 1.148e+00 | 5.038e+03 | 1.981e+03 |
| Massimo - J | 3.027e+03 | 1.510e+01 | 2.291e+01 | 1.148e+00 | 3.080e+03 | 2.701e+03 |
| Risultante - I | 6.158e+03 | 1.899e+01 | 5.075e+01 | 2.250e+00 | 1.055e+04 | 2.136e+03 |
| Risultante - J | 6.158e+03 | 1.899e+01 | 5.075e+01 | 2.250e+00 | 5.584e+03 | 3.774e+03 |

| **Elemento: 5** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 4 | 4 | 4 | 4 | 4 |
| Modo nodo J | 4 | 4 | 4 | 4 | 4 | 4 |
| Massimo - I | 2.423e+01 | 9.150e+00 | 9.468e+01 | 1.391e+00 | 1.841e+04 | 1.395e+03 |
| Massimo - J | 2.423e+01 | 9.150e+00 | 9.468e+01 | 1.391e+00 | 1.094e+04 | 1.441e+03 |
| Risultante - I | 4.567e+01 | 1.271e+01 | 1.643e+02 | 2.725e+00 | 3.523e+04 | 1.930e+03 |
| Risultante - J | 4.567e+01 | 1.271e+01 | 1.643e+02 | 2.725e+00 | 1.589e+04 | 2.012e+03 |

| **Elemento: 6** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|



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| | | | | | | |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 4 | 3 | 4 | 3 | 4 |
| Modo nodo J | 4 | 4 | 3 | 4 | 3 | 4 |
| Massimo - I | 3.660e+01 | 9.899e+00 | 1.135e+02 | 1.391e+00 | 2.061e+04 | 1.413e+03 |
| Massimo - J | 3.660e+01 | 9.899e+00 | 1.135e+02 | 1.391e+00 | 1.459e+04 | 1.656e+03 |
| Risultante - I | 6.768e+01 | 1.320e+01 | 1.759e+02 | 2.725e+00 | 3.734e+04 | 1.812e+03 |
| Risultante - J | 6.768e+01 | 1.320e+01 | 1.759e+02 | 2.725e+00 | 1.755e+04 | 2.283e+03 |

| **Elemento: 7** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 4 | 4 | 4 | 4 | 4 |
| Modo nodo J | 4 | 4 | 4 | 4 | 4 | 4 |
| Massimo - I | 3.016e+03 | 1.913e+01 | 2.405e+01 | 1.148e+00 | 5.154e+03 | 2.611e+03 |
| Massimo - J | 3.016e+03 | 1.913e+01 | 2.405e+01 | 1.148e+00 | 2.687e+03 | 3.319e+03 |
| Risultante - I | 6.146e+03 | 2.814e+01 | 5.132e+01 | 2.250e+00 | 1.065e+04 | 3.599e+03 |
| Risultante - J | 6.146e+03 | 2.814e+01 | 5.132e+01 | 2.250e+00 | 5.533e+03 | 5.137e+03 |

| **Elemento: 8** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 4 | 4 | 4 | 4 | 4 |
| Modo nodo J | 4 | 4 | 4 | 4 | 4 | 4 |
| Massimo - I | 8.553e+00 | 1.343e+01 | 3.369e+01 | 1.148e+00 | 6.153e+03 | 2.155e+03 |
| Massimo - J | 8.553e+00 | 1.343e+01 | 3.369e+01 | 1.148e+00 | 4.453e+03 | 2.009e+03 |
| Risultante - I | 1.113e+01 | 1.843e+01 | 5.008e+01 | 2.250e+00 | 1.086e+04 | 2.956e+03 |
| Risultante - J | 1.113e+01 | 1.843e+01 | 5.008e+01 | 2.250e+00 | 4.851e+03 | 2.758e+03 |

| **Elemento: 9** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 3 | 4 | 4 | 4 | 3 |
| Modo nodo J | 4 | 3 | 4 | 4 | 4 | 3 |
| Massimo - I | 3.155e+03 | 9.583e+00 | 3.486e+01 | 1.148e+00 | 6.272e+03 | 1.438e+03 |
| Massimo - J | 3.155e+03 | 9.583e+00 | 3.486e+01 | 1.148e+00 | 4.740e+03 | 1.532e+03 |
| Risultante - I | 6.582e+03 | 7.685e+00 | 5.002e+01 | 2.250e+00 | 1.084e+04 | 1.094e+03 |
| Risultante - J | 6.582e+03 | 7.685e+00 | 5.002e+01 | 2.250e+00 | 4.916e+03 | 1.302e+03 |

| **Elemento: 10** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 4 | 4 | 4 | 4 | 3 |
| Modo nodo J | 4 | 4 | 4 | 4 | 4 | 4 |
| Massimo - I | 3.058e+03 | 3.403e+01 | 3.090e+01 | 1.148e+00 | 5.860e+03 | 4.449e+03 |
| Massimo - J | 3.058e+03 | 3.403e+01 | 3.090e+01 | 1.148e+00 | 3.972e+03 | 6.100e+03 |
| Risultante - I | 6.376e+03 | 5.309e+01 | 4.178e+01 | 2.250e+00 | 9.962e+03 | 6.729e+03 |
| Risultante - J | 6.376e+03 | 5.309e+01 | 4.178e+01 | 2.250e+00 | 3.535e+03 | 9.741e+03 |

| **Elemento: 11** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 3 | 3 | 3 | 4 | 3 | 3 |
| Modo nodo J | 3 | 3 | 3 | 4 | 3 | 3 |
| Massimo - I | 4.948e+01 | 6.777e+00 | 1.192e+02 | 1.391e+00 | 2.115e+04 | 9.652e+02 |
| Massimo - J | 4.948e+01 | 6.777e+00 | 1.192e+02 | 1.391e+00 | 1.579e+04 | 1.136e+03 |
| Risultante - I | 9.890e+01 | 6.225e+00 | 2.106e+02 | 2.725e+00 | 4.074e+04 | 8.119e+02 |
| Risultante - J | 9.890e+01 | 6.225e+00 | 2.106e+02 | 2.725e+00 | 2.463e+04 | 1.127e+03 |

| **Elemento: 12** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 6 | 3 | 6 | 4 | 6 | 3 |
| Modo nodo J | 6 | 3 | 6 | 4 | 6 | 3 |
| Massimo - I | 2.861e+02 | 1.987e+01 | 1.279e+02 | 1.148e+00 | 1.415e+04 | 3.057e+03 |
| Massimo - J | 2.861e+02 | 1.987e+01 | 1.279e+02 | 1.148e+00 | 2.549e+04 | 3.102e+03 |
| Risultante - I | 2.151e+02 | 2.857e+01 | 1.022e+02 | 2.250e+00 | 1.561e+04 | 4.348e+03 |
| Risultante - J | 2.151e+02 | 2.857e+01 | 1.022e+02 | 2.250e+00 | 1.618e+04 | 4.509e+03 |

| **Elemento: 13** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 3 | 4 | 4 | 4 | 4 | 4 |
| Modo nodo J | 3 | 4 | 4 | 4 | 4 | 4 |
| Massimo - I | 7.800e+00 | 1.453e+01 | 6.766e+01 | 1.148e+00 | 9.145e+03 | 2.263e+03 |
| Massimo - J | 7.800e+00 | 1.453e+01 | 6.766e+01 | 1.148e+00 | 1.297e+04 | 2.241e+03 |
| Risultante - I | 1.197e+01 | 1.997e+01 | 9.142e+01 | 2.250e+00 | 1.456e+04 | 3.107e+03 |
| Risultante - J | 1.197e+01 | 1.997e+01 | 9.142e+01 | 2.250e+00 | 1.383e+04 | 3.083e+03 |

| **Elemento: 14** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 2 | 3 | 2 | 4 | 4 | 3 |
| Modo nodo J | 2 | 3 | 2 | 4 | 2 | 3 |
| Massimo - I | 8.923e+01 | 1.836e+01 | 2.596e+01 | 1.148e+00 | 4.638e+03 | 2.908e+03 |
| Massimo - J | 8.923e+01 | 1.836e+01 | 2.596e+01 | 1.148e+00 | 5.389e+03 | 2.854e+03 |
| Risultante - I | 1.162e+02 | 2.430e+01 | 4.917e+01 | 2.250e+00 | 1.012e+04 | 3.920e+03 |
| Risultante - J | 1.162e+02 | 2.430e+01 | 4.917e+01 | 2.250e+00 | 6.242e+03 | 3.821e+03 |

| **Elemento: 15** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 3 | 4 | 3 | 4 | 3 | 4 |
| Modo nodo J | 3 | 4 | 3 | 4 | 3 | 3 |
| Massimo - I | 3.472e+02 | 1.761e+01 | 1.262e+02 | 1.391e+00 | 2.183e+04 | 2.314e+03 |
| Massimo - J | 3.472e+02 | 1.761e+01 | 1.262e+02 | 1.391e+00 | 1.729e+04 | 3.145e+03 |
| Risultante - I | 4.245e+02 | 2.133e+01 | 1.715e+02 | 2.725e+00 | 3.677e+04 | 2.888e+03 |
| Risultante - J | 4.245e+02 | 2.133e+01 | 1.715e+02 | 2.725e+00 | 1.730e+04 | 3.833e+03 |

| **Elemento: 16** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|



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| | | | | | | |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 4 | 4 | 4 | 4 | 4 |
| Modo nodo J | 4 | 4 | 4 | 4 | 4 | 4 |
| Massimo - I | 6.941e+01 | 1.953e+01 | 3.386e+01 | 1.148e+00 | 6.170e+03 | 3.029e+03 |
| Massimo - J | 6.941e+01 | 1.953e+01 | 3.386e+01 | 1.148e+00 | 4.501e+03 | 3.026e+03 |
| Risultante - I | 6.462e+01 | 3.253e+01 | 4.987e+01 | 2.250e+00 | 1.084e+04 | 5.067e+03 |
| Risultante - J | 6.462e+01 | 3.253e+01 | 4.987e+01 | 2.250e+00 | 4.826e+03 | 5.029e+03 |

| **Elemento: 17** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 4 | 4 | 4 | 4 | 4 |
| Modo nodo J | 4 | 4 | 4 | 4 | 4 | 4 |
| Massimo - I | 1.042e+02 | 1.965e+01 | 6.200e+01 | 1.148e+00 | 8.714e+03 | 2.919e+03 |
| Massimo - J | 1.042e+02 | 1.965e+01 | 6.200e+01 | 1.148e+00 | 1.127e+04 | 3.182e+03 |
| Risultante - I | 5.854e+01 | 3.181e+01 | 8.577e+01 | 2.250e+00 | 1.398e+04 | 5.003e+03 |
| Risultante - J | 5.854e+01 | 3.181e+01 | 8.577e+01 | 2.250e+00 | 1.266e+04 | 4.864e+03 |

| **Elemento: 18** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 6 | 6 | 4 | 4 | 4 | 6 |
| Modo nodo J | 6 | 6 | 4 | 4 | 4 | 6 |
| Massimo - I | 3.671e+02 | 1.788e+01 | 8.942e+01 | 1.391e+00 | 1.790e+04 | 2.434e+03 |
| Massimo - J | 3.671e+02 | 1.788e+01 | 8.942e+01 | 1.391e+00 | 9.829e+03 | 3.108e+03 |
| Risultante - I | 4.798e+02 | 2.540e+01 | 1.513e+02 | 2.725e+00 | 3.396e+04 | 3.562e+03 |
| Risultante - J | 4.798e+02 | 2.540e+01 | 1.513e+02 | 2.725e+00 | 1.334e+04 | 4.360e+03 |

| **Elemento: 19** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 9 | 4 | 4 | 4 | 4 | 4 |
| Modo nodo J | 9 | 4 | 4 | 4 | 9 | 4 |
| Massimo - I | 9.282e+01 | 1.917e+01 | 2.411e+01 | 1.148e+00 | 5.160e+03 | 2.993e+03 |
| Massimo - J | 9.282e+01 | 1.917e+01 | 2.411e+01 | 1.148e+00 | 3.721e+03 | 2.950e+03 |
| Risultante - I | 1.305e+02 | 3.057e+01 | 5.172e+01 | 2.250e+00 | 1.065e+04 | 4.871e+03 |
| Risultante - J | 1.305e+02 | 3.057e+01 | 5.172e+01 | 2.250e+00 | 5.753e+03 | 4.623e+03 |

| **Elemento: 20** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 5 | 3 | 4 | 4 | 4 | 3 |
| Modo nodo J | 5 | 3 | 4 | 4 | 4 | 3 |
| Massimo - I | 3.678e+02 | 2.794e+01 | 3.352e+02 | 1.148e+00 | 3.663e+04 | 3.851e+03 |
| Massimo - J | 3.678e+02 | 2.794e+01 | 3.352e+02 | 1.148e+00 | 6.729e+04 | 4.811e+03 |
| Risultante - I | 3.984e+02 | 4.303e+01 | 3.039e+02 | 2.250e+00 | 3.535e+04 | 5.757e+03 |
| Risultante - J | 3.984e+02 | 4.303e+01 | 3.039e+02 | 2.250e+00 | 5.917e+04 | 7.590e+03 |

| **Elemento: 21** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 3 | 3 | 4 | 4 | 3 |
| Modo nodo J | 4 | 3 | 3 | 4 | 3 | 3 |
| Massimo - I | 7.854e+02 | 5.371e+02 | 1.531e+02 | 1.391e+00 | 2.448e+04 | 5.511e+04 |
| Massimo - J | 7.854e+02 | 5.371e+02 | 1.531e+02 | 1.391e+00 | 2.304e+04 | 1.115e+05 |
| Risultante - I | 8.405e+02 | 3.781e+02 | 3.110e+02 | 2.725e+00 | 5.043e+04 | 3.878e+04 |
| Risultante - J | 8.405e+02 | 3.781e+02 | 3.110e+02 | 2.725e+00 | 4.598e+04 | 7.843e+04 |

| **Elemento: 22** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 6 | 4 | 4 | 4 | 4 | 4 |
| Modo nodo J | 6 | 4 | 4 | 4 | 4 | 4 |
| Massimo - I | 7.393e+02 | 4.237e+02 | 1.473e+02 | 1.391e+00 | 2.389e+04 | 4.283e+04 |
| Massimo - J | 7.393e+02 | 4.237e+02 | 1.473e+02 | 1.391e+00 | 2.180e+04 | 8.851e+04 |
| Risultante - I | 8.351e+02 | 3.751e+02 | 2.973e+02 | 2.725e+00 | 4.808e+04 | 3.812e+04 |
| Risultante - J | 8.351e+02 | 3.751e+02 | 2.973e+02 | 2.725e+00 | 4.409e+04 | 7.814e+04 |

**FORZE/MOMENTI ELEMENTO FINITO TRAVE - SISMA LUNGO Y**
**Gruppo numero: 2 - Descrizione: TRAVI DI COPERTURA**

| **Elemento: 1** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 4 | 4 | 4 | 4 | 3 |
| Modo nodo J | 4 | 4 | 4 | 4 | 4 | 0 |
| Massimo - I | 1.576e+02 | 8.009e-13 | 5.524e-15 | 2.969e+02 | 3.104e-13 | 9.390e-11 |
| Massimo - J | 1.576e+02 | 8.009e-13 | 5.524e-15 | 2.969e+02 | 6.999e-13 | 0.000e+00 |
| Risultante - I | 1.367e+02 | 7.039e-13 | 5.036e-15 | 2.616e+02 | 2.598e-13 | 9.190e-11 |
| Risultante - J | 1.367e+02 | 7.039e-13 | 5.036e-15 | 2.616e+02 | 6.109e-13 | 0.000e+00 |

| **Elemento: 2** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 4 | 4 | 4 | 4 | 0 |
| Modo nodo J | 4 | 4 | 4 | 4 | 0 | 4 |
| Massimo - I | 3.002e+02 | 7.375e-13 | 6.728e-15 | 2.230e+02 | 9.187e-13 | 0.000e+00 |
| Massimo - J | 3.002e+02 | 7.375e-13 | 6.728e-15 | 2.230e+02 | 0.000e+00 | 1.046e-10 |
| Risultante - I | 2.618e+02 | 6.611e-13 | 6.091e-15 | 2.000e+02 | 8.596e-13 | 0.000e+00 |
| Risultante - J | 2.618e+02 | 6.611e-13 | 6.091e-15 | 2.000e+02 | 0.000e+00 | 9.184e-11 |

| **Elemento: 3** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 6 | 6 | 6 | 0 | 0 |
| Modo nodo J | 4 | 6 | 6 | 6 | 6 | 0 |
| Massimo - I | 4.382e+02 | 2.529e-13 | 6.570e-15 | 7.554e+01 | 0.000e+00 | 0.000e+00 |
| Massimo - J | 4.382e+02 | 2.529e-13 | 6.570e-15 | 7.554e+01 | 1.280e-13 | 0.000e+00 |
| Risultante - I | 3.845e+02 | 5.500e-14 | 4.866e-15 | 2.084e+01 | 0.000e+00 | 0.000e+00 |



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|---|---|---|---|---|---|---|
| Risultante - J | 3.845e+02 | 5.500e-14 | 4.866e-15 | 2.084e+01 | 5.140e-14 | 0.000e+00 |
| **Elemento: 4** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 3 | 4 | 4 | 4 | 4 | 4 |
| Modo nodo J | 3 | 4 | 4 | 4 | 0 | 4 |
| Massimo - I | 5.903e+03 | 7.209e+02 | 3.139e+01 | 3.836e+02 | 4.970e+03 | 1.141e+05 |
| Massimo - J | 5.903e+03 | 7.209e+02 | 3.139e+01 | 3.836e+02 | 0.000e+00 | 1.621e-10 |
| Risultante - I | 7.980e+03 | 1.036e+03 | 3.064e+01 | 3.745e+02 | 4.852e+03 | 1.640e+05 |
| Risultante - J | 7.980e+03 | 1.036e+03 | 3.064e+01 | 3.745e+02 | 0.000e+00 | 1.555e-10 |
| **Elemento: 5** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 3 | 4 | 3 | 4 | 4 | 0 |
| Modo nodo J | 3 | 4 | 3 | 4 | 3 | 0 |
| Massimo - I | 6.002e+03 | 3.569e-12 | 2.144e-14 | 6.540e+02 | 1.152e-12 | 0.000e+00 |
| Massimo - J | 6.002e+03 | 3.569e-12 | 2.144e-14 | 6.540e+02 | 9.132e-13 | 0.000e+00 |
| Risultante - I | 7.946e+03 | 2.662e-12 | 1.608e-14 | 4.881e+02 | 8.543e-13 | 0.000e+00 |
| Risultante - J | 7.946e+03 | 2.662e-12 | 1.608e-14 | 4.881e+02 | 6.862e-13 | 0.000e+00 |
| **Elemento: 6** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 3 | 3 | 3 | 3 | 4 | 3 |
| Modo nodo J | 3 | 3 | 3 | 3 | 3 | 3 |
| Massimo - I | 6.145e+03 | 1.076e+03 | 3.268e+01 | 5.232e+02 | 6.675e-14 | 2.221e-10 |
| Massimo - J | 6.145e+03 | 1.076e+03 | 3.268e+01 | 5.232e+02 | 5.925e+03 | 1.951e+05 |
| Risultante - I | 7.971e+03 | 9.099e+02 | 2.358e+01 | 3.775e+02 | 1.308e-13 | 1.596e-10 |
| Risultante - J | 7.971e+03 | 9.099e+02 | 2.358e+01 | 3.775e+02 | 4.276e+03 | 1.650e+05 |
| **Elemento: 7** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 3 | 0 | 2 | 2 | 2 | 3 |
| Modo nodo J | 3 | 0 | 2 | 2 | 2 | 0 |
| Massimo - I | 6.299e+02 | 0.000e+00 | 2.303e-14 | 2.639e+02 | 5.662e-13 | 1.350e-10 |
| Massimo - J | 6.299e+02 | 0.000e+00 | 2.303e-14 | 2.639e+02 | 7.373e-13 | 0.000e+00 |
| Risultante - I | 4.346e+02 | 0.000e+00 | 2.287e-14 | 2.631e+02 | 5.751e-13 | 9.324e-11 |
| Risultante - J | 4.346e+02 | 0.000e+00 | 2.287e-14 | 2.631e+02 | 7.488e-13 | 0.000e+00 |
| **Elemento: 8** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 4 | 4 | 4 | 4 | 3 |
| Modo nodo J | 4 | 4 | 4 | 4 | 4 | 4 |
| Massimo - I | 2.150e+02 | 1.161e+02 | 1.150e+02 | 2.836e+02 | 8.106e+03 | 6.455e+03 |
| Massimo - J | 2.150e+02 | 1.161e+02 | 1.150e+02 | 2.836e+02 | 8.106e+03 | 9.915e+03 |
| Risultante - I | 3.634e+02 | 2.242e+02 | 1.017e+02 | 2.508e+02 | 7.167e+03 | 1.284e+04 |
| Risultante - J | 3.634e+02 | 2.242e+02 | 1.017e+02 | 2.508e+02 | 7.167e+03 | 1.878e+04 |
| **Elemento: 9** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 4 | 4 | 4 | 4 | 4 |
| Modo nodo J | 4 | 4 | 4 | 4 | 4 | 4 |
| Massimo - I | 2.551e+02 | 6.994e+01 | 7.379e+01 | 2.136e+02 | 5.645e+03 | 7.335e+03 |
| Massimo - J | 2.551e+02 | 6.994e+01 | 7.379e+01 | 2.136e+02 | 5.645e+03 | 3.508e+03 |
| Risultante - I | 4.855e+02 | 1.001e+02 | 6.605e+01 | 1.912e+02 | 5.053e+03 | 1.156e+04 |
| Risultante - J | 4.855e+02 | 1.001e+02 | 6.605e+01 | 1.912e+02 | 5.053e+03 | 4.963e+03 |
| **Elemento: 10** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 3 | 3 | 6 | 6 | 6 | 3 |
| Modo nodo J | 3 | 3 | 6 | 6 | 6 | 3 |
| Massimo - I | 3.434e+02 | 6.439e+01 | 1.294e+01 | 6.993e+01 | 1.358e+03 | 3.968e+03 |
| Massimo - J | 3.434e+02 | 6.439e+01 | 1.294e+01 | 6.993e+01 | 1.358e+03 | 9.554e+03 |
| Risultante - I | 5.705e+02 | 1.001e+02 | 3.682e+00 | 1.990e+01 | 3.866e+02 | 6.140e+03 |
| Risultante - J | 5.705e+02 | 1.001e+02 | 3.682e+00 | 1.990e+01 | 3.866e+02 | 1.489e+04 |
| **Elemento: 11** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 3 | 3 | 4 | 4 | 4 | 3 |
| Modo nodo J | 3 | 3 | 4 | 4 | 4 | 3 |
| Massimo - I | 3.370e+02 | 2.893e+02 | 3.253e+02 | 5.991e+02 | 2.575e+04 | 1.942e+04 |
| Massimo - J | 3.370e+02 | 2.893e+02 | 3.253e+02 | 5.991e+02 | 2.575e+04 | 2.639e+04 |
| Risultante - I | 3.326e+02 | 4.160e+02 | 3.221e+02 | 5.933e+02 | 2.550e+04 | 3.016e+04 |
| Risultante - J | 3.326e+02 | 4.160e+02 | 3.221e+02 | 5.933e+02 | 2.550e+04 | 3.590e+04 |
| **Elemento: 12** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 3 | 3 | 4 | 4 | 4 | 3 |
| Modo nodo J | 3 | 3 | 4 | 4 | 4 | 4 |
| Massimo - I | 8.221e+02 | 1.428e+02 | 4.874e+02 | 1.011e+03 | 4.102e+04 | 2.053e+04 |
| Massimo - J | 8.221e+02 | 1.428e+02 | 4.874e+02 | 1.011e+03 | 4.102e+04 | 1.904e+04 |
| Risultante - I | 1.537e+03 | 1.004e+02 | 3.636e+02 | 7.545e+02 | 3.060e+04 | 1.828e+04 |
| Risultante - J | 1.537e+03 | 1.004e+02 | 3.636e+02 | 7.545e+02 | 3.060e+04 | 1.786e+04 |
| **Elemento: 13** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 4 | 3 | 3 | 3 | 4 |
| Modo nodo J | 4 | 4 | 3 | 3 | 3 | 4 |
| Massimo - I | 1.538e+02 | 2.775e+02 | 3.408e+02 | 8.179e+02 | 3.090e+04 | 2.675e+04 |
| Massimo - J | 1.538e+02 | 2.775e+02 | 3.408e+02 | 8.179e+02 | 3.090e+04 | 2.357e+04 |
| Risultante - I | 1.311e+02 | 4.248e+02 | 2.472e+02 | 5.934e+02 | 2.241e+04 | 3.913e+04 |



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|---|---|---|---|---|---|---|
| Risultante - J | 1.311e+02 | 4.248e+02 | 2.472e+02 | 5.934e+02 | 2.241e+04 | 3.795e+04 |
| **Elemento: 14** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 4 | 2 | 2 | 2 | 4 |
| Modo nodo J | 4 | 4 | 2 | 2 | 2 | 2 |
| Massimo - I | 6.466e+02 | 1.361e+02 | 7.354e+02 | 4.020e+02 | 3.064e+04 | 1.237e+04 |
| Massimo - J | 6.466e+02 | 1.361e+02 | 7.354e+02 | 4.020e+02 | 3.064e+04 | 4.616e+03 |
| Risultante - I | 1.114e+03 | 2.109e+02 | 7.318e+02 | 4.000e+02 | 3.049e+04 | 1.952e+04 |
| Risultante - J | 1.114e+03 | 2.109e+02 | 7.318e+02 | 4.000e+02 | 3.049e+04 | 6.672e+03 |
| **Elemento: 15** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 3 | 9 | 4 | 4 | 4 | 9 |
| Modo nodo J | 3 | 9 | 4 | 4 | 4 | 3 |
| Massimo - I | 1.156e+02 | 3.646e+01 | 3.138e+02 | 4.616e+02 | 2.212e+04 | 1.741e+03 |
| Massimo - J | 1.156e+02 | 3.646e+01 | 3.138e+02 | 4.616e+02 | 2.212e+04 | 3.400e+03 |
| Risultante - I | 1.986e+02 | 7.159e+01 | 2.836e+02 | 4.172e+02 | 1.999e+04 | 3.056e+03 |
| Risultante - J | 1.986e+02 | 7.159e+01 | 2.836e+02 | 4.172e+02 | 1.999e+04 | 7.075e+03 |
| **Elemento: 16** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 9 | 3 | 4 | 4 | 4 | 3 |
| Modo nodo J | 9 | 3 | 4 | 4 | 4 | 9 |
| Massimo - I | 1.825e+02 | 1.108e+01 | 2.072e+02 | 3.571e+02 | 1.585e+04 | 2.319e+03 |
| Massimo - J | 1.825e+02 | 1.108e+01 | 2.072e+02 | 3.571e+02 | 1.585e+04 | 1.801e+03 |
| Risultante - I | 3.494e+02 | 1.958e+01 | 1.841e+02 | 3.172e+02 | 1.408e+04 | 4.990e+03 |
| Risultante - J | 3.494e+02 | 1.958e+01 | 1.841e+02 | 3.172e+02 | 1.408e+04 | 2.402e+03 |
| **Elemento: 17** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 3 | 4 | 6 | 6 | 6 | 9 |
| Modo nodo J | 3 | 4 | 6 | 6 | 6 | 3 |
| Massimo - I | 7.339e+01 | 4.152e+01 | 2.751e+01 | 8.809e+01 | 2.889e+03 | 4.339e+03 |
| Massimo - J | 7.339e+01 | 4.152e+01 | 2.751e+01 | 8.809e+01 | 2.889e+03 | 5.052e+03 |
| Risultante - I | 1.306e+02 | 9.627e+01 | 1.606e+01 | 5.142e+01 | 1.686e+03 | 9.101e+03 |
| Risultante - J | 1.306e+02 | 9.627e+01 | 1.606e+01 | 5.142e+01 | 1.686e+03 | 1.116e+04 |
| **Elemento: 18** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 3 | 4 | 4 | 4 | 4 |
| Modo nodo J | 4 | 3 | 4 | 4 | 4 | 9 |
| Massimo - I | 1.791e+02 | 1.862e+01 | 3.359e+02 | 6.188e+02 | 2.660e+04 | 2.944e+03 |
| Massimo - J | 1.791e+02 | 1.862e+01 | 3.359e+02 | 6.188e+02 | 2.660e+04 | 1.622e+03 |
| Risultante - I | 3.852e+02 | 3.847e+01 | 3.631e+02 | 6.687e+02 | 2.874e+04 | 6.032e+03 |
| Risultante - J | 3.852e+02 | 3.847e+01 | 3.631e+02 | 6.687e+02 | 2.874e+04 | 2.269e+03 |
| **Elemento: 19** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 9 | 3 | 4 | 4 | 4 | 3 |
| Modo nodo J | 9 | 3 | 4 | 4 | 4 | 4 |
| Massimo - I | 1.114e+02 | 2.002e+01 | 4.612e+02 | 9.571e+02 | 3.882e+04 | 2.300e+03 |
| Massimo - J | 1.114e+02 | 2.002e+01 | 4.612e+02 | 9.571e+02 | 3.882e+04 | 1.660e+03 |
| Risultante - I | 1.794e+02 | 4.046e+01 | 3.429e+02 | 7.116e+02 | 2.886e+04 | 5.052e+03 |
| Risultante - J | 1.794e+02 | 4.046e+01 | 3.429e+02 | 7.116e+02 | 2.886e+04 | 3.434e+03 |
| **Elemento: 20** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 3 | 3 | 3 | 3 | 9 |
| Modo nodo J | 4 | 3 | 3 | 3 | 3 | 4 |
| Massimo - I | 1.392e+02 | 2.263e+01 | 3.455e+02 | 8.292e+02 | 3.133e+04 | 1.846e+03 |
| Massimo - J | 1.392e+02 | 2.263e+01 | 3.455e+02 | 8.292e+02 | 3.133e+04 | 2.940e+03 |
| Risultante - I | 2.628e+02 | 4.961e+01 | 2.626e+02 | 6.304e+02 | 2.381e+04 | 3.118e+03 |
| Risultante - J | 2.628e+02 | 4.961e+01 | 2.626e+02 | 6.304e+02 | 2.381e+04 | 6.215e+03 |
| **Elemento: 21** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 3 | 3 | 3 | 3 | 3 |
| Modo nodo J | 4 | 3 | 3 | 3 | 3 | 3 |
| Massimo - I | 1.020e+02 | 3.065e+01 | 1.033e+00 | 7.888e+00 | 1.291e+02 | 4.391e+03 |
| Massimo - J | 1.020e+02 | 3.065e+01 | 1.033e+00 | 7.888e+00 | 1.291e+02 | 3.271e+03 |
| Risultante - I | 1.808e+02 | 5.810e+01 | 1.492e+00 | 1.139e+01 | 1.865e+02 | 8.752e+03 |
| Risultante - J | 1.808e+02 | 5.810e+01 | 1.492e+00 | 1.139e+01 | 1.865e+02 | 5.777e+03 |
| **Elemento: 22** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 4 | 4 | 4 | 4 | 4 |
| Modo nodo J | 4 | 4 | 4 | 4 | 4 | 4 |
| Massimo - I | 6.047e+01 | 8.507e+00 | 1.262e+02 | 3.114e+02 | 8.900e+03 | 1.101e+03 |
| Massimo - J | 6.047e+01 | 8.507e+00 | 1.262e+02 | 3.114e+02 | 8.900e+03 | 9.813e+01 |
| Risultante - I | 8.337e+01 | 1.106e+01 | 1.153e+02 | 2.845e+02 | 8.132e+03 | 1.470e+03 |
| Risultante - J | 8.337e+01 | 1.106e+01 | 1.153e+02 | 2.845e+02 | 8.132e+03 | 1.084e+02 |
| **Elemento: 23** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 4 | 4 | 4 | 4 | 4 |
| Modo nodo J | 4 | 4 | 4 | 4 | 4 | 4 |
| Massimo - I | 2.119e+01 | 9.100e+00 | 8.899e+01 | 2.576e+02 | 6.808e+03 | 5.204e+02 |
| Massimo - J | 2.119e+01 | 9.100e+00 | 8.899e+01 | 2.576e+02 | 6.808e+03 | 8.719e+02 |
| Risultante - I | 2.844e+01 | 1.202e+01 | 7.932e+01 | 2.296e+02 | 6.068e+03 | 6.843e+02 |



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|---|---|---|---|---|---|---|
| Risultante - J | 2.844e+01 | 1.202e+01 | 7.932e+01 | 2.296e+02 | 6.068e+03 | 1.155e+03 |
| **Elemento: 24** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 3 | 4 | 6 | 6 | 6 | 4 |
| Modo nodo J | 3 | 4 | 6 | 6 | 6 | 4 |
| Massimo - I | 2.601e+01 | 8.218e+00 | 7.017e+00 | 3.793e+01 | 7.368e+02 | 7.197e+02 |
| Massimo - J | 2.601e+01 | 8.218e+00 | 7.017e+00 | 3.793e+01 | 7.368e+02 | 1.006e+03 |
| Risultante - I | 4.407e+01 | 1.310e+01 | 5.094e+00 | 2.753e+01 | 5.348e+02 | 1.030e+03 |
| Risultante - J | 4.407e+01 | 1.310e+01 | 5.094e+00 | 2.753e+01 | 5.348e+02 | 1.727e+03 |
| **Elemento: 25** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 4 | 4 | 4 | 4 | 3 |
| Modo nodo J | 4 | 4 | 4 | 4 | 4 | 4 |
| Massimo - I | 2.348e+01 | 1.571e+01 | 3.468e+02 | 6.388e+02 | 2.746e+04 | 1.093e+03 |
| Massimo - J | 2.348e+01 | 1.571e+01 | 3.468e+02 | 6.388e+02 | 2.746e+04 | 1.487e+03 |
| Risultante - I | 3.045e+01 | 3.207e+01 | 3.967e+02 | 7.306e+02 | 3.140e+04 | 2.241e+03 |
| Risultante - J | 3.045e+01 | 3.207e+01 | 3.967e+02 | 7.306e+02 | 3.140e+04 | 2.840e+03 |
| **Elemento: 26** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 4 | 4 | 4 | 4 | 9 |
| Modo nodo J | 4 | 4 | 4 | 4 | 4 | 4 |
| Massimo - I | 9.032e+01 | 1.120e+01 | 4.508e+02 | 9.355e+02 | 3.794e+04 | 8.699e+01 |
| Massimo - J | 9.032e+01 | 1.120e+01 | 4.508e+02 | 9.355e+02 | 3.794e+04 | 1.878e+03 |
| Risultante - I | 1.831e+02 | 2.289e+01 | 3.336e+02 | 6.923e+02 | 2.808e+04 | 1.003e+02 |
| Risultante - J | 1.831e+02 | 2.289e+01 | 3.336e+02 | 6.923e+02 | 2.808e+04 | 3.822e+03 |
| **Elemento: 27** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 3 | 3 | 3 | 3 | 3 | 3 |
| Modo nodo J | 3 | 3 | 3 | 3 | 3 | 3 |
| Massimo - I | 1.376e+02 | 5.337e+00 | 3.480e+02 | 8.353e+02 | 3.156e+04 | 9.408e+02 |
| Massimo - J | 1.376e+02 | 5.337e+00 | 3.480e+02 | 8.353e+02 | 3.156e+04 | 1.909e+03 |
| Risultante - I | 2.724e+02 | 1.044e+01 | 2.733e+02 | 6.560e+02 | 2.478e+04 | 1.889e+03 |
| Risultante - J | 2.724e+02 | 1.044e+01 | 2.733e+02 | 6.560e+02 | 2.478e+04 | 3.760e+03 |
| **Elemento: 28** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 3 | 4 | 3 | 3 | 3 | 4 |
| Modo nodo J | 3 | 4 | 3 | 3 | 3 | 4 |
| Massimo - I | 8.584e+01 | 3.089e+01 | 8.481e-01 | 6.477e+00 | 1.060e+02 | 4.210e+03 |
| Massimo - J | 8.584e+01 | 3.089e+01 | 8.481e-01 | 6.477e+00 | 1.060e+02 | 3.512e+03 |
| Risultante - I | 1.383e+02 | 5.640e+01 | 1.248e+00 | 9.534e+00 | 1.560e+02 | 7.998e+03 |
| Risultante - J | 1.383e+02 | 5.640e+01 | 1.248e+00 | 9.534e+00 | 1.560e+02 | 6.107e+03 |
| **Elemento: 29** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 4 | 4 | 4 | 4 | 5 |
| Modo nodo J | 4 | 4 | 4 | 4 | 4 | 4 |
| Massimo - I | 1.899e+02 | 7.235e+01 | 2.603e+02 | 4.104e+02 | 1.457e+04 | 3.347e+03 |
| Massimo - J | 1.899e+02 | 7.235e+01 | 2.603e+02 | 4.104e+02 | 1.457e+04 | 5.263e+03 |
| Risultante - I | 1.778e+02 | 7.017e+01 | 2.380e+02 | 3.752e+02 | 1.333e+04 | 3.992e+03 |
| Risultante - J | 1.778e+02 | 7.017e+01 | 2.380e+02 | 3.752e+02 | 1.333e+04 | 4.253e+03 |
| **Elemento: 30** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 4 | 4 | 4 | 4 | 4 |
| Modo nodo J | 4 | 4 | 4 | 4 | 4 | 4 |
| Massimo - I | 3.460e+02 | 1.387e+01 | 2.321e+02 | 3.641e+01 | 3.365e+03 | 2.951e+03 |
| Massimo - J | 3.460e+02 | 1.387e+01 | 2.321e+02 | 3.641e+01 | 3.365e+03 | 2.795e+03 |
| Risultante - I | 2.579e+02 | 1.995e+01 | 2.089e+02 | 3.278e+01 | 3.029e+03 | 2.213e+03 |
| Risultante - J | 2.579e+02 | 1.995e+01 | 2.089e+02 | 3.278e+01 | 3.029e+03 | 2.165e+03 |
| **Elemento: 31** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 4 | 4 | 4 | 4 | 4 |
| Modo nodo J | 4 | 4 | 4 | 4 | 4 | 4 |
| Massimo - I | 3.370e+02 | 1.490e+01 | 3.658e+02 | 6.272e+01 | 5.671e+03 | 2.895e+03 |
| Massimo - J | 3.370e+02 | 1.490e+01 | 3.658e+02 | 6.272e+01 | 5.671e+03 | 2.709e+03 |
| Risultante - I | 2.601e+02 | 2.005e+01 | 3.357e+02 | 5.755e+01 | 5.204e+03 | 2.148e+03 |
| Risultante - J | 2.601e+02 | 2.005e+01 | 3.357e+02 | 5.755e+01 | 5.204e+03 | 2.211e+03 |
| **Elemento: 32** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 5 | 4 | 4 | 4 | 4 | 4 |
| Modo nodo J | 5 | 4 | 4 | 4 | 4 | 4 |
| Massimo - I | 8.303e+01 | 9.034e+01 | 1.892e+02 | 3.519e+02 | 1.154e+04 | 5.991e+03 |
| Massimo - J | 8.303e+01 | 9.034e+01 | 1.892e+02 | 3.519e+02 | 1.154e+04 | 5.030e+03 |
| Risultante - I | 1.013e+02 | 6.942e+01 | 1.690e+02 | 3.144e+02 | 1.031e+04 | 4.606e+03 |
| Risultante - J | 1.013e+02 | 6.942e+01 | 1.690e+02 | 3.144e+02 | 1.031e+04 | 4.284e+03 |
| **Elemento: 33** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 6 | 6 | 6 | 6 | 6 | 6 |
| Modo nodo J | 6 | 6 | 6 | 6 | 6 | 6 |
| Massimo - I | 3.817e+02 | 5.798e+01 | 6.240e+00 | 3.373e+01 | 6.552e+02 | 3.144e+03 |
| Massimo - J | 3.817e+02 | 5.798e+01 | 6.240e+00 | 3.373e+01 | 6.552e+02 | 9.255e+03 |
| Risultante - I | 5.483e+02 | 8.201e+01 | 4.867e+00 | 2.631e+01 | 5.110e+02 | 4.287e+03 |



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| Risultante - J | 5.483e+02 | 8.201e+01 | 4.867e+00 | 2.631e+01 | 5.110e+02 | 1.296e+04 |
| **Elemento: 34** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 6 | 4 | 4 | 4 | 6 |
| Modo nodo J | 4 | 6 | 4 | 4 | 4 | 6 |
| Massimo - I | 2.792e+02 | 2.908e+02 | 3.559e+02 | 6.555e+02 | 2.818e+04 | 2.030e+04 |
| Massimo - J | 2.792e+02 | 2.908e+02 | 3.559e+02 | 6.555e+02 | 2.818e+04 | 2.574e+04 |
| Risultante - I | 3.825e+02 | 3.990e+02 | 4.144e+02 | 7.632e+02 | 3.280e+04 | 2.780e+04 |
| Risultante - J | 3.825e+02 | 3.990e+02 | 4.144e+02 | 7.632e+02 | 3.280e+04 | 3.540e+04 |
| **Elemento: 35** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 6 | 4 | 4 | 4 | 4 | 4 |
| Modo nodo J | 6 | 4 | 4 | 4 | 4 | 3 |
| Massimo - I | 1.077e+03 | 1.388e+02 | 4.546e+02 | 9.435e+02 | 3.826e+04 | 1.493e+04 |
| Massimo - J | 1.077e+03 | 1.388e+02 | 4.546e+02 | 9.435e+02 | 3.826e+04 | 1.896e+04 |
| Risultante - I | 1.503e+03 | 1.015e+02 | 3.354e+02 | 6.961e+02 | 2.823e+04 | 1.915e+04 |
| Risultante - J | 1.503e+03 | 1.015e+02 | 3.354e+02 | 6.961e+02 | 2.823e+04 | 1.625e+04 |
| **Elemento: 36** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 3 | 3 | 3 | 3 | 3 | 3 |
| Modo nodo J | 3 | 3 | 3 | 3 | 3 | 3 |
| Massimo - I | 6.798e+02 | 2.522e+02 | 9.626e+02 | 1.061e+03 | 5.840e+04 | 2.234e+04 |
| Massimo - J | 6.798e+02 | 2.522e+02 | 9.626e+02 | 1.061e+03 | 5.840e+04 | 8.484e+03 |
| Risultante - I | 7.193e+02 | 3.191e+02 | 7.588e+02 | 8.365e+02 | 4.603e+04 | 2.676e+04 |
| Risultante - J | 7.193e+02 | 3.191e+02 | 7.588e+02 | 8.365e+02 | 4.603e+04 | 1.207e+04 |
| **Elemento: 37** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 6 | 3 | 3 | 3 | 3 | 3 |
| Modo nodo J | 6 | 3 | 3 | 3 | 3 | 3 |
| Massimo - I | 3.254e+02 | 2.808e+02 | 1.257e+03 | 3.867e+02 | 3.771e+04 | 5.972e+03 |
| Massimo - J | 3.254e+02 | 2.808e+02 | 1.257e+03 | 3.867e+02 | 3.771e+04 | 1.118e+04 |
| Risultante - I | 4.752e+02 | 3.484e+02 | 1.035e+03 | 3.184e+02 | 3.105e+04 | 5.878e+03 |
| Risultante - J | 4.752e+02 | 3.484e+02 | 1.035e+03 | 3.184e+02 | 3.105e+04 | 1.516e+04 |
| **Elemento: 38** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 6 | 6 | 9 | 9 | 9 | 6 |
| Modo nodo J | 6 | 6 | 9 | 9 | 9 | 9 |
| Massimo - I | 4.187e+02 | 6.702e+01 | 2.656e+01 | 1.178e+02 | 2.523e+03 | 9.497e+03 |
| Massimo - J | 4.187e+02 | 6.702e+01 | 2.656e+01 | 1.178e+02 | 2.523e+03 | 3.236e+03 |
| Risultante - I | 5.967e+02 | 8.109e+01 | 3.015e+01 | 1.337e+02 | 2.864e+03 | 1.220e+04 |
| Risultante - J | 5.967e+02 | 8.109e+01 | 3.015e+01 | 1.337e+02 | 2.864e+03 | 5.177e+03 |
| **Elemento: 39** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 9 | 9 | 9 | 9 | 9 |
| Modo nodo J | 4 | 9 | 9 | 9 | 9 | 6 |
| Massimo - I | 1.579e+02 | 9.255e+01 | 6.877e+02 | 3.381e+02 | 2.063e+04 | 3.342e+03 |
| Massimo - J | 1.579e+02 | 9.255e+01 | 6.877e+02 | 3.381e+02 | 2.063e+04 | 2.379e+03 |
| Risultante - I | 2.210e+02 | 1.302e+02 | 7.712e+02 | 3.791e+02 | 2.314e+04 | 4.966e+03 |
| Risultante - J | 2.210e+02 | 1.302e+02 | 7.712e+02 | 3.791e+02 | 2.314e+04 | 3.546e+03 |
| **Elemento: 40** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 0 | 4 | 4 | 4 | 0 |
| Modo nodo J | 4 | 0 | 4 | 4 | 4 | 0 |
| Massimo - I | 2.573e+00 | 0.000e+00 | 3.576e-14 | 4.110e+02 | 1.335e-13 | 0.000e+00 |
| Massimo - J | 2.573e+00 | 0.000e+00 | 3.576e-14 | 4.110e+02 | 1.531e-12 | 0.000e+00 |
| Risultante - I | 2.409e+00 | 0.000e+00 | 3.106e-14 | 3.758e+02 | 2.615e-13 | 0.000e+00 |
| Risultante - J | 2.409e+00 | 0.000e+00 | 3.106e-14 | 3.758e+02 | 1.351e-12 | 0.000e+00 |
| **Elemento: 41** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 6 | 4 | 4 | 4 | 4 | 0 |
| Modo nodo J | 6 | 4 | 4 | 4 | 4 | 0 |
| Massimo - I | 4.772e+00 | 2.668e-12 | 1.699e-14 | 3.524e+02 | 1.471e-12 | 0.000e+00 |
| Massimo - J | 4.772e+00 | 2.668e-12 | 1.699e-14 | 3.524e+02 | 6.675e-14 | 0.000e+00 |
| Risultante - I | 8.543e+00 | 2.378e-12 | 1.559e-14 | 3.148e+02 | 1.441e-12 | 0.000e+00 |
| Risultante - J | 8.543e+00 | 2.378e-12 | 1.559e-14 | 3.148e+02 | 1.308e-13 | 0.000e+00 |
| **Elemento: 42** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 6 | 6 | 5 | 6 | 0 | 0 |
| Modo nodo J | 6 | 6 | 5 | 6 | 6 | 0 |
| Massimo - I | 5.325e+00 | 6.772e-14 | 3.553e-15 | 3.405e+01 | 0.000e+00 | 0.000e+00 |
| Massimo - J | 5.325e+00 | 6.772e-14 | 3.553e-15 | 3.405e+01 | 5.500e-14 | 0.000e+00 |
| Risultante - I | 6.897e+00 | 5.090e-14 | 5.821e-15 | 2.644e+01 | 0.000e+00 | 0.000e+00 |
| Risultante - J | 6.897e+00 | 5.090e-14 | 5.821e-15 | 2.644e+01 | 6.318e-14 | 0.000e+00 |
| **Elemento: 43** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 6 | 4 | 4 | 4 | 0 | 4 |
| Modo nodo J | 6 | 4 | 4 | 4 | 4 | 0 |
| Massimo - I | 1.778e+01 | 4.240e-13 | 1.337e-14 | 4.209e+02 | 0.000e+00 | 1.064e-10 |
| Massimo - J | 1.778e+01 | 4.240e-13 | 1.337e-14 | 4.209e+02 | 1.127e-12 | 0.000e+00 |
| Risultante - I | 2.258e+01 | 5.003e-13 | 1.558e-14 | 4.904e+02 | 0.000e+00 | 1.271e-10 |



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| Risultante - J | 2.258e+01 | 5.003e-13 | 1.558e-14 | 4.904e+02 | 1.307e-12 | 0.000e+00 |
| **Elemento: 44** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 6 | 4 | 4 | 4 | 4 | 0 |
| Modo nodo J | 6 | 4 | 4 | 4 | 4 | 0 |
| Massimo - I | 3.242e+01 | 1.891e-12 | 1.990e-14 | 6.056e+02 | 1.067e-12 | 0.000e+00 |
| Massimo - J | 3.242e+01 | 1.891e-12 | 1.990e-14 | 6.056e+02 | 8.466e-13 | 0.000e+00 |
| Risultante - I | 4.115e+01 | 1.394e-12 | 1.472e-14 | 4.467e+02 | 7.821e-13 | 0.000e+00 |
| Risultante - J | 4.115e+01 | 1.394e-12 | 1.472e-14 | 4.467e+02 | 6.279e-13 | 0.000e+00 |
| **Elemento: 45** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 6 | 3 | 3 | 3 | 3 | 4 |
| Modo nodo J | 6 | 3 | 3 | 3 | 3 | 0 |
| Massimo - I | 2.185e+01 | 4.130e-12 | 3.239e-14 | 6.808e+02 | 2.859e-12 | 1.649e-12 |
| Massimo - J | 2.185e+01 | 4.130e-12 | 3.239e-14 | 6.808e+02 | 1.382e-12 | 0.000e+00 |
| Risultante - I | 2.597e+01 | 3.292e-12 | 2.564e-14 | 5.368e+02 | 2.249e-12 | 2.170e-12 |
| Risultante - J | 2.597e+01 | 3.292e-12 | 2.564e-14 | 5.368e+02 | 1.094e-12 | 0.000e+00 |
| **Elemento: 46** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 6 | 3 | 9 | 9 | 9 | 9 |
| Modo nodo J | 6 | 3 | 9 | 9 | 0 | 3 |
| Massimo - I | 9.539e+00 | 2.589e-15 | 7.873e-15 | 1.186e+02 | 1.556e-13 | 6.024e-12 |
| Massimo - J | 9.539e+00 | 2.589e-15 | 7.873e-15 | 1.186e+02 | 0.000e+00 | 9.591e-13 |
| Risultante - I | 1.359e+01 | 2.736e-15 | 8.377e-15 | 1.345e+02 | 2.312e-13 | 6.842e-12 |
| Risultante - J | 1.359e+01 | 2.736e-15 | 8.377e-15 | 1.345e+02 | 0.000e+00 | 1.008e-12 |
| **Elemento: 47** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 6 | 3 | 4 | 4 | 4 | 3 |
| Modo nodo J | 6 | 3 | 4 | 4 | 4 | 3 |
| Massimo - I | 7.161e+01 | 2.873e+01 | 1.514e+02 | 2.862e+02 | 9.312e+03 | 1.231e+03 |
| Massimo - J | 7.161e+01 | 2.873e+01 | 1.514e+02 | 2.862e+02 | 9.312e+03 | 2.356e+03 |
| Risultante - I | 1.473e+02 | 6.924e+01 | 1.327e+02 | 2.509e+02 | 8.163e+03 | 3.054e+03 |
| Risultante - J | 1.473e+02 | 6.924e+01 | 1.327e+02 | 2.509e+02 | 8.163e+03 | 5.470e+03 |
| **Elemento: 48** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 3 | 4 | 4 | 4 | 4 |
| Modo nodo J | 4 | 3 | 4 | 4 | 4 | 0 |
| Massimo - I | 1.927e+02 | 1.710e-14 | 2.770e-16 | 3.126e+00 | 3.625e-14 | 6.776e-13 |
| Massimo - J | 1.927e+02 | 1.710e-14 | 2.770e-16 | 3.126e+00 | 3.902e-15 | 0.000e+00 |
| Risultante - I | 4.181e+02 | 3.702e-14 | 5.598e-16 | 5.727e+00 | 7.326e-14 | 1.413e-12 |
| Risultante - J | 4.181e+02 | 3.702e-14 | 5.598e-16 | 5.727e+00 | 7.185e-15 | 0.000e+00 |
| **Elemento: 49** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 3 | 4 | 9 | 0 | 3 |
| Modo nodo J | 4 | 3 | 4 | 9 | 0 | 4 |
| Massimo - I | 7.285e+01 | 5.839e-14 | 2.643e-16 | 5.769e-01 | 0.000e+00 | 6.454e-12 |
| Massimo - J | 7.285e+01 | 5.839e-14 | 2.643e-16 | 5.769e-01 | 0.000e+00 | 7.009e-13 |
| Risultante - I | 7.403e+01 | 1.267e-13 | 5.099e-16 | 9.791e-01 | 0.000e+00 | 1.401e-11 |
| Risultante - J | 7.403e+01 | 1.267e-13 | 5.099e-16 | 9.791e-01 | 0.000e+00 | 1.461e-12 |
| **Elemento: 50** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 5 | 3 | 4 | 4 | 4 | 0 |
| Modo nodo J | 5 | 3 | 4 | 4 | 4 | 4 |
| Massimo - I | 2.941e+01 | 4.236e-14 | 3.277e-15 | 1.903e+00 | 3.347e-14 | 0.000e+00 |
| Massimo - J | 2.941e+01 | 4.236e-14 | 3.277e-15 | 1.903e+00 | 3.706e-30 | 3.163e-14 |
| Risultante - I | 3.641e+01 | 9.199e-14 | 6.430e-15 | 1.471e+00 | 6.547e-14 | 0.000e+00 |
| Risultante - J | 3.641e+01 | 9.199e-14 | 6.430e-15 | 1.471e+00 | 7.259e-30 | 2.630e-14 |
| **Elemento: 51** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 3 | 4 | 4 | 4 | 5 |
| Modo nodo J | 4 | 3 | 4 | 4 | 4 | 4 |
| Massimo - I | 2.830e+01 | 5.776e+00 | 6.578e+00 | 4.271e+00 | 2.302e+02 | 2.741e+02 |
| Massimo - J | 2.830e+01 | 5.776e+00 | 6.578e+00 | 4.271e+00 | 2.302e+02 | 3.508e+02 |
| Risultante - I | 2.589e+01 | 1.397e+01 | 9.377e+00 | 6.089e+00 | 3.282e+02 | 3.988e+02 |
| Risultante - J | 2.589e+01 | 1.397e+01 | 9.377e+00 | 6.089e+00 | 3.282e+02 | 6.412e+02 |
| **Elemento: 52** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 4 | 4 | 4 | 4 | 4 |
| Modo nodo J | 4 | 4 | 4 | 4 | 4 | 4 |
| Massimo - I | 1.421e+03 | 4.520e+02 | 1.536e+02 | 2.904e+02 | 9.449e+03 | 1.601e+04 |
| Massimo - J | 1.421e+03 | 4.520e+02 | 1.536e+02 | 2.904e+02 | 9.449e+03 | 3.958e+04 |
| Risultante - I | 1.197e+03 | 3.839e+02 | 1.347e+02 | 2.547e+02 | 8.287e+03 | 1.375e+04 |
| Risultante - J | 1.197e+03 | 3.839e+02 | 1.347e+02 | 2.547e+02 | 8.287e+03 | 3.351e+04 |
| **Elemento: 53** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 4 | 4 | 4 | 4 | 3 |
| Modo nodo J | 4 | 4 | 4 | 4 | 4 | 0 |
| Massimo - I | 7.788e+02 | 1.023e-13 | 2.685e-16 | 2.129e+00 | 3.514e-14 | 3.215e-13 |
| Massimo - J | 7.788e+02 | 1.023e-13 | 2.685e-16 | 2.129e+00 | 2.806e-15 | 0.000e+00 |
| Risultante - I | 1.581e+03 | 8.277e-14 | 5.489e-16 | 4.278e+00 | 7.185e-14 | 7.049e-13 |



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|---|---|---|---|---|---|---|
| Risultante - J | 1.581e+03 | 8.277e-14 | 5.489e-16 | 4.278e+00 | 5.624e-15 | 0.000e+00 |
| **Elemento: 54** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 4 | 4 | 4 | 0 | 4 |
| Modo nodo J | 4 | 4 | 4 | 4 | 0 | 4 |
| Massimo - I | 7.894e+02 | 5.669e-13 | 2.640e-16 | 6.156e-01 | 0.000e+00 | 5.629e-11 |
| Massimo - J | 7.894e+02 | 5.669e-13 | 2.640e-16 | 6.156e-01 | 0.000e+00 | 6.302e-13 |
| Risultante - I | 1.015e+03 | 4.689e-13 | 5.082e-16 | 1.169e+00 | 0.000e+00 | 4.617e-11 |
| Risultante - J | 1.015e+03 | 4.689e-13 | 5.082e-16 | 1.169e+00 | 0.000e+00 | 1.363e-12 |
| **Elemento: 55** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 4 | 4 | 5 | 4 | 0 |
| Modo nodo J | 4 | 4 | 4 | 5 | 4 | 4 |
| Massimo - I | 6.453e+02 | 4.860e-13 | 3.282e-15 | 1.699e-01 | 3.342e-14 | 0.000e+00 |
| Massimo - J | 6.453e+02 | 4.860e-13 | 3.282e-15 | 1.699e-01 | 3.706e-30 | 5.158e-13 |
| Risultante - I | 6.067e+02 | 4.073e-13 | 6.431e-15 | 1.324e-01 | 6.548e-14 | 0.000e+00 |
| Risultante - J | 6.067e+02 | 4.073e-13 | 6.431e-15 | 1.324e-01 | 7.259e-30 | 4.042e-13 |
| **Elemento: 56** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 6 | 6 | 4 | 4 | 4 | 6 |
| Modo nodo J | 6 | 6 | 4 | 4 | 4 | 6 |
| Massimo - I | 9.856e+02 | 3.100e+02 | 1.570e+02 | 2.969e+02 | 9.658e+03 | 1.092e+04 |
| Massimo - J | 9.856e+02 | 3.100e+02 | 1.570e+02 | 2.969e+02 | 9.658e+03 | 2.724e+04 |
| Risultante - I | 2.524e+02 | 5.866e+01 | 1.379e+02 | 2.606e+02 | 8.480e+03 | 2.216e+03 |
| Risultante - J | 2.524e+02 | 5.866e+01 | 1.379e+02 | 2.606e+02 | 8.480e+03 | 5.591e+03 |
| **Elemento: 57** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 6 | 6 | 4 | 3 | 4 | 3 |
| Modo nodo J | 6 | 6 | 4 | 3 | 3 | 0 |
| Massimo - I | 1.352e+03 | 3.751e-14 | 2.682e-16 | 1.141e+00 | 3.511e-14 | 2.015e-13 |
| Massimo - J | 1.352e+03 | 3.751e-14 | 2.682e-16 | 1.141e+00 | 1.615e-15 | 0.000e+00 |
| Risultante - I | 4.327e+02 | 9.516e-15 | 5.352e-16 | 2.453e+00 | 7.006e-14 | 4.583e-13 |
| Risultante - J | 4.327e+02 | 9.516e-15 | 5.352e-16 | 2.453e+00 | 3.672e-15 | 0.000e+00 |
| **Elemento: 58** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 6 | 6 | 4 | 3 | 0 | 6 |
| Modo nodo J | 6 | 6 | 4 | 3 | 0 | 3 |
| Massimo - I | 1.561e+03 | 1.190e-13 | 2.577e-16 | 1.264e+00 | 0.000e+00 | 1.437e-11 |
| Massimo - J | 1.561e+03 | 1.190e-13 | 2.577e-16 | 1.264e+00 | 0.000e+00 | 4.314e-13 |
| Risultante - I | 8.860e+02 | 3.386e-14 | 4.960e-16 | 2.514e+00 | 0.000e+00 | 3.836e-12 |
| Risultante - J | 8.860e+02 | 3.386e-14 | 4.960e-16 | 2.514e+00 | 0.000e+00 | 9.679e-13 |
| **Elemento: 59** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 6 | 6 | 4 | 4 | 4 | 0 |
| Modo nodo J | 6 | 6 | 4 | 4 | 4 | 4 |
| Massimo - I | 6.750e+02 | 5.936e-14 | 3.290e-15 | 1.180e+00 | 3.351e-14 | 0.000e+00 |
| Massimo - J | 6.750e+02 | 5.936e-14 | 3.290e-15 | 1.180e+00 | 3.706e-30 | 4.605e-14 |
| Risultante - I | 4.698e+02 | 3.089e-14 | 6.373e-15 | 9.797e-01 | 6.485e-14 | 0.000e+00 |
| Risultante - J | 4.698e+02 | 3.089e-14 | 6.373e-15 | 9.797e-01 | 7.259e-30 | 2.506e-14 |
| **Elemento: 60** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 6 | 6 | 6 | 6 | 6 |
| Modo nodo J | 4 | 6 | 6 | 6 | 6 | 7 |
| Massimo - I | 7.648e+01 | 3.555e+01 | 1.127e+01 | 7.319e+00 | 3.945e+02 | 1.801e+03 |
| Massimo - J | 7.648e+01 | 3.555e+01 | 1.127e+01 | 7.319e+00 | 3.945e+02 | 7.679e+02 |
| Risultante - I | 7.158e+01 | 1.359e+01 | 1.938e+01 | 1.258e+01 | 6.782e+02 | 5.561e+02 |
| Risultante - J | 7.158e+01 | 1.359e+01 | 1.938e+01 | 1.258e+01 | 6.782e+02 | 9.242e+02 |
| **Elemento: 61** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 3 | 3 | 4 | 4 | 4 | 3 |
| Modo nodo J | 3 | 3 | 4 | 4 | 4 | 3 |
| Massimo - I | 1.287e+02 | 3.807e+02 | 1.636e+02 | 3.092e+02 | 1.006e+04 | 2.235e+04 |
| Massimo - J | 1.287e+02 | 3.807e+02 | 1.636e+02 | 3.092e+02 | 1.006e+04 | 2.448e+04 |
| Risultante - I | 1.384e+02 | 7.066e+02 | 1.449e+02 | 2.739e+02 | 8.912e+03 | 4.250e+04 |
| Risultante - J | 1.384e+02 | 7.066e+02 | 1.449e+02 | 2.739e+02 | 8.912e+03 | 4.442e+04 |
| **Elemento: 62** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 3 | 3 | 4 | 3 | 4 | 6 |
| Modo nodo J | 3 | 3 | 4 | 3 | 3 | 0 |
| Massimo - I | 6.506e+02 | 2.954e-15 | 2.759e-16 | 2.334e+00 | 3.612e-14 | 1.785e-14 |
| Massimo - J | 6.506e+02 | 2.954e-15 | 2.759e-16 | 2.334e+00 | 2.843e-15 | 0.000e+00 |
| Risultante - I | 1.151e+03 | 5.116e-15 | 5.011e-16 | 3.687e+00 | 6.564e-14 | 1.981e-14 |
| Risultante - J | 1.151e+03 | 5.116e-15 | 5.011e-16 | 3.687e+00 | 4.649e-15 | 0.000e+00 |
| **Elemento: 63** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 3 | 3 | 4 | 9 | 0 | 3 |
| Modo nodo J | 3 | 3 | 4 | 9 | 0 | 4 |
| Massimo - I | 2.645e+02 | 4.411e-14 | 2.573e-16 | 7.678e-01 | 0.000e+00 | 4.102e-12 |
| Massimo - J | 2.645e+02 | 4.411e-14 | 2.573e-16 | 7.678e-01 | 0.000e+00 | 1.392e-14 |
| Risultante - I | 5.038e+02 | 7.866e-14 | 5.030e-16 | 1.635e+00 | 0.000e+00 | 7.268e-12 |



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| Risultante - J | 5.038e+02 | 7.866e-14 | 5.030e-16 | 1.635e+00 | 0.000e+00 | 2.868e-14 |
| **Elemento: 64** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 3 | 3 | 6 | 6 | 6 | 0 |
| Modo nodo J | 3 | 3 | 6 | 6 | 4 | 6 |
| Massimo - I | 1.509e+02 | 4.219e-14 | 3.250e-15 | 5.659e+00 | 3.318e-14 | 0.000e+00 |
| Massimo - J | 1.509e+02 | 4.219e-14 | 3.250e-15 | 5.659e+00 | 3.706e-30 | 1.442e-13 |
| Risultante - I | 2.979e+02 | 7.674e-14 | 6.578e-15 | 7.287e+00 | 6.711e-14 | 0.000e+00 |
| Risultante - J | 2.979e+02 | 7.674e-14 | 6.578e-15 | 7.287e+00 | 7.259e-30 | 1.778e-13 |
| **Elemento: 65** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 6 | 4 | 4 | 4 | 6 |
| Modo nodo J | 4 | 6 | 4 | 4 | 4 | 4 |
| Massimo - I | 3.645e+01 | 1.637e+01 | 2.735e+01 | 1.776e+01 | 9.571e+02 | 6.843e+02 |
| Massimo - J | 3.645e+01 | 1.637e+01 | 2.735e+01 | 1.776e+01 | 9.571e+02 | 7.461e+02 |
| Risultante - I | 4.453e+01 | 3.460e+01 | 3.040e+01 | 1.974e+01 | 1.064e+03 | 1.047e+03 |
| Risultante - J | 4.453e+01 | 3.460e+01 | 3.040e+01 | 1.974e+01 | 1.064e+03 | 1.461e+03 |
| **Elemento: 66** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 3 | 3 | 4 | 4 | 4 | 3 |
| Modo nodo J | 3 | 3 | 4 | 4 | 4 | 3 |
| Massimo - I | 1.092e+03 | 3.865e+02 | 1.525e+02 | 2.882e+02 | 9.377e+03 | 1.471e+04 |
| Massimo - J | 1.092e+03 | 3.865e+02 | 1.525e+02 | 2.882e+02 | 9.377e+03 | 3.283e+04 |
| Risultante - I | 1.020e+03 | 3.691e+02 | 1.135e+02 | 2.146e+02 | 6.982e+03 | 1.425e+04 |
| Risultante - J | 1.020e+03 | 3.691e+02 | 1.135e+02 | 2.146e+02 | 6.982e+03 | 3.115e+04 |
| **Elemento: 67** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 3 | 4 | 4 | 4 | 4 | 3 |
| Modo nodo J | 3 | 4 | 4 | 4 | 4 | 0 |
| Massimo - I | 2.822e+03 | 1.624e-13 | 2.708e-16 | 2.025e+00 | 3.546e-14 | 4.700e-13 |
| Massimo - J | 2.822e+03 | 1.624e-13 | 2.708e-16 | 2.025e+00 | 2.545e-15 | 0.000e+00 |
| Risultante - I | 3.028e+03 | 1.584e-13 | 4.968e-16 | 3.486e+00 | 6.508e-14 | 7.634e-13 |
| Risultante - J | 3.028e+03 | 1.584e-13 | 4.968e-16 | 3.486e+00 | 4.483e-15 | 0.000e+00 |
| **Elemento: 68** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 3 | 4 | 4 | 4 | 0 | 4 |
| Modo nodo J | 3 | 4 | 4 | 4 | 0 | 9 |
| Massimo - I | 1.809e+03 | 8.590e-13 | 2.620e-16 | 2.105e-01 | 0.000e+00 | 8.685e-11 |
| Massimo - J | 1.809e+03 | 8.590e-13 | 2.620e-16 | 2.105e-01 | 0.000e+00 | 1.108e-13 |
| Risultante - I | 2.333e+03 | 9.391e-13 | 5.159e-16 | 4.181e-01 | 0.000e+00 | 9.287e-11 |
| Risultante - J | 2.333e+03 | 9.391e-13 | 5.159e-16 | 4.181e-01 | 0.000e+00 | 1.577e-13 |
| **Elemento: 69** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 6 | 4 | 4 | 6 | 4 | 0 |
| Modo nodo J | 6 | 4 | 4 | 6 | 4 | 6 |
| Massimo - I | 1.230e+03 | 7.194e-13 | 3.121e-15 | 3.895e+00 | 3.178e-14 | 0.000e+00 |
| Massimo - J | 1.230e+03 | 7.194e-13 | 3.121e-15 | 3.895e+00 | 3.705e-30 | 2.386e-12 |
| Risultante - I | 2.043e+03 | 8.408e-13 | 6.521e-15 | 5.049e+00 | 6.647e-14 | 0.000e+00 |
| Risultante - J | 2.043e+03 | 8.408e-13 | 6.521e-15 | 5.049e+00 | 7.259e-30 | 3.061e-12 |
| **Elemento: 70** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 4 | 3 | 3 | 3 | 4 |
| Modo nodo J | 4 | 4 | 3 | 3 | 3 | 4 |
| Massimo - I | 5.087e+02 | 2.882e+02 | 2.219e+01 | 1.441e+01 | 7.768e+02 | 1.431e+04 |
| Massimo - J | 5.087e+02 | 2.882e+02 | 2.219e+01 | 1.441e+01 | 7.768e+02 | 5.867e+03 |
| Risultante - I | 7.002e+02 | 3.871e+02 | 2.373e+01 | 1.541e+01 | 8.306e+02 | 1.934e+04 |
| Risultante - J | 7.002e+02 | 3.871e+02 | 2.373e+01 | 1.541e+01 | 8.306e+02 | 7.779e+03 |
| **Elemento: 71** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 4 | 3 | 3 | 3 | 4 |
| Modo nodo J | 4 | 4 | 3 | 3 | 3 | 4 |
| Massimo - I | 9.805e+02 | 3.492e+02 | 1.543e+02 | 2.916e+02 | 9.486e+03 | 1.335e+04 |
| Massimo - J | 9.805e+02 | 3.492e+02 | 1.543e+02 | 2.916e+02 | 9.486e+03 | 2.961e+04 |
| Risultante - I | 9.784e+02 | 3.600e+02 | 1.088e+02 | 2.057e+02 | 6.692e+03 | 1.404e+04 |
| Risultante - J | 9.784e+02 | 3.600e+02 | 1.088e+02 | 2.057e+02 | 6.692e+03 | 3.025e+04 |
| **Elemento: 72** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 3 | 4 | 3 | 4 | 4 |
| Modo nodo J | 4 | 3 | 4 | 3 | 3 | 0 |
| Massimo - I | 2.420e+03 | 2.565e-13 | 2.573e-16 | 1.654e+00 | 3.369e-14 | 5.160e-13 |
| Massimo - J | 2.420e+03 | 2.565e-13 | 2.573e-16 | 1.654e+00 | 2.092e-15 | 0.000e+00 |
| Risultante - I | 2.681e+03 | 1.839e-13 | 5.298e-16 | 2.685e+00 | 6.937e-14 | 8.438e-13 |
| Risultante - J | 2.681e+03 | 1.839e-13 | 5.298e-16 | 2.685e+00 | 3.419e-15 | 0.000e+00 |
| **Elemento: 73** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 3 | 4 | 4 | 0 | 3 |
| Modo nodo J | 4 | 3 | 4 | 4 | 0 | 4 |
| Massimo - I | 1.394e+03 | 1.327e-12 | 2.657e-16 | 2.178e-01 | 0.000e+00 | 1.352e-10 |
| Massimo - J | 1.394e+03 | 1.327e-12 | 2.657e-16 | 2.178e-01 | 0.000e+00 | 1.327e-13 |
| Risultante - I | 1.679e+03 | 9.997e-13 | 5.184e-16 | 3.827e-01 | 0.000e+00 | 1.008e-10 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| Risultante - J | 1.679e+03 | 9.997e-13 | 5.184e-16 | 3.827e-01 | 0.000e+00 | 2.685e-13 |
| **Elemento: 74** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 6 | 3 | 4 | 6 | 4 | 0 |
| Modo nodo J | 6 | 3 | 4 | 6 | 4 | 6 |
| Massimo - I | 6.323e+02 | 1.088e-12 | 3.600e-15 | 3.863e+00 | 3.689e-14 | 0.000e+00 |
| Massimo - J | 6.323e+02 | 1.088e-12 | 3.600e-15 | 3.863e+00 | 3.705e-30 | 2.298e-12 |
| Risultante - I | 1.024e+03 | 8.459e-13 | 6.341e-15 | 4.967e+00 | 6.451e-14 | 0.000e+00 |
| Risultante - J | 1.024e+03 | 8.459e-13 | 6.341e-15 | 4.967e+00 | 7.259e-30 | 2.980e-12 |
| **Elemento: 75** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 3 | 3 | 6 | 6 | 6 | 3 |
| Modo nodo J | 3 | 3 | 6 | 6 | 6 | 3 |
| Massimo - I | 5.909e+02 | 3.439e+02 | 1.604e+01 | 1.041e+01 | 5.614e+02 | 1.694e+04 |
| Massimo - J | 5.909e+02 | 3.439e+02 | 1.604e+01 | 1.041e+01 | 5.614e+02 | 7.136e+03 |
| Risultante - I | 5.079e+02 | 2.868e+02 | 2.223e+01 | 1.443e+01 | 7.780e+02 | 1.422e+04 |
| Risultante - J | 5.079e+02 | 2.868e+02 | 2.223e+01 | 1.443e+01 | 7.780e+02 | 5.884e+03 |
| **Elemento: 76** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 2 | 4 | 3 | 3 | 3 | 4 |
| Modo nodo J | 2 | 4 | 3 | 3 | 3 | 4 |
| Massimo - I | 2.105e+02 | 4.112e+02 | 2.043e+02 | 3.862e+02 | 1.256e+04 | 2.367e+04 |
| Massimo - J | 2.105e+02 | 4.112e+02 | 2.043e+02 | 3.862e+02 | 1.256e+04 | 2.692e+04 |
| Risultante - I | 2.926e+02 | 7.746e+02 | 1.414e+02 | 2.673e+02 | 8.695e+03 | 4.600e+04 |
| Risultante - J | 2.926e+02 | 7.746e+02 | 1.414e+02 | 2.673e+02 | 8.695e+03 | 4.934e+04 |
| **Elemento: 77** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 4 | 4 | 4 | 4 | 6 |
| Modo nodo J | 4 | 4 | 4 | 4 | 4 | 0 |
| Massimo - I | 7.025e+02 | 3.644e-15 | 2.649e-16 | 2.407e+00 | 3.468e-14 | 2.144e-14 |
| Massimo - J | 7.025e+02 | 3.644e-15 | 2.649e-16 | 2.407e+00 | 2.458e-15 | 0.000e+00 |
| Risultante - I | 1.204e+03 | 5.774e-15 | 5.349e-16 | 3.968e+00 | 7.003e-14 | 3.228e-14 |
| Risultante - J | 1.204e+03 | 5.774e-15 | 5.349e-16 | 3.968e+00 | 4.239e-15 | 0.000e+00 |
| **Elemento: 78** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 4 | 4 | 4 | 0 | 4 |
| Modo nodo J | 4 | 4 | 4 | 4 | 0 | 4 |
| Massimo - I | 3.299e+02 | 5.067e-14 | 2.653e-16 | 1.318e+00 | 0.000e+00 | 4.650e-12 |
| Massimo - J | 3.299e+02 | 5.067e-14 | 2.653e-16 | 1.318e+00 | 0.000e+00 | 1.494e-14 |
| Risultante - I | 4.736e+02 | 8.322e-14 | 5.064e-16 | 2.662e+00 | 0.000e+00 | 7.749e-12 |
| Risultante - J | 4.736e+02 | 8.322e-14 | 5.064e-16 | 2.662e+00 | 0.000e+00 | 3.141e-14 |
| **Elemento: 79** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 4 | 3 | 6 | 3 | 0 |
| Modo nodo J | 4 | 4 | 3 | 6 | 4 | 3 |
| Massimo - I | 3.285e+02 | 5.241e-14 | 3.725e-15 | 5.904e+00 | 3.826e-14 | 0.000e+00 |
| Massimo - J | 3.285e+02 | 5.241e-14 | 3.725e-15 | 5.904e+00 | 3.706e-30 | 1.371e-13 |
| Risultante - I | 3.419e+02 | 7.839e-14 | 6.427e-15 | 6.808e+00 | 6.546e-14 | 0.000e+00 |
| Risultante - J | 3.419e+02 | 7.839e-14 | 6.427e-15 | 6.808e+00 | 7.259e-30 | 1.709e-13 |
| **Elemento: 80** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 3 | 4 | 6 | 6 | 6 | 4 |
| Modo nodo J | 3 | 4 | 6 | 6 | 6 | 4 |
| Massimo - I | 1.292e+01 | 1.242e+01 | 1.377e+01 | 8.944e+00 | 4.821e+02 | 4.268e+02 |
| Massimo - J | 1.292e+01 | 1.242e+01 | 1.377e+01 | 8.944e+00 | 4.821e+02 | 4.422e+02 |
| Risultante - I | 1.486e+01 | 1.987e+01 | 1.761e+01 | 1.143e+01 | 6.162e+02 | 6.239e+02 |
| Risultante - J | 1.486e+01 | 1.987e+01 | 1.761e+01 | 1.143e+01 | 6.162e+02 | 7.801e+02 |
| **Elemento: 81** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 2 | 4 | 3 | 3 | 3 | 4 |
| Modo nodo J | 2 | 4 | 3 | 3 | 3 | 4 |
| Massimo - I | 3.384e+01 | 1.546e+01 | 1.977e+02 | 3.737e+02 | 1.216e+04 | 6.992e+02 |
| Massimo - J | 3.384e+01 | 1.546e+01 | 1.977e+02 | 3.737e+02 | 1.216e+04 | 1.203e+03 |
| Risultante - I | 6.674e+01 | 3.149e+01 | 1.366e+02 | 2.583e+02 | 8.403e+03 | 1.417e+03 |
| Risultante - J | 6.674e+01 | 3.149e+01 | 1.366e+02 | 2.583e+02 | 8.403e+03 | 2.471e+03 |
| **Elemento: 82** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 2 | 3 | 4 | 4 | 4 | 4 |
| Modo nodo J | 2 | 3 | 4 | 4 | 4 | 0 |
| Massimo - I | 5.296e+02 | 9.450e-15 | 2.635e-16 | 1.490e+00 | 3.450e-14 | 3.374e-13 |
| Massimo - J | 5.296e+02 | 9.450e-15 | 2.635e-16 | 1.490e+00 | 1.317e-15 | 0.000e+00 |
| Risultante - I | 6.198e+02 | 1.976e-14 | 5.237e-16 | 2.612e+00 | 6.858e-14 | 6.782e-13 |
| Risultante - J | 6.198e+02 | 1.976e-14 | 5.237e-16 | 2.612e+00 | 2.270e-15 | 0.000e+00 |
| **Elemento: 83** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 2 | 3 | 4 | 4 | 0 | 3 |
| Modo nodo J | 2 | 3 | 4 | 4 | 0 | 4 |
| Massimo - I | 2.761e+02 | 4.286e-14 | 2.600e-16 | 2.788e+00 | 0.000e+00 | 3.565e-12 |
| Massimo - J | 2.761e+02 | 4.286e-14 | 2.600e-16 | 2.788e+00 | 0.000e+00 | 1.339e-12 |
| Risultante - I | 3.563e+02 | 8.602e-14 | 4.817e-16 | 5.659e+00 | 0.000e+00 | 7.170e-12 |



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|---|---|---|---|---|---|---|
| Risultante - J | 3.563e+02 | 8.602e-14 | 4.817e-16 | 5.659e+00 | 0.000e+00 | 2.726e-12 |
| **Elemento: 84** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 9 | 3 | 4 | 3 | 4 | 0 |
| Modo nodo J | 9 | 3 | 4 | 3 | 4 | 4 |
| Massimo - I | 4.112e+02 | 3.128e-14 | 3.248e-15 | 3.156e+00 | 3.316e-14 | 0.000e+00 |
| Massimo - J | 4.112e+02 | 3.128e-14 | 3.248e-15 | 3.156e+00 | 3.706e-30 | 1.338e-12 |
| Risultante - I | 4.367e+02 | 6.472e-14 | 6.681e-15 | 6.099e+00 | 6.822e-14 | 0.000e+00 |
| Risultante - J | 4.367e+02 | 6.472e-14 | 6.681e-15 | 6.099e+00 | 7.259e-30 | 2.715e-12 |
| **Elemento: 85** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 4 | 6 | 6 | 6 | 4 |
| Modo nodo J | 4 | 4 | 6 | 6 | 6 | 4 |
| Massimo - I | 1.264e+02 | 7.324e+01 | 3.625e+00 | 2.354e+00 | 1.269e+02 | 3.612e+03 |
| Massimo - J | 1.264e+02 | 7.324e+01 | 3.625e+00 | 2.354e+00 | 1.269e+02 | 1.515e+03 |
| Risultante - I | 1.076e+02 | 6.026e+01 | 6.320e+00 | 4.103e+00 | 2.212e+02 | 2.990e+03 |
| Risultante - J | 1.076e+02 | 6.026e+01 | 6.320e+00 | 4.103e+00 | 2.212e+02 | 1.244e+03 |
| **Elemento: 86** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 4 | 4 | 4 | 4 | 4 |
| Modo nodo J | 4 | 4 | 4 | 4 | 4 | 4 |
| Massimo - I | 1.438e+02 | 8.067e+01 | 1.018e+01 | 6.612e+00 | 3.564e+02 | 4.016e+03 |
| Massimo - J | 1.438e+02 | 8.067e+01 | 1.018e+01 | 6.612e+00 | 3.564e+02 | 1.631e+03 |
| Risultante - I | 1.226e+02 | 6.635e+01 | 1.660e+01 | 1.078e+01 | 5.811e+02 | 3.325e+03 |
| Risultante - J | 1.226e+02 | 6.635e+01 | 1.660e+01 | 1.078e+01 | 5.811e+02 | 1.340e+03 |
| **Elemento: 87** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 3 | 3 | 6 | 6 | 6 | 3 |
| Modo nodo J | 3 | 3 | 6 | 6 | 6 | 4 |
| Massimo - I | 8.612e+01 | 2.294e+01 | 2.455e+01 | 1.594e+01 | 8.594e+02 | 1.517e+03 |
| Massimo - J | 8.612e+01 | 2.294e+01 | 2.455e+01 | 1.594e+01 | 8.594e+02 | 3.265e+02 |
| Risultante - I | 7.207e+01 | 2.211e+01 | 2.969e+01 | 1.928e+01 | 1.039e+03 | 1.296e+03 |
| Risultante - J | 7.207e+01 | 2.211e+01 | 2.969e+01 | 1.928e+01 | 1.039e+03 | 4.955e+02 |
| **Elemento: 88** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 9 | 9 | 3 | 3 | 3 | 9 |
| Modo nodo J | 9 | 9 | 3 | 3 | 3 | 9 |
| Massimo - I | 2.039e+02 | 1.132e+02 | 1.671e+01 | 1.085e+01 | 5.847e+02 | 5.652e+03 |
| Massimo - J | 2.039e+02 | 1.132e+02 | 1.671e+01 | 1.085e+01 | 5.847e+02 | 2.270e+03 |
| Risultante - I | 2.193e+02 | 1.184e+02 | 1.729e+01 | 1.123e+01 | 6.052e+02 | 5.954e+03 |
| Risultante - J | 2.193e+02 | 1.184e+02 | 1.729e+01 | 1.123e+01 | 6.052e+02 | 2.353e+03 |
| **Elemento: 89** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 3 | 9 | 8 | 9 | 4 | 3 |
| Modo nodo J | 3 | 9 | 8 | 9 | 0 | 0 |
| Massimo - I | 4.217e+02 | 5.265e-13 | 2.716e-15 | 3.638e+01 | 2.232e-13 | 1.335e-10 |
| Massimo - J | 4.217e+02 | 5.265e-13 | 2.716e-15 | 3.638e+01 | 0.000e+00 | 0.000e+00 |
| Risultante - I | 2.903e+02 | 1.037e-12 | 5.721e-15 | 7.139e+01 | 4.624e-13 | 9.218e-11 |
| Risultante - J | 2.903e+02 | 1.037e-12 | 5.721e-15 | 7.139e+01 | 0.000e+00 | 0.000e+00 |
| **Elemento: 90** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 3 | 2 | 2 | 2 | 2 | 3 |
| Modo nodo J | 3 | 2 | 2 | 2 | 2 | 0 |
| Massimo - I | 2.158e+02 | 3.481e-12 | 6.313e-14 | 2.412e+02 | 1.347e-12 | 1.324e-10 |
| Massimo - J | 2.158e+02 | 3.481e-12 | 6.313e-14 | 2.412e+02 | 6.735e-13 | 0.000e+00 |
| Risultante - I | 1.481e+02 | 3.465e-12 | 6.544e-14 | 2.402e+02 | 1.370e-12 | 9.147e-11 |
| Risultante - J | 1.481e+02 | 3.465e-12 | 6.544e-14 | 2.402e+02 | 6.848e-13 | 0.000e+00 |
| **Elemento: 91** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 2 | 2 | 2 | 2 | 2 | 2 |
| Modo nodo J | 2 | 2 | 2 | 2 | 2 | 4 |
| Massimo - I | 1.360e+02 | 8.194e+01 | 6.808e+02 | 3.721e+02 | 2.836e+04 | 4.611e+03 |
| Massimo - J | 1.360e+02 | 8.194e+01 | 6.808e+02 | 3.721e+02 | 2.836e+04 | 2.903e+03 |
| Risultante - I | 2.731e+02 | 1.291e+02 | 6.775e+02 | 3.703e+02 | 2.823e+04 | 7.265e+03 |
| Risultante - J | 2.731e+02 | 1.291e+02 | 6.775e+02 | 3.703e+02 | 2.823e+04 | 4.191e+03 |
| **Elemento: 92** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 4 | 4 | 9 | 9 | 9 | 4 |
| Modo nodo J | 4 | 4 | 9 | 9 | 9 | 2 |
| Massimo - I | 3.196e+02 | 1.159e+02 | 9.917e+01 | 5.421e+01 | 4.132e+03 | 7.941e+03 |
| Massimo - J | 3.196e+02 | 1.159e+02 | 9.917e+01 | 5.421e+01 | 4.132e+03 | 2.828e+03 |
| Risultante - I | 6.161e+02 | 1.577e+02 | 1.975e+02 | 1.079e+02 | 8.228e+03 | 1.200e+04 |
| Risultante - J | 6.161e+02 | 1.577e+02 | 1.975e+02 | 1.079e+02 | 8.228e+03 | 3.533e+03 |
| **Elemento: 93** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
| Modo nodo I | 2 | 2 | 3 | 3 | 3 | 2 |
| Modo nodo J | 2 | 2 | 3 | 3 | 3 | 2 |
| Massimo - I | 2.655e+02 | 9.011e+01 | 1.987e+02 | 3.756e+02 | 1.222e+04 | 3.339e+03 |
| Massimo - J | 2.655e+02 | 9.011e+01 | 1.987e+02 | 3.756e+02 | 1.222e+04 | 7.744e+03 |
| Risultante - I | 2.999e+02 | 1.116e+02 | 1.373e+02 | 2.595e+02 | 8.442e+03 | 4.433e+03 |



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|---|---|---|---|---|---|---|
| Risultante - J | 2.999e+02 | 1.116e+02 | 1.373e+02 | 2.595e+02 | 8.442e+03 | 9.328e+03 |

| **Elemento: 94** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 2 | 2 | 3 | 3 | 3 | 2 |
| Modo nodo J | 2 | 2 | 3 | 3 | 3 | 2 |
| Massimo - I | 2.484e+02 | 8.437e+01 | 2.008e+02 | 3.797e+02 | 1.235e+04 | 3.128e+03 |
| Massimo - J | 2.484e+02 | 8.437e+01 | 2.008e+02 | 3.797e+02 | 1.235e+04 | 7.249e+03 |
| Risultante - I | 2.620e+02 | 9.544e+01 | 1.388e+02 | 2.624e+02 | 8.538e+03 | 3.769e+03 |
| Risultante - J | 2.620e+02 | 9.544e+01 | 1.388e+02 | 2.624e+02 | 8.538e+03 | 8.009e+03 |

**FORZE/MOMENTI ELEMENTO FINITO TRAVE - SISMA LUNGO Y**
**Gruppo numero: 3 - Descrizione: DIAGONALI DI PARETE**

| **Elemento: 1** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 4 | 4 | 3 | 0 | 0 |
| Modo nodo J | 4 | 4 | 4 | 3 | 4 | 3 |
| Massimo - I | 3.931e+03 | 1.523e-15 | 2.886e-17 | 2.145e-01 | 0.000e+00 | 0.000e+00 |
| Massimo - J | 3.931e+03 | 1.523e-15 | 2.886e-17 | 2.145e-01 | 2.654e-15 | 9.078e-14 |
| Risultante - I | 8.003e+03 | 3.097e-15 | 3.497e-17 | 4.551e-01 | 0.000e+00 | 0.000e+00 |
| Risultante - J | 8.003e+03 | 3.097e-15 | 3.497e-17 | 4.551e-01 | 3.639e-15 | 1.842e-13 |

| **Elemento: 2** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 4 | 3 | 4 | 0 | 0 |
| Modo nodo J | 4 | 4 | 3 | 4 | 3 | 3 |
| Massimo - I | 3.928e+03 | 1.536e-15 | 2.110e-17 | 2.366e-01 | 0.000e+00 | 0.000e+00 |
| Massimo - J | 3.928e+03 | 1.536e-15 | 2.110e-17 | 2.366e-01 | 1.579e-15 | 9.774e-14 |
| Risultante - I | 8.000e+03 | 3.114e-15 | 1.708e-17 | 4.749e-01 | 0.000e+00 | 0.000e+00 |
| Risultante - J | 8.000e+03 | 3.114e-15 | 1.708e-17 | 4.749e-01 | 1.200e-15 | 1.979e-13 |

| **Elemento: 3** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 3 | 3 | 4 | 0 | 0 |
| Modo nodo J | 4 | 3 | 3 | 4 | 0 | 3 |
| Massimo - I | 4.077e+03 | 1.615e-15 | 6.857e-18 | 3.973e-01 | 0.000e+00 | 0.000e+00 |
| Massimo - J | 4.077e+03 | 1.615e-15 | 6.857e-18 | 3.973e-01 | 0.000e+00 | 1.109e-13 |
| Risultante - I | 8.479e+03 | 3.401e-15 | 9.564e-18 | 7.587e-01 | 0.000e+00 | 0.000e+00 |
| Risultante - J | 8.479e+03 | 3.401e-15 | 9.564e-18 | 7.587e-01 | 0.000e+00 | 2.591e-13 |

| **Elemento: 4** | **Fx** | **Fy** | **Fz** | **Mx** | **My** | **Mz** |
|---|---|---|---|---|---|---|
| Modo nodo I | 4 | 3 | 3 | 6 | 0 | 0 |
| Modo nodo J | 4 | 3 | 3 | 6 | 0 | 3 |
| Massimo - I | 4.057e+03 | 1.576e-15 | 3.084e-18 | 1.654e-01 | 0.000e+00 | 0.000e+00 |
| Massimo - J | 4.057e+03 | 1.576e-15 | 3.084e-18 | 1.654e-01 | 0.000e+00 | 8.893e-14 |
| Risultante - I | 8.437e+03 | 3.308e-15 | 2.343e-18 | 3.137e-01 | 0.000e+00 | 0.000e+00 |
| Risultante - J | 8.437e+03 | 3.308e-15 | 2.343e-18 | 3.137e-01 | 0.000e+00 | 2.085e-13 |

**TENSIONI/MOMENTI ELEMENTO FINITO VINCOLO - SISMA LUNGO X**
**Gruppo numero: 1 - Descrizione: PLINTI**

| **Nodo** | **FX** | **FY** | **FZ** | **MX** | **MY** | **MZ** |
|---|---|---|---|---|---|---|
| 1 | modo: 1 | modo: 1 | modo: 1 | modo: 1 | modo: 1 | modo: 1 |
| Massimo | +6.670e+02 | +4.330e+01 | +1.750e+02 | +6.480e+03 | +1.350e+05 | +2.040e+00 |
| Risultante | +6.710e+02 | +4.430e+01 | +2.100e+02 | +6.650e+03 | +1.350e+05 | +2.040e+00 |
| 2 | modo: 1 | modo: 4 | modo: 1 | modo: 1 | modo: 1 | modo: 1 |
| Massimo | +2.050e+03 | +5.140e+00 | +1.710e+03 | +1.460e+03 | +3.220e+05 | +1.680e+00 |
| Risultante | +2.050e+03 | +5.310e+00 | +1.710e+03 | +1.480e+03 | +3.220e+05 | +1.680e+00 |
| 6 | modo: 1 | modo: 4 | modo: 1 | modo: 1 | modo: 1 | modo: 1 |
| Massimo | +1.850e+03 | +7.340e+02 | +2.080e+03 | +1.480e+03 | +3.010e+05 | +5.400e+00 |
| Risultante | +1.850e+03 | +7.480e+02 | +2.110e+03 | +1.510e+03 | +3.010e+05 | +5.400e+00 |
| 7 | modo: 1 | modo: 1 | modo: 1 | modo: 1 | modo: 1 | modo: 1 |
| Massimo | +1.850e+03 | +1.020e+03 | +3.350e+03 | +1.490e+03 | +3.010e+05 | +4.410e+00 |
| Risultante | +1.850e+03 | +1.040e+03 | +3.370e+03 | +1.530e+03 | +3.010e+05 | +4.410e+00 |
| 21 | modo: 1 | modo: 1 | modo: 1 | modo: 3 | modo: 1 | modo: 1 |
| Massimo | +1.230e+03 | +2.660e+01 | +8.830e+02 | +3.300e+03 | +1.920e+05 | +2.040e+00 |
| Risultante | +1.230e+03 | +2.730e+01 | +8.830e+02 | +3.490e+03 | +1.920e+05 | +2.040e+00 |
| 23 | modo: 1 | modo: 1 | modo: 1 | modo: 1 | modo: 1 | modo: 1 |
| Massimo | +1.240e+03 | +2.210e+01 | +4.390e+02 | +2.740e+03 | +1.920e+05 | +2.040e+00 |
| Risultante | +1.240e+03 | +2.290e+01 | +4.390e+02 | +2.980e+03 | +1.920e+05 | +2.040e+00 |
| 25 | modo: 1 | modo: 1 | modo: 1 | modo: 1 | modo: 1 | modo: 1 |
| Massimo | +1.260e+03 | +3.650e+01 | +1.490e+03 | +5.830e+03 | +1.960e+05 | +2.040e+00 |
| Risultante | +1.260e+03 | +3.760e+01 | +1.490e+03 | +6.010e+03 | +1.960e+05 | +2.040e+00 |
| 28 | modo: 1 | modo: 4 | modo: 1 | modo: 4 | modo: 1 | modo: 1 |
| Massimo | +1.240e+03 | +1.230e+01 | +7.940e+02 | +1.970e+03 | +1.930e+05 | +2.040e+00 |
| Risultante | +1.240e+03 | +1.300e+01 | +7.940e+02 | +2.110e+03 | +1.930e+05 | +2.040e+00 |
| 29 | modo: 1 | modo: 1 | modo: 1 | modo: 4 | modo: 1 | modo: 1 |
| Massimo | +1.260e+03 | +1.950e+01 | +5.420e+02 | +2.490e+03 | +1.950e+05 | +2.040e+00 |
| Risultante | +1.260e+03 | +2.070e+01 | +5.420e+02 | +2.790e+03 | +1.950e+05 | +2.040e+00 |
| 47 | modo: 1 | modo: 3 | modo: 1 | modo: 3 | modo: 1 | modo: 1 |
| Massimo | +1.230e+03 | +1.880e+01 | +1.100e+03 | +2.860e+03 | +1.910e+05 | +2.040e+00 |
| Risultante | +1.230e+03 | +1.990e+01 | +1.100e+03 | +3.120e+03 | +1.910e+05 | +2.040e+00 |
| 48 | modo: 1 | modo: 4 | modo: 1 | modo: 4 | modo: 1 | modo: 1 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| Massimo | +2.050e+03 | +5.560e+00 | +7.220e+02 | +7.810e+02 | +3.210e+05 | +1.680e+00 |
| Risultante | +2.050e+03 | +3.400e+00 | +7.220e+02 | +7.700e+02 | +3.210e+05 | +1.680e+00 |
| 50 | modo: 1 | modo: 4 | modo: 1 | modo: 4 | modo: 1 | modo: 1 |
| Massimo | +2.050e+03 | +7.030e+00 | +1.150e+03 | +9.320e+02 | +3.210e+05 | +1.680e+00 |
| Risultante | +2.050e+03 | +3.590e+00 | +1.150e+03 | +7.440e+02 | +3.210e+05 | +1.680e+00 |
| 51 | modo: 1 | modo: 4 | modo: 1 | modo: 4 | modo: 1 | modo: 1 |
| Massimo | +2.050e+03 | +2.720e+01 | +9.280e+02 | +3.010e+03 | +3.220e+05 | +1.680e+00 |
| Risultante | +2.050e+03 | +1.170e+01 | +9.280e+02 | +1.590e+03 | +3.220e+05 | +1.680e+00 |
| 56 | modo: 1 | modo: 1 | modo: 1 | modo: 1 | modo: 1 | modo: 1 |
| Massimo | +1.250e+03 | +3.610e+01 | +1.060e+03 | +4.210e+03 | +1.940e+05 | +2.040e+00 |
| Risultante | +1.250e+03 | +3.690e+01 | +1.060e+03 | +4.380e+03 | +1.940e+05 | +2.040e+00 |
| 57 | modo: 1 | modo: 4 | modo: 1 | modo: 4 | modo: 1 | modo: 1 |
| Massimo | +2.070e+03 | +5.210e+00 | +8.050e+02 | +7.450e+02 | +3.230e+05 | +1.680e+00 |
| Risultante | +2.070e+03 | +3.290e+00 | +8.050e+02 | +7.620e+02 | +3.230e+05 | +1.680e+00 |
| 58 | modo: 1 | modo: 4 | modo: 1 | modo: 1 | modo: 1 | modo: 1 |
| Massimo | +1.900e+03 | +5.570e+00 | +1.430e+03 | +1.500e+03 | +3.060e+05 | +1.680e+00 |
| Risultante | +1.900e+03 | +5.890e+00 | +1.430e+03 | +1.540e+03 | +3.060e+05 | +1.680e+00 |
| 59 | modo: 1 | modo: 1 | modo: 1 | modo: 1 | modo: 1 | modo: 1 |
| Massimo | +1.240e+03 | +2.280e+01 | +4.400e+02 | +2.810e+03 | +1.920e+05 | +2.040e+00 |
| Risultante | +1.240e+03 | +2.350e+01 | +4.400e+02 | +3.030e+03 | +1.920e+05 | +2.040e+00 |
| 60 | modo: 1 | modo: 4 | modo: 1 | modo: 4 | modo: 1 | modo: 1 |
| Massimo | +1.940e+03 | +4.540e+00 | +1.610e+03 | +1.300e+03 | +3.100e+05 | +1.680e+00 |
| Risultante | +1.940e+03 | +4.710e+00 | +1.610e+03 | +1.330e+03 | +3.100e+05 | +1.680e+00 |
| 64 | modo: 1 | modo: 4 | modo: 1 | modo: 4 | modo: 1 | modo: 1 |
| Massimo | +1.910e+03 | +4.580e+00 | +1.540e+03 | +1.300e+03 | +3.070e+05 | +1.680e+00 |
| Risultante | +1.910e+03 | +4.750e+00 | +1.540e+03 | +1.330e+03 | +3.070e+05 | +1.680e+00 |
| 65 | modo: 1 | modo: 1 | modo: 1 | modo: 4 | modo: 1 | modo: 1 |
| Massimo | +1.960e+03 | +1.140e+03 | +2.870e+03 | +1.310e+03 | +3.120e+05 | +3.350e+00 |
| Risultante | +1.960e+03 | +1.140e+03 | +2.890e+03 | +1.340e+03 | +3.120e+05 | +3.350e+00 |
| 66 | modo: 1 | modo: 4 | modo: 1 | modo: 4 | modo: 1 | modo: 1 |
| Massimo | +1.940e+03 | +7.100e+02 | +3.770e+03 | +1.290e+03 | +3.110e+05 | +3.870e+00 |
| Risultante | +1.940e+03 | +7.250e+02 | +3.780e+03 | +1.320e+03 | +3.110e+05 | +3.870e+00 |
| 80 | modo: 1 | modo: 4 | modo: 1 | modo: 4 | modo: 1 | modo: 1 |
| Massimo | +6.700e+02 | +1.240e+01 | +2.040e+02 | +1.960e+03 | +1.350e+05 | +2.040e+00 |
| Risultante | +6.730e+02 | +1.560e+01 | +2.140e+02 | +2.280e+03 | +1.360e+05 | +2.040e+00 |

**TENSIONI/MOMENTI ELEMENTO FINITO VINCOLO - SISMA LUNGO Y**
**Gruppo numero: 1 - Descrizione: PLINTI**

| Nodo | FX | FY | FZ | MX | MY | MZ |
|---|---|---|---|---|---|---|
| 1 | modo: 3 | modo: 3 | modo: 4 | modo: 4 | modo: 3 | modo: 4 |
| Massimo | +5.370e+02 | +1.530e+02 | +7.850e+02 | +2.450e+04 | +5.510e+04 | +1.390e+00 |
| Risultante | +3.780e+02 | +3.110e+02 | +8.400e+02 | +5.040e+04 | +3.880e+04 | +2.730e+00 |
| 2 | modo: 3 | modo: 2 | modo: 2 | modo: 4 | modo: 3 | modo: 4 |
| Massimo | +1.840e+01 | +2.600e+01 | +8.920e+01 | +4.640e+03 | +2.910e+03 | +1.150e+00 |
| Risultante | +2.430e+01 | +4.920e+01 | +1.160e+02 | +1.010e+04 | +3.920e+03 | +2.250e+00 |
| 6 | modo: 3 | modo: 4 | modo: 4 | modo: 4 | modo: 3 | modo: 4 |
| Massimo | +1.510e+01 | +2.540e+03 | +6.040e+03 | +5.040e+03 | +1.980e+03 | +1.240e+00 |
| Risultante | +1.900e+01 | +5.180e+03 | +1.230e+04 | +1.050e+04 | +2.140e+03 | +2.330e+00 |
| 7 | modo: 4 | modo: 4 | modo: 4 | modo: 4 | modo: 4 | modo: 4 |
| Massimo | +1.910e+01 | +2.540e+03 | +6.030e+03 | +5.150e+03 | +2.610e+03 | +1.250e+00 |
| Risultante | +2.810e+01 | +5.180e+03 | +1.230e+04 | +1.060e+04 | +3.600e+03 | +2.350e+00 |
| 21 | modo: 4 | modo: 3 | modo: 4 | modo: 3 | modo: 4 | modo: 4 |
| Massimo | +9.900e+00 | +1.140e+02 | +3.660e+01 | +2.060e+04 | +1.410e+03 | +1.390e+00 |
| Risultante | +1.320e+01 | +1.760e+02 | +6.770e+01 | +3.730e+04 | +1.810e+03 | +2.730e+00 |
| 23 | modo: 4 | modo: 4 | modo: 4 | modo: 4 | modo: 4 | modo: 4 |
| Massimo | +9.150e+00 | +9.470e+01 | +2.420e+01 | +1.840e+04 | +1.390e+03 | +1.390e+00 |
| Risultante | +1.270e+01 | +1.640e+02 | +4.570e+01 | +3.520e+04 | +1.930e+03 | +2.730e+00 |
| 25 | modo: 3 | modo: 3 | modo: 6 | modo: 3 | modo: 3 | modo: 4 |
| Massimo | +1.620e+01 | +1.530e+02 | +2.070e+02 | +2.440e+04 | +2.260e+03 | +1.390e+00 |
| Risultante | +2.290e+01 | +3.040e+02 | +2.640e+02 | +4.980e+04 | +3.170e+03 | +2.730e+00 |
| 28 | modo: 3 | modo: 4 | modo: 6 | modo: 4 | modo: 3 | modo: 4 |
| Massimo | +1.750e+01 | +1.470e+02 | +2.320e+02 | +2.340e+04 | +2.270e+03 | +1.390e+00 |
| Risultante | +2.480e+01 | +2.930e+02 | +2.980e+02 | +4.770e+04 | +3.160e+03 | +2.730e+00 |
| 29 | modo: 3 | modo: 4 | modo: 4 | modo: 4 | modo: 3 | modo: 4 |
| Massimo | +6.530e+00 | +1.110e+02 | +5.740e+01 | +2.000e+04 | +9.400e+02 | +1.390e+00 |
| Risultante | +5.820e+00 | +2.030e+02 | +1.230e+02 | +3.900e+04 | +7.710e+02 | +2.730e+00 |
| 47 | modo: 3 | modo: 3 | modo: 3 | modo: 3 | modo: 3 | modo: 4 |
| Massimo | +6.780e+00 | +1.190e+02 | +4.950e+01 | +2.120e+04 | +9.650e+02 | +1.390e+00 |
| Risultante | +6.220e+00 | +2.110e+02 | +9.890e+01 | +4.070e+04 | +8.120e+02 | +2.730e+00 |
| 48 | modo: 4 | modo: 4 | modo: 3 | modo: 4 | modo: 4 | modo: 4 |
| Massimo | +1.450e+01 | +6.770e+01 | +7.800e+00 | +9.140e+03 | +2.260e+03 | +1.150e+00 |
| Risultante | +2.000e+01 | +9.140e+01 | +1.200e+01 | +1.460e+04 | +3.110e+03 | +2.250e+00 |
| 50 | modo: 3 | modo: 6 | modo: 6 | modo: 6 | modo: 3 | modo: 4 |
| Massimo | +1.990e+01 | +1.280e+02 | +2.860e+02 | +1.420e+04 | +3.060e+03 | +1.150e+00 |
| Risultante | +2.860e+01 | +1.020e+02 | +2.150e+02 | +1.560e+04 | +4.350e+03 | +2.250e+00 |
| 51 | modo: 3 | modo: 4 | modo: 5 | modo: 4 | modo: 3 | modo: 4 |
| Massimo | +2.790e+01 | +3.350e+02 | +3.680e+02 | +3.660e+04 | +3.850e+03 | +1.150e+00 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| Risultante | +4.300e+01 | +3.040e+02 | +3.980e+02 | +3.530e+04 | +5.760e+03 | +2.250e+00 |
| 56 | modo: 4 | modo: 3 | modo: 3 | modo: 3 | modo: 4 | modo: 4 |
| Massimo | +1.760e+01 | +1.260e+02 | +3.470e+02 | +2.180e+04 | +2.310e+03 | +1.390e+00 |
| Risultante | +2.130e+01 | +1.720e+02 | +4.250e+02 | +3.680e+04 | +2.890e+03 | +2.730e+00 |
| 57 | modo: 4 | modo: 4 | modo: 4 | modo: 4 | modo: 4 | modo: 4 |
| Massimo | +1.960e+01 | +6.200e+01 | +1.040e+02 | +8.710e+03 | +2.920e+03 | +1.150e+00 |
| Risultante | +3.180e+01 | +8.580e+01 | +5.850e+01 | +1.400e+04 | +5.000e+03 | +2.250e+00 |
| 58 | modo: 4 | modo: 4 | modo: 9 | modo: 4 | modo: 4 | modo: 4 |
| Massimo | +1.920e+01 | +2.410e+01 | +9.280e+01 | +5.160e+03 | +2.990e+03 | +1.150e+00 |
| Risultante | +3.060e+01 | +5.170e+01 | +1.300e+02 | +1.060e+04 | +4.870e+03 | +2.250e+00 |
| 59 | modo: 6 | modo: 4 | modo: 6 | modo: 4 | modo: 6 | modo: 4 |
| Massimo | +1.790e+01 | +8.940e+01 | +3.670e+02 | +1.790e+04 | +2.430e+03 | +1.390e+00 |
| Risultante | +2.540e+01 | +1.510e+02 | +4.800e+02 | +3.400e+04 | +3.560e+03 | +2.730e+00 |
| 60 | modo: 4 | modo: 4 | modo: 4 | modo: 4 | modo: 4 | modo: 4 |
| Massimo | +1.950e+01 | +3.390e+01 | +6.940e+01 | +6.170e+03 | +3.030e+03 | +1.150e+00 |
| Risultante | +3.250e+01 | +4.990e+01 | +6.460e+01 | +1.080e+04 | +5.070e+03 | +2.250e+00 |
| 64 | modo: 4 | modo: 4 | modo: 4 | modo: 4 | modo: 4 | modo: 4 |
| Massimo | +1.340e+01 | +3.370e+01 | +8.550e+00 | +6.150e+03 | +2.160e+03 | +1.150e+00 |
| Risultante | +1.840e+01 | +5.010e+01 | +1.110e+01 | +1.090e+04 | +2.960e+03 | +2.250e+00 |
| 65 | modo: 3 | modo: 4 | modo: 4 | modo: 4 | modo: 3 | modo: 4 |
| Massimo | +9.580e+00 | +2.640e+03 | +6.280e+03 | +6.270e+03 | +1.440e+03 | +1.400e+00 |
| Risultante | +7.680e+00 | +5.500e+03 | +1.310e+04 | +1.080e+04 | +1.090e+03 | +2.820e+00 |
| 66 | modo: 4 | modo: 4 | modo: 4 | modo: 4 | modo: 3 | modo: 4 |
| Massimo | +3.400e+01 | +2.630e+03 | +6.170e+03 | +5.860e+03 | +4.450e+03 | +1.240e+00 |
| Risultante | +5.310e+01 | +5.460e+03 | +1.280e+04 | +9.960e+03 | +6.730e+03 | +2.490e+00 |
| 80 | modo: 4 | modo: 4 | modo: 6 | modo: 4 | modo: 4 | modo: 4 |
| Massimo | +4.240e+02 | +1.470e+02 | +7.390e+02 | +2.390e+04 | +4.280e+04 | +1.390e+00 |
| Risultante | +3.750e+02 | +2.970e+02 | +8.350e+02 | +4.810e+04 | +3.810e+04 | +2.730e+00 |



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## 2e) INVILUPPI SLE

**TABELLA INVILUPPI**

**MEDIA QUADRATICA DEI RISULTATI DINAMICI (EX+λ*EY)**

| Nodo | Traslaz.X | Traslaz.Y | Traslaz.Z | Rotaz.X | Rotaz.Y | Rotaz.Z |
|---|---|---|---|---|---|---|
| 1 | +0.00e+00 | +0.00e+00 | +2.93e-02 | +7.06e-05 | +1.85e-04 | +0.00e+00 |
| 2 | +0.00e+00 | +0.00e+00 | +1.96e-01 | +4.68e-04 | +1.16e-03 | +0.00e+00 |
| 5 | +0.00e+00 | +0.00e+00 | +1.59e-02 | +1.87e-05 | +4.11e-05 | +0.00e+00 |
| 6 | +0.00e+00 | +0.00e+00 | +1.95e-02 | +5.97e-05 | +1.21e-04 | +0.00e+00 |
| 7 | +0.00e+00 | +0.00e+00 | +1.55e-02 | +8.94e-05 | +1.15e-04 | +0.00e+00 |
| 8 | +0.00e+00 | +0.00e+00 | +1.42e-02 | +4.93e-05 | +3.13e-05 | +0.00e+00 |
| 9 | +7.03e-01 | +1.03e-01 | +1.93e-02 | +1.02e-04 | +2.74e-03 | +1.21e-04 |
| 10 | +7.03e-01 | +1.01e-01 | +2.03e-02 | +1.32e-04 | +2.69e-03 | +1.21e-04 |
| 11 | +6.97e-01 | +1.01e-01 | +1.99e-02 | +5.99e-05 | +2.72e-03 | +1.21e-04 |
| 12 | +6.97e-01 | +1.03e-01 | +1.63e-02 | +3.66e-05 | +2.77e-03 | +1.21e-04 |
| 13 | +7.51e-01 | +1.03e-01 | +1.78e-02 | +5.69e-05 | +6.97e-03 | +1.21e-04 |
| 14 | +7.51e-01 | +1.01e-01 | +1.40e-01 | +4.95e-04 | +7.16e-03 | +1.21e-04 |
| 15 | +7.70e-01 | +1.01e-01 | +2.29e-01 | +3.66e-04 | +2.38e-03 | +1.21e-04 |
| 16 | +7.70e-01 | +1.03e-01 | +2.93e-02 | +1.40e-04 | +2.85e-03 | +1.21e-04 |
| 17 | +7.70e-01 | +8.73e-02 | +6.55e-02 | +1.63e-04 | +2.34e-03 | +1.21e-04 |
| 18 | +0.00e+00 | +0.00e+00 | +6.45e-02 | +4.57e-05 | +2.09e-04 | +0.00e+00 |
| 19 | +7.70e-01 | +8.29e-02 | +7.23e-02 | +1.11e-04 | +2.03e-03 | +1.21e-04 |
| 20 | +0.00e+00 | +0.00e+00 | +4.00e-02 | +3.02e-04 | +7.16e-04 | +0.00e+00 |
| 21 | +0.00e+00 | +0.00e+00 | +1.54e-02 | +8.20e-05 | +3.75e-05 | +0.00e+00 |
| 22 | +7.03e-01 | +8.29e-02 | +1.57e-02 | +1.39e-04 | +2.59e-03 | +1.21e-04 |
| 23 | +0.00e+00 | +0.00e+00 | +9.76e-03 | +4.35e-05 | +4.11e-05 | +0.00e+00 |
| 24 | +7.03e-01 | +8.73e-02 | +9.48e-03 | +4.14e-05 | +2.63e-03 | +1.21e-04 |
| 25 | +7.68e-01 | +8.29e-02 | +7.12e-02 | +9.01e-05 | +6.60e-03 | +1.21e-04 |
| 26 | +7.51e-01 | +8.29e-02 | +6.80e-02 | +9.52e-05 | +7.12e-03 | +1.21e-04 |
| 27 | +7.51e-01 | +8.73e-02 | +3.70e-02 | +1.42e-04 | +6.98e-03 | +1.21e-04 |
| 29 | +0.00e+00 | +0.00e+00 | +9.90e-03 | +6.78e-06 | +3.37e-05 | +0.00e+00 |
| 30 | +6.97e-01 | +8.73e-02 | +9.76e-03 | +3.27e-05 | +2.65e-03 | +1.21e-04 |
| 31 | +6.97e-01 | +8.29e-02 | +1.59e-02 | +1.44e-04 | +2.61e-03 | +1.21e-04 |
| 32 | +7.90e-01 | +8.73e-02 | +6.35e-02 | +1.49e-04 | +3.18e-03 | +1.21e-04 |
| 33 | +7.46e-01 | +8.73e-02 | +1.41e-02 | +8.34e-05 | +2.15e-03 | +1.21e-04 |
| 34 | +0.00e+00 | +0.00e+00 | +1.36e-02 | +1.50e-05 | +4.19e-05 | +0.00e+00 |
| 35 | +7.46e-01 | +8.29e-02 | +6.13e-02 | +1.10e-04 | +1.32e-03 | +1.21e-04 |
| 36 | +0.00e+00 | +0.00e+00 | +1.55e-02 | +2.80e-05 | +4.46e-05 | +0.00e+00 |
| 37 | +7.46e-01 | +1.01e-01 | +5.13e-02 | +2.88e-04 | +2.09e-03 | +1.21e-04 |
| 38 | +7.46e-01 | +1.03e-01 | +1.34e-02 | +3.65e-05 | +2.58e-03 | +1.21e-04 |
| 39 | +0.00e+00 | +0.00e+00 | +1.32e-02 | +4.82e-05 | +6.59e-05 | +0.00e+00 |
| 40 | +0.00e+00 | +0.00e+00 | +5.01e-02 | +2.65e-04 | +3.59e-04 | +0.00e+00 |
| 41 | +0.00e+00 | +0.00e+00 | +6.35e-02 | +3.07e-05 | +2.30e-04 | +0.00e+00 |
| 42 | +7.90e-01 | +8.29e-02 | +7.79e-02 | +1.18e-04 | +2.83e-03 | +1.21e-04 |
| 43 | +0.00e+00 | +0.00e+00 | +4.40e-02 | +3.03e-04 | +7.27e-04 | +0.00e+00 |
| 44 | +7.90e-01 | +1.01e-01 | +2.31e-01 | +3.64e-04 | +2.78e-03 | +1.21e-04 |
| 45 | +7.90e-01 | +1.03e-01 | +2.59e-02 | +1.17e-04 | +3.31e-03 | +1.21e-04 |
| 46 | +0.00e+00 | +0.00e+00 | +2.58e-02 | +5.57e-05 | +2.02e-04 | +0.00e+00 |
| 47 | +0.00e+00 | +0.00e+00 | +1.98e-01 | +4.73e-04 | +1.19e-03 | +0.00e+00 |
| 48 | +6.83e-01 | +7.15e-02 | +8.25e-03 | +4.99e-05 | +3.94e-03 | +1.21e-04 |
| 49 | +7.68e-01 | +8.73e-02 | +3.64e-02 | +1.37e-04 | +6.45e-03 | +1.21e-04 |
| 50 | +7.33e-01 | +7.15e-02 | +6.76e-02 | +1.41e-04 | +1.32e-03 | +1.21e-04 |
| 52 | +7.51e-01 | +7.15e-02 | +8.43e-02 | +1.01e-04 | +7.06e-03 | +1.21e-04 |
| 53 | +0.00e+00 | +0.00e+00 | +1.54e-02 | +6.45e-05 | +1.23e-04 | +0.00e+00 |
| 54 | +0.00e+00 | +0.00e+00 | +1.53e-02 | +5.17e-05 | +4.99e-05 | +0.00e+00 |
| 55 | +7.15e-01 | +8.29e-02 | +4.26e-02 | +1.27e-04 | +5.99e-03 | +1.21e-04 |
| 56 | +0.00e+00 | +0.00e+00 | +1.04e-02 | +1.65e-05 | +2.86e-05 | +0.00e+00 |
| 57 | +0.00e+00 | +0.00e+00 | +1.05e-02 | +6.19e-05 | +3.06e-05 | +0.00e+00 |
| 58 | +6.97e-01 | +7.15e-02 | +1.08e-02 | +1.53e-04 | +2.61e-03 | +1.21e-04 |
| 59 | +7.03e-01 | +7.15e-02 | +1.08e-02 | +1.47e-04 | +2.59e-03 | +1.21e-04 |
| 60 | +7.15e-01 | +8.73e-02 | +8.75e-03 | +4.18e-05 | +5.87e-03 | +1.21e-04 |
| 61 | +7.33e-01 | +8.29e-02 | +6.08e-02 | +1.05e-04 | +1.25e-03 | +1.21e-04 |
| 62 | +7.33e-01 | +8.73e-02 | +1.28e-02 | +8.68e-05 | +2.08e-03 | +1.21e-04 |
| 63 | +7.15e-01 | +7.15e-02 | +4.15e-02 | +1.60e-04 | +5.92e-03 | +1.21e-04 |
| 65 | +6.83e-01 | +8.73e-02 | +2.24e-03 | +4.53e-05 | +3.88e-03 | +1.21e-04 |
| 66 | +6.83e-01 | +8.29e-02 | +5.65e-03 | +5.64e-05 | +3.95e-03 | +1.21e-04 |
| 67 | +7.90e-01 | +7.15e-02 | +9.62e-02 | +1.18e-04 | +3.03e-03 | +1.21e-04 |
| 68 | +7.46e-01 | +7.15e-02 | +6.85e-02 | +1.46e-04 | +1.39e-03 | +1.21e-04 |
| 69 | +7.68e-01 | +7.15e-02 | +8.70e-02 | +9.82e-05 | +6.51e-03 | +1.21e-04 |
| 70 | +7.70e-01 | +7.15e-02 | +9.30e-02 | +1.13e-04 | +1.07e-03 | +1.21e-04 |
| 71 | +7.24e-01 | +7.15e-02 | +4.11e-02 | +1.65e-04 | +5.94e-03 | +1.21e-04 |
| 72 | +7.24e-01 | +8.29e-02 | +4.20e-02 | +1.30e-04 | +6.01e-03 | +1.21e-04 |
| 73 | +7.24e-01 | +8.73e-02 | +1.06e-02 | +3.41e-05 | +5.88e-03 | +1.21e-04 |
| 74 | +7.24e-01 | +1.01e-01 | +3.03e-02 | +1.53e-04 | +6.05e-03 | +1.21e-04 |
| 75 | +6.83e-01 | +1.01e-01 | +4.16e-03 | +1.27e-04 | +3.88e-03 | +1.21e-04 |
| 77 | +7.33e-01 | +1.01e-01 | +4.97e-02 | +2.85e-04 | +2.03e-03 | +1.21e-04 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| 78 | +7.15e-01 | +1.01e-01 | +2.34e-02 | +1.57e-04 | +6.03e-03 | +1.21e-04 |
| 79 | +7.68e-01 | +1.01e-01 | +1.40e-01 | +5.14e-04 | +6.64e-03 | +1.21e-04 |
| 80 | +7.24e-01 | +1.03e-01 | +1.95e-02 | +4.17e-05 | +5.88e-03 | +1.21e-04 |
| 81 | +6.83e-01 | +1.03e-01 | +4.53e-03 | +1.20e-04 | +3.79e-03 | +1.21e-04 |
| 82 | +0.00e+00 | +0.00e+00 | +9.57e-02 | +1.56e-04 | +4.37e-05 | +0.00e+00 |
| 83 | +7.33e-01 | +1.03e-01 | +9.63e-03 | +5.69e-05 | +2.51e-03 | +1.21e-04 |
| 84 | +7.15e-01 | +1.03e-01 | +1.23e-02 | +3.97e-05 | +5.87e-03 | +1.21e-04 |
| 85 | +7.68e-01 | +1.03e-01 | +1.65e-02 | +5.76e-05 | +6.45e-03 | +1.21e-04 |
| 86 | +0.00e+00 | +0.00e+00 | +5.25e-03 | +4.66e-05 | +6.21e-05 | +0.00e+00 |
| 87 | +6.77e-01 | +8.73e-02 | +5.17e-03 | +6.71e-05 | +2.43e-03 | +1.21e-04 |
| 88 | +6.77e-01 | +7.15e-02 | +8.91e-03 | +3.18e-05 | +2.02e-03 | +1.21e-04 |
| 90 | +6.77e-01 | +8.29e-02 | +5.98e-03 | +4.07e-05 | +1.96e-03 | +1.21e-04 |
| 92 | +6.77e-01 | +1.03e-01 | +2.07e-02 | +1.00e-04 | +2.61e-03 | +1.21e-04 |
| 93 | +6.77e-01 | +1.01e-01 | +2.04e-02 | +1.08e-04 | +2.36e-03 | +1.21e-04 |
| 94 | +0.00e+00 | +0.00e+00 | +9.29e-02 | +1.55e-04 | +2.53e-05 | +0.00e+00 |
| 95 | +0.00e+00 | +0.00e+00 | +9.53e-03 | +3.83e-05 | +4.83e-05 | +0.00e+00 |
| 96 | +0.00e+00 | +0.00e+00 | +1.22e-02 | +8.00e-06 | +2.63e-05 | +0.00e+00 |
| 97 | +0.00e+00 | +0.00e+00 | +4.86e-02 | +2.51e-04 | +3.53e-04 | +0.00e+00 |

**MASSIME DEFORMAZIONI NODALI/ NODI CORRISPONDENTI**

| Traslaz.X | Traslaz.Y | Traslaz.Z | Rotaz.X | Rotaz.Y | Rotaz.Z | DLMax |
|---|---|---|---|---|---|---|
| +7.90e-01 | +1.03e-01 | +2.31e-01 | +5.14e-04 | +7.16e-03 | +1.21e-04 | +8.29e-01 |
| Nodo: 32 | Nodo: 9 | Nodo: 44 | Nodo: 79 | Nodo: 14 | Nodo: 9 | Nodo: 44 |

**MEDIA QUADRATICA DEI RISULTATI DINAMICI (λ*EX+EY)**

| Nodo | Traslaz.X | Traslaz.Y | Traslaz.Z | Rotaz.X | Rotaz.Y | Rotaz.Z |
|---|---|---|---|---|---|---|
| 1 | +0.00e+00 | +0.00e+00 | +2.00e-02 | +7.85e-05 | +8.61e-05 | +0.00e+00 |
| 2 | +0.00e+00 | +0.00e+00 | +8.22e-02 | +2.11e-04 | +4.92e-04 | +0.00e+00 |
| 5 | +0.00e+00 | +0.00e+00 | +3.15e-02 | +4.48e-05 | +8.00e-05 | +0.00e+00 |
| 6 | +0.00e+00 | +0.00e+00 | +3.84e-02 | +6.60e-05 | +9.34e-05 | +0.00e+00 |
| 7 | +0.00e+00 | +0.00e+00 | +3.20e-02 | +1.56e-04 | +8.48e-05 | +0.00e+00 |
| 8 | +0.00e+00 | +0.00e+00 | +3.10e-02 | +1.21e-04 | +6.33e-05 | +0.00e+00 |
| 9 | +2.35e-01 | +2.37e-01 | +4.38e-02 | +2.40e-04 | +8.87e-04 | +1.32e-04 |
| 10 | +2.35e-01 | +2.36e-01 | +4.42e-02 | +2.62e-04 | +8.79e-04 | +1.32e-04 |
| 11 | +2.34e-01 | +2.36e-01 | +3.94e-02 | +8.00e-05 | +8.92e-04 | +1.32e-04 |
| 12 | +2.34e-01 | +2.37e-01 | +3.25e-02 | +7.73e-05 | +9.00e-04 | +1.32e-04 |
| 13 | +3.03e-01 | +2.37e-01 | +8.75e-03 | +3.09e-05 | +5.10e-03 | +1.32e-04 |
| 14 | +3.03e-01 | +2.36e-01 | +6.02e-02 | +2.13e-04 | +5.22e-03 | +1.32e-04 |
| 15 | +3.26e-01 | +2.36e-01 | +9.56e-02 | +3.28e-04 | +9.62e-04 | +1.32e-04 |
| 16 | +3.26e-01 | +2.37e-01 | +2.06e-02 | +2.68e-04 | +1.16e-03 | +1.32e-04 |
| 17 | +3.26e-01 | +2.31e-01 | +3.25e-02 | +1.83e-04 | +9.38e-04 | +1.32e-04 |
| 18 | +0.00e+00 | +0.00e+00 | +3.18e-02 | +1.04e-04 | +9.32e-05 | +0.00e+00 |
| 19 | +3.26e-01 | +2.30e-01 | +3.51e-02 | +1.46e-04 | +8.01e-04 | +1.32e-04 |
| 20 | +0.00e+00 | +0.00e+00 | +2.15e-02 | +1.97e-04 | +3.04e-04 | +0.00e+00 |
| 21 | +0.00e+00 | +0.00e+00 | +2.03e-02 | +1.80e-04 | +5.64e-05 | +0.00e+00 |
| 22 | +2.35e-01 | +2.30e-01 | +2.06e-02 | +1.62e-04 | +8.33e-04 | +1.32e-04 |
| 23 | +0.00e+00 | +0.00e+00 | +1.85e-02 | +1.24e-04 | +6.35e-05 | +0.00e+00 |
| 24 | +2.35e-01 | +2.31e-01 | +1.82e-02 | +9.66e-05 | +8.37e-04 | +1.32e-04 |
| 25 | +3.07e-01 | +2.30e-01 | +4.18e-02 | +9.05e-05 | +4.92e-03 | +1.32e-04 |
| 26 | +3.03e-01 | +2.30e-01 | +4.63e-02 | +1.21e-04 | +5.20e-03 | +1.32e-04 |
| 27 | +3.03e-01 | +2.31e-01 | +1.66e-02 | +6.81e-05 | +5.11e-03 | +1.32e-04 |
| 29 | +0.00e+00 | +0.00e+00 | +1.85e-02 | +7.66e-06 | +5.94e-05 | +0.00e+00 |
| 30 | +2.34e-01 | +2.31e-01 | +1.86e-02 | +6.72e-05 | +8.48e-04 | +1.32e-04 |
| 31 | +2.34e-01 | +2.30e-01 | +2.38e-02 | +1.96e-04 | +8.44e-04 | +1.32e-04 |
| 32 | +3.31e-01 | +2.31e-01 | +3.13e-02 | +1.58e-04 | +1.26e-03 | +1.32e-04 |
| 33 | +2.83e-01 | +2.31e-01 | +1.36e-02 | +5.27e-05 | +7.05e-04 | +1.32e-04 |
| 34 | +0.00e+00 | +0.00e+00 | +1.33e-02 | +3.36e-05 | +4.95e-05 | +0.00e+00 |
| 35 | +2.83e-01 | +2.30e-01 | +4.77e-02 | +9.57e-05 | +6.68e-04 | +1.32e-04 |
| 36 | +0.00e+00 | +0.00e+00 | +2.33e-02 | +1.68e-05 | +6.93e-05 | +0.00e+00 |
| 37 | +2.83e-01 | +2.36e-01 | +3.56e-02 | +1.27e-04 | +7.03e-04 | +1.32e-04 |
| 38 | +2.83e-01 | +2.37e-01 | +2.17e-02 | +4.68e-05 | +8.60e-04 | +1.32e-04 |
| 39 | +0.00e+00 | +0.00e+00 | +2.13e-02 | +6.35e-05 | +7.24e-05 | +0.00e+00 |
| 40 | +0.00e+00 | +0.00e+00 | +3.50e-02 | +1.54e-04 | +1.65e-04 | +0.00e+00 |
| 41 | +0.00e+00 | +0.00e+00 | +3.09e-02 | +7.65e-05 | +1.02e-04 | +0.00e+00 |
| 42 | +3.31e-01 | +2.30e-01 | +3.71e-02 | +1.61e-04 | +1.11e-03 | +1.32e-04 |
| 43 | +0.00e+00 | +0.00e+00 | +2.29e-02 | +1.71e-04 | +3.05e-04 | +0.00e+00 |
| 44 | +3.31e-01 | +2.36e-01 | +9.53e-02 | +3.04e-04 | +1.11e-03 | +1.32e-04 |
| 45 | +3.31e-01 | +2.37e-01 | +2.02e-02 | +2.43e-04 | +1.34e-03 | +1.32e-04 |
| 46 | +0.00e+00 | +0.00e+00 | +1.96e-02 | +4.86e-05 | +9.82e-05 | +0.00e+00 |
| 47 | +0.00e+00 | +0.00e+00 | +8.18e-02 | +1.97e-04 | +4.97e-04 | +0.00e+00 |
| 48 | +2.13e-01 | +2.26e-01 | +5.51e-03 | +3.96e-05 | +1.42e-03 | +1.32e-04 |
| 49 | +3.07e-01 | +2.31e-01 | +1.80e-02 | +6.17e-05 | +4.83e-03 | +1.32e-04 |
| 50 | +2.80e-01 | +2.26e-01 | +4.46e-02 | +1.02e-04 | +6.66e-04 | +1.32e-04 |
| 52 | +3.03e-01 | +2.26e-01 | +4.56e-02 | +7.35e-05 | +5.15e-03 | +1.32e-04 |
| 53 | +0.00e+00 | +0.00e+00 | +3.68e-02 | +1.30e-04 | +5.09e-05 | +0.00e+00 |
| 54 | +0.00e+00 | +0.00e+00 | +3.05e-02 | +1.16e-04 | +8.16e-05 | +0.00e+00 |
| 55 | +2.57e-01 | +2.30e-01 | +5.17e-02 | +1.10e-04 | +3.57e-03 | +1.32e-04 |
| 56 | +0.00e+00 | +0.00e+00 | +1.51e-02 | +2.38e-05 | +2.78e-05 | +0.00e+00 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| 57 | +0.00e+00 | +0.00e+00 | +1.41e-02 | +1.66e-04 | +2.49e-05 | +0.00e+00 |
| 58 | +2.34e-01 | +2.26e-01 | +1.53e-02 | +1.65e-04 | +8.34e-04 | +1.32e-04 |
| 59 | +2.35e-01 | +2.26e-01 | +1.43e-02 | +1.38e-04 | +8.24e-04 | +1.32e-04 |
| 60 | +2.57e-01 | +2.31e-01 | +1.35e-02 | +5.24e-05 | +3.51e-03 | +1.32e-04 |
| 61 | +2.80e-01 | +2.30e-01 | +5.80e-02 | +9.98e-05 | +6.60e-04 | +1.32e-04 |
| 62 | +2.80e-01 | +2.31e-01 | +6.61e-03 | +5.37e-05 | +6.90e-04 | +1.32e-04 |
| 63 | +2.57e-01 | +2.26e-01 | +3.67e-02 | +9.94e-05 | +3.54e-03 | +1.32e-04 |
| 65 | +2.13e-01 | +2.31e-01 | +4.11e-03 | +9.88e-05 | +1.40e-03 | +1.32e-04 |
| 66 | +2.13e-01 | +2.30e-01 | +5.97e-03 | +6.48e-05 | +1.42e-03 | +1.32e-04 |
| 67 | +3.31e-01 | +2.26e-01 | +4.40e-02 | +1.77e-04 | +1.19e-03 | +1.32e-04 |
| 68 | +2.83e-01 | +2.26e-01 | +3.99e-02 | +1.02e-04 | +6.74e-04 | +1.32e-04 |
| 69 | +3.07e-01 | +2.26e-01 | +4.46e-02 | +5.50e-05 | +4.87e-03 | +1.32e-04 |
| 70 | +3.26e-01 | +2.26e-01 | +4.33e-02 | +1.60e-04 | +4.21e-04 | +1.32e-04 |
| 71 | +2.59e-01 | +2.26e-01 | +3.12e-02 | +9.81e-05 | +3.50e-03 | +1.32e-04 |
| 72 | +2.59e-01 | +2.30e-01 | +4.26e-02 | +9.38e-05 | +3.53e-03 | +1.32e-04 |
| 73 | +2.59e-01 | +2.31e-01 | +1.88e-02 | +3.08e-05 | +3.47e-03 | +1.32e-04 |
| 74 | +2.59e-01 | +2.36e-01 | +4.90e-02 | +1.08e-04 | +3.55e-03 | +1.32e-04 |
| 75 | +2.13e-01 | +2.36e-01 | +9.66e-03 | +2.92e-04 | +1.40e-03 | +1.32e-04 |
| 77 | +2.80e-01 | +2.36e-01 | +2.40e-02 | +1.47e-04 | +6.83e-04 | +1.32e-04 |
| 78 | +2.57e-01 | +2.36e-01 | +2.91e-02 | +1.30e-04 | +3.59e-03 | +1.32e-04 |
| 79 | +3.07e-01 | +2.36e-01 | +5.87e-02 | +2.37e-04 | +4.95e-03 | +1.32e-04 |
| 80 | +2.59e-01 | +2.37e-01 | +4.31e-02 | +7.36e-05 | +3.47e-03 | +1.32e-04 |
| 81 | +2.13e-01 | +2.37e-01 | +6.20e-03 | +2.74e-04 | +1.37e-03 | +1.32e-04 |
| 82 | +0.00e+00 | +0.00e+00 | +4.36e-02 | +1.34e-04 | +2.03e-05 | +0.00e+00 |
| 83 | +2.80e-01 | +2.37e-01 | +9.61e-03 | +8.50e-05 | +8.41e-04 | +1.32e-04 |
| 84 | +2.57e-01 | +2.37e-01 | +2.15e-02 | +7.48e-05 | +3.51e-03 | +1.32e-04 |
| 85 | +3.07e-01 | +2.37e-01 | +1.25e-02 | +4.01e-05 | +4.83e-03 | +1.32e-04 |
| 86 | +0.00e+00 | +0.00e+00 | +1.33e-02 | +1.03e-04 | +1.00e-04 | +0.00e+00 |
| 87 | +2.08e-01 | +2.31e-01 | +1.29e-02 | +1.72e-04 | +7.73e-04 | +1.32e-04 |
| 88 | +2.08e-01 | +2.26e-01 | +3.56e-03 | +3.62e-05 | +6.38e-04 | +1.32e-04 |
| 90 | +2.08e-01 | +2.30e-01 | +4.36e-03 | +6.23e-05 | +6.16e-04 | +1.32e-04 |
| 92 | +2.08e-01 | +2.37e-01 | +4.30e-02 | +2.28e-04 | +8.26e-04 | +1.32e-04 |
| 93 | +2.08e-01 | +2.36e-01 | +4.85e-02 | +2.36e-04 | +7.35e-04 | +1.32e-04 |
| 94 | +0.00e+00 | +0.00e+00 | +4.30e-02 | +1.58e-04 | +1.36e-05 | +0.00e+00 |
| 95 | +0.00e+00 | +0.00e+00 | +9.55e-03 | +3.61e-05 | +4.82e-05 | +0.00e+00 |
| 96 | +0.00e+00 | +0.00e+00 | +6.22e-03 | +1.03e-05 | +2.74e-05 | +0.00e+00 |
| 97 | +0.00e+00 | +0.00e+00 | +2.36e-02 | +1.32e-04 | +1.51e-04 | +0.00e+00 |

**MASSIME DEFORMAZIONI NODALI/ NODI CORRISPONDENTI**

| Traslaz.X | Traslaz.Y | Traslaz.Z | Rotaz.X | Rotaz.Y | Rotaz.Z | DLMax |
|---|---|---|---|---|---|---|
| +3.31e-01 | +2.37e-01 | +9.56e-02 | +3.28e-04 | +5.22e-03 | +1.32e-04 | +4.18e-01 |
| Nodo: 32 | Nodo: 9 | Nodo: 15 | Nodo: 15 | Nodo: 14 | Nodo: 9 | Nodo: 44 |

**FORZE / MOMENTI ELEMENTO FINITO TRAVE (EX+λ*EY)**
**Gruppo: 1 - Descrizione: MONTANTI**

| Asta | Fx (I/J) | Fy (I/J) | Fz (I/J) | Mx (I/J) | My (I/J) | Mz (I/J) |
|---|---|---|---|---|---|---|
| 1 | +8.67e+01 | +1.99e+02 | +1.36e+02 | +4.34e+00 | +2.44e+04 | +5.09e+04 |
| | +8.67e+01 | +1.99e+02 | +1.36e+02 | +4.34e+00 | +2.13e+04 | +1.57e+04 |
| 2 | +9.24e+03 | +1.90e+02 | +1.69e+02 | +4.34e+00 | +3.34e+04 | +3.95e+04 |
| | +9.24e+03 | +1.90e+02 | +1.69e+02 | +4.34e+00 | +2.35e+04 | +2.42e+04 |
| 3 | +9.16e+03 | +1.08e+02 | +3.29e+02 | +4.34e+00 | +5.85e+04 | +2.52e+04 |
| | +9.16e+03 | +1.08e+02 | +3.29e+02 | +4.34e+00 | +5.19e+04 | +1.10e+04 |
| 4 | +2.91e+02 | +2.53e+02 | +1.40e+02 | +4.34e+00 | +2.20e+04 | +5.72e+04 |
| | +2.91e+02 | +2.53e+02 | +1.40e+02 | +4.34e+00 | +2.48e+04 | +2.76e+04 |
| 5 | +1.53e+02 | +1.39e+02 | +1.72e+02 | +4.34e+00 | +2.96e+04 | +3.85e+04 |
| | +1.53e+02 | +1.39e+02 | +1.72e+02 | +4.34e+00 | +2.79e+04 | +8.03e+03 |
| 6 | +1.21e+02 | +1.44e+02 | +1.59e+02 | +4.34e+00 | +2.75e+04 | +4.03e+04 |
| | +1.21e+02 | +1.44e+02 | +1.59e+02 | +4.34e+00 | +2.57e+04 | +8.01e+03 |
| 7 | +7.40e+01 | +1.57e+02 | +1.30e+02 | +4.34e+00 | +2.23e+04 | +4.19e+04 |
| | +7.40e+01 | +1.57e+02 | +1.30e+02 | +4.34e+00 | +2.12e+04 | +1.08e+04 |
| 8 | +7.86e+01 | +1.64e+02 | +1.19e+02 | +4.34e+00 | +1.97e+04 | +4.29e+04 |
| | +7.86e+01 | +1.64e+02 | +1.19e+02 | +4.34e+00 | +2.02e+04 | +1.21e+04 |
| 9 | +1.61e+03 | +1.51e+02 | +1.24e+02 | +4.34e+00 | +2.15e+04 | +4.14e+04 |
| | +1.61e+03 | +1.51e+02 | +1.24e+02 | +4.34e+00 | +1.99e+04 | +9.32e+03 |
| 10 | +1.29e+02 | +1.66e+02 | +1.17e+02 | +4.34e+00 | +1.78e+04 | +4.28e+04 |
| | +1.29e+02 | +1.66e+02 | +1.17e+02 | +4.34e+00 | +2.13e+04 | +1.27e+04 |
| 11 | +1.60e+03 | +1.45e+02 | +1.33e+02 | +4.34e+00 | +2.31e+04 | +3.95e+04 |
| | +1.60e+03 | +1.45e+02 | +1.33e+02 | +4.34e+00 | +2.15e+04 | +9.28e+03 |
| 12 | +3.34e+02 | +2.10e+02 | +2.99e+02 | +4.34e+00 | +5.00e+04 | +4.52e+04 |
| | +3.34e+02 | +2.10e+02 | +2.99e+02 | +4.34e+00 | +5.02e+04 | +2.53e+04 |
| 13 | +6.14e+01 | +1.99e+02 | +1.79e+02 | +4.34e+00 | +3.05e+04 | +4.85e+04 |
| | +6.14e+01 | +1.99e+02 | +1.79e+02 | +4.34e+00 | +2.93e+04 | +1.80e+04 |
| 14 | +1.61e+02 | +2.44e+02 | +1.59e+02 | +4.34e+00 | +2.59e+04 | +5.33e+04 |
| | +1.61e+02 | +2.44e+02 | +1.59e+02 | +4.34e+00 | +2.75e+04 | +2.84e+04 |
| 15 | +1.13e+02 | +1.82e+02 | +1.53e+02 | +4.34e+00 | +2.43e+04 | +5.02e+04 |
| | +1.13e+02 | +1.82e+02 | +1.53e+02 | +4.34e+00 | +2.71e+04 | +1.07e+04 |
| 16 | +9.78e+01 | +1.65e+02 | +1.53e+02 | +4.34e+00 | +2.74e+04 | +4.79e+04 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| | +9.78e+01 | +1.65e+02 | +1.53e+02 | +4.34e+00 | +2.40e+04 | +7.23e+03 |
| 17 | +9.68e+03 | +1.19e+02 | +1.69e+02 | +4.34e+00 | +3.38e+04 | +3.22e+04 |
| | +9.68e+03 | +1.19e+02 | +1.69e+02 | +4.34e+00 | +2.29e+04 | +7.81e+03 |
| 18 | +9.41e+03 | +7.62e+01 | +3.43e+02 | +4.34e+00 | +6.09e+04 | +2.20e+04 |
| | +9.41e+03 | +7.62e+01 | +3.43e+02 | +4.34e+00 | +5.41e+04 | +3.54e+03 |
| 19 | +1.34e+02 | +1.60e+02 | +1.27e+02 | +4.34e+00 | +2.07e+04 | +4.19e+04 |
| | +1.34e+02 | +1.60e+02 | +1.27e+02 | +4.34e+00 | +2.18e+04 | +1.16e+04 |
| 20 | +1.24e+02 | +1.69e+02 | +1.20e+02 | +4.34e+00 | +1.78e+04 | +4.34e+04 |
| | +1.24e+02 | +1.69e+02 | +1.20e+02 | +4.34e+00 | +2.24e+04 | +1.31e+04 |
| 21 | +1.24e+02 | +1.63e+02 | +1.21e+02 | +4.34e+00 | +1.88e+04 | +4.25e+04 |
| | +1.24e+02 | +1.63e+02 | +1.21e+02 | +4.34e+00 | +2.17e+04 | +1.20e+04 |
| 22 | +7.55e+01 | +1.66e+02 | +1.08e+02 | +4.34e+00 | +1.84e+04 | +4.21e+04 |
| | +7.55e+01 | +1.66e+02 | +1.08e+02 | +4.34e+00 | +1.78e+04 | +1.38e+04 |
| 23 | +1.50e+03 | +1.62e+02 | +1.20e+02 | +4.34e+00 | +2.08e+04 | +4.00e+04 |
| | +1.50e+03 | +1.62e+02 | +1.20e+02 | +4.34e+00 | +1.93e+04 | +1.41e+04 |
| 24 | +1.54e+03 | +1.49e+02 | +1.23e+02 | +4.34e+00 | +2.14e+04 | +4.01e+04 |
| | +1.54e+03 | +1.49e+02 | +1.23e+02 | +4.34e+00 | +1.99e+04 | +9.87e+03 |
| 25 | +1.44e+02 | +1.77e+02 | +1.03e+02 | +4.34e+00 | +2.00e+04 | +4.75e+04 |
| | +1.44e+02 | +1.77e+02 | +1.03e+02 | +4.34e+00 | +1.68e+04 | +1.19e+04 |
| 26 | +8.72e+01 | +3.66e+02 | +1.07e+02 | +4.34e+00 | +2.04e+04 | +6.76e+04 |
| | +8.72e+01 | +3.66e+02 | +1.07e+02 | +4.34e+00 | +1.70e+04 | +5.49e+04 |
| 27 | +4.05e+01 | +1.97e+02 | +1.54e+02 | +4.34e+00 | +2.65e+04 | +4.77e+04 |
| | +4.05e+01 | +1.97e+02 | +1.54e+02 | +4.34e+00 | +2.53e+04 | +1.81e+04 |
| 28 | +1.70e+02 | +2.42e+02 | +1.45e+02 | +4.34e+00 | +2.33e+04 | +5.25e+04 |
| | +1.70e+02 | +2.42e+02 | +1.45e+02 | +4.34e+00 | +2.52e+04 | +2.86e+04 |
| 29 | +3.27e+02 | +2.09e+02 | +2.86e+02 | +4.34e+00 | +4.78e+04 | +4.46e+04 |
| | +3.27e+02 | +2.09e+02 | +2.86e+02 | +4.34e+00 | +4.79e+04 | +2.55e+04 |

**FORZE / MOMENTI ELEMENTO FINITO TRAVE (EX+λ*EY)**
**Gruppo: 2 - Descrizione: TRAVI DI COPERTURA**

| Asta | Fx (l/J) | Fy (l/J) | Fz (l/J) | Mx (l/J) | My (l/J) | Mz (l/J) |
|---|---|---|---|---|---|---|
| 1 | +1.30e+03 | +1.72e-14 | +2.14e-15 | +3.12e+00 | +0.00e+00 | +0.00e+00 |
| | +1.30e+03 | +1.72e-14 | +2.14e-15 | +3.12e+00 | +0.00e+00 | +0.00e+00 |
| 2 | +3.21e+03 | +3.02e+02 | +8.97e-02 | +1.97e+00 | +0.00e+00 | +1.63e-12 |
| | +3.21e+03 | +3.02e+02 | +8.97e-02 | +1.97e+00 | +1.62e+01 | +5.44e+04 |
| 3 | +2.21e+03 | +2.00e+02 | +3.38e-02 | +8.88e-01 | +6.65e+00 | +3.93e+04 |
| | +2.21e+03 | +2.00e+02 | +3.38e-02 | +8.88e-01 | +0.00e+00 | +0.00e+00 |
| 4 | +7.39e+02 | +2.73e-13 | +7.04e-16 | +7.56e+00 | +0.00e+00 | +0.00e+00 |
| | +7.39e+02 | +2.73e-13 | +7.04e-16 | +7.56e+00 | +0.00e+00 | +0.00e+00 |
| 5 | +2.25e+01 | +8.87e-15 | +2.16e-15 | +1.88e+00 | +0.00e+00 | +0.00e+00 |
| | +2.25e+01 | +8.87e-15 | +2.16e-15 | +1.88e+00 | +0.00e+00 | +0.00e+00 |
| 6 | +1.93e+02 | +3.85e-13 | +9.17e-16 | +1.70e+00 | +0.00e+00 | +2.78e-12 |
| | +1.93e+02 | +3.85e-13 | +9.17e-16 | +1.70e+00 | +5.63e-14 | +0.00e+00 |
| 7 | +1.54e+02 | +5.30e-15 | +0.00e+00 | +9.08e-01 | +0.00e+00 | +0.00e+00 |
| | +1.54e+02 | +5.30e-15 | +0.00e+00 | +9.08e-01 | +0.00e+00 | +0.00e+00 |
| 8 | +8.45e+01 | +1.88e-13 | +7.54e-16 | +1.03e+01 | +0.00e+00 | +0.00e+00 |
| | +8.45e+01 | +1.88e-13 | +7.54e-16 | +1.03e+01 | +0.00e+00 | +0.00e+00 |
| 9 | +1.19e+03 | +3.21e-15 | +2.13e-15 | +1.56e+00 | +0.00e+00 | +0.00e+00 |
| | +1.19e+03 | +3.21e-15 | +2.13e-15 | +1.56e+00 | +0.00e+00 | +0.00e+00 |
| 10 | +2.26e+03 | +1.44e-13 | +9.41e-16 | +1.53e+00 | +0.00e+00 | +3.22e-12 |
| | +2.26e+03 | +1.44e-13 | +9.41e-16 | +1.53e+00 | +5.63e-14 | +0.00e+00 |
| 11 | +1.93e+02 | +4.66e-15 | +0.00e+00 | +9.02e-01 | +0.00e+00 | +0.00e+00 |
| | +1.93e+02 | +4.66e-15 | +0.00e+00 | +9.02e-01 | +0.00e+00 | +0.00e+00 |
| 12 | +1.95e+03 | +9.65e-14 | +7.07e-16 | +7.01e+00 | +0.00e+00 | +0.00e+00 |
| | +1.95e+03 | +9.65e-14 | +7.07e-16 | +7.01e+00 | +0.00e+00 | +0.00e+00 |
| 13 | +5.02e+00 | +1.95e-15 | +2.12e-15 | +5.17e-01 | +0.00e+00 | +0.00e+00 |
| | +5.02e+00 | +1.95e-15 | +2.12e-15 | +5.17e-01 | +0.00e+00 | +0.00e+00 |
| 14 | +1.41e+02 | +3.27e-13 | +9.59e-16 | +2.88e+00 | +0.00e+00 | +2.07e-12 |
| | +1.41e+02 | +3.27e-13 | +9.59e-16 | +2.88e+00 | +5.63e-14 | +0.00e+00 |
| 15 | +1.58e+02 | +3.17e-15 | +0.00e+00 | +1.13e+00 | +0.00e+00 | +0.00e+00 |
| | +1.58e+02 | +3.17e-15 | +0.00e+00 | +1.13e+00 | +0.00e+00 | +0.00e+00 |
| 16 | +8.52e+01 | +4.48e-14 | +7.06e-16 | +4.92e+00 | +0.00e+00 | +0.00e+00 |
| | +8.52e+01 | +4.48e-14 | +7.06e-16 | +4.92e+00 | +0.00e+00 | +0.00e+00 |
| 17 | +3.05e+02 | +3.02e-15 | +2.10e-15 | +3.50e-01 | +0.00e+00 | +0.00e+00 |
| | +3.05e+02 | +3.02e-15 | +2.10e-15 | +3.50e-01 | +0.00e+00 | +0.00e+00 |
| 18 | +1.25e+02 | +1.57e-13 | +9.50e-16 | +2.80e+00 | +0.00e+00 | +3.84e-13 |
| | +1.25e+02 | +1.57e-13 | +9.50e-16 | +2.80e+00 | +5.63e-14 | +0.00e+00 |
| 19 | +1.41e+01 | +1.22e-15 | +0.00e+00 | +1.05e+00 | +0.00e+00 | +0.00e+00 |
| | +1.41e+01 | +1.22e-15 | +0.00e+00 | +1.05e+00 | +0.00e+00 | +0.00e+00 |
| 20 | +2.28e+02 | +1.56e-14 | +7.20e-16 | +2.72e+00 | +0.00e+00 | +0.00e+00 |
| | +2.28e+02 | +1.56e-14 | +7.20e-16 | +2.72e+00 | +0.00e+00 | +0.00e+00 |
| 21 | +4.46e+02 | +7.08e-15 | +2.08e-15 | +7.54e-01 | +0.00e+00 | +0.00e+00 |
| | +4.46e+02 | +7.08e-15 | +2.08e-15 | +7.54e-01 | +0.00e+00 | +0.00e+00 |
| 22 | +1.06e+03 | +1.41e-13 | +9.29e-16 | +1.55e+00 | +0.00e+00 | +8.01e-13 |
| | +1.06e+03 | +1.41e-13 | +9.29e-16 | +1.55e+00 | +5.63e-14 | +0.00e+00 |
| 23 | +1.30e+02 | +1.54e-15 | +0.00e+00 | +4.71e-01 | +0.00e+00 | +0.00e+00 |
| | +1.30e+02 | +1.54e-15 | +0.00e+00 | +4.71e-01 | +0.00e+00 | +0.00e+00 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| 24 | +8.70e+02 | +2.04e-14 | +7.23e-16 | +1.71e+00 | +0.00e+00 | +0.00e+00 |
| | +8.70e+02 | +2.04e-14 | +7.23e-16 | +1.71e+00 | +0.00e+00 | +0.00e+00 |
| 25 | +2.19e+02 | +2.30e-15 | +2.07e-15 | +2.00e+00 | +0.00e+00 | +0.00e+00 |
| | +2.19e+02 | +2.30e-15 | +2.07e-15 | +2.00e+00 | +0.00e+00 | +0.00e+00 |
| 26 | +1.51e+02 | +2.29e-13 | +9.12e-16 | +1.37e+00 | +0.00e+00 | +4.93e-13 |
| | +1.51e+02 | +2.29e-13 | +9.12e-16 | +1.37e+00 | +5.63e-14 | +0.00e+00 |
| 27 | +2.92e+01 | +1.48e-15 | +0.00e+00 | +5.32e-01 | +0.00e+00 | +0.00e+00 |
| | +2.92e+01 | +1.48e-15 | +0.00e+00 | +5.32e-01 | +0.00e+00 | +0.00e+00 |
| 28 | +1.49e+02 | +8.53e-15 | +7.34e-16 | +2.34e+00 | +0.00e+00 | +0.00e+00 |
| | +1.49e+02 | +8.53e-15 | +7.34e-16 | +2.34e+00 | +0.00e+00 | +0.00e+00 |
| 29 | +2.92e+02 | +5.99e-15 | +2.08e-15 | +1.66e+00 | +0.00e+00 | +0.00e+00 |
| | +2.92e+02 | +5.99e-15 | +2.08e-15 | +1.66e+00 | +0.00e+00 | +0.00e+00 |
| 30 | +1.18e+02 | +1.56e-13 | +8.80e-16 | +2.81e+00 | +0.00e+00 | +4.37e-13 |
| | +1.18e+02 | +1.56e-13 | +8.80e-16 | +2.81e+00 | +5.63e-14 | +0.00e+00 |
| 31 | +1.34e+01 | +1.18e-15 | +0.00e+00 | +9.39e-01 | +0.00e+00 | +0.00e+00 |
| | +1.34e+01 | +1.18e-15 | +0.00e+00 | +9.39e-01 | +0.00e+00 | +0.00e+00 |
| 32 | +2.17e+02 | +1.83e-14 | +7.61e-16 | +2.94e+00 | +0.00e+00 | +0.00e+00 |
| | +2.17e+02 | +1.83e-14 | +7.61e-16 | +2.94e+00 | +0.00e+00 | +0.00e+00 |
| 33 | +4.63e+00 | +5.87e-15 | +2.10e-15 | +6.42e-01 | +0.00e+00 | +0.00e+00 |
| | +4.63e+00 | +5.87e-15 | +2.10e-15 | +6.42e-01 | +0.00e+00 | +0.00e+00 |
| 34 | +1.41e+02 | +3.27e-13 | +8.78e-16 | +2.92e+00 | +0.00e+00 | +2.12e-12 |
| | +1.41e+02 | +3.27e-13 | +8.78e-16 | +2.92e+00 | +5.63e-14 | +0.00e+00 |
| 35 | +1.59e+02 | +2.69e-15 | +0.00e+00 | +1.04e+00 | +0.00e+00 | +0.00e+00 |
| | +1.59e+02 | +2.69e-15 | +0.00e+00 | +1.04e+00 | +0.00e+00 | +0.00e+00 |
| 36 | +8.61e+01 | +4.23e-14 | +8.07e-16 | +4.91e+00 | +0.00e+00 | +0.00e+00 |
| | +8.61e+01 | +4.23e-14 | +8.07e-16 | +4.91e+00 | +0.00e+00 | +0.00e+00 |
| 37 | +1.19e+03 | +4.73e-15 | +2.05e-15 | +1.30e+00 | +0.00e+00 | +0.00e+00 |
| | +1.19e+03 | +4.73e-15 | +2.05e-15 | +1.30e+00 | +0.00e+00 | +0.00e+00 |
| 38 | +2.24e+03 | +1.49e-13 | +9.09e-16 | +1.71e+00 | +0.00e+00 | +3.35e-12 |
| | +2.24e+03 | +1.49e-13 | +9.09e-16 | +1.71e+00 | +5.63e-14 | +0.00e+00 |
| 39 | +1.98e+02 | +4.10e-15 | +0.00e+00 | +8.43e-01 | +0.00e+00 | +0.00e+00 |
| | +1.98e+02 | +4.10e-15 | +0.00e+00 | +8.43e-01 | +0.00e+00 | +0.00e+00 |
| 40 | +1.93e+03 | +9.49e-14 | +8.32e-16 | +7.14e+00 | +0.00e+00 | +0.00e+00 |
| | +1.93e+03 | +9.49e-14 | +8.32e-16 | +7.14e+00 | +0.00e+00 | +0.00e+00 |
| 41 | +7.29e+00 | +9.65e-15 | +2.03e-15 | +1.91e+00 | +0.00e+00 | +0.00e+00 |
| | +7.29e+00 | +9.65e-15 | +2.03e-15 | +1.91e+00 | +0.00e+00 | +0.00e+00 |
| 42 | +1.63e+02 | +3.52e-13 | +9.50e-16 | +1.50e+00 | +0.00e+00 | +3.06e-12 |
| | +1.63e+02 | +3.52e-13 | +9.50e-16 | +1.50e+00 | +5.63e-14 | +0.00e+00 |
| 43 | +1.88e+02 | +4.74e-15 | +0.00e+00 | +8.21e-01 | +0.00e+00 | +0.00e+00 |
| | +1.88e+02 | +4.74e-15 | +0.00e+00 | +8.21e-01 | +0.00e+00 | +0.00e+00 |
| 44 | +1.02e+02 | +1.91e-13 | +8.80e-16 | +1.03e+01 | +0.00e+00 | +0.00e+00 |
| | +1.02e+02 | +1.91e-13 | +8.80e-16 | +1.03e+01 | +0.00e+00 | +0.00e+00 |
| 45 | +3.51e+02 | +1.81e-14 | +2.00e-15 | +3.32e+00 | +0.00e+00 | +0.00e+00 |
| | +3.51e+02 | +1.81e-14 | +2.00e-15 | +3.32e+00 | +0.00e+00 | +0.00e+00 |
| 46 | +3.59e+02 | +2.00e-13 | +9.52e-16 | +1.87e+00 | +0.00e+00 | +1.94e-12 |
| | +3.59e+02 | +2.00e-13 | +9.52e-16 | +1.87e+00 | +5.63e-14 | +0.00e+00 |
| 47 | +4.72e+02 | +4.21e-15 | +0.00e+00 | +8.45e-01 | +0.00e+00 | +0.00e+00 |
| | +4.72e+02 | +4.21e-15 | +0.00e+00 | +8.45e-01 | +0.00e+00 | +0.00e+00 |
| 48 | +1.21e+02 | +2.80e-13 | +8.27e-16 | +7.36e+00 | +0.00e+00 | +0.00e+00 |
| | +1.21e+02 | +2.80e-13 | +8.27e-16 | +7.36e+00 | +0.00e+00 | +0.00e+00 |
| 49 | +6.17e+02 | +9.07e+01 | +1.37e+02 | +5.60e+02 | +1.25e+04 | +1.34e+04 |
| | +6.17e+02 | +9.07e+01 | +1.37e+02 | +5.60e+02 | +1.25e+04 | +3.16e+03 |
| 50 | +2.72e+02 | +9.66e+01 | +1.32e+02 | +5.41e+02 | +1.21e+04 | +6.56e+03 |
| | +2.72e+02 | +9.66e+01 | +1.32e+02 | +5.41e+02 | +1.21e+04 | +1.11e+04 |
| 51 | +4.17e+02 | +7.96e+01 | +1.17e+02 | +4.78e+02 | +1.06e+04 | +1.07e+04 |
| | +4.17e+02 | +7.96e+01 | +1.17e+02 | +4.78e+02 | +1.06e+04 | +3.83e+03 |
| 52 | +3.61e+02 | +7.10e+01 | +1.20e+02 | +4.93e+02 | +1.10e+04 | +3.91e+03 |
| | +3.61e+02 | +7.10e+01 | +1.20e+02 | +4.93e+02 | +1.10e+04 | +9.05e+03 |
| 53 | +3.07e+02 | +1.77e+02 | +1.72e+00 | +8.88e+00 | +1.77e+02 | +1.56e+04 |
| | +3.07e+02 | +1.77e+02 | +1.72e+00 | +8.88e+00 | +1.77e+02 | +2.07e+04 |
| 54 | +1.43e+02 | +3.69e+01 | +2.17e+02 | +4.91e+02 | +1.46e+04 | +3.67e+03 |
| | +1.43e+02 | +3.69e+01 | +2.17e+02 | +4.91e+02 | +1.46e+04 | +1.31e+03 |
| 55 | +1.03e+02 | +3.92e+01 | +1.11e+02 | +3.97e+02 | +9.46e+03 | +2.48e+03 |
| | +1.03e+02 | +3.92e+01 | +1.11e+02 | +3.97e+02 | +9.46e+03 | +4.19e+03 |
| 56 | +7.76e+02 | +9.40e+01 | +1.20e+02 | +4.92e+02 | +1.10e+04 | +1.50e+04 |
| | +7.76e+02 | +9.40e+01 | +1.20e+02 | +4.92e+02 | +1.10e+04 | +2.91e+03 |
| 57 | +2.92e+02 | +1.08e+02 | +1.18e+02 | +4.83e+02 | +1.08e+04 | +8.35e+03 |
| | +2.92e+02 | +1.08e+02 | +1.18e+02 | +4.83e+02 | +1.08e+04 | +1.18e+04 |
| 58 | +2.63e+02 | +1.04e+02 | +1.26e+02 | +5.15e+02 | +1.15e+04 | +1.16e+04 |
| | +2.63e+02 | +1.04e+02 | +1.26e+02 | +5.15e+02 | +1.15e+04 | +7.26e+03 |
| 59 | +7.05e+02 | +1.01e+02 | +1.36e+02 | +5.57e+02 | +1.24e+04 | +3.34e+03 |
| | +7.05e+02 | +1.01e+02 | +1.36e+02 | +5.57e+02 | +1.24e+04 | +1.50e+04 |
| 60 | +5.00e+02 | +1.22e+02 | +3.43e+02 | +8.33e+02 | +3.13e+04 | +1.62e+04 |
| | +5.00e+02 | +1.22e+02 | +3.43e+02 | +8.33e+02 | +3.13e+04 | +5.96e+03 |
| 61 | +5.60e+02 | +1.48e+02 | +3.32e+02 | +8.06e+02 | +3.03e+04 | +7.75e+03 |
| | +5.60e+02 | +1.48e+02 | +3.32e+02 | +8.06e+02 | +3.03e+04 | +1.93e+04 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| 62 | +6.52e+02 | +1.20e+02 | +2.91e+02 | +7.07e+02 | +2.65e+04 | +1.76e+04 |
| | +6.52e+02 | +1.20e+02 | +2.91e+02 | +7.07e+02 | +2.65e+04 | +4.81e+03 |
| 63 | +4.95e+02 | +1.09e+02 | +3.13e+02 | +7.62e+02 | +2.86e+04 | +7.12e+03 |
| | +4.95e+02 | +1.09e+02 | +3.13e+02 | +7.62e+02 | +2.86e+04 | +1.28e+04 |
| 64 | +2.21e+02 | +8.25e+01 | +2.28e+00 | +1.17e+01 | +2.34e+02 | +6.62e+03 |
| | +2.21e+02 | +8.25e+01 | +2.28e+00 | +1.17e+01 | +2.34e+02 | +1.03e+04 |
| 65 | +2.75e+02 | +2.47e+01 | +2.14e+02 | +4.84e+02 | +1.44e+04 | +3.95e+03 |
| | +2.75e+02 | +2.47e+01 | +2.14e+02 | +4.84e+02 | +1.44e+04 | +8.67e+02 |
| 66 | +2.73e+01 | +2.62e+01 | +1.11e+02 | +3.95e+02 | +9.42e+03 | +2.32e+03 |
| | +2.73e+01 | +2.62e+01 | +1.11e+02 | +3.95e+02 | +9.42e+03 | +2.29e+03 |
| 67 | +5.67e+02 | +9.37e+01 | +3.13e+02 | +7.61e+02 | +2.86e+04 | +1.14e+04 |
| | +5.67e+02 | +9.37e+01 | +3.13e+02 | +7.61e+02 | +2.86e+04 | +5.96e+03 |
| 68 | +5.74e+02 | +1.08e+02 | +2.94e+02 | +7.15e+02 | +2.68e+04 | +5.75e+03 |
| | +5.74e+02 | +1.08e+02 | +2.94e+02 | +7.15e+02 | +2.68e+04 | +1.54e+04 |
| 69 | +6.21e+02 | +1.59e+02 | +3.15e+02 | +7.65e+02 | +2.87e+04 | +2.09e+04 |
| | +6.21e+02 | +1.59e+02 | +3.15e+02 | +7.65e+02 | +2.87e+04 | +8.08e+03 |
| 70 | +5.34e+02 | +1.36e+02 | +3.54e+02 | +8.60e+02 | +3.23e+04 | +6.97e+03 |
| | +5.34e+02 | +1.36e+02 | +3.54e+02 | +8.60e+02 | +3.23e+04 | +1.80e+04 |
| 71 | +6.27e+02 | +1.08e+02 | +2.99e+02 | +7.26e+02 | +2.72e+04 | +1.17e+04 |
| | +6.27e+02 | +1.08e+02 | +2.99e+02 | +7.26e+02 | +2.72e+04 | +1.14e+04 |
| 72 | +6.55e+02 | +4.87e+01 | +3.01e+02 | +7.33e+02 | +2.75e+04 | +8.62e+03 |
| | +6.55e+02 | +4.87e+01 | +3.01e+02 | +7.33e+02 | +2.75e+04 | +8.16e+03 |
| 73 | +5.25e+02 | +8.09e+01 | +2.60e+02 | +6.32e+02 | +2.37e+04 | +1.03e+04 |
| | +5.25e+02 | +8.09e+01 | +2.60e+02 | +6.32e+02 | +2.37e+04 | +6.89e+03 |
| 74 | +6.57e+02 | +1.16e+02 | +3.14e+02 | +7.62e+02 | +2.86e+04 | +9.67e+03 |
| | +6.57e+02 | +1.16e+02 | +3.14e+02 | +7.62e+02 | +2.86e+04 | +1.58e+04 |
| 75 | +5.85e+02 | +2.53e+01 | +5.96e+00 | +3.07e+01 | +6.10e+02 | +5.75e+03 |
| | +5.85e+02 | +2.53e+01 | +5.96e+00 | +3.07e+01 | +6.10e+02 | +4.98e+03 |
| 76 | +4.55e+02 | +1.59e+01 | +2.01e+02 | +4.56e+02 | +1.36e+04 | +4.67e+03 |
| | +4.55e+02 | +1.59e+01 | +2.01e+02 | +4.56e+02 | +1.36e+04 | +4.50e+03 |
| 77 | +5.67e+02 | +2.74e+01 | +1.11e+02 | +3.96e+02 | +9.45e+03 | +4.53e+03 |
| | +5.67e+02 | +2.74e+01 | +1.11e+02 | +3.96e+02 | +9.45e+03 | +5.51e+03 |
| 78 | +6.59e+02 | +1.20e+02 | +3.14e+02 | +7.62e+02 | +2.86e+04 | +1.66e+04 |
| | +6.59e+02 | +1.20e+02 | +3.14e+02 | +7.62e+02 | +2.86e+04 | +9.11e+03 |
| 79 | +4.84e+02 | +8.55e+01 | +2.63e+02 | +6.40e+02 | +2.40e+04 | +6.80e+03 |
| | +4.84e+02 | +8.55e+01 | +2.63e+02 | +6.40e+02 | +2.40e+04 | +1.07e+04 |
| 80 | +7.03e+02 | +4.72e+01 | +2.84e+02 | +6.91e+02 | +2.59e+04 | +7.62e+03 |
| | +7.03e+02 | +4.72e+01 | +2.84e+02 | +6.91e+02 | +2.59e+04 | +9.31e+03 |
| 81 | +6.79e+02 | +1.03e+02 | +3.51e+02 | +8.53e+02 | +3.20e+04 | +1.20e+04 |
| | +6.79e+02 | +1.03e+02 | +3.51e+02 | +8.53e+02 | +3.20e+04 | +1.12e+04 |
| 82 | +5.44e+02 | +1.30e+02 | +3.36e+02 | +8.18e+02 | +3.07e+04 | +1.56e+04 |
| | +5.44e+02 | +1.30e+02 | +3.36e+02 | +8.18e+02 | +3.07e+04 | +1.02e+04 |
| 83 | +5.47e+02 | +5.72e+01 | +3.01e+02 | +7.31e+02 | +2.75e+04 | +6.76e+03 |
| | +5.47e+02 | +5.72e+01 | +3.01e+02 | +7.31e+02 | +2.75e+04 | +9.71e+03 |
| 84 | +6.17e+02 | +6.42e+01 | +2.59e+02 | +6.30e+02 | +2.37e+04 | +9.80e+03 |
| | +6.17e+02 | +6.42e+01 | +2.59e+02 | +6.30e+02 | +2.37e+04 | +6.91e+03 |
| 85 | +6.38e+02 | +1.06e+02 | +3.16e+02 | +7.69e+02 | +2.89e+04 | +1.12e+04 |
| | +6.38e+02 | +1.06e+02 | +3.16e+02 | +7.69e+02 | +2.89e+04 | +1.29e+04 |
| 86 | +5.08e+02 | +2.53e+01 | +6.49e+00 | +3.35e+01 | +6.66e+02 | +5.59e+03 |
| | +5.08e+02 | +2.53e+01 | +6.49e+00 | +3.35e+01 | +6.66e+02 | +3.82e+03 |
| 87 | +3.49e+02 | +1.79e+01 | +2.00e+02 | +4.53e+02 | +1.35e+04 | +3.86e+03 |
| | +3.49e+02 | +1.79e+01 | +2.00e+02 | +4.53e+02 | +1.35e+04 | +3.76e+03 |
| 88 | +4.92e+02 | +2.65e+01 | +1.11e+02 | +3.97e+02 | +9.46e+03 | +3.49e+03 |
| | +4.92e+02 | +2.65e+01 | +1.11e+02 | +3.97e+02 | +9.46e+03 | +5.42e+03 |
| 89 | +6.07e+02 | +1.03e+02 | +3.16e+02 | +7.68e+02 | +2.88e+04 | +1.33e+04 |
| | +6.07e+02 | +1.03e+02 | +3.16e+02 | +7.68e+02 | +2.88e+04 | +1.02e+04 |
| 90 | +5.51e+02 | +6.66e+01 | +2.63e+02 | +6.39e+02 | +2.40e+04 | +6.35e+03 |
| | +5.51e+02 | +6.66e+01 | +2.63e+02 | +6.39e+02 | +2.40e+04 | +9.32e+03 |
| 91 | +5.50e+02 | +5.19e+01 | +2.84e+02 | +6.91e+02 | +2.59e+04 | +8.77e+03 |
| | +5.50e+02 | +5.19e+01 | +2.84e+02 | +6.91e+02 | +2.59e+04 | +7.27e+03 |
| 92 | +5.78e+02 | +1.23e+02 | +3.46e+02 | +8.42e+02 | +3.16e+04 | +1.01e+04 |
| | +5.78e+02 | +1.23e+02 | +3.46e+02 | +8.42e+02 | +3.16e+04 | +1.50e+04 |
| 93 | +1.38e+03 | +2.55e+02 | +1.33e+02 | +5.45e+02 | +1.21e+04 | +3.47e+04 |
| | +1.38e+03 | +2.55e+02 | +1.33e+02 | +5.45e+02 | +1.21e+04 | +1.18e+04 |
| 94 | +1.26e+03 | +3.20e+02 | +1.28e+02 | +5.22e+02 | +1.16e+04 | +1.87e+04 |
| | +1.26e+03 | +3.20e+02 | +1.28e+02 | +5.22e+02 | +1.16e+04 | +3.96e+04 |
| 95 | +9.91e+02 | +1.12e+02 | +1.12e+02 | +4.58e+02 | +1.02e+04 | +1.85e+04 |
| | +9.91e+02 | +1.12e+02 | +1.12e+02 | +4.58e+02 | +1.02e+04 | +6.91e+03 |
| 96 | +8.18e+02 | +9.57e+01 | +1.22e+02 | +4.99e+02 | +1.11e+04 | +8.72e+03 |
| | +8.18e+02 | +9.57e+01 | +1.22e+02 | +4.99e+02 | +1.11e+04 | +9.26e+03 |
| 97 | +4.52e+02 | +1.70e+02 | +3.53e+00 | +1.82e+01 | +3.62e+02 | +1.55e+04 |
| | +4.52e+02 | +1.70e+02 | +3.53e+00 | +1.82e+01 | +3.62e+02 | +2.06e+04 |
| 98 | +2.67e+02 | +4.79e+01 | +2.12e+02 | +4.79e+02 | +1.43e+04 | +4.62e+03 |
| | +2.67e+02 | +4.79e+01 | +2.12e+02 | +4.79e+02 | +1.43e+04 | +2.61e+03 |
| 99 | +2.50e+02 | +5.11e+01 | +1.12e+02 | +3.98e+02 | +9.51e+03 | +3.59e+03 |
| | +2.50e+02 | +5.11e+01 | +1.12e+02 | +3.98e+02 | +9.51e+03 | +6.39e+03 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| 100 | +1.22e+03 | +1.14e+02 | +1.22e+02 | +4.99e+02 | +1.11e+04 | +1.51e+04 |
| | +1.22e+03 | +1.14e+02 | +1.22e+02 | +4.99e+02 | +1.11e+04 | +7.81e+03 |
| 101 | +9.15e+02 | +1.39e+02 | +1.13e+02 | +4.63e+02 | +1.03e+04 | +1.12e+04 |
| | +9.15e+02 | +1.39e+02 | +1.13e+02 | +4.63e+02 | +1.03e+04 | +1.99e+04 |
| 102 | +1.29e+03 | +3.28e+02 | +1.21e+02 | +4.96e+02 | +1.11e+04 | +4.06e+04 |
| | +1.29e+03 | +3.28e+02 | +1.21e+02 | +4.96e+02 | +1.11e+04 | +1.92e+04 |
| 103 | +1.44e+03 | +2.66e+02 | +1.31e+02 | +5.38e+02 | +1.20e+04 | +1.23e+04 |
| | +1.44e+03 | +2.66e+02 | +1.31e+02 | +5.38e+02 | +1.20e+04 | +3.62e+04 |

**FORZE / MOMENTI ELEMENTO FINITO TRAVE (EX+λ*EY)**
**Gruppo: 3 - Descrizione: DIAGONALI DI PARETE**

| Asta | Fx (I/J) | Fy (I/J) | Fz (I/J) | Mx (I/J) | My (I/J) | Mz (I/J) |
|---|---|---|---|---|---|---|
| 1 | +2.34e+03 | +3.89e-16 | +3.83e-16 | +6.85e+00 | +4.52e-14 | +7.72e-14 |
| | +2.34e+03 | +3.89e-16 | +3.83e-16 | +6.85e+00 | +7.99e-14 | +0.00e+00 |
| 2 | +2.35e+03 | +3.90e-16 | +3.89e-16 | +6.97e+00 | +4.35e-14 | +7.76e-14 |
| | +2.35e+03 | +3.90e-16 | +3.89e-16 | +6.97e+00 | +7.69e-14 | +0.00e+00 |
| 3 | +2.28e+03 | +3.89e-16 | +3.83e-16 | +6.43e+00 | +4.52e-14 | +7.75e-14 |
| | +2.28e+03 | +3.89e-16 | +3.83e-16 | +6.43e+00 | +7.99e-14 | +0.00e+00 |
| 4 | +2.29e+03 | +4.02e-16 | +4.02e-16 | +6.12e+00 | +4.35e-14 | +8.12e-14 |
| | +2.29e+03 | +4.02e-16 | +4.02e-16 | +6.12e+00 | +7.69e-14 | +0.00e+00 |
| 5 | +1.14e+04 | +2.89e-15 | +1.12e-16 | +5.07e-01 | +0.00e+00 | +0.00e+00 |
| | +1.14e+04 | +2.89e-15 | +1.12e-16 | +5.07e-01 | +0.00e+00 | +0.00e+00 |
| 6 | +1.13e+04 | +2.89e-15 | +9.21e-17 | +1.75e+00 | +0.00e+00 | +0.00e+00 |
| | +1.13e+04 | +2.89e-15 | +9.21e-17 | +1.75e+00 | +0.00e+00 | +0.00e+00 |
| 7 | +1.11e+04 | +2.81e-15 | +9.21e-17 | +1.62e+00 | +0.00e+00 | +0.00e+00 |
| | +1.11e+04 | +2.81e-15 | +9.21e-17 | +1.62e+00 | +0.00e+00 | +0.00e+00 |
| 8 | +1.11e+04 | +2.81e-15 | +1.12e-16 | +4.40e-01 | +0.00e+00 | +0.00e+00 |
| | +1.11e+04 | +2.81e-15 | +1.12e-16 | +4.40e-01 | +0.00e+00 | +0.00e+00 |

**FORZE / MOMENTI ELEMENTO FINITO TRAVE (λ*EX+EY)**
**Gruppo: 1 - Descrizione: MONTANTI**

| Asta | Fx (I/J) | Fy (I/J) | Fz (I/J) | Mx (I/J) | My (I/J) | Mz (I/J) |
|---|---|---|---|---|---|---|
| 1 | +1.90e+02 | +8.90e+01 | +2.93e+02 | +4.75e+00 | +5.23e+04 | +2.21e+04 |
| | +1.90e+02 | +8.90e+01 | +2.93e+02 | +4.75e+00 | +4.60e+04 | +7.72e+03 |
| 2 | +4.00e+03 | +8.67e+01 | +3.30e+02 | +4.75e+00 | +5.63e+04 | +1.74e+04 |
| | +4.00e+03 | +8.67e+01 | +3.30e+02 | +4.75e+00 | +5.42e+04 | +1.17e+04 |
| 3 | +3.84e+03 | +5.07e+01 | +3.63e+02 | +4.75e+00 | +6.46e+04 | +1.12e+04 |
| | +3.84e+03 | +5.07e+01 | +3.63e+02 | +4.75e+00 | +5.71e+04 | +5.79e+03 |
| 4 | +2.32e+02 | +1.13e+02 | +3.06e+02 | +4.75e+00 | +5.16e+04 | +2.49e+04 |
| | +2.32e+02 | +1.13e+02 | +3.06e+02 | +4.75e+00 | +5.11e+04 | +1.30e+04 |
| 5 | +3.12e+02 | +5.12e+01 | +3.74e+02 | +4.75e+00 | +6.46e+04 | +1.37e+04 |
| | +3.12e+02 | +5.12e+01 | +3.74e+02 | +4.75e+00 | +6.06e+04 | +3.52e+03 |
| 6 | +2.86e+02 | +5.35e+01 | +3.67e+02 | +4.75e+00 | +6.34e+04 | +1.44e+04 |
| | +2.86e+02 | +5.35e+01 | +3.67e+02 | +4.75e+00 | +5.95e+04 | +3.55e+03 |
| 7 | +5.95e+01 | +5.91e+01 | +3.49e+02 | +4.75e+00 | +5.96e+04 | +1.50e+04 |
| | +5.95e+01 | +5.91e+01 | +3.49e+02 | +4.75e+00 | +5.73e+04 | +4.82e+03 |
| 8 | +9.44e+01 | +6.09e+01 | +3.08e+02 | +4.75e+00 | +5.11e+04 | +1.52e+04 |
| | +9.44e+01 | +6.09e+01 | +3.08e+02 | +4.75e+00 | +5.21e+04 | +5.17e+03 |
| 9 | +3.71e+03 | +5.50e+01 | +2.80e+02 | +4.75e+00 | +4.88e+04 | +1.45e+04 |
| | +3.71e+03 | +5.50e+01 | +2.80e+02 | +4.75e+00 | +4.50e+04 | +3.92e+03 |
| 10 | +1.94e+02 | +6.17e+01 | +2.90e+02 | +4.75e+00 | +4.73e+04 | +1.53e+04 |
| | +1.94e+02 | +6.17e+01 | +2.90e+02 | +4.75e+00 | +4.98e+04 | +5.42e+03 |
| 11 | +3.54e+03 | +5.30e+01 | +2.73e+02 | +4.75e+00 | +4.74e+04 | +1.40e+04 |
| | +3.54e+03 | +5.30e+01 | +2.73e+02 | +4.75e+00 | +4.40e+04 | +3.89e+03 |
| 12 | +2.01e+02 | +9.88e+01 | +4.28e+02 | +4.75e+00 | +7.30e+04 | +1.93e+04 |
| | +2.01e+02 | +9.88e+01 | +4.28e+02 | +4.75e+00 | +7.04e+04 | +1.39e+04 |
| 13 | +1.11e+02 | +8.89e+01 | +3.84e+02 | +4.75e+00 | +6.58e+04 | +2.00e+04 |
| | +1.11e+02 | +8.89e+01 | +3.84e+02 | +4.75e+00 | +6.28e+04 | +9.77e+03 |
| 14 | +9.51e+01 | +1.14e+02 | +3.73e+02 | +4.75e+00 | +6.30e+04 | +2.26e+04 |
| | +9.51e+01 | +1.14e+02 | +3.73e+02 | +4.75e+00 | +6.18e+04 | +1.54e+04 |
| 15 | +2.06e+02 | +8.42e+01 | +3.22e+02 | +4.75e+00 | +5.43e+04 | +2.20e+04 |
| | +2.06e+02 | +8.42e+01 | +3.22e+02 | +4.75e+00 | +5.37e+04 | +6.26e+03 |
| 16 | +2.00e+02 | +7.49e+01 | +3.10e+02 | +4.75e+00 | +5.52e+04 | +2.08e+04 |
| | +2.00e+02 | +7.49e+01 | +3.10e+02 | +4.75e+00 | +4.85e+04 | +4.33e+03 |
| 17 | +4.15e+03 | +5.81e+01 | +3.28e+02 | +4.75e+00 | +5.72e+04 | +1.44e+04 |
| | +4.15e+03 | +5.81e+01 | +3.28e+02 | +4.75e+00 | +5.28e+04 | +5.12e+03 |
| 18 | +3.92e+03 | +3.79e+01 | +3.81e+02 | +4.75e+00 | +6.78e+04 | +9.93e+03 |
| | +3.92e+03 | +3.79e+01 | +3.81e+02 | +4.75e+00 | +6.00e+04 | +2.81e+03 |
| 19 | +2.32e+02 | +6.03e+01 | +3.24e+02 | +4.75e+00 | +5.62e+04 | +1.52e+04 |
| | +2.32e+02 | +6.03e+01 | +3.24e+02 | +4.75e+00 | +5.24e+04 | +5.12e+03 |
| 20 | +1.23e+02 | +6.25e+01 | +2.97e+02 | +4.75e+00 | +4.82e+04 | +1.54e+04 |
| | +1.23e+02 | +6.25e+01 | +2.97e+02 | +4.75e+00 | +5.14e+04 | +5.59e+03 |
| 21 | +1.38e+02 | +6.11e+01 | +3.25e+02 | +4.75e+00 | +5.56e+04 | +1.52e+04 |
| | +1.38e+02 | +6.11e+01 | +3.25e+02 | +4.75e+00 | +5.35e+04 | +5.28e+03 |
| 22 | +1.30e+02 | +5.56e+01 | +2.93e+02 | +4.75e+00 | +5.01e+04 | +1.43e+04 |
| | +1.30e+02 | +5.56e+01 | +2.93e+02 | +4.75e+00 | +4.79e+04 | +4.42e+03 |
| 23 | +3.36e+03 | +5.04e+01 | +2.79e+02 | +4.75e+00 | +4.83e+04 | +1.24e+04 |
| | +3.36e+03 | +5.04e+01 | +2.79e+02 | +4.75e+00 | +4.50e+04 | +4.47e+03 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| 24 | +3.55e+03 | +4.87e+01 | +2.85e+02 | +4.75e+00 | +4.94e+04 | +1.33e+04 |
| | +3.55e+03 | +4.87e+01 | +2.85e+02 | +4.75e+00 | +4.59e+04 | +3.07e+03 |
| 25 | +1.47e+02 | +8.29e+01 | +2.96e+02 | +4.75e+00 | +5.12e+04 | +2.09e+04 |
| | +1.47e+02 | +8.29e+01 | +2.96e+02 | +4.75e+00 | +4.86e+04 | +6.90e+03 |
| 26 | +1.52e+02 | +1.58e+02 | +2.96e+02 | +4.75e+00 | +5.05e+04 | +2.90e+04 |
| | +1.52e+02 | +1.58e+02 | +2.96e+02 | +4.75e+00 | +4.93e+04 | +2.40e+04 |
| 27 | +2.30e+01 | +8.87e+01 | +3.61e+02 | +4.75e+00 | +6.22e+04 | +1.98e+04 |
| | +2.30e+01 | +8.87e+01 | +3.61e+02 | +4.75e+00 | +5.89e+04 | +9.92e+03 |
| 28 | +1.10e+02 | +1.14e+02 | +3.63e+02 | +4.75e+00 | +6.10e+04 | +2.25e+04 |
| | +1.10e+02 | +1.14e+02 | +3.63e+02 | +4.75e+00 | +6.05e+04 | +1.57e+04 |
| 29 | +1.50e+02 | +9.89e+01 | +4.12e+02 | +4.75e+00 | +7.04e+04 | +1.90e+04 |
| | +1.50e+02 | +9.89e+01 | +4.12e+02 | +4.75e+00 | +6.76e+04 | +1.41e+04 |

**FORZE / MOMENTI ELEMENTO FINITO TRAVE (λ*EX+EY)**
**Gruppo: 2 - Descrizione: TRAVI DI COPERTURA**

| Asta | Fx (I/J) | Fy (I/J) | Fz (I/J) | Mx (I/J) | My (I/J) | Mz (I/J) |
|---|---|---|---|---|---|---|
| 1 | +5.78e+02 | +7.76e-15 | +2.30e-15 | +3.13e+00 | +0.00e+00 | +0.00e+00 |
| | +5.78e+02 | +7.76e-15 | +2.30e-15 | +3.13e+00 | +0.00e+00 | +0.00e+00 |
| 2 | +1.30e+03 | +1.21e+02 | +7.85e-02 | +1.73e+00 | +0.00e+00 | +7.40e-13 |
| | +1.30e+03 | +1.21e+02 | +7.85e-02 | +1.73e+00 | +1.41e+01 | +2.18e+04 |
| 3 | +8.72e+02 | +7.82e+01 | +5.55e-02 | +1.46e+00 | +1.09e+01 | +1.54e+04 |
| | +8.72e+02 | +7.82e+01 | +5.55e-02 | +1.46e+00 | +0.00e+00 | +0.00e+00 |
| 4 | +3.40e+02 | +1.16e-13 | +7.84e-16 | +5.37e+00 | +0.00e+00 | +0.00e+00 |
| | +3.40e+02 | +1.16e-13 | +7.84e-16 | +5.37e+00 | +0.00e+00 | +0.00e+00 |
| 5 | +1.39e+01 | +4.00e-15 | +2.31e-15 | +8.26e-01 | +0.00e+00 | +0.00e+00 |
| | +1.39e+01 | +4.00e-15 | +2.31e-15 | +8.26e-01 | +0.00e+00 | +0.00e+00 |
| 6 | +1.11e+02 | +2.85e-13 | +1.03e-15 | +1.69e+00 | +0.00e+00 | +1.73e-12 |
| | +1.11e+02 | +2.85e-13 | +1.03e-15 | +1.69e+00 | +6.16e-14 | +0.00e+00 |
| 7 | +9.97e+01 | +4.63e-15 | +0.00e+00 | +1.25e+00 | +0.00e+00 | +0.00e+00 |
| | +9.97e+01 | +4.63e-15 | +0.00e+00 | +1.25e+00 | +0.00e+00 | +0.00e+00 |
| 8 | +5.10e+01 | +9.37e-14 | +8.19e-16 | +4.97e+00 | +0.00e+00 | +0.00e+00 |
| | +5.10e+01 | +9.37e-14 | +8.19e-16 | +4.97e+00 | +0.00e+00 | +0.00e+00 |
| 9 | +6.56e+02 | +3.10e-15 | +2.30e-15 | +1.49e+00 | +0.00e+00 | +0.00e+00 |
| | +6.56e+02 | +3.10e-15 | +2.30e-15 | +1.49e+00 | +0.00e+00 | +0.00e+00 |
| 10 | +1.23e+03 | +5.35e-14 | +1.02e-15 | +2.23e+00 | +0.00e+00 | +2.26e-12 |
| | +1.23e+03 | +5.35e-14 | +1.02e-15 | +2.23e+00 | +6.16e-14 | +0.00e+00 |
| 11 | +9.48e+01 | +5.72e-15 | +0.00e+00 | +6.43e-01 | +0.00e+00 | +0.00e+00 |
| | +9.48e+01 | +5.72e-15 | +0.00e+00 | +6.43e-01 | +0.00e+00 | +0.00e+00 |
| 12 | +1.09e+03 | +6.31e-14 | +8.02e-16 | +4.38e+00 | +0.00e+00 | +0.00e+00 |
| | +1.09e+03 | +6.31e-14 | +8.02e-16 | +4.38e+00 | +0.00e+00 | +0.00e+00 |
| 13 | +7.22e+00 | +3.79e-15 | +2.31e-15 | +6.64e-01 | +0.00e+00 | +0.00e+00 |
| | +7.22e+00 | +3.79e-15 | +2.31e-15 | +6.64e-01 | +0.00e+00 | +0.00e+00 |
| 14 | +7.53e+01 | +1.95e-13 | +1.01e-15 | +2.04e+00 | +0.00e+00 | +1.61e-12 |
| | +7.53e+01 | +1.95e-13 | +1.01e-15 | +2.04e+00 | +6.16e-14 | +0.00e+00 |
| 15 | +8.04e+01 | +4.35e-15 | +0.00e+00 | +1.12e+00 | +0.00e+00 | +0.00e+00 |
| | +8.04e+01 | +4.35e-15 | +0.00e+00 | +1.12e+00 | +0.00e+00 | +0.00e+00 |
| 16 | +3.88e+01 | +3.41e-14 | +8.22e-16 | +3.72e+00 | +0.00e+00 | +0.00e+00 |
| | +3.88e+01 | +3.41e-14 | +8.22e-16 | +3.72e+00 | +0.00e+00 | +0.00e+00 |
| 17 | +1.42e+02 | +6.40e-15 | +2.30e-15 | +3.47e-01 | +0.00e+00 | +0.00e+00 |
| | +1.42e+02 | +6.40e-15 | +2.30e-15 | +3.47e-01 | +0.00e+00 | +0.00e+00 |
| 18 | +8.08e+01 | +5.23e-14 | +1.00e-15 | +2.32e+00 | +0.00e+00 | +3.98e-13 |
| | +8.08e+01 | +5.23e-14 | +1.00e-15 | +2.32e+00 | +6.16e-14 | +0.00e+00 |
| 19 | +4.12e+01 | +2.08e-15 | +0.00e+00 | +1.08e+00 | +0.00e+00 | +0.00e+00 |
| | +4.12e+01 | +2.08e-15 | +0.00e+00 | +1.08e+00 | +0.00e+00 | +0.00e+00 |
| 20 | +1.05e+02 | +1.79e-14 | +8.18e-16 | +2.64e+00 | +0.00e+00 | +0.00e+00 |
| | +1.05e+02 | +1.79e-14 | +8.18e-16 | +2.64e+00 | +0.00e+00 | +0.00e+00 |
| 21 | +1.39e+02 | +1.37e-14 | +2.29e-15 | +1.30e+00 | +0.00e+00 | +0.00e+00 |
| | +1.39e+02 | +1.37e-14 | +2.29e-15 | +1.30e+00 | +0.00e+00 | +0.00e+00 |
| 22 | +3.46e+02 | +4.99e-14 | +1.02e-15 | +3.17e+00 | +0.00e+00 | +9.18e-13 |
| | +3.46e+02 | +4.99e-14 | +1.02e-15 | +3.17e+00 | +6.16e-14 | +0.00e+00 |
| 23 | +6.18e+01 | +9.79e-16 | +0.00e+00 | +6.38e-01 | +0.00e+00 | +0.00e+00 |
| | +6.18e+01 | +9.79e-16 | +0.00e+00 | +6.38e-01 | +0.00e+00 | +0.00e+00 |
| 24 | +2.84e+02 | +4.32e-14 | +7.91e-16 | +3.31e+00 | +0.00e+00 | +0.00e+00 |
| | +2.84e+02 | +4.32e-14 | +7.91e-16 | +3.31e+00 | +0.00e+00 | +0.00e+00 |
| 25 | +7.35e+01 | +4.46e-15 | +2.30e-15 | +3.99e+00 | +0.00e+00 | +0.00e+00 |
| | +7.35e+01 | +4.46e-15 | +2.30e-15 | +3.99e+00 | +0.00e+00 | +0.00e+00 |
| 26 | +5.01e+01 | +8.22e-14 | +1.01e-15 | +1.75e+00 | +0.00e+00 | +2.01e-13 |
| | +5.01e+01 | +8.22e-14 | +1.01e-15 | +1.75e+00 | +6.16e-14 | +0.00e+00 |
| 27 | +9.37e+00 | +8.52e-16 | +0.00e+00 | +6.34e-01 | +0.00e+00 | +0.00e+00 |
| | +9.37e+00 | +8.52e-16 | +0.00e+00 | +6.34e-01 | +0.00e+00 | +0.00e+00 |
| 28 | +5.05e+01 | +1.40e-14 | +7.90e-16 | +4.45e+00 | +0.00e+00 | +0.00e+00 |
| | +5.05e+01 | +1.40e-14 | +7.90e-16 | +4.45e+00 | +0.00e+00 | +0.00e+00 |
| 29 | +1.32e+02 | +1.22e-14 | +2.30e-15 | +3.28e+00 | +0.00e+00 | +0.00e+00 |
| | +1.32e+02 | +1.22e-14 | +2.30e-15 | +3.28e+00 | +0.00e+00 | +0.00e+00 |
| 30 | +7.19e+01 | +5.19e-14 | +9.85e-16 | +1.77e+00 | +0.00e+00 | +4.34e-13 |
| | +7.19e+01 | +5.19e-14 | +9.85e-16 | +1.77e+00 | +6.16e-14 | +0.00e+00 |
| 31 | +3.78e+01 | +1.63e-15 | +0.00e+00 | +8.99e-01 | +0.00e+00 | +0.00e+00 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| | +3.78e+01 | +1.63e-15 | +0.00e+00 | +8.99e-01 | +0.00e+00 | +0.00e+00 |
| 32 | +1.00e+02 | +2.58e-14 | +8.12e-16 | +3.01e+00 | +0.00e+00 | +0.00e+00 |
| | +1.00e+02 | +2.58e-14 | +8.12e-16 | +3.01e+00 | +0.00e+00 | +0.00e+00 |
| 33 | +6.91e+00 | +1.17e-14 | +2.30e-15 | +1.09e+00 | +0.00e+00 | +0.00e+00 |
| | +6.91e+00 | +1.17e-14 | +2.30e-15 | +1.09e+00 | +0.00e+00 | +0.00e+00 |
| 34 | +7.44e+01 | +1.92e-13 | +9.87e-16 | +1.73e+00 | +0.00e+00 | +1.39e-12 |
| | +7.44e+01 | +1.92e-13 | +9.87e-16 | +1.73e+00 | +6.16e-14 | +0.00e+00 |
| 35 | +7.98e+01 | +3.43e-15 | +0.00e+00 | +9.54e-01 | +0.00e+00 | +0.00e+00 |
| | +7.98e+01 | +3.43e-15 | +0.00e+00 | +9.54e-01 | +0.00e+00 | +0.00e+00 |
| 36 | +3.88e+01 | +3.09e-14 | +8.48e-16 | +3.09e+00 | +0.00e+00 | +0.00e+00 |
| | +3.88e+01 | +3.09e-14 | +8.48e-16 | +3.09e+00 | +0.00e+00 | +0.00e+00 |
| 37 | +6.45e+02 | +5.44e-15 | +2.28e-15 | +7.08e-01 | +0.00e+00 | +0.00e+00 |
| | +6.45e+02 | +5.44e-15 | +2.28e-15 | +7.08e-01 | +0.00e+00 | +0.00e+00 |
| 38 | +1.22e+03 | +5.17e-14 | +1.01e-15 | +2.25e+00 | +0.00e+00 | +2.09e-12 |
| | +1.22e+03 | +5.17e-14 | +1.01e-15 | +2.25e+00 | +6.16e-14 | +0.00e+00 |
| 39 | +9.85e+01 | +4.66e-15 | +0.00e+00 | +5.57e-01 | +0.00e+00 | +0.00e+00 |
| | +9.85e+01 | +4.66e-15 | +0.00e+00 | +5.57e-01 | +0.00e+00 | +0.00e+00 |
| 40 | +1.07e+03 | +5.24e-14 | +8.42e-16 | +3.93e+00 | +0.00e+00 | +0.00e+00 |
| | +1.07e+03 | +5.24e-14 | +8.42e-16 | +3.93e+00 | +0.00e+00 | +0.00e+00 |
| 41 | +7.87e+00 | +4.53e-15 | +2.27e-15 | +9.56e-01 | +0.00e+00 | +0.00e+00 |
| | +7.87e+00 | +4.53e-15 | +2.27e-15 | +9.56e-01 | +0.00e+00 | +0.00e+00 |
| 42 | +9.77e+01 | +2.68e-13 | +1.03e-15 | +1.25e+00 | +0.00e+00 | +1.85e-12 |
| | +9.77e+01 | +2.68e-13 | +1.03e-15 | +1.25e+00 | +6.16e-14 | +0.00e+00 |
| 43 | +1.12e+02 | +3.88e-15 | +0.00e+00 | +1.01e+00 | +0.00e+00 | +0.00e+00 |
| | +1.12e+02 | +3.88e-15 | +0.00e+00 | +1.01e+00 | +0.00e+00 | +0.00e+00 |
| 44 | +5.72e+01 | +8.90e-14 | +8.63e-16 | +4.25e+00 | +0.00e+00 | +0.00e+00 |
| | +5.72e+01 | +8.90e-14 | +8.63e-16 | +4.25e+00 | +0.00e+00 | +0.00e+00 |
| 45 | +2.03e+02 | +8.27e-15 | +2.26e-15 | +3.26e+00 | +0.00e+00 | +0.00e+00 |
| | +2.03e+02 | +8.27e-15 | +2.26e-15 | +3.26e+00 | +0.00e+00 | +0.00e+00 |
| 46 | +1.70e+02 | +7.98e-14 | +1.03e-15 | +1.61e+00 | +0.00e+00 | +8.66e-13 |
| | +1.70e+02 | +7.98e-14 | +1.03e-15 | +1.61e+00 | +6.16e-14 | +0.00e+00 |
| 47 | +1.92e+02 | +1.78e-15 | +0.00e+00 | +1.19e+00 | +0.00e+00 | +0.00e+00 |
| | +1.92e+02 | +1.78e-15 | +0.00e+00 | +1.19e+00 | +0.00e+00 | +0.00e+00 |
| 48 | +7.51e+01 | +1.17e-13 | +8.26e-16 | +4.29e+00 | +0.00e+00 | +0.00e+00 |
| | +7.51e+01 | +1.17e-13 | +8.26e-16 | +4.29e+00 | +0.00e+00 | +0.00e+00 |
| 49 | +1.37e+03 | +1.83e+02 | +8.71e+01 | +3.57e+02 | +7.95e+03 | +2.81e+04 |
| | +1.37e+03 | +1.83e+02 | +8.71e+01 | +3.57e+02 | +7.95e+03 | +5.34e+03 |
| 50 | +4.14e+02 | +1.83e+02 | +8.26e+01 | +3.38e+02 | +7.54e+03 | +1.33e+04 |
| | +4.14e+02 | +1.83e+02 | +8.26e+01 | +3.38e+02 | +7.54e+03 | +2.01e+04 |
| 51 | +8.28e+02 | +1.75e+02 | +6.03e+01 | +2.47e+02 | +5.51e+03 | +2.28e+04 |
| | +8.28e+02 | +1.75e+02 | +6.03e+01 | +2.47e+02 | +5.51e+03 | +9.10e+03 |
| 52 | +8.06e+02 | +1.54e+02 | +6.14e+01 | +2.52e+02 | +5.60e+03 | +7.51e+03 |
| | +8.06e+02 | +1.54e+02 | +6.14e+01 | +2.52e+02 | +5.60e+03 | +2.06e+04 |
| 53 | +7.23e+02 | +4.01e+02 | +9.73e-01 | +5.01e+00 | +9.97e+01 | +3.51e+04 |
| | +7.23e+02 | +4.01e+02 | +9.73e-01 | +5.01e+00 | +9.97e+01 | +4.71e+04 |
| 54 | +3.37e+02 | +8.39e+01 | +7.18e+01 | +1.63e+02 | +4.84e+03 | +8.46e+03 |
| | +3.37e+02 | +8.39e+01 | +7.18e+01 | +1.63e+02 | +4.84e+03 | +2.87e+03 |
| 55 | +1.99e+02 | +8.88e+01 | +3.84e+01 | +1.37e+02 | +3.27e+03 | +5.90e+03 |
| | +1.99e+02 | +8.88e+01 | +3.84e+01 | +1.37e+02 | +3.27e+03 | +9.20e+03 |
| 56 | +1.69e+03 | +2.15e+02 | +6.07e+01 | +2.48e+02 | +5.54e+03 | +3.37e+04 |
| | +1.69e+03 | +2.15e+02 | +6.07e+01 | +2.48e+02 | +5.54e+03 | +5.84e+03 |
| 57 | +6.07e+02 | +2.58e+02 | +6.01e+01 | +2.46e+02 | +5.49e+03 | +1.87e+04 |
| | +6.07e+02 | +2.58e+02 | +6.01e+01 | +2.46e+02 | +5.49e+03 | +2.84e+04 |
| 58 | +3.87e+02 | +1.86e+02 | +7.91e+01 | +3.24e+02 | +7.22e+03 | +2.02e+04 |
| | +3.87e+02 | +1.86e+02 | +7.91e+01 | +3.24e+02 | +7.22e+03 | +1.38e+04 |
| 59 | +1.45e+03 | +1.93e+02 | +8.57e+01 | +3.51e+02 | +7.82e+03 | +5.52e+03 |
| | +1.45e+03 | +1.93e+02 | +8.57e+01 | +3.51e+02 | +7.82e+03 | +2.96e+04 |
| 60 | +1.26e+03 | +1.73e+02 | +2.22e+02 | +5.39e+02 | +2.02e+04 | +2.87e+04 |
| | +1.26e+03 | +1.73e+02 | +2.22e+02 | +5.39e+02 | +2.02e+04 | +2.88e+03 |
| 61 | +2.93e+02 | +1.81e+02 | +2.09e+02 | +5.08e+02 | +1.91e+04 | +1.36e+04 |
| | +2.93e+02 | +1.81e+02 | +2.09e+02 | +5.08e+02 | +1.91e+04 | +1.95e+04 |
| 62 | +7.93e+02 | +2.21e+02 | +1.50e+02 | +3.65e+02 | +1.37e+04 | +2.83e+04 |
| | +7.93e+02 | +2.21e+02 | +1.50e+02 | +3.65e+02 | +1.37e+04 | +1.21e+04 |
| 63 | +1.04e+03 | +1.95e+02 | +1.60e+02 | +3.89e+02 | +1.46e+04 | +7.70e+03 |
| | +1.04e+03 | +1.95e+02 | +1.60e+02 | +3.89e+02 | +1.46e+04 | +2.79e+04 |
| 64 | +5.18e+02 | +1.89e+02 | +1.08e+00 | +5.58e+00 | +1.11e+02 | +1.51e+04 |
| | +5.18e+02 | +1.89e+02 | +1.08e+00 | +5.58e+00 | +1.11e+02 | +2.36e+04 |
| 65 | +5.67e+02 | +4.18e+01 | +7.10e+01 | +1.61e+02 | +4.79e+03 | +7.52e+03 |
| | +5.67e+02 | +4.18e+01 | +7.10e+01 | +1.61e+02 | +4.79e+03 | +1.99e+03 |
| 66 | +2.77e+01 | +4.79e+01 | +3.81e+01 | +1.36e+02 | +3.24e+03 | +4.13e+03 |
| | +2.77e+01 | +4.79e+01 | +3.81e+01 | +1.36e+02 | +3.24e+03 | +4.06e+03 |
| 67 | +1.13e+03 | +1.70e+02 | +1.58e+02 | +3.85e+02 | +1.44e+04 | +2.64e+04 |
| | +1.13e+03 | +1.70e+02 | +1.58e+02 | +3.85e+02 | +1.44e+04 | +4.81e+03 |
| 68 | +5.91e+02 | +2.06e+02 | +1.50e+02 | +3.64e+02 | +1.37e+04 | +1.33e+04 |
| | +5.91e+02 | +2.06e+02 | +1.50e+02 | +3.64e+02 | +1.37e+04 | +2.48e+04 |
| 69 | +4.80e+02 | +2.01e+02 | +2.00e+02 | +4.85e+02 | +1.82e+04 | +2.33e+04 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| | +4.80e+02 | +2.01e+02 | +2.00e+02 | +4.85e+02 | +1.82e+04 | +1.34e+04 |
| 70 | +1.25e+03 | +2.03e+02 | +2.23e+02 | +5.43e+02 | +2.04e+04 | +5.73e+03 |
| | +1.25e+03 | +2.03e+02 | +2.23e+02 | +5.43e+02 | +2.04e+04 | +3.15e+04 |
| 71 | +1.46e+03 | +1.46e+02 | +2.05e+02 | +4.98e+02 | +1.87e+04 | +2.56e+04 |
| | +1.46e+03 | +1.46e+02 | +2.05e+02 | +4.98e+02 | +1.87e+04 | +1.22e+04 |
| 72 | +7.48e+02 | +1.09e+02 | +1.92e+02 | +4.68e+02 | +1.76e+04 | +1.47e+04 |
| | +7.48e+02 | +1.09e+02 | +1.92e+02 | +4.68e+02 | +1.76e+04 | +1.01e+04 |
| 73 | +7.67e+02 | +1.02e+02 | +1.33e+02 | +3.23e+02 | +1.21e+04 | +1.01e+04 |
| | +7.67e+02 | +1.02e+02 | +1.33e+02 | +3.23e+02 | +1.21e+04 | +1.35e+04 |
| 74 | +1.29e+03 | +1.14e+02 | +1.61e+02 | +3.90e+02 | +1.46e+04 | +1.38e+04 |
| | +1.29e+03 | +1.14e+02 | +1.61e+02 | +3.90e+02 | +1.46e+04 | +2.01e+04 |
| 75 | +6.24e+02 | +3.57e+01 | +2.23e+00 | +1.15e+01 | +2.28e+02 | +8.22e+03 |
| | +6.24e+02 | +3.57e+01 | +2.23e+00 | +1.15e+01 | +2.28e+02 | +3.09e+03 |
| 76 | +1.70e+02 | +3.34e+01 | +6.75e+01 | +1.53e+02 | +4.55e+03 | +3.43e+03 |
| | +1.70e+02 | +3.34e+01 | +6.75e+01 | +1.53e+02 | +4.55e+03 | +3.24e+03 |
| 77 | +5.75e+02 | +4.11e+01 | +3.81e+01 | +1.36e+02 | +3.24e+03 | +2.44e+03 |
| | +5.75e+02 | +4.11e+01 | +3.81e+01 | +1.36e+02 | +3.24e+03 | +7.74e+03 |
| 78 | +1.20e+03 | +1.10e+02 | +1.59e+02 | +3.86e+02 | +1.45e+04 | +2.02e+04 |
| | +1.20e+03 | +1.10e+02 | +1.59e+02 | +3.86e+02 | +1.45e+04 | +1.11e+04 |
| 79 | +5.85e+02 | +1.04e+02 | +1.33e+02 | +3.23e+02 | +1.21e+04 | +1.22e+04 |
| | +5.85e+02 | +1.04e+02 | +1.33e+02 | +3.23e+02 | +1.21e+04 | +9.80e+03 |
| 80 | +8.06e+02 | +9.94e+01 | +1.83e+02 | +4.45e+02 | +1.67e+04 | +7.47e+03 |
| | +8.06e+02 | +9.94e+01 | +1.83e+02 | +4.45e+02 | +1.67e+04 | +1.55e+04 |
| 81 | +1.52e+03 | +1.23e+02 | +2.22e+02 | +5.40e+02 | +2.03e+04 | +1.27e+04 |
| | +1.52e+03 | +1.23e+02 | +2.22e+02 | +5.40e+02 | +2.03e+04 | +2.41e+04 |
| 82 | +1.42e+03 | +2.08e+02 | +2.20e+02 | +5.35e+02 | +2.01e+04 | +3.03e+04 |
| | +1.42e+03 | +2.08e+02 | +2.20e+02 | +5.35e+02 | +2.01e+04 | +1.44e+04 |
| 83 | +8.42e+02 | +1.31e+02 | +1.92e+02 | +4.68e+02 | +1.76e+04 | +1.36e+04 |
| | +8.42e+02 | +1.31e+02 | +1.92e+02 | +4.68e+02 | +1.76e+04 | +1.69e+04 |
| 84 | +1.17e+03 | +9.72e+01 | +1.33e+02 | +3.23e+02 | +1.21e+04 | +1.51e+04 |
| | +1.17e+03 | +9.72e+01 | +1.33e+02 | +3.23e+02 | +1.21e+04 | +1.50e+04 |
| 85 | +1.37e+03 | +1.57e+02 | +1.62e+02 | +3.93e+02 | +1.48e+04 | +2.11e+04 |
| | +1.37e+03 | +1.57e+02 | +1.62e+02 | +3.93e+02 | +1.48e+04 | +1.91e+04 |
| 86 | +6.83e+02 | +4.71e+01 | +2.45e+00 | +1.26e+01 | +2.51e+02 | +9.98e+03 |
| | +6.83e+02 | +4.71e+01 | +2.45e+00 | +1.26e+01 | +2.51e+02 | +2.88e+03 |
| 87 | +1.57e+02 | +4.48e+01 | +6.71e+01 | +1.52e+02 | +4.53e+03 | +4.00e+03 |
| | +1.57e+02 | +4.48e+01 | +6.71e+01 | +1.52e+02 | +4.53e+03 | +3.67e+03 |
| 88 | +6.08e+02 | +5.19e+01 | +3.82e+01 | +1.36e+02 | +3.25e+03 | +2.44e+03 |
| | +6.08e+02 | +5.19e+01 | +3.82e+01 | +1.36e+02 | +3.25e+03 | +9.05e+03 |
| 89 | +1.25e+03 | +1.28e+02 | +1.60e+02 | +3.89e+02 | +1.46e+04 | +1.86e+04 |
| | +1.25e+03 | +1.28e+02 | +1.60e+02 | +3.89e+02 | +1.46e+04 | +1.68e+04 |
| 90 | +9.00e+02 | +9.59e+01 | +1.33e+02 | +3.22e+02 | +1.21e+04 | +1.32e+04 |
| | +9.00e+02 | +9.59e+01 | +1.33e+02 | +3.22e+02 | +1.21e+04 | +1.19e+04 |
| 91 | +7.46e+02 | +1.14e+02 | +1.84e+02 | +4.46e+02 | +1.68e+04 | +1.27e+04 |
| | +7.46e+02 | +1.14e+02 | +1.84e+02 | +4.46e+02 | +1.68e+04 | +1.43e+04 |
| 92 | +1.47e+03 | +1.72e+02 | +2.21e+02 | +5.37e+02 | +2.02e+04 | +1.24e+04 |
| | +1.47e+03 | +1.72e+02 | +2.21e+02 | +5.37e+02 | +2.02e+04 | +2.78e+04 |
| 93 | +1.66e+03 | +2.38e+02 | +8.60e+01 | +3.52e+02 | +7.85e+03 | +3.55e+04 |
| | +1.66e+03 | +2.38e+02 | +8.60e+01 | +3.52e+02 | +7.85e+03 | +7.99e+03 |
| 94 | +7.70e+02 | +2.66e+02 | +8.05e+01 | +3.30e+02 | +7.35e+03 | +1.79e+04 |
| | +7.70e+02 | +2.66e+02 | +8.05e+01 | +3.30e+02 | +7.35e+03 | +3.06e+04 |
| 95 | +1.01e+03 | +1.93e+02 | +5.78e+01 | +2.37e+02 | +5.28e+03 | +2.59e+04 |
| | +1.01e+03 | +1.93e+02 | +5.78e+01 | +2.37e+02 | +5.28e+03 | +1.08e+04 |
| 96 | +1.01e+03 | +1.60e+02 | +6.23e+01 | +2.55e+02 | +5.68e+03 | +8.41e+03 |
| | +1.01e+03 | +1.60e+02 | +6.23e+01 | +2.55e+02 | +5.68e+03 | +2.10e+04 |
| 97 | +8.19e+02 | +3.99e+02 | +1.61e+00 | +8.29e+00 | +1.65e+02 | +3.47e+04 |
| | +8.19e+02 | +3.99e+02 | +1.61e+00 | +8.29e+00 | +1.65e+02 | +4.75e+04 |
| 98 | +4.46e+02 | +9.95e+01 | +7.05e+01 | +1.60e+02 | +4.76e+03 | +1.02e+04 |
| | +4.46e+02 | +9.95e+01 | +7.05e+01 | +1.60e+02 | +4.76e+03 | +3.52e+03 |
| 99 | +2.68e+02 | +1.09e+02 | +3.86e+01 | +1.37e+02 | +3.28e+03 | +7.53e+03 |
| | +2.68e+02 | +1.09e+02 | +3.86e+01 | +1.37e+02 | +3.28e+03 | +1.14e+04 |
| 100 | +1.88e+03 | +2.10e+02 | +6.15e+01 | +2.52e+02 | +5.61e+03 | +3.30e+04 |
| | +1.88e+03 | +2.10e+02 | +6.15e+01 | +2.52e+02 | +5.61e+03 | +5.92e+03 |
| 101 | +7.28e+02 | +2.67e+02 | +5.76e+01 | +2.36e+02 | +5.26e+03 | +2.01e+04 |
| | +7.28e+02 | +2.67e+02 | +5.76e+01 | +2.36e+02 | +5.26e+03 | +3.03e+04 |
| 102 | +8.10e+02 | +2.73e+02 | +7.71e+01 | +3.16e+02 | +7.03e+03 | +3.16e+04 |
| | +8.10e+02 | +2.73e+02 | +7.71e+01 | +3.16e+02 | +7.03e+03 | +1.82e+04 |
| 103 | +1.73e+03 | +2.55e+02 | +8.42e+01 | +3.45e+02 | +7.69e+03 | +8.94e+03 |
| | +1.73e+03 | +2.55e+02 | +8.42e+01 | +3.45e+02 | +7.69e+03 | +3.76e+04 |

**FORZE / MOMENTI ELEMENTO FINITO TRAVE (λ*EX+EY)**
**Gruppo: 3 - Descrizione: DIAGONALI DI PARETE**

| Asta | Fx (I/J) | Fy (I/J) | Fz (I/J) | Mx (I/J) | My (I/J) | Mz (I/J) |
|---|---|---|---|---|---|---|
| 1 | +5.37e+03 | +8.95e-16 | +1.25e-16 | +2.23e+00 | +1.51e-14 | +1.78e-13 |
| | +5.37e+03 | +8.95e-16 | +1.25e-16 | +2.23e+00 | +2.67e-14 | +0.00e+00 |
| 2 | +5.39e+03 | +8.88e-16 | +1.24e-16 | +2.32e+00 | +1.34e-14 | +1.76e-13 |
| | +5.39e+03 | +8.88e-16 | +1.24e-16 | +2.32e+00 | +2.37e-14 | +0.00e+00 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| 3 | +5.11e+03 | +9.02e-16 | +1.24e-16 | +2.05e+00 | +1.51e-14 | +1.79e-13 |
| | +5.11e+03 | +9.02e-16 | +1.24e-16 | +2.05e+00 | +2.67e-14 | +0.00e+00 |
| 4 | +5.13e+03 | +8.88e-16 | +1.26e-16 | +2.10e+00 | +1.34e-14 | +1.75e-13 |
| | +5.13e+03 | +8.88e-16 | +1.26e-16 | +2.10e+00 | +2.37e-14 | +0.00e+00 |
| 5 | +4.80e+03 | +1.21e-15 | +2.62e-16 | +5.36e-01 | +0.00e+00 | +0.00e+00 |
| | +4.80e+03 | +1.21e-15 | +2.62e-16 | +5.36e-01 | +0.00e+00 | +0.00e+00 |
| 6 | +4.75e+03 | +1.21e-15 | +2.56e-16 | +1.08e+00 | +0.00e+00 | +0.00e+00 |
| | +4.75e+03 | +1.21e-15 | +2.56e-16 | +1.08e+00 | +0.00e+00 | +0.00e+00 |
| 7 | +4.66e+03 | +1.19e-15 | +2.56e-16 | +9.58e-01 | +0.00e+00 | +0.00e+00 |
| | +4.66e+03 | +1.19e-15 | +2.56e-16 | +9.58e-01 | +0.00e+00 | +0.00e+00 |
| 8 | +4.69e+03 | +1.19e-15 | +2.62e-16 | +5.05e-01 | +0.00e+00 | +0.00e+00 |
| | +4.69e+03 | +1.19e-15 | +2.62e-16 | +5.05e-01 | +0.00e+00 | +0.00e+00 |

**FORZE / MOMENTI ELEMENTO FINITO TRAVE DI FONDAZIONE (EX+λ*EY)**
**Gruppo: 1 - Descrizione: CORDOLI DI FONDAZIONE**

**Trave numero: 1 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +9.670e+02 | +7.340e+04 | +1.540e+05 | +2.926e-02 | +7.060e-05 | +1.846e-04 | 0.07023 |
| 35.000 | +1.120e+03 | +7.340e+04 | +1.210e+05 | +3.565e-02 | +6.513e-05 | +1.981e-04 | 0.08556 |
| 70.000 | +1.310e+03 | +7.340e+04 | +8.340e+04 | +4.251e-02 | +5.966e-05 | +2.080e-04 | 0.10203 |
| 105.000 | +1.530e+03 | +7.340e+04 | +3.930e+04 | +4.972e-02 | +5.420e-05 | +2.136e-04 | 0.11933 |
| 140.000 | +1.800e+03 | +7.340e+04 | +2.250e+04 | +5.711e-02 | +4.958e-05 | +2.143e-04 | 0.13706 |
| 175.000 | +1.800e+03 | +7.340e+04 | +8.330e+04 | +6.449e-02 | +4.569e-05 | +2.092e-04 | 0.15478 |

**Trave numero: 2 lunghezza: 180.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +3.530e+03 | +2.040e+05 | +1.070e+04 | +6.449e-02 | +4.569e-05 | +2.092e-04 | 0.15478 |
| 36.000 | +3.870e+03 | +2.040e+05 | +1.260e+05 | +7.208e-02 | +4.409e-05 | +2.028e-04 | 0.17299 |
| 72.000 | +4.260e+03 | +2.040e+05 | +2.640e+05 | +7.926e-02 | +7.173e-05 | +1.826e-04 | 0.19022 |
| 108.000 | +4.670e+03 | +2.040e+05 | +4.170e+05 | +8.551e-02 | +9.947e-05 | +1.472e-04 | 0.20522 |
| 144.000 | +5.110e+03 | +2.040e+05 | +5.850e+05 | +9.025e-02 | +1.272e-04 | +9.517e-05 | 0.21660 |
| 180.000 | +5.110e+03 | +2.040e+05 | +7.690e+05 | +9.285e-02 | +1.552e-04 | +2.528e-05 | 0.22285 |

**Trave numero: 3 lunghezza: 197.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +5.550e+03 | +2.070e+05 | +7.010e+05 | +9.285e-02 | +1.552e-04 | +2.528e-05 | 0.22285 |
| 39.400 | +6.040e+03 | +2.070e+05 | +9.200e+05 | +9.258e-02 | +1.845e-04 | +6.769e-05 | 0.22220 |
| 78.800 | +6.510e+03 | +2.070e+05 | +1.160e+06 | +8.826e-02 | +2.138e-04 | +1.856e-04 | 0.21181 |
| 118.200 | +6.920e+03 | +2.070e+05 | +1.410e+06 | +7.880e-02 | +2.432e-04 | +3.316e-04 | 0.18913 |
| 157.600 | +7.260e+03 | +2.070e+05 | +1.690e+06 | +6.310e-02 | +2.726e-04 | +5.078e-04 | 0.15144 |
| 197.000 | +7.260e+03 | +2.070e+05 | +1.970e+06 | +3.998e-02 | +3.020e-04 | +7.157e-04 | 0.09595 |

**Trave numero: 4 lunghezza: 215.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.110e+04 | +2.380e+05 | +1.930e+06 | +3.998e-02 | +3.020e-04 | +7.157e-04 | 0.09595 |
| 43.000 | +1.110e+04 | +2.380e+05 | +1.460e+06 | +4.341e-03 | +3.349e-04 | +9.259e-04 | 0.01042 |
| 86.000 | +1.130e+04 | +2.380e+05 | +9.820e+05 | +4.379e-02 | +3.678e-04 | +1.077e-03 | 0.10509 |
| 129.000 | +1.180e+04 | +2.380e+05 | +4.960e+05 | +9.250e-02 | +4.009e-04 | +1.169e-03 | 0.22199 |
| 172.000 | +1.270e+04 | +2.380e+05 | +1.590e+04 | +1.442e-01 | +4.341e-04 | +1.199e-03 | 0.34618 |
| 215.000 | +1.270e+04 | +2.380e+05 | +5.580e+05 | +1.964e-01 | +4.676e-04 | +1.163e-03 | 0.47143 |

**Trave numero: 5 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +5.900e+01 | +4.540e+04 | +3.650e+04 | +9.531e-03 | +3.831e-05 | +4.826e-05 | 0.02288 |
| 35.000 | +7.290e+01 | +4.540e+04 | +3.790e+04 | +9.765e-03 | +3.224e-05 | +4.450e-05 | 0.02344 |
| 70.000 | +1.070e+02 | +4.540e+04 | +4.040e+04 | +1.017e-02 | +2.617e-05 | +4.055e-05 | 0.02441 |
| 105.000 | +1.480e+02 | +4.540e+04 | +4.410e+04 | +1.090e-02 | +2.011e-05 | +3.629e-05 | 0.02617 |
| 140.000 | +1.950e+02 | +4.540e+04 | +4.920e+04 | +1.158e-02 | +1.404e-05 | +3.158e-05 | 0.02779 |
| 175.000 | +1.950e+02 | +4.540e+04 | +5.600e+04 | +1.221e-02 | +7.996e-06 | +2.627e-05 | 0.02931 |

**Trave numero: 6 lunghezza: 592.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +4.900e+02 | +1.130e+05 | +3.230e+04 | +1.221e-02 | +7.996e-06 | +2.627e-05 | 0.02443 |
| 118.400 | +6.720e+02 | +1.130e+05 | +8.840e+04 | +1.380e-02 | +4.725e-05 | +5.747e-06 | 0.02759 |
| 236.800 | +8.340e+02 | +1.130e+05 | +1.650e+05 | +1.239e-02 | +9.801e-05 | +3.764e-05 | 0.02477 |
| 355.200 | +8.950e+02 | +1.130e+05 | +2.600e+05 | +4.772e-03 | +1.489e-04 | +1.102e-04 | 0.00954 |
| 473.600 | +8.950e+02 | +1.130e+05 | +3.630e+05 | +1.539e-02 | +1.998e-04 | +2.163e-04 | 0.03079 |
| 592.000 | +7.210e+02 | +1.130e+05 | +4.450e+05 | +4.856e-02 | +2.507e-04 | +3.531e-04 | 0.09711 |

**Trave numero: 7 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +4.490e+02 | +2.400e+04 | +4.470e+04 | +1.589e-02 | +1.871e-05 | +4.106e-05 | 0.03814 |
| 35.000 | +4.490e+02 | +2.400e+04 | +3.260e+04 | +1.446e-02 | +1.630e-05 | +3.926e-05 | 0.03472 |
| 70.000 | +4.150e+02 | +2.400e+04 | +3.400e+04 | +1.313e-02 | +1.390e-05 | +3.661e-05 | 0.03151 |
| 105.000 | +3.860e+02 | +2.400e+04 | +3.740e+04 | +1.191e-02 | +1.150e-05 | +3.594e-05 | 0.02858 |
| 140.000 | +3.630e+02 | +2.400e+04 | +4.110e+04 | +1.082e-02 | +9.118e-06 | +3.542e-05 | 0.02598 |
| 175.000 | +3.460e+02 | +2.400e+04 | +4.310e+04 | +9.895e-03 | +6.778e-06 | +3.369e-05 | 0.02375 |

**Trave numero: 8 lunghezza: 180.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +5.290e+02 | +3.340e+04 | +8.720e+04 | +9.895e-03 | +6.778e-06 | +3.369e-05 | 0.02375 |
| 36.000 | +5.290e+02 | +3.340e+04 | +7.330e+04 | +9.229e-03 | +2.807e-06 | +3.521e-05 | 0.02215 |



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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 72.000 | +5.350e+02 | +3.340e+04 | +5.790e+04 | +8.845e-03 | +5.386e-06 | +3.493e-05 | 0.02123 |
| 108.000 | +5.560e+02 | +3.340e+04 | +4.140e+04 | +8.688e-03 | +8.626e-06 | +3.321e-05 | 0.02085 |
| 144.000 | +5.920e+02 | +3.340e+04 | +5.250e+04 | +9.485e-03 | +1.201e-05 | +3.106e-05 | 0.02276 |
| 180.000 | +5.920e+02 | +3.340e+04 | +7.150e+04 | +1.042e-02 | +1.652e-05 | +2.858e-05 | 0.02500 |

**Trave numero: 9 lunghezza: 197.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +5.340e+02 | +2.530e+04 | +4.290e+04 | +1.042e-02 | +1.652e-05 | +2.858e-05 | 0.02500 |
| 39.400 | +5.930e+02 | +2.530e+04 | +4.850e+04 | +1.151e-02 | +1.872e-05 | +2.996e-05 | 0.02761 |
| 78.800 | +6.580e+02 | +2.530e+04 | +6.750e+04 | +1.267e-02 | +2.094e-05 | +2.967e-05 | 0.03041 |
| 118.200 | +7.290e+02 | +2.530e+04 | +8.760e+04 | +1.381e-02 | +2.326e-05 | +2.697e-05 | 0.03315 |
| 157.600 | +8.050e+02 | +2.530e+04 | +1.090e+05 | +1.481e-02 | +2.560e-05 | +3.256e-05 | 0.03554 |
| 197.000 | +8.050e+02 | +2.530e+04 | +1.310e+05 | +1.554e-02 | +2.799e-05 | +4.456e-05 | 0.03729 |

**Trave numero: 10 lunghezza: 215.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +7.990e+02 | +4.440e+04 | +9.020e+04 | +1.554e-02 | +2.799e-05 | +4.456e-05 | 0.03729 |
| 43.000 | +8.860e+02 | +4.440e+04 | +1.140e+05 | +1.596e-02 | +3.161e-05 | +5.557e-05 | 0.03831 |
| 86.000 | +9.730e+02 | +4.440e+04 | +1.390e+05 | +1.595e-02 | +3.832e-05 | +6.898e-05 | 0.03828 |
| 129.000 | +1.060e+03 | +4.440e+04 | +1.700e+05 | +1.530e-02 | +4.540e-05 | +8.452e-05 | 0.03671 |
| 172.000 | +1.130e+03 | +4.440e+04 | +2.130e+05 | +1.483e-02 | +5.255e-05 | +1.019e-04 | 0.03559 |
| 215.000 | +1.130e+03 | +4.440e+04 | +2.610e+05 | +1.952e-02 | +5.974e-05 | +1.208e-04 | 0.04686 |

**Trave numero: 11 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +6.360e+02 | +1.360e+04 | +5.650e+04 | +1.527e-02 | +5.172e-05 | +4.990e-05 | 0.03666 |
| 35.000 | +6.360e+02 | +1.360e+04 | +3.430e+04 | +1.344e-02 | +5.070e-05 | +5.370e-05 | 0.03226 |
| 70.000 | +6.010e+02 | +1.360e+04 | +2.540e+04 | +1.149e-02 | +4.968e-05 | +5.664e-05 | 0.02759 |
| 105.000 | +5.700e+02 | +1.360e+04 | +1.970e+04 | +9.463e-03 | +4.866e-05 | +5.891e-05 | 0.02271 |
| 140.000 | +5.410e+02 | +1.360e+04 | +2.570e+04 | +7.370e-03 | +4.764e-05 | +6.069e-05 | 0.01769 |
| 175.000 | +5.160e+02 | +1.360e+04 | +4.380e+04 | +5.248e-03 | +4.663e-05 | +6.209e-05 | 0.01259 |

**Trave numero: 12 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +7.980e+02 | +1.660e+04 | +8.530e+04 | +1.422e-02 | +4.931e-05 | +3.133e-05 | 0.03412 |
| 35.000 | +7.980e+02 | +1.660e+04 | +5.750e+04 | +1.324e-02 | +4.807e-05 | +3.847e-05 | 0.03178 |
| 70.000 | +7.550e+02 | +1.660e+04 | +3.150e+04 | +1.226e-02 | +4.692e-05 | +4.290e-05 | 0.02942 |
| 105.000 | +7.190e+02 | +1.660e+04 | +2.610e+04 | +1.132e-02 | +4.576e-05 | +4.475e-05 | 0.02718 |
| 140.000 | +6.900e+02 | +1.660e+04 | +3.440e+04 | +1.048e-02 | +4.461e-05 | +4.413e-05 | 0.02514 |
| 175.000 | +6.690e+02 | +1.660e+04 | +4.320e+04 | +9.757e-03 | +4.346e-05 | +4.114e-05 | 0.02342 |

**Trave numero: 13 lunghezza: 180.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +5.130e+02 | +4.310e+04 | +7.410e+04 | +9.757e-03 | +4.346e-05 | +4.114e-05 | 0.02342 |
| 36.000 | +5.130e+02 | +4.310e+04 | +6.160e+04 | +9.285e-03 | +4.679e-05 | +4.215e-05 | 0.02228 |
| 72.000 | +5.130e+02 | +4.310e+04 | +4.760e+04 | +9.058e-03 | +5.015e-05 | +4.136e-05 | 0.02174 |
| 108.000 | +5.300e+02 | +4.310e+04 | +3.720e+04 | +9.015e-03 | +5.353e-05 | +3.880e-05 | 0.02164 |
| 144.000 | +5.600e+02 | +4.310e+04 | +5.500e+04 | +9.509e-03 | +5.694e-05 | +3.492e-05 | 0.02282 |
| 180.000 | +5.600e+02 | +4.310e+04 | +7.360e+04 | +1.046e-02 | +6.187e-05 | +3.056e-05 | 0.02511 |

**Trave numero: 14 lunghezza: 197.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +5.010e+02 | +2.890e+04 | +3.770e+04 | +1.046e-02 | +6.187e-05 | +3.056e-05 | 0.02511 |
| 39.400 | +5.610e+02 | +2.890e+04 | +4.910e+04 | +1.155e-02 | +6.589e-05 | +3.034e-05 | 0.02772 |
| 78.800 | +6.260e+02 | +2.890e+04 | +6.760e+04 | +1.268e-02 | +6.990e-05 | +2.912e-05 | 0.03044 |
| 118.200 | +6.970e+02 | +2.890e+04 | +8.750e+04 | +1.378e-02 | +7.393e-05 | +2.583e-05 | 0.03306 |
| 157.600 | +7.730e+02 | +2.890e+04 | +1.090e+05 | +1.471e-02 | +7.796e-05 | +2.555e-05 | 0.03531 |
| 197.000 | +7.730e+02 | +2.890e+04 | +1.310e+05 | +1.537e-02 | +8.199e-05 | +3.748e-05 | 0.03689 |

**Trave numero: 15 lunghezza: 215.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +7.710e+02 | +3.030e+04 | +8.950e+04 | +1.537e-02 | +8.199e-05 | +3.748e-05 | 0.03689 |
| 43.000 | +8.570e+02 | +3.030e+04 | +1.130e+05 | +1.572e-02 | +8.347e-05 | +4.829e-05 | 0.03773 |
| 86.000 | +9.430e+02 | +3.030e+04 | +1.380e+05 | +1.563e-02 | +8.495e-05 | +6.176e-05 | 0.03751 |
| 129.000 | +1.020e+03 | +3.030e+04 | +1.680e+05 | +1.491e-02 | +8.644e-05 | +7.758e-05 | 0.03578 |
| 172.000 | +1.100e+03 | +3.030e+04 | +2.080e+05 | +1.336e-02 | +8.793e-05 | +9.557e-05 | 0.03206 |
| 215.000 | +1.100e+03 | +3.030e+04 | +2.550e+05 | +1.555e-02 | +8.942e-05 | +1.155e-04 | 0.03731 |

**Trave numero: 16 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.580e+02 | +5.000e+04 | +3.450e+04 | +1.317e-02 | +4.819e-05 | +6.590e-05 | 0.03161 |
| 35.000 | +2.600e+02 | +5.000e+04 | +3.350e+04 | +1.328e-02 | +4.151e-05 | +6.299e-05 | 0.03186 |
| 70.000 | +2.720e+02 | +5.000e+04 | +4.230e+04 | +1.331e-02 | +3.484e-05 | +5.918e-05 | 0.03196 |
| 105.000 | +2.930e+02 | +5.000e+04 | +5.170e+04 | +1.331e-02 | +2.817e-05 | +5.444e-05 | 0.03194 |
| 140.000 | +3.230e+02 | +5.000e+04 | +6.190e+04 | +1.327e-02 | +2.153e-05 | +4.871e-05 | 0.03184 |
| 175.000 | +3.230e+02 | +5.000e+04 | +7.320e+04 | +1.357e-02 | +1.498e-05 | +4.190e-05 | 0.03257 |

**Trave numero: 17 lunghezza: 592.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +4.810e+02 | +1.170e+05 | +4.830e+04 | +1.357e-02 | +1.498e-05 | +4.190e-05 | 0.02714 |
| 118.400 | +6.670e+02 | +1.170e+05 | +1.050e+05 | +1.544e-02 | +5.540e-05 | +1.599e-05 | 0.03087 |
| 236.800 | +8.590e+02 | +1.170e+05 | +1.800e+05 | +1.496e-02 | +1.073e-04 | +3.856e-05 | 0.02993 |



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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 355.200 | +9.680e+02 | +1.170e+05 | +2.730e+05 | +8.704e-03 | +1.597e-04 | +1.103e-04 | 0.01741 |
| 473.600 | +9.680e+02 | +1.170e+05 | +3.730e+05 | +1.802e-02 | +2.123e-04 | +2.200e-04 | 0.03604 |
| 592.000 | +8.620e+02 | +1.170e+05 | +4.650e+05 | +5.010e-02 | +2.649e-04 | +3.593e-04 | 0.10019 |

**Trave numero: 18 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +8.840e+02 | +7.560e+04 | +1.550e+05 | +2.580e-02 | +5.570e-05 | +2.022e-04 | 0.06192 |
| 35.000 | +1.020e+03 | +7.560e+04 | +1.260e+05 | +3.251e-02 | +5.029e-05 | +2.153e-04 | 0.07803 |
| 70.000 | +1.190e+03 | +7.560e+04 | +9.180e+04 | +3.985e-02 | +4.489e-05 | +2.252e-04 | 0.09563 |
| 105.000 | +1.410e+03 | +7.560e+04 | +5.180e+04 | +4.756e-02 | +3.950e-05 | +2.315e-04 | 0.11415 |
| 140.000 | +1.670e+03 | +7.560e+04 | +1.100e+04 | +5.552e-02 | +3.427e-05 | +2.333e-04 | 0.13324 |
| 175.000 | +1.670e+03 | +7.560e+04 | +6.690e+04 | +6.353e-02 | +3.070e-05 | +2.297e-04 | 0.15248 |

**Trave numero: 19 lunghezza: 180.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +3.700e+03 | +2.050e+05 | +2.600e+04 | +6.353e-02 | +3.070e-05 | +2.297e-04 | 0.15248 |
| 36.000 | +4.050e+03 | +2.050e+05 | +1.220e+05 | +7.186e-02 | +4.369e-05 | +2.242e-04 | 0.17247 |
| 72.000 | +4.430e+03 | +2.050e+05 | +2.650e+05 | +7.982e-02 | +7.151e-05 | +2.043e-04 | 0.19157 |
| 108.000 | +4.860e+03 | +2.050e+05 | +4.240e+05 | +8.686e-02 | +9.948e-05 | +1.686e-04 | 0.20846 |
| 144.000 | +5.300e+03 | +2.050e+05 | +5.980e+05 | +9.237e-02 | +1.276e-04 | +1.156e-04 | 0.22170 |
| 180.000 | +5.300e+03 | +2.050e+05 | +7.880e+05 | +9.571e-02 | +1.557e-04 | +4.371e-05 | 0.22970 |

**Trave numero: 20 lunghezza: 197.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +5.660e+03 | +2.090e+05 | +7.410e+05 | +9.571e-02 | +1.557e-04 | +4.371e-05 | 0.22970 |
| 39.400 | +6.170e+03 | +2.090e+05 | +9.630e+05 | +9.611e-02 | +1.850e-04 | +5.339e-05 | 0.23065 |
| 78.800 | +6.660e+03 | +2.090e+05 | +1.210e+06 | +9.225e-02 | +2.144e-04 | +1.766e-04 | 0.22140 |
| 118.200 | +7.100e+03 | +2.090e+05 | +1.470e+06 | +8.305e-02 | +2.438e-04 | +3.285e-04 | 0.19933 |
| 157.600 | +7.460e+03 | +2.090e+05 | +1.750e+06 | +6.736e-02 | +2.733e-04 | +5.113e-04 | 0.16167 |
| 197.000 | +7.460e+03 | +2.090e+05 | +2.040e+06 | +4.397e-02 | +3.028e-04 | +7.266e-04 | 0.10553 |

**Trave numero: 21 lunghezza: 215.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.160e+04 | +2.410e+05 | +2.010e+06 | +4.397e-02 | +3.028e-04 | +7.266e-04 | 0.10553 |
| 43.000 | +1.160e+04 | +2.410e+05 | +1.510e+06 | +7.379e-03 | +3.358e-04 | +9.450e-04 | 0.01771 |
| 86.000 | +1.180e+04 | +2.410e+05 | +1.020e+06 | +4.155e-02 | +3.690e-04 | +1.102e-03 | 0.09971 |
| 129.000 | +1.230e+04 | +2.410e+05 | +5.120e+05 | +9.144e-02 | +4.026e-04 | +1.197e-03 | 0.21945 |
| 172.000 | +1.310e+04 | +2.410e+05 | +2.080e+04 | +1.444e-01 | +4.365e-04 | +1.227e-03 | 0.34658 |
| 215.000 | +1.310e+04 | +2.410e+05 | +5.810e+05 | +1.979e-01 | +4.728e-04 | +1.190e-03 | 0.47484 |

**Trave numero: 22 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +7.240e+02 | +1.030e+05 | +9.770e+04 | +2.926e-02 | +7.060e-05 | +1.846e-04 | 0.07023 |
| 73.000 | +7.240e+02 | +1.030e+05 | +4.610e+04 | +2.389e-02 | +7.287e-05 | +1.571e-04 | 0.05734 |
| 146.000 | +5.210e+02 | +1.030e+05 | +5.620e+04 | +1.867e-02 | +6.718e-05 | +1.298e-04 | 0.04481 |
| 219.000 | +3.680e+02 | +1.030e+05 | +7.000e+04 | +1.417e-02 | +5.709e-05 | +1.025e-04 | 0.03402 |
| 292.000 | +2.570e+02 | +1.030e+05 | +7.700e+04 | +1.084e-02 | +4.789e-05 | +7.535e-05 | 0.02602 |
| 365.000 | +1.830e+02 | +1.030e+05 | +7.900e+04 | +9.531e-03 | +3.831e-05 | +4.826e-05 | 0.02288 |

**Trave numero: 23 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.100e+02 | +3.400e+04 | +8.240e+04 | +9.531e-03 | +3.831e-05 | +4.826e-05 | 0.02288 |
| 73.000 | +2.820e+02 | +3.400e+04 | +6.850e+04 | +9.418e-03 | +4.100e-05 | +4.439e-05 | 0.02260 |
| 146.000 | +3.800e+02 | +3.400e+04 | +4.810e+04 | +1.039e-02 | +4.062e-05 | +4.054e-05 | 0.02493 |
| 219.000 | +4.940e+02 | +3.400e+04 | +2.600e+04 | +1.210e-02 | +3.715e-05 | +3.673e-05 | 0.02903 |
| 292.000 | +6.260e+02 | +3.400e+04 | +4.260e+04 | +1.412e-02 | +3.012e-05 | +3.301e-05 | 0.03388 |
| 365.000 | +6.260e+02 | +3.400e+04 | +6.580e+04 | +1.589e-02 | +1.871e-05 | +4.106e-05 | 0.03814 |

**Trave numero: 24 lunghezza: 205.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +9.390e+02 | +1.990e+04 | +2.340e+04 | +1.589e-02 | +1.871e-05 | +4.106e-05 | 0.03814 |
| 41.000 | +1.030e+03 | +1.990e+04 | +5.370e+04 | +1.666e-02 | +1.444e-05 | +4.281e-05 | 0.03998 |
| 82.000 | +1.120e+03 | +1.990e+04 | +9.140e+04 | +1.719e-02 | +6.176e-06 | +4.456e-05 | 0.04127 |
| 123.000 | +1.210e+03 | +1.990e+04 | +1.370e+05 | +1.729e-02 | +7.406e-06 | +4.633e-05 | 0.04150 |
| 164.000 | +1.290e+03 | +1.990e+04 | +1.860e+05 | +1.673e-02 | +2.653e-05 | +4.811e-05 | 0.04016 |
| 205.000 | +1.290e+03 | +1.990e+04 | +2.400e+05 | +1.527e-02 | +5.172e-05 | +4.990e-05 | 0.03666 |

**Trave numero: 25 lunghezza: 305.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.560e+03 | +6.940e+04 | +2.260e+05 | +1.527e-02 | +5.172e-05 | +4.990e-05 | 0.03666 |
| 61.000 | +1.560e+03 | +6.940e+04 | +1.300e+05 | +1.086e-02 | +8.305e-05 | +3.376e-05 | 0.02607 |
| 122.000 | +1.480e+03 | +6.940e+04 | +4.110e+04 | +5.080e-03 | +9.805e-05 | +1.769e-05 | 0.01219 |
| 183.000 | +1.450e+03 | +6.940e+04 | +4.770e+04 | +5.288e-03 | +9.739e-05 | +1.010e-05 | 0.01269 |
| 244.000 | +1.500e+03 | +6.940e+04 | +1.360e+05 | +1.033e-02 | +8.125e-05 | +1.816e-05 | 0.02480 |
| 305.000 | +1.500e+03 | +6.940e+04 | +2.270e+05 | +1.422e-02 | +4.931e-05 | +3.133e-05 | 0.03412 |

**Trave numero: 26 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.020e+03 | +2.640e+04 | +2.390e+05 | +1.422e-02 | +4.931e-05 | +3.133e-05 | 0.03412 |
| 73.000 | +1.020e+03 | +2.640e+04 | +1.710e+05 | +1.607e-02 | +1.209e-05 | +3.812e-05 | 0.03857 |
| 146.000 | +8.740e+02 | +2.640e+04 | +1.110e+05 | +1.599e-02 | +2.361e-05 | +4.502e-05 | 0.03838 |
| 219.000 | +7.260e+02 | +2.640e+04 | +5.980e+04 | +1.496e-02 | +4.160e-05 | +5.196e-05 | 0.03591 |



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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 292.000 | +6.210e+02 | +2.640e+04 | +3.430e+04 | +1.380e-02 | +4.944e-05 | +5.893e-05 | 0.03312 |
| 365.000 | +5.680e+02 | +2.640e+04 | +6.740e+04 | +1.317e-02 | +4.819e-05 | +6.590e-05 | 0.03161 |

**Trave numero: 27 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +3.000e+02 | +1.080e+05 | +6.820e+04 | +1.317e-02 | +4.819e-05 | +6.590e-05 | 0.03161 |
| 73.000 | +3.210e+02 | +1.080e+05 | +6.630e+04 | +1.350e-02 | +5.723e-05 | +9.298e-05 | 0.03240 |
| 146.000 | +3.860e+02 | +1.080e+05 | +6.330e+04 | +1.482e-02 | +6.160e-05 | +1.201e-04 | 0.03557 |
| 219.000 | +4.960e+02 | +1.080e+05 | +5.240e+04 | +1.727e-02 | +6.115e-05 | +1.474e-04 | 0.04146 |
| 292.000 | +6.600e+02 | +1.080e+05 | +5.590e+04 | +2.146e-02 | +6.029e-05 | +1.747e-04 | 0.05152 |
| 365.000 | +6.600e+02 | +1.080e+05 | +1.030e+05 | +2.580e-02 | +5.570e-05 | +2.022e-04 | 0.06192 |

**Trave numero: 28 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.360e+03 | +2.730e+04 | +1.520e+05 | +6.449e-02 | +4.569e-05 | +2.092e-04 | 0.15478 |
| 73.000 | +1.360e+03 | +2.730e+04 | +5.400e+04 | +5.497e-02 | +1.902e-04 | +1.720e-04 | 0.13192 |
| 146.000 | +8.150e+02 | +2.730e+04 | +1.540e+04 | +3.949e-02 | +2.141e-04 | +1.350e-04 | 0.09478 |
| 219.000 | +4.250e+02 | +2.730e+04 | +4.200e+04 | +2.510e-02 | +1.691e-04 | +9.862e-05 | 0.06025 |
| 292.000 | +1.790e+02 | +2.730e+04 | +5.150e+04 | +1.553e-02 | +9.325e-05 | +6.236e-05 | 0.03727 |
| 365.000 | +6.070e+01 | +2.730e+04 | +5.170e+04 | +1.221e-02 | +7.996e-06 | +2.627e-05 | 0.02931 |

**Trave numero: 29 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.420e+02 | +3.820e+03 | +2.860e+04 | +1.221e-02 | +7.996e-06 | +2.627e-05 | 0.02931 |
| 73.000 | +2.420e+02 | +3.820e+03 | +1.140e+04 | +1.088e-02 | +4.169e-05 | +2.772e-05 | 0.02611 |
| 146.000 | +1.470e+02 | +3.820e+03 | +6.700e+03 | +9.043e-03 | +5.186e-05 | +2.919e-05 | 0.02170 |
| 219.000 | +9.340e+01 | +3.820e+03 | +7.330e+03 | +8.628e-03 | +4.726e-05 | +3.067e-05 | 0.02071 |
| 292.000 | +1.740e+02 | +3.820e+03 | +1.180e+04 | +9.249e-03 | +3.217e-05 | +3.217e-05 | 0.02220 |
| 365.000 | +1.740e+02 | +3.820e+03 | +1.850e+04 | +9.895e-03 | +6.778e-06 | +3.369e-05 | 0.02375 |

**Trave numero: 30 lunghezza: 205.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.310e+02 | +1.000e+04 | +1.830e+04 | +9.895e-03 | +6.778e-06 | +3.369e-05 | 0.02375 |
| 41.000 | +2.490e+02 | +1.000e+04 | +1.070e+04 | +9.686e-03 | +1.927e-05 | +3.261e-05 | 0.02325 |
| 82.000 | +2.740e+02 | +1.000e+04 | +8.370e+03 | +9.073e-03 | +2.416e-05 | +3.987e-05 | 0.02177 |
| 123.000 | +3.040e+02 | +1.000e+04 | +1.320e+04 | +8.137e-03 | +2.719e-05 | +4.723e-05 | 0.01953 |
| 164.000 | +3.350e+02 | +1.000e+04 | +2.570e+04 | +6.885e-03 | +3.561e-05 | +5.464e-05 | 0.01652 |
| 205.000 | +3.350e+02 | +1.000e+04 | +3.940e+04 | +5.248e-03 | +4.663e-05 | +6.209e-05 | 0.01259 |

**Trave numero: 31 lunghezza: 305.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +7.510e+01 | +1.790e+04 | +1.250e+04 | +5.248e-03 | +4.663e-05 | +6.209e-05 | 0.01259 |
| 61.000 | +8.740e+01 | +1.790e+04 | +8.780e+03 | +2.916e-03 | +4.507e-05 | +4.153e-05 | 0.00700 |
| 122.000 | +9.850e+01 | +1.790e+04 | +4.470e+03 | +1.356e-03 | +5.117e-05 | +2.111e-05 | 0.00326 |
| 183.000 | +1.090e+02 | +1.790e+04 | +3.500e+03 | +3.610e-03 | +5.378e-05 | +7.132e-06 | 0.00866 |
| 244.000 | +1.320e+02 | +1.790e+04 | +1.020e+04 | +6.865e-03 | +5.166e-05 | +2.067e-05 | 0.01648 |
| 305.000 | +1.320e+02 | +1.790e+04 | +1.750e+04 | +9.757e-03 | +4.346e-05 | +4.114e-05 | 0.02342 |

**Trave numero: 32 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.590e+02 | +2.200e+03 | +4.010e+04 | +9.757e-03 | +4.346e-05 | +4.114e-05 | 0.02342 |
| 73.000 | +2.590e+02 | +2.200e+03 | +2.450e+04 | +1.133e-02 | +1.713e-05 | +4.127e-05 | 0.02719 |
| 146.000 | +1.700e+02 | +2.200e+03 | +1.220e+04 | +1.168e-02 | +4.254e-05 | +4.141e-05 | 0.02804 |
| 219.000 | +1.640e+02 | +2.200e+03 | +3.990e+03 | +1.212e-02 | +5.389e-05 | +4.156e-05 | 0.02908 |
| 292.000 | +2.500e+02 | +2.200e+03 | +1.060e+04 | +1.290e-02 | +4.611e-05 | +4.173e-05 | 0.03096 |
| 365.000 | +2.500e+02 | +2.200e+03 | +2.670e+04 | +1.357e-02 | +1.498e-05 | +4.190e-05 | 0.03257 |

**Trave numero: 33 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +8.020e+01 | +2.890e+04 | +5.550e+04 | +1.357e-02 | +1.498e-05 | +4.190e-05 | 0.03257 |
| 73.000 | +2.040e+02 | +2.890e+04 | +5.230e+04 | +1.623e-02 | +1.031e-04 | +7.897e-05 | 0.03896 |
| 146.000 | +4.340e+02 | +2.890e+04 | +4.200e+04 | +2.520e-02 | +1.747e-04 | +1.162e-04 | 0.06048 |
| 219.000 | +8.170e+02 | +2.890e+04 | +1.420e+04 | +3.934e-02 | +2.129e-04 | +1.536e-04 | 0.09442 |
| 292.000 | +1.370e+03 | +2.890e+04 | +5.590e+04 | +5.460e-02 | +1.830e-04 | +1.911e-04 | 0.13105 |
| 365.000 | +1.370e+03 | +2.890e+04 | +1.530e+05 | +6.353e-02 | +3.070e-05 | +2.297e-04 | 0.15248 |

**Trave numero: 34 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +4.270e+03 | +5.830e+05 | +2.960e+05 | +1.964e-01 | +4.676e-04 | +1.163e-03 | 0.47143 |
| 73.000 | +4.270e+03 | +5.830e+05 | +7.960e+04 | +1.607e-01 | +4.864e-04 | +1.001e-03 | 0.38566 |
| 146.000 | +2.690e+03 | +5.830e+05 | +2.600e+05 | +1.256e-01 | +4.572e-04 | +8.382e-04 | 0.30137 |
| 219.000 | +1.460e+03 | +5.830e+05 | +3.580e+05 | +9.405e-02 | +3.983e-04 | +6.759e-04 | 0.22572 |
| 292.000 | +5.470e+02 | +5.830e+05 | +3.890e+05 | +6.804e-02 | +3.255e-04 | +5.140e-04 | 0.16330 |
| 365.000 | +2.580e+02 | +5.830e+05 | +3.720e+05 | +4.856e-02 | +2.507e-04 | +3.531e-04 | 0.11653 |

**Trave numero: 35 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.150e+02 | +1.840e+05 | +2.560e+05 | +4.856e-02 | +2.507e-04 | +3.531e-04 | 0.11653 |
| 73.000 | +5.000e+02 | +1.840e+05 | +2.510e+05 | +3.414e-02 | +2.094e-04 | +3.051e-04 | 0.08194 |
| 146.000 | +7.430e+02 | +1.840e+05 | +2.210e+05 | +2.514e-02 | +1.677e-04 | +2.576e-04 | 0.06033 |
| 219.000 | +9.490e+02 | +1.840e+05 | +1.830e+05 | +2.153e-02 | +1.283e-04 | +2.103e-04 | 0.05168 |
| 292.000 | +1.140e+03 | +1.840e+05 | +1.620e+05 | +2.002e-02 | +9.236e-05 | +1.635e-04 | 0.04805 |



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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 365.000 | +1.140e+03 | +1.840e+05 | +1.480e+05 | +1.952e-02 | +5.974e-05 | +1.208e-04 | 0.04686 |

**Trave numero: 36 lunghezza: 205.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.000e+03 | +4.220e+04 | +7.620e+04 | +1.952e-02 | +5.974e-05 | +1.208e-04 | 0.04686 |
| 41.000 | +1.100e+03 | +4.220e+04 | +1.110e+05 | +1.929e-02 | +4.875e-05 | +1.212e-04 | 0.04631 |
| 82.000 | +1.200e+03 | +4.220e+04 | +1.500e+05 | +1.897e-02 | +3.334e-05 | +1.216e-04 | 0.04553 |
| 123.000 | +1.290e+03 | +4.220e+04 | +1.930e+05 | +1.834e-02 | +2.456e-05 | +1.219e-04 | 0.04401 |
| 164.000 | +1.380e+03 | +4.220e+04 | +2.400e+05 | +1.714e-02 | +4.122e-05 | +1.223e-04 | 0.04115 |
| 205.000 | +1.380e+03 | +4.220e+04 | +2.900e+05 | +1.540e-02 | +6.452e-05 | +1.230e-04 | 0.03696 |

**Trave numero: 37 lunghezza: 305.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.710e+03 | +3.700e+04 | +2.690e+05 | +1.540e-02 | +6.452e-05 | +1.230e-04 | 0.03696 |
| 61.000 | +1.710e+03 | +3.700e+04 | +1.780e+05 | +1.120e-02 | +9.168e-05 | +1.147e-04 | 0.02688 |
| 122.000 | +1.630e+03 | +3.700e+04 | +9.260e+04 | +5.109e-03 | +1.073e-04 | +1.141e-04 | 0.01226 |
| 183.000 | +1.620e+03 | +3.700e+04 | +9.660e+04 | +2.462e-03 | +1.162e-04 | +1.144e-04 | 0.00591 |
| 244.000 | +1.680e+03 | +3.700e+04 | +1.950e+05 | +9.180e-03 | +1.103e-04 | +1.150e-04 | 0.02203 |
| 305.000 | +1.680e+03 | +3.700e+04 | +2.970e+05 | +1.555e-02 | +8.942e-05 | +1.155e-04 | 0.03731 |

**Trave numero: 38 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.550e+03 | +1.840e+05 | +3.350e+05 | +1.555e-02 | +8.942e-05 | +1.155e-04 | 0.03731 |
| 73.000 | +1.550e+03 | +1.840e+05 | +3.050e+05 | +2.078e-02 | +6.879e-05 | +1.612e-04 | 0.04987 |
| 146.000 | +1.360e+03 | +1.840e+05 | +2.840e+05 | +2.515e-02 | +1.077e-04 | +2.103e-04 | 0.06036 |
| 219.000 | +1.120e+03 | +1.840e+05 | +2.640e+05 | +3.019e-02 | +1.651e-04 | +2.599e-04 | 0.07245 |
| 292.000 | +8.300e+02 | +1.840e+05 | +2.430e+05 | +3.716e-02 | +2.182e-04 | +3.095e-04 | 0.08919 |
| 365.000 | +5.560e+02 | +1.840e+05 | +2.450e+05 | +5.010e-02 | +2.649e-04 | +3.593e-04 | 0.12023 |

**Trave numero: 39 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +4.010e+02 | +6.030e+05 | +3.740e+05 | +5.010e-02 | +2.649e-04 | +3.593e-04 | 0.12023 |
| 73.000 | +6.390e+02 | +6.030e+05 | +3.870e+05 | +6.929e-02 | +3.424e-04 | +5.221e-04 | 0.16629 |
| 146.000 | +1.520e+03 | +6.030e+05 | +3.570e+05 | +9.468e-02 | +4.154e-04 | +6.879e-04 | 0.22722 |
| 219.000 | +2.730e+03 | +6.030e+05 | +2.600e+05 | +1.258e-01 | +4.727e-04 | +8.550e-04 | 0.30192 |
| 292.000 | +4.300e+03 | +6.030e+05 | +8.350e+04 | +1.613e-01 | +4.987e-04 | +1.023e-03 | 0.38724 |
| 365.000 | +4.300e+03 | +6.030e+05 | +3.020e+05 | +1.979e-01 | +4.728e-04 | +1.190e-03 | 0.47484 |

**Pressione massima nel gruppo: 0.475 Trave numero: 21 Distanza: 215.000**

**FORZE / MOMENTI ELEMENTO FINITO TRAVE DI FONDAZIONE (λ*EX+EY)**
**Gruppo: 1 - Descrizione: CORDOLI DI FONDAZIONE**

**Trave numero: 1 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +4.550e+02 | +7.150e+04 | +6.710e+04 | +2.004e-02 | +7.846e-05 | +8.605e-05 | 0.04810 |
| 35.000 | +4.910e+02 | +7.150e+04 | +5.550e+04 | +2.186e-02 | +8.336e-05 | +9.104e-05 | 0.05246 |
| 70.000 | +5.660e+02 | +7.150e+04 | +4.210e+04 | +2.399e-02 | +8.828e-05 | +9.449e-05 | 0.05758 |
| 105.000 | +6.660e+02 | +7.150e+04 | +2.740e+04 | +2.641e-02 | +9.319e-05 | +9.620e-05 | 0.06337 |
| 140.000 | +7.880e+02 | +7.150e+04 | +2.280e+04 | +2.903e-02 | +9.837e-05 | +9.587e-05 | 0.06966 |
| 175.000 | +7.880e+02 | +7.150e+04 | +4.300e+04 | +3.176e-02 | +1.038e-04 | +9.315e-05 | 0.07622 |

**Trave numero: 2 lunghezza: 180.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.520e+03 | +9.790e+04 | +1.730e+04 | +3.176e-02 | +1.038e-04 | +9.315e-05 | 0.07622 |
| 36.000 | +1.670e+03 | +9.790e+04 | +6.140e+04 | +3.466e-02 | +1.075e-04 | +8.991e-05 | 0.08319 |
| 72.000 | +1.830e+03 | +9.790e+04 | +1.180e+05 | +3.748e-02 | +1.199e-04 | +8.081e-05 | 0.08995 |
| 108.000 | +2.010e+03 | +9.790e+04 | +1.820e+05 | +3.998e-02 | +1.324e-04 | +6.529e-05 | 0.09595 |
| 144.000 | +2.200e+03 | +9.790e+04 | +2.540e+05 | +4.190e-02 | +1.449e-04 | +4.278e-05 | 0.10056 |
| 180.000 | +2.200e+03 | +9.790e+04 | +3.320e+05 | +4.296e-02 | +1.580e-04 | +1.361e-05 | 0.10311 |

**Trave numero: 3 lunghezza: 197.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.330e+03 | +9.000e+04 | +3.030e+05 | +4.296e-02 | +1.580e-04 | +1.361e-05 | 0.10311 |
| 39.400 | +2.540e+03 | +9.000e+04 | +3.950e+05 | +4.283e-02 | +1.656e-04 | +2.884e-05 | 0.10280 |
| 78.800 | +2.750e+03 | +9.000e+04 | +4.940e+05 | +4.104e-02 | +1.733e-04 | +7.882e-05 | 0.09849 |
| 118.200 | +2.930e+03 | +9.000e+04 | +6.020e+05 | +3.714e-02 | +1.810e-04 | +1.410e-04 | 0.08915 |
| 157.600 | +3.080e+03 | +9.000e+04 | +7.170e+05 | +3.074e-02 | +1.888e-04 | +2.160e-04 | 0.07378 |
| 197.000 | +3.080e+03 | +9.000e+04 | +8.380e+05 | +2.151e-02 | +1.967e-04 | +3.043e-04 | 0.05161 |

**Trave numero: 4 lunghezza: 215.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +4.760e+03 | +1.400e+05 | +8.210e+05 | +2.151e-02 | +1.967e-04 | +3.043e-04 | 0.05161 |
| 43.000 | +4.760e+03 | +1.400e+05 | +6.170e+05 | +8.624e-03 | +1.988e-04 | +3.935e-04 | 0.02070 |
| 86.000 | +4.830e+03 | +1.400e+05 | +4.130e+05 | +2.210e-02 | +2.012e-04 | +4.573e-04 | 0.05304 |
| 129.000 | +5.030e+03 | +1.400e+05 | +2.070e+05 | +4.009e-02 | +2.040e-04 | +4.957e-04 | 0.09622 |
| 172.000 | +5.360e+03 | +1.400e+05 | +1.980e+04 | +6.038e-02 | +2.074e-04 | +5.079e-04 | 0.14492 |
| 215.000 | +5.360e+03 | +1.400e+05 | +2.430e+05 | +8.218e-02 | +2.114e-04 | +4.923e-04 | 0.19723 |

**Trave numero: 5 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.670e+02 | +3.870e+04 | +2.870e+04 | +9.555e-03 | +3.607e-05 | +4.817e-05 | 0.02293 |
| 35.000 | +1.670e+02 | +3.870e+04 | +3.400e+04 | +8.550e-03 | +3.090e-05 | +4.501e-05 | 0.02052 |
| 70.000 | +1.480e+02 | +3.870e+04 | +3.890e+04 | +7.674e-03 | +2.573e-05 | +4.133e-05 | 0.01842 |



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|---|---|---|---|---|---|---|---|
| 105.000 | +1.380e+02 | +3.870e+04 | +4.360e+04 | +6.987e-03 | +2.056e-05 | +3.716e-05 | 0.01677 |
| 140.000 | +1.370e+02 | +3.870e+04 | +4.830e+04 | +6.470e-03 | +1.540e-05 | +3.253e-05 | 0.01553 |
| 175.000 | +1.370e+02 | +3.870e+04 | +5.300e+04 | +6.221e-03 | +1.030e-05 | +2.742e-05 | 0.01493 |

**Trave numero: 6 lunghezza: 592.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.910e+02 | +5.700e+04 | +4.850e+04 | +6.221e-03 | +1.030e-05 | +2.742e-05 | 0.01244 |
| 118.400 | +2.700e+02 | +5.700e+04 | +6.450e+04 | +6.332e-03 | +2.984e-05 | +8.255e-06 | 0.01266 |
| 236.800 | +3.460e+02 | +5.700e+04 | +8.720e+04 | +6.041e-03 | +5.505e-05 | +1.780e-05 | 0.01208 |
| 355.200 | +3.920e+02 | +5.700e+04 | +1.170e+05 | +4.022e-03 | +8.059e-05 | +5.238e-05 | 0.00804 |
| 473.600 | +3.920e+02 | +5.700e+04 | +1.520e+05 | +9.327e-03 | +1.063e-04 | +9.715e-05 | 0.01865 |
| 592.000 | +3.690e+02 | +5.700e+04 | +1.860e+05 | +2.356e-02 | +1.320e-04 | +1.505e-04 | 0.04711 |

**Trave numero: 7 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +9.940e+02 | +5.820e+04 | +4.110e+04 | +3.149e-02 | +4.479e-05 | +7.996e-05 | 0.07557 |
| 35.000 | +9.940e+02 | +5.820e+04 | +1.840e+04 | +2.860e-02 | +3.731e-05 | +8.070e-05 | 0.06864 |
| 70.000 | +8.820e+02 | +5.820e+04 | +4.060e+04 | +2.576e-02 | +2.984e-05 | +7.837e-05 | 0.06182 |
| 105.000 | +7.810e+02 | +5.820e+04 | +6.480e+04 | +2.306e-02 | +2.238e-05 | +7.418e-05 | 0.05534 |
| 140.000 | +6.920e+02 | +5.820e+04 | +8.620e+04 | +2.059e-02 | +1.495e-05 | +6.790e-05 | 0.04943 |
| 175.000 | +6.130e+02 | +5.820e+04 | +1.050e+05 | +1.846e-02 | +7.662e-06 | +5.945e-05 | 0.04431 |

**Trave numero: 8 lunghezza: 180.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +3.310e+02 | +4.450e+04 | +1.220e+05 | +1.846e-02 | +7.662e-06 | +5.945e-05 | 0.04431 |
| 36.000 | +3.310e+02 | +4.450e+04 | +1.230e+05 | +1.677e-02 | +3.039e-06 | +5.048e-05 | 0.04025 |
| 72.000 | +2.850e+02 | +4.450e+04 | +1.220e+05 | +1.555e-02 | +6.549e-06 | +4.083e-05 | 0.03732 |
| 108.000 | +2.610e+02 | +4.450e+04 | +1.180e+05 | +1.480e-02 | +1.203e-05 | +3.193e-05 | 0.03551 |
| 144.000 | +2.970e+02 | +4.450e+04 | +1.210e+05 | +1.473e-02 | +1.776e-05 | +2.742e-05 | 0.03534 |
| 180.000 | +2.970e+02 | +4.450e+04 | +1.240e+05 | +1.510e-02 | +2.383e-05 | +2.784e-05 | 0.03623 |

**Trave numero: 9 lunghezza: 197.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.610e+02 | +2.410e+04 | +1.160e+05 | +1.510e-02 | +2.383e-05 | +2.784e-05 | 0.03623 |
| 39.400 | +3.390e+02 | +2.410e+04 | +1.130e+05 | +1.596e-02 | +2.214e-05 | +3.446e-05 | 0.03829 |
| 78.800 | +4.230e+02 | +2.410e+04 | +1.130e+05 | +1.727e-02 | +2.051e-05 | +4.250e-05 | 0.04146 |
| 118.200 | +5.150e+02 | +2.410e+04 | +1.100e+05 | +1.900e-02 | +1.918e-05 | +4.998e-05 | 0.04559 |
| 157.600 | +6.180e+02 | +2.410e+04 | +1.050e+05 | +2.104e-02 | +1.794e-05 | +5.928e-05 | 0.05051 |
| 197.000 | +6.180e+02 | +2.410e+04 | +9.790e+04 | +2.333e-02 | +1.685e-05 | +6.931e-05 | 0.05600 |

**Trave numero: 10 lunghezza: 215.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +6.290e+02 | +7.910e+04 | +8.660e+04 | +2.333e-02 | +1.685e-05 | +6.931e-05 | 0.05600 |
| 43.000 | +7.610e+02 | +7.910e+04 | +7.760e+04 | +2.601e-02 | +1.761e-05 | +7.855e-05 | 0.06243 |
| 86.000 | +9.100e+02 | +7.910e+04 | +6.700e+04 | +2.879e-02 | +2.864e-05 | +8.652e-05 | 0.06909 |
| 129.000 | +1.070e+03 | +7.910e+04 | +7.150e+04 | +3.150e-02 | +4.091e-05 | +9.221e-05 | 0.07560 |
| 172.000 | +1.250e+03 | +7.910e+04 | +1.100e+05 | +3.424e-02 | +5.344e-05 | +9.480e-05 | 0.08219 |
| 215.000 | +1.250e+03 | +7.910e+04 | +1.620e+05 | +3.835e-02 | +6.605e-05 | +9.342e-05 | 0.09204 |

**Trave numero: 11 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.150e+03 | +2.050e+04 | +1.200e+05 | +3.054e-02 | +1.155e-04 | +8.164e-05 | 0.07330 |
| 35.000 | +1.150e+03 | +2.050e+04 | +8.030e+04 | +2.742e-02 | +1.131e-04 | +9.154e-05 | 0.06580 |
| 70.000 | +1.040e+03 | +2.050e+04 | +4.770e+04 | +2.402e-02 | +1.107e-04 | +9.798e-05 | 0.05765 |
| 105.000 | +9.390e+02 | +2.050e+04 | +1.910e+04 | +2.046e-02 | +1.082e-04 | +1.014e-04 | 0.04910 |
| 140.000 | +8.560e+02 | +2.050e+04 | +1.880e+04 | +1.684e-02 | +1.058e-04 | +1.020e-04 | 0.04041 |
| 175.000 | +7.860e+02 | +2.050e+04 | +4.630e+04 | +1.326e-02 | +1.034e-04 | +1.002e-04 | 0.03181 |

**Trave numero: 12 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.630e+03 | +2.110e+04 | +1.310e+05 | +3.096e-02 | +1.211e-04 | +6.328e-05 | 0.07430 |
| 35.000 | +1.630e+03 | +2.110e+04 | +7.430e+04 | +2.852e-02 | +1.215e-04 | +7.363e-05 | 0.06844 |
| 70.000 | +1.520e+03 | +2.110e+04 | +2.280e+04 | +2.588e-02 | +1.222e-04 | +7.845e-05 | 0.06211 |
| 105.000 | +1.410e+03 | +2.110e+04 | +3.930e+04 | +2.322e-02 | +1.229e-04 | +7.814e-05 | 0.05573 |
| 140.000 | +1.320e+03 | +2.110e+04 | +8.060e+04 | +2.071e-02 | +1.235e-04 | +7.305e-05 | 0.04970 |
| 175.000 | +1.240e+03 | +2.110e+04 | +1.190e+05 | +1.849e-02 | +1.242e-04 | +6.354e-05 | 0.04436 |

**Trave numero: 13 lunghezza: 180.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +3.460e+02 | +6.630e+04 | +1.030e+05 | +1.849e-02 | +1.242e-04 | +6.354e-05 | 0.04436 |
| 36.000 | +3.460e+02 | +6.630e+04 | +1.060e+05 | +1.671e-02 | +1.326e-04 | +5.563e-05 | 0.04011 |
| 72.000 | +2.960e+02 | +6.630e+04 | +1.060e+05 | +1.538e-02 | +1.409e-04 | +4.679e-05 | 0.03690 |
| 108.000 | +2.590e+02 | +6.630e+04 | +1.060e+05 | +1.445e-02 | +1.492e-04 | +3.737e-05 | 0.03467 |
| 144.000 | +2.590e+02 | +6.630e+04 | +1.110e+05 | +1.404e-02 | +1.575e-04 | +2.902e-05 | 0.03369 |
| 180.000 | +2.590e+02 | +6.630e+04 | +1.160e+05 | +1.412e-02 | +1.663e-04 | +2.491e-05 | 0.03389 |

**Trave numero: 14 lunghezza: 197.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.250e+02 | +2.560e+04 | +1.050e+05 | +1.412e-02 | +1.663e-04 | +2.491e-05 | 0.03389 |
| 39.400 | +2.960e+02 | +2.560e+04 | +1.060e+05 | +1.462e-02 | +1.691e-04 | +2.749e-05 | 0.03510 |
| 78.800 | +3.720e+02 | +2.560e+04 | +1.060e+05 | +1.555e-02 | +1.718e-04 | +3.340e-05 | 0.03732 |
| 118.200 | +4.540e+02 | +2.560e+04 | +1.050e+05 | +1.685e-02 | +1.746e-04 | +3.968e-05 | 0.04043 |



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|---|---|---|---|---|---|---|---|
| 157.600 | +5.440e+02 | +2.560e+04 | +1.020e+05 | +1.845e-02 | +1.774e-04 | +4.663e-05 | 0.04427 |
| 197.000 | +5.440e+02 | +2.560e+04 | +9.700e+04 | +2.027e-02 | +1.801e-04 | +5.637e-05 | 0.04865 |

**Trave numero: 15 lunghezza: 215.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +5.720e+02 | +4.190e+04 | +8.540e+04 | +2.027e-02 | +1.801e-04 | +5.637e-05 | 0.04865 |
| 43.000 | +6.870e+02 | +4.190e+04 | +7.830e+04 | +2.245e-02 | +1.754e-04 | +6.514e-05 | 0.05388 |
| 86.000 | +8.150e+02 | +4.190e+04 | +7.000e+04 | +2.472e-02 | +1.707e-04 | +7.348e-05 | 0.05933 |
| 129.000 | +9.560e+02 | +4.190e+04 | +6.690e+04 | +2.695e-02 | +1.659e-04 | +7.997e-05 | 0.06469 |
| 172.000 | +1.110e+03 | +4.190e+04 | +9.710e+04 | +2.896e-02 | +1.612e-04 | +8.398e-05 | 0.06951 |
| 215.000 | +1.110e+03 | +4.190e+04 | +1.420e+05 | +3.197e-02 | +1.564e-04 | +8.477e-05 | 0.07673 |

**Trave numero: 16 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +6.790e+02 | +4.580e+04 | +2.640e+04 | +2.133e-02 | +6.350e-05 | +7.241e-05 | 0.05119 |
| 35.000 | +6.790e+02 | +4.580e+04 | +1.680e+04 | +1.954e-02 | +5.742e-05 | +7.193e-05 | 0.04690 |
| 70.000 | +6.130e+02 | +4.580e+04 | +3.750e+04 | +1.777e-02 | +5.134e-05 | +6.921e-05 | 0.04265 |
| 105.000 | +5.580e+02 | +4.580e+04 | +5.680e+04 | +1.607e-02 | +4.528e-05 | +6.446e-05 | 0.03857 |
| 140.000 | +5.140e+02 | +4.580e+04 | +7.470e+04 | +1.451e-02 | +3.930e-05 | +5.784e-05 | 0.03482 |
| 175.000 | +4.780e+02 | +4.580e+04 | +9.130e+04 | +1.325e-02 | +3.360e-05 | +4.950e-05 | 0.03180 |

**Trave numero: 17 lunghezza: 592.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.880e+02 | +5.980e+04 | +8.220e+04 | +1.325e-02 | +3.360e-05 | +4.950e-05 | 0.02650 |
| 118.400 | +2.730e+02 | +5.980e+04 | +1.040e+05 | +1.117e-02 | +5.185e-05 | +1.841e-05 | 0.02233 |
| 236.800 | +4.080e+02 | +5.980e+04 | +1.230e+05 | +1.150e-02 | +7.601e-05 | +2.436e-05 | 0.02299 |
| 355.200 | +5.480e+02 | +5.980e+04 | +1.410e+05 | +1.207e-02 | +1.017e-04 | +6.603e-05 | 0.02414 |
| 473.600 | +6.660e+02 | +5.980e+04 | +1.570e+05 | +1.961e-02 | +1.278e-04 | +1.152e-04 | 0.03922 |
| 592.000 | +6.660e+02 | +5.980e+04 | +2.040e+05 | +3.496e-02 | +1.543e-04 | +1.646e-04 | 0.06992 |

**Trave numero: 18 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +4.210e+02 | +7.640e+04 | +7.100e+04 | +1.961e-02 | +4.858e-05 | +9.815e-05 | 0.04705 |
| 35.000 | +4.490e+02 | +7.640e+04 | +6.210e+04 | +2.088e-02 | +5.404e-05 | +1.014e-04 | 0.05011 |
| 70.000 | +5.160e+02 | +7.640e+04 | +5.110e+04 | +2.295e-02 | +5.950e-05 | +1.034e-04 | 0.05507 |
| 105.000 | +6.110e+02 | +7.640e+04 | +3.900e+04 | +2.536e-02 | +6.496e-05 | +1.048e-04 | 0.06086 |
| 140.000 | +7.290e+02 | +7.640e+04 | +2.630e+04 | +2.805e-02 | +7.048e-05 | +1.045e-04 | 0.06732 |
| 175.000 | +7.290e+02 | +7.640e+04 | +4.380e+04 | +3.093e-02 | +7.650e-05 | +1.020e-04 | 0.07422 |

**Trave numero: 19 lunghezza: 180.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.570e+03 | +9.590e+04 | +3.120e+04 | +3.093e-02 | +7.650e-05 | +1.020e-04 | 0.07422 |
| 36.000 | +1.720e+03 | +9.590e+04 | +6.710e+04 | +3.405e-02 | +8.405e-05 | +9.882e-05 | 0.08173 |
| 72.000 | +1.880e+03 | +9.590e+04 | +1.200e+05 | +3.715e-02 | +9.608e-05 | +8.964e-05 | 0.08915 |
| 108.000 | +2.070e+03 | +9.590e+04 | +1.850e+05 | +3.995e-02 | +1.085e-04 | +7.392e-05 | 0.09587 |
| 144.000 | +2.260e+03 | +9.590e+04 | +2.570e+05 | +4.218e-02 | +1.213e-04 | +5.099e-05 | 0.10123 |
| 180.000 | +2.260e+03 | +9.590e+04 | +3.370e+05 | +4.355e-02 | +1.341e-04 | +2.027e-05 | 0.10453 |

**Trave numero: 20 lunghezza: 197.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.350e+03 | +9.470e+04 | +3.170e+05 | +4.355e-02 | +1.341e-04 | +2.027e-05 | 0.10453 |
| 39.400 | +2.570e+03 | +9.470e+04 | +4.080e+05 | +4.374e-02 | +1.412e-04 | +2.173e-05 | 0.10497 |
| 78.800 | +2.790e+03 | +9.470e+04 | +5.090e+05 | +4.219e-02 | +1.485e-04 | +7.359e-05 | 0.10126 |
| 118.200 | +2.980e+03 | +9.470e+04 | +6.180e+05 | +3.848e-02 | +1.558e-04 | +1.376e-04 | 0.09235 |
| 157.600 | +3.140e+03 | +9.470e+04 | +7.350e+05 | +3.218e-02 | +1.632e-04 | +2.145e-04 | 0.07724 |
| 197.000 | +3.140e+03 | +9.470e+04 | +8.580e+05 | +2.295e-02 | +1.708e-04 | +3.050e-04 | 0.05507 |

**Trave numero: 21 lunghezza: 215.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +4.930e+03 | +1.460e+05 | +8.440e+05 | +2.295e-02 | +1.708e-04 | +3.050e-04 | 0.05507 |
| 43.000 | +4.930e+03 | +1.460e+05 | +6.320e+05 | +9.472e-03 | +1.728e-04 | +3.965e-04 | 0.02273 |
| 86.000 | +4.980e+03 | +1.460e+05 | +4.230e+05 | +2.110e-02 | +1.755e-04 | +4.619e-04 | 0.05064 |
| 129.000 | +5.180e+03 | +1.460e+05 | +2.110e+05 | +3.932e-02 | +1.791e-04 | +5.010e-04 | 0.09438 |
| 172.000 | +5.510e+03 | +1.460e+05 | +2.870e+04 | +5.974e-02 | +1.841e-04 | +5.131e-04 | 0.14338 |
| 215.000 | +5.510e+03 | +1.460e+05 | +2.550e+05 | +8.175e-02 | +1.970e-04 | +4.969e-04 | 0.19621 |

**Trave numero: 22 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +3.060e+02 | +4.600e+04 | +1.240e+05 | +2.004e-02 | +7.846e-05 | +8.605e-05 | 0.04810 |
| 73.000 | +3.060e+02 | +4.600e+04 | +1.060e+05 | +1.510e-02 | +5.972e-05 | +7.778e-05 | 0.03624 |
| 146.000 | +2.690e+02 | +4.600e+04 | +1.020e+05 | +1.140e-02 | +4.193e-05 | +6.999e-05 | 0.02736 |
| 219.000 | +2.690e+02 | +4.600e+04 | +9.560e+04 | +9.225e-03 | +2.815e-05 | +6.247e-05 | 0.02214 |
| 292.000 | +2.930e+02 | +4.600e+04 | +8.420e+04 | +8.615e-03 | +2.926e-05 | +5.520e-05 | 0.02068 |
| 365.000 | +2.930e+02 | +4.600e+04 | +6.780e+04 | +9.555e-03 | +3.607e-05 | +4.817e-05 | 0.02293 |

**Trave numero: 23 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +5.130e+02 | +3.510e+04 | +1.450e+05 | +9.555e-03 | +3.607e-05 | +4.817e-05 | 0.02293 |
| 73.000 | +6.170e+02 | +3.510e+04 | +1.080e+05 | +1.213e-02 | +5.848e-05 | +5.377e-05 | 0.02911 |
| 146.000 | +7.650e+02 | +3.510e+04 | +6.320e+04 | +1.644e-02 | +7.255e-05 | +5.940e-05 | 0.03947 |
| 219.000 | +9.600e+02 | +3.510e+04 | +1.250e+04 | +2.172e-02 | +7.661e-05 | +6.505e-05 | 0.05213 |
| 292.000 | +1.200e+03 | +3.510e+04 | +7.150e+04 | +2.709e-02 | +6.837e-05 | +7.074e-05 | 0.06503 |



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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 365.000 | +1.200e+03 | +3.510e+04 | +1.530e+05 | +3.149e-02 | +4.479e-05 | +7.996e-05 | 0.07557 |

**Trave numero: 24 lunghezza: 205.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.140e+03 | +1.170e+04 | +3.460e+04 | +3.149e-02 | +4.479e-05 | +7.996e-05 | 0.07557 |
| 41.000 | +2.310e+03 | +1.170e+04 | +1.190e+05 | +3.337e-02 | +3.579e-05 | +8.028e-05 | 0.08010 |
| 82.000 | +2.480e+03 | +1.170e+04 | +2.130e+05 | +3.470e-02 | +1.642e-05 | +8.061e-05 | 0.08328 |
| 123.000 | +2.660e+03 | +1.170e+04 | +3.140e+05 | +3.500e-02 | +1.499e-05 | +8.094e-05 | 0.08401 |
| 164.000 | +2.830e+03 | +1.170e+04 | +4.230e+05 | +3.379e-02 | +5.860e-05 | +8.129e-05 | 0.08110 |
| 205.000 | +2.830e+03 | +1.170e+04 | +5.390e+05 | +3.054e-02 | +1.155e-04 | +8.164e-05 | 0.07330 |

**Trave numero: 25 lunghezza: 305.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +3.400e+03 | +1.240e+05 | +5.080e+05 | +3.054e-02 | +1.155e-04 | +8.164e-05 | 0.07330 |
| 61.000 | +3.400e+03 | +1.240e+05 | +3.010e+05 | +2.066e-02 | +1.867e-04 | +5.271e-05 | 0.04958 |
| 122.000 | +3.240e+03 | +1.240e+05 | +1.030e+05 | +7.592e-03 | +2.222e-04 | +2.386e-05 | 0.01822 |
| 183.000 | +3.230e+03 | +1.240e+05 | +9.120e+04 | +7.898e-03 | +2.233e-04 | +8.937e-06 | 0.01896 |
| 244.000 | +3.380e+03 | +1.240e+05 | +2.880e+05 | +2.093e-02 | +1.899e-04 | +3.525e-05 | 0.05023 |
| 305.000 | +3.380e+03 | +1.240e+05 | +4.950e+05 | +3.096e-02 | +1.211e-04 | +6.328e-05 | 0.07430 |

**Trave numero: 26 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.410e+03 | +1.090e+04 | +5.440e+05 | +3.096e-02 | +1.211e-04 | +6.328e-05 | 0.07430 |
| 73.000 | +2.410e+03 | +1.090e+04 | +3.710e+05 | +3.568e-02 | +2.693e-05 | +6.506e-05 | 0.08562 |
| 146.000 | +2.090e+03 | +1.090e+04 | +2.200e+05 | +3.490e-02 | +3.746e-05 | +6.688e-05 | 0.08376 |
| 219.000 | +1.770e+03 | +1.090e+04 | +9.050e+04 | +3.097e-02 | +7.008e-05 | +6.871e-05 | 0.07433 |
| 292.000 | +1.510e+03 | +1.090e+04 | +3.450e+04 | +2.589e-02 | +7.756e-05 | +7.056e-05 | 0.06213 |
| 365.000 | +1.300e+03 | +1.090e+04 | +1.270e+05 | +2.133e-02 | +6.350e-05 | +7.241e-05 | 0.05119 |

**Trave numero: 27 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +5.240e+02 | +5.250e+04 | +4.500e+04 | +2.133e-02 | +6.350e-05 | +7.241e-05 | 0.05119 |
| 73.000 | +5.240e+02 | +5.250e+04 | +7.340e+04 | +1.811e-02 | +5.896e-05 | +7.705e-05 | 0.04345 |
| 146.000 | +4.070e+02 | +5.250e+04 | +9.450e+04 | +1.601e-02 | +4.756e-05 | +8.189e-05 | 0.03843 |
| 219.000 | +3.260e+02 | +5.250e+04 | +1.060e+05 | +1.542e-02 | +3.255e-05 | +8.698e-05 | 0.03702 |
| 292.000 | +2.810e+02 | +5.250e+04 | +1.150e+05 | +1.674e-02 | +3.414e-05 | +9.238e-05 | 0.04018 |
| 365.000 | +2.810e+02 | +5.250e+04 | +1.320e+05 | +1.961e-02 | +4.858e-05 | +9.815e-05 | 0.04705 |

**Trave numero: 28 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +5.830e+02 | +1.170e+04 | +7.760e+04 | +3.176e-02 | +1.038e-04 | +9.315e-05 | 0.07622 |
| 73.000 | +5.830e+02 | +1.170e+04 | +3.960e+04 | +2.486e-02 | +1.126e-04 | +7.817e-05 | 0.05966 |
| 146.000 | +3.710e+02 | +1.170e+04 | +2.060e+04 | +1.727e-02 | +9.979e-05 | +6.360e-05 | 0.04146 |
| 219.000 | +2.380e+02 | +1.170e+04 | +2.310e+04 | +1.087e-02 | +7.413e-05 | +5.105e-05 | 0.02610 |
| 292.000 | +1.590e+02 | +1.170e+04 | +2.280e+04 | +7.005e-03 | +4.509e-05 | +3.899e-05 | 0.01681 |
| 365.000 | +1.330e+02 | +1.170e+04 | +2.510e+04 | +6.221e-03 | +1.030e-05 | +2.742e-05 | 0.01493 |

**Trave numero: 29 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +9.930e+01 | +5.480e+03 | +2.070e+04 | +6.221e-03 | +1.030e-05 | +2.742e-05 | 0.01493 |
| 73.000 | +9.930e+01 | +5.480e+03 | +1.490e+04 | +6.751e-03 | +4.020e-05 | +3.382e-05 | 0.01620 |
| 146.000 | +1.230e+02 | +5.480e+03 | +1.070e+04 | +8.781e-03 | +6.016e-05 | +4.022e-05 | 0.02107 |
| 219.000 | +2.120e+02 | +5.480e+03 | +4.070e+03 | +1.224e-02 | +6.753e-05 | +4.662e-05 | 0.02939 |
| 292.000 | +3.680e+02 | +5.480e+03 | +1.540e+04 | +1.615e-02 | +5.446e-05 | +5.303e-05 | 0.03876 |
| 365.000 | +3.680e+02 | +5.480e+03 | +4.050e+04 | +1.846e-02 | +7.662e-06 | +5.945e-05 | 0.04431 |

**Trave numero: 30 lunghezza: 205.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.800e+02 | +1.190e+04 | +9.060e+03 | +1.846e-02 | +7.662e-06 | +5.945e-05 | 0.04431 |
| 41.000 | +2.680e+02 | +1.190e+04 | +6.650e+03 | +1.862e-02 | +1.162e-05 | +6.544e-05 | 0.04468 |
| 82.000 | +3.610e+02 | +1.190e+04 | +1.340e+04 | +1.854e-02 | +1.247e-05 | +7.401e-05 | 0.04449 |
| 123.000 | +4.540e+02 | +1.190e+04 | +2.620e+04 | +1.794e-02 | +2.629e-05 | +8.267e-05 | 0.04305 |
| 164.000 | +5.410e+02 | +1.190e+04 | +4.480e+04 | +1.638e-02 | +5.654e-05 | +9.140e-05 | 0.03930 |
| 205.000 | +5.410e+02 | +1.190e+04 | +6.700e+04 | +1.326e-02 | +1.034e-04 | +1.002e-04 | 0.03181 |

**Trave numero: 31 lunghezza: 305.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +4.790e+01 | +2.850e+04 | +8.720e+03 | +1.326e-02 | +1.034e-04 | +1.002e-04 | 0.03181 |
| 61.000 | +1.010e+02 | +2.850e+04 | +6.160e+03 | +7.323e-03 | +9.729e-05 | +6.755e-05 | 0.01757 |
| 122.000 | +1.170e+02 | +2.850e+04 | +2.720e+03 | +1.908e-03 | +9.732e-05 | +3.518e-05 | 0.00458 |
| 183.000 | +1.170e+02 | +2.850e+04 | +7.440e+03 | +4.767e-03 | +1.028e-04 | +7.813e-06 | 0.01144 |
| 244.000 | +9.190e+01 | +2.850e+04 | +1.300e+04 | +1.131e-02 | +1.134e-04 | +3.106e-05 | 0.02715 |
| 305.000 | +6.710e+01 | +2.850e+04 | +1.470e+04 | +1.849e-02 | +1.242e-04 | +6.354e-05 | 0.04436 |

**Trave numero: 32 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +6.420e+02 | +2.750e+03 | +9.360e+04 | +1.849e-02 | +1.242e-04 | +6.354e-05 | 0.04436 |
| 73.000 | +6.420e+02 | +2.750e+03 | +4.770e+04 | +2.268e-02 | +1.463e-05 | +6.072e-05 | 0.05443 |
| 146.000 | +4.290e+02 | +2.750e+03 | +1.640e+04 | +2.135e-02 | +5.037e-05 | +5.790e-05 | 0.05125 |
| 219.000 | +2.490e+02 | +2.750e+03 | +3.560e+03 | +1.829e-02 | +6.241e-05 | +5.510e-05 | 0.04389 |
| 292.000 | +1.270e+02 | +2.750e+03 | +1.040e+04 | +1.543e-02 | +5.205e-05 | +5.229e-05 | 0.03703 |
| 365.000 | +1.270e+02 | +2.750e+03 | +1.240e+04 | +1.325e-02 | +3.360e-05 | +4.950e-05 | 0.03180 |



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**Trave numero: 33 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.080e+02 | +1.290e+04 | +2.990e+04 | +1.325e-02 | +3.360e-05 | +4.950e-05 | 0.03180 |
| 73.000 | +2.080e+02 | +1.290e+04 | +2.350e+04 | +1.149e-02 | +6.988e-05 | +5.849e-05 | 0.02758 |
| 146.000 | +2.250e+02 | +1.290e+04 | +2.500e+04 | +1.269e-02 | +8.495e-05 | +6.790e-05 | 0.03045 |
| 219.000 | +3.480e+02 | +1.290e+04 | +2.160e+04 | +1.786e-02 | +9.389e-05 | +7.780e-05 | 0.04286 |
| 292.000 | +5.770e+02 | +1.290e+04 | +3.870e+04 | +2.494e-02 | +9.675e-05 | +8.828e-05 | 0.05985 |
| 365.000 | +5.770e+02 | +1.290e+04 | +7.320e+04 | +3.093e-02 | +7.650e-05 | +1.020e-04 | 0.07422 |

**Trave numero: 34 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.790e+03 | +2.540e+05 | +2.040e+05 | +8.218e-02 | +2.114e-04 | +4.923e-04 | 0.19723 |
| 73.000 | +1.790e+03 | +2.540e+05 | +1.250e+05 | +6.723e-02 | +2.046e-04 | +4.223e-04 | 0.16135 |
| 146.000 | +1.160e+03 | +2.540e+05 | +1.720e+05 | +5.248e-02 | +1.933e-04 | +3.525e-04 | 0.12596 |
| 219.000 | +6.910e+02 | +2.540e+05 | +1.960e+05 | +3.917e-02 | +1.746e-04 | +2.832e-04 | 0.09400 |
| 292.000 | +3.730e+02 | +2.540e+05 | +1.950e+05 | +2.896e-02 | +1.532e-04 | +2.151e-04 | 0.06950 |
| 365.000 | +3.120e+02 | +2.540e+05 | +1.750e+05 | +2.356e-02 | +1.320e-04 | +1.505e-04 | 0.05654 |

**Trave numero: 35 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +5.120e+02 | +9.230e+04 | +1.960e+05 | +2.356e-02 | +1.320e-04 | +1.505e-04 | 0.05654 |
| 73.000 | +6.990e+02 | +9.230e+04 | +1.630e+05 | +2.180e-02 | +1.346e-04 | +1.363e-04 | 0.05233 |
| 146.000 | +9.190e+02 | +9.230e+04 | +1.170e+05 | +2.407e-02 | +1.316e-04 | +1.231e-04 | 0.05776 |
| 219.000 | +1.180e+03 | +9.230e+04 | +8.180e+04 | +2.871e-02 | +1.211e-04 | +1.110e-04 | 0.06890 |
| 292.000 | +1.480e+03 | +9.230e+04 | +1.270e+05 | +3.391e-02 | +1.005e-04 | +1.006e-04 | 0.08138 |
| 365.000 | +1.480e+03 | +9.230e+04 | +2.010e+05 | +3.835e-02 | +6.605e-05 | +9.342e-05 | 0.09204 |

**Trave numero: 36 lunghezza: 205.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.390e+03 | +6.780e+04 | +6.480e+04 | +3.835e-02 | +6.605e-05 | +9.342e-05 | 0.09204 |
| 41.000 | +2.590e+03 | +6.780e+04 | +1.550e+05 | +4.026e-02 | +5.338e-05 | +8.489e-05 | 0.09663 |
| 82.000 | +2.800e+03 | +6.780e+04 | +2.570e+05 | +4.159e-02 | +2.917e-05 | +7.636e-05 | 0.09981 |
| 123.000 | +3.010e+03 | +6.780e+04 | +3.680e+05 | +4.181e-02 | +1.946e-05 | +6.783e-05 | 0.10035 |
| 164.000 | +3.210e+03 | +6.780e+04 | +4.890e+05 | +4.038e-02 | +6.726e-05 | +5.931e-05 | 0.09692 |
| 205.000 | +3.210e+03 | +6.780e+04 | +6.190e+05 | +3.677e-02 | +1.303e-04 | +5.087e-05 | 0.08825 |

**Trave numero: 37 lunghezza: 305.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +3.710e+03 | +6.600e+04 | +5.700e+05 | +3.677e-02 | +1.303e-04 | +5.087e-05 | 0.08825 |
| 61.000 | +3.710e+03 | +6.600e+04 | +3.480e+05 | +2.601e-02 | +2.075e-04 | +3.578e-05 | 0.06243 |
| 122.000 | +3.520e+03 | +6.600e+04 | +1.380e+05 | +1.153e-02 | +2.478e-04 | +4.602e-05 | 0.02767 |
| 183.000 | +3.470e+03 | +6.600e+04 | +1.040e+05 | +4.711e-03 | +2.539e-04 | +5.890e-05 | 0.01131 |
| 244.000 | +3.610e+03 | +6.600e+04 | +3.150e+05 | +1.968e-02 | +2.238e-04 | +7.183e-05 | 0.04724 |
| 305.000 | +3.610e+03 | +6.600e+04 | +5.350e+05 | +3.197e-02 | +1.564e-04 | +8.477e-05 | 0.07673 |

**Trave numero: 38 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.640e+03 | +8.030e+04 | +6.140e+05 | +3.197e-02 | +1.564e-04 | +8.477e-05 | 0.07673 |
| 73.000 | +2.640e+03 | +8.030e+04 | +4.490e+05 | +3.909e-02 | +5.880e-05 | +9.775e-05 | 0.09382 |
| 146.000 | +2.290e+03 | +8.030e+04 | +3.090e+05 | +4.049e-02 | +6.176e-05 | +1.131e-04 | 0.09717 |
| 219.000 | +1.920e+03 | +8.030e+04 | +1.910e+05 | +3.873e-02 | +1.135e-04 | +1.299e-04 | 0.09296 |
| 292.000 | +1.570e+03 | +8.030e+04 | +1.020e+05 | +3.599e-02 | +1.435e-04 | +1.470e-04 | 0.08638 |
| 365.000 | +1.270e+03 | +8.030e+04 | +1.510e+05 | +3.496e-02 | +1.543e-04 | +1.646e-04 | 0.08391 |

**Trave numero: 39 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +6.400e+02 | +2.640e+05 | +1.570e+05 | +3.496e-02 | +1.543e-04 | +1.646e-04 | 0.08391 |
| 73.000 | +6.400e+02 | +2.640e+05 | +1.740e+05 | +3.737e-02 | +1.803e-04 | +2.196e-04 | 0.08968 |
| 146.000 | +8.160e+02 | +2.640e+05 | +1.860e+05 | +4.327e-02 | +2.000e-04 | +2.845e-04 | 0.10386 |
| 219.000 | +1.220e+03 | +2.640e+05 | +1.710e+05 | +5.291e-02 | +2.120e-04 | +3.539e-04 | 0.12698 |
| 292.000 | +1.820e+03 | +2.640e+05 | +1.300e+05 | +6.664e-02 | +2.127e-04 | +4.250e-04 | 0.15994 |
| 365.000 | +1.820e+03 | +2.640e+05 | +2.130e+05 | +8.175e-02 | +1.970e-04 | +4.969e-04 | 0.19621 |

**Pressione massima nel gruppo: 0.197 Trave numero: 4 Distanza: 215.000**



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## 2f) TABELLA INVILUPPI - SPETTRO SLD

**MEDIA QUADRATICA DEI RISULTATI DINAMICI (EX+λ*EY)**

| Nodo | Traslaz.X | Traslaz.Y | Traslaz.Z | Rotaz.X | Rotaz.Y | Rotaz.Z |
|---|---|---|---|---|---|---|
| 1 | +0.00e+00 | +0.00e+00 | +7.65e-03 | +1.86e-05 | +4.80e-05 | +0.00e+00 |
| 2 | +0.00e+00 | +0.00e+00 | +5.11e-02 | +1.22e-04 | +3.02e-04 | +0.00e+00 |
| 5 | +0.00e+00 | +0.00e+00 | +4.28e-03 | +5.08e-06 | +1.11e-05 | +0.00e+00 |
| 6 | +0.00e+00 | +0.00e+00 | +5.26e-03 | +1.58e-05 | +3.17e-05 | +0.00e+00 |
| 7 | +0.00e+00 | +0.00e+00 | +4.20e-03 | +2.40e-05 | +3.02e-05 | +0.00e+00 |
| 8 | +0.00e+00 | +0.00e+00 | +3.84e-03 | +1.34e-05 | +8.46e-06 | +0.00e+00 |
| 9 | +1.82e-01 | +2.81e-02 | +5.22e-03 | +2.78e-05 | +7.12e-04 | +3.20e-05 |
| 10 | +1.82e-01 | +2.74e-02 | +5.50e-03 | +3.56e-05 | +6.99e-04 | +3.20e-05 |
| 11 | +1.81e-01 | +2.74e-02 | +5.35e-03 | +1.59e-05 | +7.06e-04 | +3.20e-05 |
| 12 | +1.81e-01 | +2.81e-02 | +4.39e-03 | +9.88e-06 | +7.19e-04 | +3.20e-05 |
| 13 | +1.95e-01 | +2.81e-02 | +4.63e-03 | +1.48e-05 | +1.83e-03 | +3.20e-05 |
| 14 | +1.95e-01 | +2.74e-02 | +3.65e-02 | +1.29e-04 | +1.88e-03 | +3.20e-05 |
| 15 | +2.00e-01 | +2.74e-02 | +5.94e-02 | +9.62e-05 | +6.19e-04 | +3.20e-05 |
| 16 | +2.00e-01 | +2.81e-02 | +7.67e-03 | +3.76e-05 | +7.40e-04 | +3.20e-05 |
| 17 | +2.00e-01 | +2.39e-02 | +1.70e-02 | +4.31e-05 | +6.09e-04 | +3.20e-05 |
| 18 | +0.00e+00 | +0.00e+00 | +1.68e-02 | +1.24e-05 | +5.44e-05 | +0.00e+00 |
| 19 | +2.00e-01 | +2.28e-02 | +1.88e-02 | +2.99e-05 | +5.28e-04 | +3.20e-05 |
| 20 | +0.00e+00 | +0.00e+00 | +1.04e-02 | +7.89e-05 | +1.86e-04 | +0.00e+00 |
| 21 | +0.00e+00 | +0.00e+00 | +4.08e-03 | +2.22e-05 | +9.98e-06 | +0.00e+00 |
| 22 | +1.82e-01 | +2.28e-02 | +4.17e-03 | +3.71e-05 | +6.72e-04 | +3.20e-05 |
| 23 | +0.00e+00 | +0.00e+00 | +2.62e-03 | +1.20e-05 | +1.10e-05 | +0.00e+00 |
| 24 | +1.82e-01 | +2.39e-02 | +2.55e-03 | +1.12e-05 | +6.82e-04 | +3.20e-05 |
| 25 | +1.99e-01 | +2.28e-02 | +1.86e-02 | +2.41e-05 | +1.73e-03 | +3.20e-05 |
| 26 | +1.95e-01 | +2.28e-02 | +1.78e-02 | +2.56e-05 | +1.87e-03 | +3.20e-05 |
| 27 | +1.95e-01 | +2.39e-02 | +9.62e-03 | +3.69e-05 | +1.83e-03 | +3.20e-05 |
| 29 | +0.00e+00 | +0.00e+00 | +2.66e-03 | +1.79e-06 | +9.03e-06 | +0.00e+00 |
| 30 | +1.81e-01 | +2.39e-02 | +2.62e-03 | +8.83e-06 | +6.89e-04 | +3.20e-05 |
| 31 | +1.81e-01 | +2.28e-02 | +4.23e-03 | +3.85e-05 | +6.78e-04 | +3.20e-05 |
| 32 | +2.05e-01 | +2.39e-02 | +1.65e-02 | +3.94e-05 | +8.25e-04 | +3.20e-05 |
| 33 | +1.94e-01 | +2.39e-02 | +3.72e-03 | +2.18e-05 | +5.58e-04 | +3.20e-05 |
| 34 | +0.00e+00 | +0.00e+00 | +3.57e-03 | +4.06e-06 | +1.11e-05 | +0.00e+00 |
| 35 | +1.94e-01 | +2.28e-02 | +1.62e-02 | +2.89e-05 | +3.43e-04 | +3.20e-05 |
| 36 | +0.00e+00 | +0.00e+00 | +4.14e-03 | +7.30e-06 | +1.19e-05 | +0.00e+00 |
| 37 | +1.94e-01 | +2.74e-02 | +1.34e-02 | +7.48e-05 | +5.43e-04 | +3.20e-05 |
| 38 | +1.94e-01 | +2.81e-02 | +3.58e-03 | +9.68e-06 | +6.69e-04 | +3.20e-05 |
| 39 | +0.00e+00 | +0.00e+00 | +3.52e-03 | +1.28e-05 | +1.74e-05 | +0.00e+00 |
| 40 | +0.00e+00 | +0.00e+00 | +1.31e-02 | +6.91e-05 | +9.35e-05 | +0.00e+00 |
| 41 | +0.00e+00 | +0.00e+00 | +1.65e-02 | +8.38e-06 | +5.97e-05 | +0.00e+00 |
| 42 | +2.05e-01 | +2.28e-02 | +2.03e-02 | +3.18e-05 | +7.35e-04 | +3.20e-05 |
| 43 | +0.00e+00 | +0.00e+00 | +1.14e-02 | +7.89e-05 | +1.89e-04 | +0.00e+00 |
| 44 | +2.05e-01 | +2.74e-02 | +6.00e-02 | +9.55e-05 | +7.23e-04 | +3.20e-05 |
| 45 | +2.05e-01 | +2.81e-02 | +6.78e-03 | +3.15e-05 | +8.61e-04 | +3.20e-05 |
| 46 | +0.00e+00 | +0.00e+00 | +6.76e-03 | +1.46e-05 | +5.26e-05 | +0.00e+00 |
| 47 | +0.00e+00 | +0.00e+00 | +5.14e-02 | +1.23e-04 | +3.09e-04 | +0.00e+00 |
| 48 | +1.77e-01 | +1.98e-02 | +2.24e-03 | +1.32e-05 | +1.02e-03 | +3.20e-05 |
| 49 | +1.99e-01 | +2.39e-02 | +9.46e-03 | +3.58e-05 | +1.69e-03 | +3.20e-05 |
| 50 | +1.90e-01 | +1.98e-02 | +1.77e-02 | +3.70e-05 | +3.45e-04 | +3.20e-05 |
| 52 | +1.95e-01 | +1.98e-02 | +2.20e-02 | +2.69e-05 | +1.85e-03 | +3.20e-05 |
| 53 | +0.00e+00 | +0.00e+00 | +4.19e-03 | +1.74e-05 | +3.20e-05 | +0.00e+00 |
| 54 | +0.00e+00 | +0.00e+00 | +4.11e-03 | +1.40e-05 | +1.33e-05 | +0.00e+00 |
| 55 | +1.86e-01 | +2.28e-02 | +1.14e-02 | +3.38e-05 | +1.56e-03 | +3.20e-05 |
| 56 | +0.00e+00 | +0.00e+00 | +2.77e-03 | +4.40e-06 | +7.52e-06 | +0.00e+00 |
| 57 | +0.00e+00 | +0.00e+00 | +2.78e-03 | +1.69e-05 | +8.02e-06 | +0.00e+00 |
| 58 | +1.81e-01 | +1.98e-02 | +2.86e-03 | +4.07e-05 | +6.77e-04 | +3.20e-05 |
| 59 | +1.82e-01 | +1.98e-02 | +2.87e-03 | +3.91e-05 | +6.71e-04 | +3.20e-05 |
| 60 | +1.86e-01 | +2.39e-02 | +2.33e-03 | +1.11e-05 | +1.53e-03 | +3.20e-05 |
| 61 | +1.90e-01 | +2.28e-02 | +1.61e-02 | +2.76e-05 | +3.26e-04 | +3.20e-05 |
| 62 | +1.90e-01 | +2.39e-02 | +3.34e-03 | +2.26e-05 | +5.40e-04 | +3.20e-05 |
| 63 | +1.86e-01 | +1.98e-02 | +1.10e-02 | +4.21e-05 | +1.55e-03 | +3.20e-05 |
| 65 | +1.77e-01 | +2.39e-02 | +6.03e-04 | +1.22e-05 | +1.01e-03 | +3.20e-05 |
| 66 | +1.77e-01 | +2.28e-02 | +1.57e-03 | +1.50e-05 | +1.02e-03 | +3.20e-05 |
| 67 | +2.05e-01 | +1.98e-02 | +2.50e-02 | +3.22e-05 | +7.88e-04 | +3.20e-05 |
| 68 | +1.94e-01 | +1.98e-02 | +1.79e-02 | +3.82e-05 | +3.63e-04 | +3.20e-05 |
| 69 | +1.99e-01 | +1.98e-02 | +2.27e-02 | +2.60e-05 | +1.71e-03 | +3.20e-05 |
| 70 | +2.00e-01 | +1.98e-02 | +2.42e-02 | +3.07e-05 | +2.77e-04 | +3.20e-05 |
| 71 | +1.88e-01 | +1.98e-02 | +1.08e-02 | +4.33e-05 | +1.55e-03 | +3.20e-05 |
| 72 | +1.88e-01 | +2.28e-02 | +1.12e-02 | +3.44e-05 | +1.57e-03 | +3.20e-05 |
| 73 | +1.88e-01 | +2.39e-02 | +2.84e-03 | +8.95e-06 | +1.54e-03 | +3.20e-05 |
| 74 | +1.88e-01 | +2.74e-02 | +8.08e-03 | +4.00e-05 | +1.58e-03 | +3.20e-05 |
| 75 | +1.77e-01 | +2.74e-02 | +1.13e-03 | +3.44e-05 | +1.01e-03 | +3.20e-05 |
| 77 | +1.90e-01 | +2.74e-02 | +1.29e-02 | +7.42e-05 | +5.27e-04 | +3.20e-05 |
| 78 | +1.86e-01 | +2.74e-02 | +6.20e-03 | +4.12e-05 | +1.57e-03 | +3.20e-05 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| 79 | +1.99e-01 | +2.74e-02 | +3.64e-02 | +1.34e-04 | +1.74e-03 | +3.20e-05 |
| 80 | +1.88e-01 | +2.81e-02 | +5.28e-03 | +1.12e-05 | +1.54e-03 | +3.20e-05 |
| 81 | +1.77e-01 | +2.81e-02 | +1.20e-03 | +3.25e-05 | +9.84e-04 | +3.20e-05 |
| 82 | +0.00e+00 | +0.00e+00 | +2.49e-02 | +4.09e-05 | +1.14e-05 | +0.00e+00 |
| 83 | +1.90e-01 | +2.81e-02 | +2.54e-03 | +1.52e-05 | +6.52e-04 | +3.20e-05 |
| 84 | +1.86e-01 | +2.81e-02 | +3.30e-03 | +1.07e-05 | +1.53e-03 | +3.20e-05 |
| 85 | +1.99e-01 | +2.81e-02 | +4.31e-03 | +1.50e-05 | +1.69e-03 | +3.20e-05 |
| 86 | +0.00e+00 | +0.00e+00 | +1.43e-03 | +1.26e-05 | +1.66e-05 | +0.00e+00 |
| 87 | +1.75e-01 | +2.39e-02 | +1.41e-03 | +1.83e-05 | +6.31e-04 | +3.20e-05 |
| 88 | +1.75e-01 | +1.98e-02 | +2.41e-03 | +8.49e-06 | +5.23e-04 | +3.20e-05 |
| 90 | +1.75e-01 | +2.28e-02 | +1.65e-03 | +1.09e-05 | +5.08e-04 | +3.20e-05 |
| 92 | +1.75e-01 | +2.81e-02 | +5.58e-03 | +2.72e-05 | +6.76e-04 | +3.20e-05 |
| 93 | +1.75e-01 | +2.74e-02 | +5.55e-03 | +2.92e-05 | +6.13e-04 | +3.20e-05 |
| 94 | +0.00e+00 | +0.00e+00 | +2.41e-02 | +4.09e-05 | +6.59e-06 | +0.00e+00 |
| 95 | +0.00e+00 | +0.00e+00 | +2.51e-03 | +1.01e-05 | +1.27e-05 | +0.00e+00 |
| 96 | +0.00e+00 | +0.00e+00 | +3.18e-03 | +2.12e-06 | +6.92e-06 | +0.00e+00 |
| 97 | +0.00e+00 | +0.00e+00 | +1.26e-02 | +6.53e-05 | +9.18e-05 | +0.00e+00 |

**MASSIME DEFORMAZIONI NODALI/ NODI CORRISPONDENTI**

| Traslaz.X | Traslaz.Y | Traslaz.Z | Rotaz.X | Rotaz.Y | Rotaz.Z | DLMax |
|---|---|---|---|---|---|---|
| +2.05e-01 | +2.81e-02 | +6.00e-02 | +1.34e-04 | +1.88e-03 | +3.20e-05 | +2.16e-01 |
| Nodo: 32 | Nodo: 9 | Nodo: 44 | Nodo: 79 | Nodo: 14 | Nodo: 9 | Nodo: 44 |

**MEDIA QUADRATICA DEI RISULTATI DINAMICI (λ*EX+EY)**

| Nodo | Traslaz.X | Traslaz.Y | Traslaz.Z | Rotaz.X | Rotaz.Y | Rotaz.Z |
|---|---|---|---|---|---|---|
| 1 | +0.00e+00 | +0.00e+00 | +5.42e-03 | +2.15e-05 | +2.30e-05 | +0.00e+00 |
| 2 | +0.00e+00 | +0.00e+00 | +2.18e-02 | +5.61e-05 | +1.30e-04 | +0.00e+00 |
| 5 | +0.00e+00 | +0.00e+00 | +8.68e-03 | +1.24e-05 | +2.20e-05 | +0.00e+00 |
| 6 | +0.00e+00 | +0.00e+00 | +1.06e-02 | +1.80e-05 | +2.54e-05 | +0.00e+00 |
| 7 | +0.00e+00 | +0.00e+00 | +8.83e-03 | +4.31e-05 | +2.30e-05 | +0.00e+00 |
| 8 | +0.00e+00 | +0.00e+00 | +8.55e-03 | +3.35e-05 | +1.74e-05 | +0.00e+00 |
| 9 | +6.14e-02 | +6.55e-02 | +1.21e-02 | +6.62e-05 | +2.31e-04 | +3.61e-05 |
| 10 | +6.14e-02 | +6.54e-02 | +1.22e-02 | +7.23e-05 | +2.29e-04 | +3.61e-05 |
| 11 | +6.11e-02 | +6.54e-02 | +1.09e-02 | +2.20e-05 | +2.33e-04 | +3.61e-05 |
| 12 | +6.11e-02 | +6.55e-02 | +8.96e-03 | +2.13e-05 | +2.35e-04 | +3.61e-05 |
| 13 | +8.00e-02 | +6.55e-02 | +2.33e-03 | +8.24e-06 | +1.38e-03 | +3.61e-05 |
| 14 | +8.00e-02 | +6.54e-02 | +1.60e-02 | +5.65e-05 | +1.41e-03 | +3.61e-05 |
| 15 | +8.63e-02 | +6.54e-02 | +2.53e-02 | +8.94e-05 | +2.54e-04 | +3.61e-05 |
| 16 | +8.63e-02 | +6.55e-02 | +5.58e-03 | +7.38e-05 | +3.07e-04 | +3.61e-05 |
| 17 | +8.63e-02 | +6.39e-02 | +8.64e-03 | +5.01e-05 | +2.48e-04 | +3.61e-05 |
| 18 | +0.00e+00 | +0.00e+00 | +8.45e-03 | +2.87e-05 | +2.48e-05 | +0.00e+00 |
| 19 | +8.63e-02 | +6.38e-02 | +9.32e-03 | +4.08e-05 | +2.11e-04 | +3.61e-05 |
| 20 | +0.00e+00 | +0.00e+00 | +5.74e-03 | +5.30e-05 | +8.06e-05 | +0.00e+00 |
| 21 | +0.00e+00 | +0.00e+00 | +5.57e-03 | +4.98e-05 | +1.55e-05 | +0.00e+00 |
| 22 | +6.14e-02 | +6.38e-02 | +5.66e-03 | +4.47e-05 | +2.17e-04 | +3.61e-05 |
| 23 | +0.00e+00 | +0.00e+00 | +5.10e-03 | +3.44e-05 | +1.75e-05 | +0.00e+00 |
| 24 | +6.14e-02 | +6.39e-02 | +5.01e-03 | +2.67e-05 | +2.18e-04 | +3.61e-05 |
| 25 | +8.10e-02 | +6.38e-02 | +1.13e-02 | +2.52e-05 | +1.33e-03 | +3.61e-05 |
| 26 | +8.00e-02 | +6.38e-02 | +1.26e-02 | +3.38e-05 | +1.41e-03 | +3.61e-05 |
| 27 | +8.00e-02 | +6.39e-02 | +4.39e-03 | +1.81e-05 | +1.38e-03 | +3.61e-05 |
| 29 | +0.00e+00 | +0.00e+00 | +5.10e-03 | +2.09e-06 | +1.64e-05 | +0.00e+00 |
| 30 | +6.11e-02 | +6.39e-02 | +5.12e-03 | +1.86e-05 | +2.21e-04 | +3.61e-05 |
| 31 | +6.11e-02 | +6.38e-02 | +6.55e-03 | +5.41e-05 | +2.20e-04 | +3.61e-05 |
| 32 | +8.76e-02 | +6.39e-02 | +8.33e-03 | +4.31e-05 | +3.32e-04 | +3.61e-05 |
| 33 | +7.45e-02 | +6.39e-02 | +3.71e-03 | +1.42e-05 | +1.84e-04 | +3.61e-05 |
| 34 | +0.00e+00 | +0.00e+00 | +3.62e-03 | +9.30e-06 | +1.35e-05 | +0.00e+00 |
| 35 | +7.45e-02 | +6.38e-02 | +1.31e-02 | +2.61e-05 | +1.79e-04 | +3.61e-05 |
| 36 | +0.00e+00 | +0.00e+00 | +6.42e-03 | +4.52e-06 | +1.90e-05 | +0.00e+00 |
| 37 | +7.45e-02 | +6.54e-02 | +9.65e-03 | +3.37e-05 | +1.84e-04 | +3.61e-05 |
| 38 | +7.45e-02 | +6.55e-02 | +5.98e-03 | +1.28e-05 | +2.25e-04 | +3.61e-05 |
| 39 | +0.00e+00 | +0.00e+00 | +5.88e-03 | +1.74e-05 | +1.98e-05 | +0.00e+00 |
| 40 | +0.00e+00 | +0.00e+00 | +9.46e-03 | +4.13e-05 | +4.37e-05 | +0.00e+00 |
| 41 | +0.00e+00 | +0.00e+00 | +8.22e-03 | +2.12e-05 | +2.72e-05 | +0.00e+00 |
| 42 | +8.76e-02 | +6.38e-02 | +9.86e-03 | +4.48e-05 | +2.93e-04 | +3.61e-05 |
| 43 | +0.00e+00 | +0.00e+00 | +6.12e-03 | +4.58e-05 | +8.07e-05 | +0.00e+00 |
| 44 | +8.76e-02 | +6.54e-02 | +2.52e-02 | +8.27e-05 | +2.94e-04 | +3.61e-05 |
| 45 | +8.76e-02 | +6.55e-02 | +5.49e-03 | +6.71e-05 | +3.53e-04 | +3.61e-05 |
| 46 | +0.00e+00 | +0.00e+00 | +5.32e-03 | +1.32e-05 | +2.61e-05 | +0.00e+00 |
| 47 | +0.00e+00 | +0.00e+00 | +2.17e-02 | +5.22e-05 | +1.32e-04 | +0.00e+00 |
| 48 | +5.53e-02 | +6.28e-02 | +1.51e-03 | +1.08e-05 | +3.72e-04 | +3.61e-05 |
| 49 | +8.10e-02 | +6.39e-02 | +4.80e-03 | +1.64e-05 | +1.31e-03 | +3.61e-05 |
| 50 | +7.37e-02 | +6.28e-02 | +1.21e-02 | +2.75e-05 | +1.78e-04 | +3.61e-05 |
| 52 | +8.00e-02 | +6.28e-02 | +1.23e-02 | +2.03e-05 | +1.40e-03 | +3.61e-05 |
| 53 | +0.00e+00 | +0.00e+00 | +1.02e-02 | +3.60e-05 | +1.35e-05 | +0.00e+00 |
| 54 | +0.00e+00 | +0.00e+00 | +8.42e-03 | +3.19e-05 | +2.25e-05 | +0.00e+00 |
| 55 | +6.74e-02 | +6.38e-02 | +1.43e-02 | +3.07e-05 | +9.62e-04 | +3.61e-05 |
| 56 | +0.00e+00 | +0.00e+00 | +4.15e-03 | +6.56e-06 | +7.57e-06 | +0.00e+00 |
| 57 | +0.00e+00 | +0.00e+00 | +3.88e-03 | +4.61e-05 | +6.77e-06 | +0.00e+00 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| 58 | +6.11e-02 | +6.28e-02 | +4.21e-03 | +4.53e-05 | +2.17e-04 | +3.61e-05 |
| 59 | +6.14e-02 | +6.28e-02 | +3.92e-03 | +3.80e-05 | +2.14e-04 | +3.61e-05 |
| 60 | +6.74e-02 | +6.39e-02 | +3.73e-03 | +1.44e-05 | +9.45e-04 | +3.61e-05 |
| 61 | +7.37e-02 | +6.38e-02 | +1.60e-02 | +2.73e-05 | +1.77e-04 | +3.61e-05 |
| 62 | +7.37e-02 | +6.39e-02 | +1.76e-03 | +1.44e-05 | +1.80e-04 | +3.61e-05 |
| 63 | +6.74e-02 | +6.28e-02 | +1.01e-02 | +2.70e-05 | +9.53e-04 | +3.61e-05 |
| 65 | +5.53e-02 | +6.39e-02 | +1.14e-03 | +2.73e-05 | +3.66e-04 | +3.61e-05 |
| 66 | +5.53e-02 | +6.38e-02 | +1.66e-03 | +1.77e-05 | +3.73e-04 | +3.61e-05 |
| 67 | +8.76e-02 | +6.28e-02 | +1.17e-02 | +4.90e-05 | +3.14e-04 | +3.61e-05 |
| 68 | +7.45e-02 | +6.28e-02 | +1.08e-02 | +2.75e-05 | +1.80e-04 | +3.61e-05 |
| 69 | +8.10e-02 | +6.28e-02 | +1.20e-02 | +1.51e-05 | +1.32e-03 | +3.61e-05 |
| 70 | +8.63e-02 | +6.28e-02 | +1.15e-02 | +4.46e-05 | +1.11e-04 | +3.61e-05 |
| 71 | +6.79e-02 | +6.28e-02 | +8.52e-03 | +2.66e-05 | +9.41e-04 | +3.61e-05 |
| 72 | +6.79e-02 | +6.38e-02 | +1.17e-02 | +2.60e-05 | +9.51e-04 | +3.61e-05 |
| 73 | +6.79e-02 | +6.39e-02 | +5.18e-03 | +8.37e-06 | +9.34e-04 | +3.61e-05 |
| 74 | +6.79e-02 | +6.54e-02 | +1.35e-02 | +2.92e-05 | +9.56e-04 | +3.61e-05 |
| 75 | +5.53e-02 | +6.54e-02 | +2.67e-03 | +8.08e-05 | +3.66e-04 | +3.61e-05 |
| 77 | +7.37e-02 | +6.54e-02 | +6.40e-03 | +3.92e-05 | +1.79e-04 | +3.61e-05 |
| 78 | +6.74e-02 | +6.54e-02 | +7.97e-03 | +3.52e-05 | +9.67e-04 | +3.61e-05 |
| 79 | +8.10e-02 | +6.54e-02 | +1.56e-02 | +6.28e-05 | +1.34e-03 | +3.61e-05 |
| 80 | +6.79e-02 | +6.55e-02 | +1.19e-02 | +2.03e-05 | +9.33e-04 | +3.61e-05 |
| 81 | +5.53e-02 | +6.55e-02 | +1.71e-03 | +7.57e-05 | +3.59e-04 | +3.61e-05 |
| 82 | +0.00e+00 | +0.00e+00 | +1.16e-02 | +3.65e-05 | +5.41e-06 | +0.00e+00 |
| 83 | +7.37e-02 | +6.55e-02 | +2.63e-03 | +2.34e-05 | +2.19e-04 | +3.61e-05 |
| 84 | +6.74e-02 | +6.55e-02 | +5.91e-03 | +2.06e-05 | +9.44e-04 | +3.61e-05 |
| 85 | +8.10e-02 | +6.55e-02 | +3.39e-03 | +1.08e-05 | +1.31e-03 | +3.61e-05 |
| 86 | +0.00e+00 | +0.00e+00 | +3.67e-03 | +2.86e-05 | +2.76e-05 | +0.00e+00 |
| 87 | +5.41e-02 | +6.39e-02 | +3.56e-03 | +4.75e-05 | +2.01e-04 | +3.61e-05 |
| 88 | +5.41e-02 | +6.28e-02 | +9.75e-04 | +9.95e-06 | +1.66e-04 | +3.61e-05 |
| 90 | +5.41e-02 | +6.38e-02 | +1.22e-03 | +1.71e-05 | +1.60e-04 | +3.61e-05 |
| 92 | +5.41e-02 | +6.55e-02 | +1.19e-02 | +6.29e-05 | +2.15e-04 | +3.61e-05 |
| 93 | +5.41e-02 | +6.54e-02 | +1.34e-02 | +6.54e-05 | +1.91e-04 | +3.61e-05 |
| 94 | +0.00e+00 | +0.00e+00 | +1.14e-02 | +4.32e-05 | +3.66e-06 | +0.00e+00 |
| 95 | +0.00e+00 | +0.00e+00 | +2.61e-03 | +9.81e-06 | +1.31e-05 | +0.00e+00 |
| 96 | +0.00e+00 | +0.00e+00 | +1.66e-03 | +2.83e-06 | +7.48e-06 | +0.00e+00 |
| 97 | +0.00e+00 | +0.00e+00 | +6.27e-03 | +3.52e-05 | +3.98e-05 | +0.00e+00 |

**MASSIME DEFORMAZIONI NODALI/ NODI CORRISPONDENTI**

| Traslaz.X | Traslaz.Y | Traslaz.Z | Rotaz.X | Rotaz.Y | Rotaz.Z | DLMax |
|---|---|---|---|---|---|---|
| +8.76e-02 | +6.55e-02 | +2.53e-02 | +8.94e-05 | +1.41e-03 | +3.61e-05 | +1.12e-01 |
| Nodo: 32 | Nodo: 9 | Nodo: 15 | Nodo: 15 | Nodo: 14 | Nodo: 9 | Nodo: 44 |

**FORZE / MOMENTI ELEMENTO FINITO TRAVE (EX+λ*EY)**
**Gruppo: 1 - Descrizione: MONTANTI**

| Asta | Fx (I/J) | Fy (I/J) | Fz (I/J) | Mx (I/J) | My (I/J) | Mz (I/J) |
|---|---|---|---|---|---|---|
| 1 | +2.34e+01 | +5.17e+01 | +3.68e+01 | +1.15e+00 | +6.58e+03 | +1.32e+04 |
| | +2.34e+01 | +5.17e+01 | +3.68e+01 | +1.15e+00 | +5.75e+03 | +4.10e+03 |
| 2 | +2.40e+03 | +4.95e+01 | +4.56e+01 | +1.15e+00 | +8.93e+03 | +1.03e+04 |
| | +2.40e+03 | +4.95e+01 | +4.56e+01 | +1.15e+00 | +6.38e+03 | +6.31e+03 |
| 3 | +2.38e+03 | +2.81e+01 | +8.69e+01 | +1.15e+00 | +1.54e+04 | +6.54e+03 |
| | +2.38e+03 | +2.81e+01 | +8.69e+01 | +1.15e+00 | +1.37e+04 | +2.87e+03 |
| 4 | +7.63e+01 | +6.58e+01 | +3.78e+01 | +1.15e+00 | +5.97e+03 | +1.49e+04 |
| | +7.63e+01 | +6.58e+01 | +3.78e+01 | +1.15e+00 | +6.70e+03 | +7.18e+03 |
| 5 | +4.14e+01 | +3.60e+01 | +4.65e+01 | +1.15e+00 | +8.03e+03 | +9.99e+03 |
| | +4.14e+01 | +3.60e+01 | +4.65e+01 | +1.15e+00 | +7.56e+03 | +2.09e+03 |
| 6 | +3.28e+01 | +3.75e+01 | +4.31e+01 | +1.15e+00 | +7.45e+03 | +1.05e+04 |
| | +3.28e+01 | +3.75e+01 | +4.31e+01 | +1.15e+00 | +6.98e+03 | +2.08e+03 |
| 7 | +1.94e+01 | +4.09e+01 | +3.56e+01 | +1.15e+00 | +6.11e+03 | +1.09e+04 |
| | +1.94e+01 | +4.09e+01 | +3.56e+01 | +1.15e+00 | +5.82e+03 | +2.82e+03 |
| 8 | +2.08e+01 | +4.26e+01 | +3.26e+01 | +1.15e+00 | +5.39e+03 | +1.11e+04 |
| | +2.08e+01 | +4.26e+01 | +3.26e+01 | +1.15e+00 | +5.53e+03 | +3.14e+03 |
| 9 | +4.37e+02 | +3.93e+01 | +3.35e+01 | +1.15e+00 | +5.84e+03 | +1.07e+04 |
| | +4.37e+02 | +3.93e+01 | +3.35e+01 | +1.15e+00 | +5.38e+03 | +2.42e+03 |
| 10 | +3.52e+01 | +4.30e+01 | +3.19e+01 | +1.15e+00 | +4.88e+03 | +1.11e+04 |
| | +3.52e+01 | +4.30e+01 | +3.19e+01 | +1.15e+00 | +5.81e+03 | +3.31e+03 |
| 11 | +4.33e+02 | +3.77e+01 | +3.59e+01 | +1.15e+00 | +6.24e+03 | +1.02e+04 |
| | +4.33e+02 | +3.77e+01 | +3.59e+01 | +1.15e+00 | +5.80e+03 | +2.41e+03 |
| 12 | +8.72e+01 | +5.47e+01 | +7.95e+01 | +1.15e+00 | +1.33e+04 | +1.17e+04 |
| | +8.72e+01 | +5.47e+01 | +7.95e+01 | +1.15e+00 | +1.33e+04 | +6.60e+03 |
| 13 | +1.65e+01 | +5.16e+01 | +4.83e+01 | +1.15e+00 | +8.25e+03 | +1.26e+04 |
| | +1.65e+01 | +5.16e+01 | +4.83e+01 | +1.15e+00 | +7.91e+03 | +4.70e+03 |
| 14 | +4.20e+01 | +6.34e+01 | +4.33e+01 | +1.15e+00 | +7.05e+03 | +1.39e+04 |
| | +4.20e+01 | +6.34e+01 | +4.33e+01 | +1.15e+00 | +7.45e+03 | +7.39e+03 |
| 15 | +3.04e+01 | +4.73e+01 | +4.15e+01 | +1.15e+00 | +6.59e+03 | +1.30e+04 |
| | +3.04e+01 | +4.73e+01 | +4.15e+01 | +1.15e+00 | +7.31e+03 | +2.79e+03 |
| 16 | +2.64e+01 | +4.28e+01 | +4.13e+01 | +1.15e+00 | +7.39e+03 | +1.25e+04 |
| | +2.64e+01 | +4.28e+01 | +4.13e+01 | +1.15e+00 | +6.47e+03 | +1.89e+03 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| 17 | +2.52e+03 | +3.10e+01 | +4.54e+01 | +1.15e+00 | +9.05e+03 | +8.36e+03 |
| | +2.52e+03 | +3.10e+01 | +4.54e+01 | +1.15e+00 | +6.23e+03 | +2.04e+03 |
| 18 | +2.45e+03 | +1.98e+01 | +9.05e+01 | +1.15e+00 | +1.61e+04 | +5.72e+03 |
| | +2.45e+03 | +1.98e+01 | +9.05e+01 | +1.15e+00 | +1.43e+04 | +9.29e+02 |
| 19 | +3.67e+01 | +4.15e+01 | +3.47e+01 | +1.15e+00 | +5.68e+03 | +1.09e+04 |
| | +3.67e+01 | +4.15e+01 | +3.47e+01 | +1.15e+00 | +5.94e+03 | +3.02e+03 |
| 20 | +3.33e+01 | +4.38e+01 | +3.27e+01 | +1.15e+00 | +4.87e+03 | +1.13e+04 |
| | +3.33e+01 | +4.38e+01 | +3.27e+01 | +1.15e+00 | +6.09e+03 | +3.40e+03 |
| 21 | +3.34e+01 | +4.22e+01 | +3.32e+01 | +1.15e+00 | +5.19e+03 | +1.10e+04 |
| | +3.34e+01 | +4.22e+01 | +3.32e+01 | +1.15e+00 | +5.93e+03 | +3.11e+03 |
| 22 | +2.02e+01 | +4.32e+01 | +2.96e+01 | +1.15e+00 | +5.05e+03 | +1.09e+04 |
| | +2.02e+01 | +4.32e+01 | +2.96e+01 | +1.15e+00 | +4.87e+03 | +3.59e+03 |
| 23 | +4.06e+02 | +4.19e+01 | +3.25e+01 | +1.15e+00 | +5.64e+03 | +1.04e+04 |
| | +4.06e+02 | +4.19e+01 | +3.25e+01 | +1.15e+00 | +5.25e+03 | +3.67e+03 |
| 24 | +4.18e+02 | +3.86e+01 | +3.35e+01 | +1.15e+00 | +5.82e+03 | +1.04e+04 |
| | +4.18e+02 | +3.86e+01 | +3.35e+01 | +1.15e+00 | +5.40e+03 | +2.56e+03 |
| 25 | +3.85e+01 | +4.61e+01 | +2.86e+01 | +1.15e+00 | +5.45e+03 | +1.24e+04 |
| | +3.85e+01 | +4.61e+01 | +2.86e+01 | +1.15e+00 | +4.68e+03 | +3.10e+03 |
| 26 | +2.47e+01 | +9.51e+01 | +2.95e+01 | +1.15e+00 | +5.57e+03 | +1.76e+04 |
| | +2.47e+01 | +9.51e+01 | +2.95e+01 | +1.15e+00 | +4.72e+03 | +1.43e+04 |
| 27 | +1.06e+01 | +5.11e+01 | +4.19e+01 | +1.15e+00 | +7.18e+03 | +1.24e+04 |
| | +1.06e+01 | +5.11e+01 | +4.19e+01 | +1.15e+00 | +6.85e+03 | +4.73e+03 |
| 28 | +4.43e+01 | +6.30e+01 | +3.94e+01 | +1.15e+00 | +6.36e+03 | +1.37e+04 |
| | +4.43e+01 | +6.30e+01 | +3.94e+01 | +1.15e+00 | +6.85e+03 | +7.45e+03 |
| 29 | +8.51e+01 | +5.44e+01 | +7.60e+01 | +1.15e+00 | +1.27e+04 | +1.16e+04 |
| | +8.51e+01 | +5.44e+01 | +7.60e+01 | +1.15e+00 | +1.27e+04 | +6.66e+03 |

**FORZE / MOMENTI ELEMENTO FINITO TRAVE (EX+λ*EY)**
**Gruppo: 2 - Descrizione: TRAVI DI COPERTURA**

| Asta | Fx (l/J) | Fy (l/J) | Fz (l/J) | Mx (l/J) | My (l/J) | Mz (l/J) |
|---|---|---|---|---|---|---|
| 1 | +3.37e+02 | +4.46e-15 | +5.65e-16 | +8.22e-01 | +0.00e+00 | +0.00e+00 |
| | +3.37e+02 | +4.46e-15 | +5.65e-16 | +8.22e-01 | +0.00e+00 | +0.00e+00 |
| 2 | +8.33e+02 | +7.85e+01 | +2.43e-02 | +5.33e-01 | +0.00e+00 | +4.25e-13 |
| | +8.33e+02 | +7.85e+01 | +2.43e-02 | +5.33e-01 | +4.37e+00 | +1.41e+04 |
| 3 | +5.75e+02 | +5.19e+01 | +9.60e-03 | +2.53e-01 | +1.89e+00 | +1.02e+04 |
| | +5.75e+02 | +5.19e+01 | +9.60e-03 | +2.53e-01 | +0.00e+00 | +0.00e+00 |
| 4 | +1.92e+02 | +7.09e-14 | +1.86e-16 | +1.98e+00 | +0.00e+00 | +0.00e+00 |
| | +1.92e+02 | +7.09e-14 | +1.86e-16 | +1.98e+00 | +0.00e+00 | +0.00e+00 |
| 5 | +5.88e+00 | +2.31e-15 | +5.70e-16 | +4.90e-01 | +0.00e+00 | +0.00e+00 |
| | +5.88e+00 | +2.31e-15 | +5.70e-16 | +4.90e-01 | +0.00e+00 | +0.00e+00 |
| 6 | +5.03e+01 | +1.01e-13 | +2.43e-16 | +4.58e-01 | +0.00e+00 | +7.31e-13 |
| | +5.03e+01 | +1.01e-13 | +2.43e-16 | +4.58e-01 | +1.49e-14 | +0.00e+00 |
| 7 | +4.03e+01 | +1.41e-15 | +0.00e+00 | +2.50e-01 | +0.00e+00 | +0.00e+00 |
| | +4.03e+01 | +1.41e-15 | +0.00e+00 | +2.50e-01 | +0.00e+00 | +0.00e+00 |
| 8 | +2.21e+01 | +4.90e-14 | +1.99e-16 | +2.67e+00 | +0.00e+00 | +0.00e+00 |
| | +2.21e+01 | +4.90e-14 | +1.99e-16 | +2.67e+00 | +0.00e+00 | +0.00e+00 |
| 9 | +3.11e+02 | +8.44e-16 | +5.62e-16 | +4.11e-01 | +0.00e+00 | +0.00e+00 |
| | +3.11e+02 | +8.44e-16 | +5.62e-16 | +4.11e-01 | +0.00e+00 | +0.00e+00 |
| 10 | +5.88e+02 | +3.75e-14 | +2.49e-16 | +4.08e-01 | +0.00e+00 | +8.47e-13 |
| | +5.88e+02 | +3.75e-14 | +2.49e-16 | +4.08e-01 | +1.49e-14 | +0.00e+00 |
| 11 | +5.02e+01 | +1.26e-15 | +0.00e+00 | +2.36e-01 | +0.00e+00 | +0.00e+00 |
| | +5.02e+01 | +1.26e-15 | +0.00e+00 | +2.36e-01 | +0.00e+00 | +0.00e+00 |
| 12 | +5.09e+02 | +2.53e-14 | +1.87e-16 | +1.83e+00 | +0.00e+00 | +0.00e+00 |
| | +5.09e+02 | +2.53e-14 | +1.87e-16 | +1.83e+00 | +0.00e+00 | +0.00e+00 |
| 13 | +1.34e+00 | +5.25e-16 | +5.60e-16 | +1.37e-01 | +0.00e+00 | +0.00e+00 |
| | +1.34e+00 | +5.25e-16 | +5.60e-16 | +1.37e-01 | +0.00e+00 | +0.00e+00 |
| 14 | +3.67e+01 | +8.53e-14 | +2.53e-16 | +7.59e-01 | +0.00e+00 | +5.46e-13 |
| | +3.67e+01 | +8.53e-14 | +2.53e-16 | +7.59e-01 | +1.49e-14 | +0.00e+00 |
| 15 | +4.11e+01 | +8.61e-16 | +0.00e+00 | +3.04e-01 | +0.00e+00 | +0.00e+00 |
| | +4.11e+01 | +8.61e-16 | +0.00e+00 | +3.04e-01 | +0.00e+00 | +0.00e+00 |
| 16 | +2.22e+01 | +1.18e-14 | +1.87e-16 | +1.29e+00 | +0.00e+00 | +0.00e+00 |
| | +2.22e+01 | +1.18e-14 | +1.87e-16 | +1.29e+00 | +0.00e+00 | +0.00e+00 |
| 17 | +7.94e+01 | +8.17e-16 | +5.55e-16 | +9.22e-02 | +0.00e+00 | +0.00e+00 |
| | +7.94e+01 | +8.17e-16 | +5.55e-16 | +9.22e-02 | +0.00e+00 | +0.00e+00 |
| 18 | +3.27e+01 | +4.08e-14 | +2.51e-16 | +7.42e-01 | +0.00e+00 | +1.02e-13 |
| | +3.27e+01 | +4.08e-14 | +2.51e-16 | +7.42e-01 | +1.49e-14 | +0.00e+00 |
| 19 | +3.89e+00 | +3.25e-16 | +0.00e+00 | +2.85e-01 | +0.00e+00 | +0.00e+00 |
| | +3.89e+00 | +3.25e-16 | +0.00e+00 | +2.85e-01 | +0.00e+00 | +0.00e+00 |
| 20 | +5.93e+01 | +4.12e-15 | +1.90e-16 | +7.21e-01 | +0.00e+00 | +0.00e+00 |
| | +5.93e+01 | +4.12e-15 | +1.90e-16 | +7.21e-01 | +0.00e+00 | +0.00e+00 |
| 21 | +1.16e+02 | +1.90e-15 | +5.51e-16 | +2.02e-01 | +0.00e+00 | +0.00e+00 |
| | +1.16e+02 | +1.90e-15 | +5.51e-16 | +2.02e-01 | +0.00e+00 | +0.00e+00 |
| 22 | +2.75e+02 | +3.66e-14 | +2.45e-16 | +4.20e-01 | +0.00e+00 | +2.17e-13 |
| | +2.75e+02 | +3.66e-14 | +2.45e-16 | +4.20e-01 | +1.49e-14 | +0.00e+00 |
| 23 | +3.37e+01 | +4.19e-16 | +0.00e+00 | +1.26e-01 | +0.00e+00 | +0.00e+00 |
| | +3.37e+01 | +4.19e-16 | +0.00e+00 | +1.26e-01 | +0.00e+00 | +0.00e+00 |
| 24 | +2.26e+02 | +5.57e-15 | +1.91e-16 | +4.60e-01 | +0.00e+00 | +0.00e+00 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| | +2.26e+02 | +5.57e-15 | +1.91e-16 | +4.60e-01 | +0.00e+00 | +0.00e+00 |
| 25 | +5.69e+01 | +6.20e-16 | +5.47e-16 | +5.39e-01 | +0.00e+00 | +0.00e+00 |
| | +5.69e+01 | +6.20e-16 | +5.47e-16 | +5.39e-01 | +0.00e+00 | +0.00e+00 |
| 26 | +3.92e+01 | +5.93e-14 | +2.41e-16 | +3.67e-01 | +0.00e+00 | +1.33e-13 |
| | +3.92e+01 | +5.93e-14 | +2.41e-16 | +3.67e-01 | +1.49e-14 | +0.00e+00 |
| 27 | +7.57e+00 | +3.99e-16 | +0.00e+00 | +1.44e-01 | +0.00e+00 | +0.00e+00 |
| | +7.57e+00 | +3.99e-16 | +0.00e+00 | +1.44e-01 | +0.00e+00 | +0.00e+00 |
| 28 | +3.88e+01 | +2.35e-15 | +1.94e-16 | +6.30e-01 | +0.00e+00 | +0.00e+00 |
| | +3.88e+01 | +2.35e-15 | +1.94e-16 | +6.30e-01 | +0.00e+00 | +0.00e+00 |
| 29 | +7.59e+01 | +1.62e-15 | +5.48e-16 | +4.47e-01 | +0.00e+00 | +0.00e+00 |
| | +7.59e+01 | +1.62e-15 | +5.48e-16 | +4.47e-01 | +0.00e+00 | +0.00e+00 |
| 30 | +3.08e+01 | +4.06e-14 | +2.33e-16 | +7.41e-01 | +0.00e+00 | +1.15e-13 |
| | +3.08e+01 | +4.06e-14 | +2.33e-16 | +7.41e-01 | +1.49e-14 | +0.00e+00 |
| 31 | +3.70e+00 | +3.12e-16 | +0.00e+00 | +2.56e-01 | +0.00e+00 | +0.00e+00 |
| | +3.70e+00 | +3.12e-16 | +0.00e+00 | +2.56e-01 | +0.00e+00 | +0.00e+00 |
| 32 | +5.64e+01 | +4.86e-15 | +2.01e-16 | +7.80e-01 | +0.00e+00 | +0.00e+00 |
| | +5.64e+01 | +4.86e-15 | +2.01e-16 | +7.80e-01 | +0.00e+00 | +0.00e+00 |
| 33 | +1.24e+00 | +1.58e-15 | +5.55e-16 | +1.72e-01 | +0.00e+00 | +0.00e+00 |
| | +1.24e+00 | +1.58e-15 | +5.55e-16 | +1.72e-01 | +0.00e+00 | +0.00e+00 |
| 34 | +3.67e+01 | +8.52e-14 | +2.32e-16 | +7.69e-01 | +0.00e+00 | +5.58e-13 |
| | +3.67e+01 | +8.52e-14 | +2.32e-16 | +7.69e-01 | +1.49e-14 | +0.00e+00 |
| 35 | +4.13e+01 | +7.36e-16 | +0.00e+00 | +2.82e-01 | +0.00e+00 | +0.00e+00 |
| | +4.13e+01 | +7.36e-16 | +0.00e+00 | +2.82e-01 | +0.00e+00 | +0.00e+00 |
| 36 | +2.24e+01 | +1.11e-14 | +2.13e-16 | +1.28e+00 | +0.00e+00 | +0.00e+00 |
| | +2.24e+01 | +1.11e-14 | +2.13e-16 | +1.28e+00 | +0.00e+00 | +0.00e+00 |
| 37 | +3.09e+02 | +1.25e-15 | +5.43e-16 | +3.39e-01 | +0.00e+00 | +0.00e+00 |
| | +3.09e+02 | +1.25e-15 | +5.43e-16 | +3.39e-01 | +0.00e+00 | +0.00e+00 |
| 38 | +5.85e+02 | +3.86e-14 | +2.40e-16 | +4.54e-01 | +0.00e+00 | +8.80e-13 |
| | +5.85e+02 | +3.86e-14 | +2.40e-16 | +4.54e-01 | +1.49e-14 | +0.00e+00 |
| 39 | +5.15e+01 | +1.12e-15 | +0.00e+00 | +2.20e-01 | +0.00e+00 | +0.00e+00 |
| | +5.15e+01 | +1.12e-15 | +0.00e+00 | +2.20e-01 | +0.00e+00 | +0.00e+00 |
| 40 | +5.04e+02 | +2.48e-14 | +2.19e-16 | +1.86e+00 | +0.00e+00 | +0.00e+00 |
| | +5.04e+02 | +2.48e-14 | +2.19e-16 | +1.86e+00 | +0.00e+00 | +0.00e+00 |
| 41 | +1.93e+00 | +2.51e-15 | +5.37e-16 | +4.98e-01 | +0.00e+00 | +0.00e+00 |
| | +1.93e+00 | +2.51e-15 | +5.37e-16 | +4.98e-01 | +0.00e+00 | +0.00e+00 |
| 42 | +4.25e+01 | +9.23e-14 | +2.51e-16 | +4.07e-01 | +0.00e+00 | +8.01e-13 |
| | +4.25e+01 | +9.23e-14 | +2.51e-16 | +4.07e-01 | +1.49e-14 | +0.00e+00 |
| 43 | +4.92e+01 | +1.26e-15 | +0.00e+00 | +2.27e-01 | +0.00e+00 | +0.00e+00 |
| | +4.92e+01 | +1.26e-15 | +0.00e+00 | +2.27e-01 | +0.00e+00 | +0.00e+00 |
| 44 | +2.65e+01 | +4.98e-14 | +2.32e-16 | +2.68e+00 | +0.00e+00 | +0.00e+00 |
| | +2.65e+01 | +4.98e-14 | +2.32e-16 | +2.68e+00 | +0.00e+00 | +0.00e+00 |
| 45 | +9.17e+01 | +4.70e-15 | +5.28e-16 | +8.73e-01 | +0.00e+00 | +0.00e+00 |
| | +9.17e+01 | +4.70e-15 | +5.28e-16 | +8.73e-01 | +0.00e+00 | +0.00e+00 |
| 46 | +9.33e+01 | +5.20e-14 | +2.52e-16 | +5.08e-01 | +0.00e+00 | +5.05e-13 |
| | +9.33e+01 | +5.20e-14 | +2.52e-16 | +5.08e-01 | +1.49e-14 | +0.00e+00 |
| 47 | +1.23e+02 | +1.10e-15 | +0.00e+00 | +2.40e-01 | +0.00e+00 | +0.00e+00 |
| | +1.23e+02 | +1.10e-15 | +0.00e+00 | +2.40e-01 | +0.00e+00 | +0.00e+00 |
| 48 | +3.16e+01 | +7.28e-14 | +2.18e-16 | +1.92e+00 | +0.00e+00 | +0.00e+00 |
| | +3.16e+01 | +7.28e-14 | +2.18e-16 | +1.92e+00 | +0.00e+00 | +0.00e+00 |
| 49 | +1.67e+02 | +2.44e+01 | +3.57e+01 | +1.46e+02 | +3.26e+03 | +3.61e+03 |
| | +1.67e+02 | +2.44e+01 | +3.57e+01 | +1.46e+02 | +3.26e+03 | +8.46e+02 |
| 50 | +7.25e+01 | +2.59e+01 | +3.45e+01 | +1.41e+02 | +3.15e+03 | +1.77e+03 |
| | +7.25e+01 | +2.59e+01 | +3.45e+01 | +1.41e+02 | +3.15e+03 | +2.97e+03 |
| 51 | +1.12e+02 | +2.15e+01 | +3.04e+01 | +1.24e+02 | +2.77e+03 | +2.89e+03 |
| | +1.12e+02 | +2.15e+01 | +3.04e+01 | +1.24e+02 | +2.77e+03 | +1.04e+03 |
| 52 | +9.76e+01 | +1.92e+01 | +3.14e+01 | +1.28e+02 | +2.86e+03 | +1.05e+03 |
| | +9.76e+01 | +1.92e+01 | +3.14e+01 | +1.28e+02 | +2.86e+03 | +2.45e+03 |
| 53 | +8.34e+01 | +4.80e+01 | +4.49e-01 | +2.31e+00 | +4.60e+01 | +4.22e+03 |
| | +8.34e+01 | +4.80e+01 | +4.49e-01 | +2.31e+00 | +4.60e+01 | +5.61e+03 |
| 54 | +3.88e+01 | +1.00e+01 | +5.62e+01 | +1.27e+02 | +3.79e+03 | +9.97e+02 |
| | +3.88e+01 | +1.00e+01 | +5.62e+01 | +1.27e+02 | +3.79e+03 | +3.53e+02 |
| 55 | +2.77e+01 | +1.06e+01 | +2.89e+01 | +1.03e+02 | +2.46e+03 | +6.74e+02 |
| | +2.77e+01 | +1.06e+01 | +2.89e+01 | +1.03e+02 | +2.46e+03 | +1.13e+03 |
| 56 | +2.10e+02 | +2.55e+01 | +3.13e+01 | +1.28e+02 | +2.86e+03 | +4.07e+03 |
| | +2.10e+02 | +2.55e+01 | +3.13e+01 | +1.28e+02 | +2.86e+03 | +7.84e+02 |
| 57 | +7.89e+01 | +2.93e+01 | +3.07e+01 | +1.26e+02 | +2.80e+03 | +2.26e+03 |
| | +7.89e+01 | +2.93e+01 | +3.07e+01 | +1.26e+02 | +2.80e+03 | +3.20e+03 |
| 58 | +7.01e+01 | +2.78e+01 | +3.28e+01 | +1.34e+02 | +3.00e+03 | +3.11e+03 |
| | +7.01e+01 | +2.78e+01 | +3.28e+01 | +1.34e+02 | +3.00e+03 | +1.95e+03 |
| 59 | +1.90e+02 | +2.71e+01 | +3.55e+01 | +1.45e+02 | +3.24e+03 | +8.93e+02 |
| | +1.90e+02 | +2.71e+01 | +3.55e+01 | +1.45e+02 | +3.24e+03 | +4.04e+03 |
| 60 | +1.36e+02 | +3.23e+01 | +8.95e+01 | +2.18e+02 | +8.17e+03 | +4.35e+03 |
| | +1.36e+02 | +3.23e+01 | +8.95e+01 | +2.18e+02 | +8.17e+03 | +1.55e+03 |
| 61 | +1.46e+02 | +3.92e+01 | +8.67e+01 | +2.11e+02 | +7.91e+03 | +2.07e+03 |
| | +1.46e+02 | +3.92e+01 | +8.67e+01 | +2.11e+02 | +7.91e+03 | +5.08e+03 |
| 62 | +1.73e+02 | +3.22e+01 | +7.58e+01 | +1.84e+02 | +6.92e+03 | +4.69e+03 |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | |
|---|---|---|---|---|---|---|
| | +1.73e+02 | +3.22e+01 | +7.58e+01 | +1.84e+02 | +6.92e+03 | +1.31e+03 |
| 63 | +1.34e+02 | +2.92e+01 | +8.16e+01 | +1.98e+02 | +7.45e+03 | +1.88e+03 |
| | +1.34e+02 | +2.92e+01 | +8.16e+01 | +1.98e+02 | +7.45e+03 | +3.46e+03 |
| 64 | +6.01e+01 | +2.24e+01 | +5.93e-01 | +3.06e+00 | +6.08e+01 | +1.80e+03 |
| | +6.01e+01 | +2.24e+01 | +5.93e-01 | +3.06e+00 | +6.08e+01 | +2.79e+03 |
| 65 | +7.43e+01 | +6.61e+00 | +5.54e+01 | +1.26e+02 | +3.74e+03 | +1.06e+03 |
| | +7.43e+01 | +6.61e+00 | +5.54e+01 | +1.26e+02 | +3.74e+03 | +2.35e+02 |
| 66 | +7.25e+00 | +7.02e+00 | +2.88e+01 | +1.02e+02 | +2.45e+03 | +6.21e+02 |
| | +7.25e+00 | +7.02e+00 | +2.88e+01 | +1.02e+02 | +2.45e+03 | +6.14e+02 |
| 67 | +1.53e+02 | +2.52e+01 | +8.15e+01 | +1.98e+02 | +7.44e+03 | +3.10e+03 |
| | +1.53e+02 | +2.52e+01 | +8.15e+01 | +1.98e+02 | +7.44e+03 | +1.56e+03 |
| 68 | +1.51e+02 | +2.91e+01 | +7.66e+01 | +1.86e+02 | +6.99e+03 | +1.56e+03 |
| | +1.51e+02 | +2.91e+01 | +7.66e+01 | +1.86e+02 | +6.99e+03 | +4.12e+03 |
| 69 | +1.63e+02 | +4.21e+01 | +8.22e+01 | +2.00e+02 | +7.51e+03 | +5.53e+03 |
| | +1.63e+02 | +4.21e+01 | +8.22e+01 | +2.00e+02 | +7.51e+03 | +2.16e+03 |
| 70 | +1.45e+02 | +3.63e+01 | +9.24e+01 | +2.25e+02 | +8.43e+03 | +1.83e+03 |
| | +1.45e+02 | +3.63e+01 | +9.24e+01 | +2.25e+02 | +8.43e+03 | +4.82e+03 |
| 71 | +1.71e+02 | +2.95e+01 | +7.81e+01 | +1.90e+02 | +7.13e+03 | +3.24e+03 |
| | +1.71e+02 | +2.95e+01 | +7.81e+01 | +1.90e+02 | +7.13e+03 | +3.09e+03 |
| 72 | +1.79e+02 | +1.36e+01 | +7.88e+01 | +1.91e+02 | +7.19e+03 | +2.32e+03 |
| | +1.79e+02 | +1.36e+01 | +7.88e+01 | +1.91e+02 | +7.19e+03 | +2.27e+03 |
| 73 | +1.47e+02 | +2.17e+01 | +6.77e+01 | +1.65e+02 | +6.18e+03 | +2.81e+03 |
| | +1.47e+02 | +2.17e+01 | +6.77e+01 | +1.65e+02 | +6.18e+03 | +1.86e+03 |
| 74 | +1.77e+02 | +3.13e+01 | +8.17e+01 | +1.99e+02 | +7.46e+03 | +2.67e+03 |
| | +1.77e+02 | +3.13e+01 | +8.17e+01 | +1.99e+02 | +7.46e+03 | +4.25e+03 |
| 75 | +1.55e+02 | +7.04e+00 | +1.55e+00 | +7.97e+00 | +1.58e+02 | +1.53e+03 |
| | +1.55e+02 | +7.04e+00 | +1.55e+00 | +7.97e+00 | +1.58e+02 | +1.34e+03 |
| 76 | +1.20e+02 | +4.36e+00 | +5.22e+01 | +1.18e+02 | +3.53e+03 | +1.24e+03 |
| | +1.20e+02 | +4.36e+00 | +5.22e+01 | +1.18e+02 | +3.53e+03 | +1.19e+03 |
| 77 | +1.50e+02 | +7.65e+00 | +2.88e+01 | +1.03e+02 | +2.45e+03 | +1.21e+03 |
| | +1.50e+02 | +7.65e+00 | +2.88e+01 | +1.03e+02 | +2.45e+03 | +1.47e+03 |
| 78 | +1.77e+02 | +3.23e+01 | +8.17e+01 | +1.98e+02 | +7.45e+03 | +4.45e+03 |
| | +1.77e+02 | +3.23e+01 | +8.17e+01 | +1.98e+02 | +7.45e+03 | +2.52e+03 |
| 79 | +1.35e+02 | +2.29e+01 | +6.86e+01 | +1.67e+02 | +6.26e+03 | +1.83e+03 |
| | +1.35e+02 | +2.29e+01 | +6.86e+01 | +1.67e+02 | +6.26e+03 | +2.90e+03 |
| 80 | +1.92e+02 | +1.32e+01 | +7.43e+01 | +1.81e+02 | +6.78e+03 | +2.12e+03 |
| | +1.92e+02 | +1.32e+01 | +7.43e+01 | +1.81e+02 | +6.78e+03 | +2.50e+03 |
| 81 | +1.85e+02 | +2.81e+01 | +9.16e+01 | +2.23e+02 | +8.36e+03 | +3.26e+03 |
| | +1.85e+02 | +2.81e+01 | +9.16e+01 | +2.23e+02 | +8.36e+03 | +3.10e+03 |
| 82 | +1.50e+02 | +3.53e+01 | +8.79e+01 | +2.14e+02 | +8.02e+03 | +4.22e+03 |
| | +1.50e+02 | +3.53e+01 | +8.79e+01 | +2.14e+02 | +8.02e+03 | +2.80e+03 |
| 83 | +1.53e+02 | +1.58e+01 | +7.86e+01 | +1.91e+02 | +7.17e+03 | +1.84e+03 |
| | +1.53e+02 | +1.58e+01 | +7.86e+01 | +1.91e+02 | +7.17e+03 | +2.69e+03 |
| 84 | +1.72e+02 | +1.75e+01 | +6.76e+01 | +1.64e+02 | +6.17e+03 | +2.71e+03 |
| | +1.72e+02 | +1.75e+01 | +6.76e+01 | +1.64e+02 | +6.17e+03 | +1.88e+03 |
| 85 | +1.73e+02 | +2.92e+01 | +8.24e+01 | +2.00e+02 | +7.52e+03 | +3.10e+03 |
| | +1.73e+02 | +2.92e+01 | +8.24e+01 | +2.00e+02 | +7.52e+03 | +3.50e+03 |
| 86 | +1.36e+02 | +7.11e+00 | +1.69e+00 | +8.69e+00 | +1.73e+02 | +1.51e+03 |
| | +1.36e+02 | +7.11e+00 | +1.69e+00 | +8.69e+00 | +1.73e+02 | +1.03e+03 |
| 87 | +9.25e+01 | +5.03e+00 | +5.19e+01 | +1.18e+02 | +3.50e+03 | +1.04e+03 |
| | +9.25e+01 | +5.03e+00 | +5.19e+01 | +1.18e+02 | +3.50e+03 | +1.01e+03 |
| 88 | +1.32e+02 | +7.46e+00 | +2.89e+01 | +1.03e+02 | +2.46e+03 | +9.40e+02 |
| | +1.32e+02 | +7.46e+00 | +2.89e+01 | +1.03e+02 | +2.46e+03 | +1.46e+03 |
| 89 | +1.64e+02 | +2.82e+01 | +8.23e+01 | +2.00e+02 | +7.51e+03 | +3.59e+03 |
| | +1.64e+02 | +2.82e+01 | +8.23e+01 | +2.00e+02 | +7.51e+03 | +2.83e+03 |
| 90 | +1.53e+02 | +1.80e+01 | +6.84e+01 | +1.66e+02 | +6.25e+03 | +1.72e+03 |
| | +1.53e+02 | +1.80e+01 | +6.84e+01 | +1.66e+02 | +6.25e+03 | +2.57e+03 |
| 91 | +1.52e+02 | +1.44e+01 | +7.43e+01 | +1.81e+02 | +6.78e+03 | +2.43e+03 |
| | +1.52e+02 | +1.44e+01 | +7.43e+01 | +1.81e+02 | +6.78e+03 | +1.98e+03 |
| 92 | +1.59e+02 | +3.32e+01 | +9.05e+01 | +2.20e+02 | +8.26e+03 | +2.76e+03 |
| | +1.59e+02 | +3.32e+01 | +9.05e+01 | +2.20e+02 | +8.26e+03 | +4.05e+03 |
| 93 | +3.65e+02 | +6.70e+01 | +3.47e+01 | +1.42e+02 | +3.17e+03 | +9.14e+03 |
| | +3.65e+02 | +6.70e+01 | +3.47e+01 | +1.42e+02 | +3.17e+03 | +3.08e+03 |
| 94 | +3.28e+02 | +8.38e+01 | +3.33e+01 | +1.36e+02 | +3.04e+03 | +4.93e+03 |
| | +3.28e+02 | +8.38e+01 | +3.33e+01 | +1.36e+02 | +3.04e+03 | +1.04e+04 |
| 95 | +2.61e+02 | +3.00e+01 | +2.91e+01 | +1.19e+02 | +2.66e+03 | +4.90e+03 |
| | +2.61e+02 | +3.00e+01 | +2.91e+01 | +1.19e+02 | +2.66e+03 | +1.84e+03 |
| 96 | +2.16e+02 | +2.56e+01 | +3.18e+01 | +1.30e+02 | +2.90e+03 | +2.29e+03 |
| | +2.16e+02 | +2.56e+01 | +3.18e+01 | +1.30e+02 | +2.90e+03 | +2.51e+03 |
| 97 | +1.21e+02 | +4.62e+01 | +9.19e-01 | +4.74e+00 | +9.42e+01 | +4.20e+03 |
| | +1.21e+02 | +4.62e+01 | +9.19e-01 | +4.74e+00 | +9.42e+01 | +5.60e+03 |
| 98 | +7.14e+01 | +1.29e+01 | +5.49e+01 | +1.24e+02 | +3.71e+03 | +1.25e+03 |
| | +7.14e+01 | +1.29e+01 | +5.49e+01 | +1.24e+02 | +3.71e+03 | +6.91e+02 |
| 99 | +6.60e+01 | +1.38e+01 | +2.90e+01 | +1.03e+02 | +2.47e+03 | +9.71e+02 |
| | +6.60e+01 | +1.38e+01 | +2.90e+01 | +1.03e+02 | +2.47e+03 | +1.71e+03 |
| 100 | +3.25e+02 | +3.07e+01 | +3.17e+01 | +1.30e+02 | +2.89e+03 | +4.09e+03 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| | +3.25e+02 | +3.07e+01 | +3.17e+01 | +1.30e+02 | +2.89e+03 | +2.05e+03 |
| 101 | +2.40e+02 | +3.73e+01 | +2.94e+01 | +1.21e+02 | +2.69e+03 | +3.01e+03 |
| | +2.40e+02 | +3.73e+01 | +2.94e+01 | +1.21e+02 | +2.69e+03 | +5.31e+03 |
| 102 | +3.36e+02 | +8.59e+01 | +3.17e+01 | +1.30e+02 | +2.89e+03 | +1.06e+04 |
| | +3.36e+02 | +8.59e+01 | +3.17e+01 | +1.30e+02 | +2.89e+03 | +5.06e+03 |
| 103 | +3.80e+02 | +6.99e+01 | +3.43e+01 | +1.40e+02 | +3.13e+03 | +3.22e+03 |
| | +3.80e+02 | +6.99e+01 | +3.43e+01 | +1.40e+02 | +3.13e+03 | +9.53e+03 |

**FORZE / MOMENTI ELEMENTO FINITO TRAVE (EX+λ*EY)**
**Gruppo: 3 - Descrizione: DIAGONALI DI PARETE**

| Asta | Fx (l/J) | Fy (l/J) | Fz (l/J) | Mx (l/J) | My (l/J) | Mz (l/J) |
|---|---|---|---|---|---|---|
| 1 | +6.34e+02 | +1.05e-16 | +9.95e-17 | +1.78e+00 | +1.17e-14 | +2.09e-14 |
| | +6.34e+02 | +1.05e-16 | +9.95e-17 | +1.78e+00 | +2.07e-14 | +0.00e+00 |
| 2 | +6.37e+02 | +1.06e-16 | +1.01e-16 | +1.81e+00 | +1.13e-14 | +2.10e-14 |
| | +6.37e+02 | +1.06e-16 | +1.01e-16 | +1.81e+00 | +1.99e-14 | +0.00e+00 |
| 3 | +6.18e+02 | +1.06e-16 | +9.94e-17 | +1.67e+00 | +1.17e-14 | +2.10e-14 |
| | +6.18e+02 | +1.06e-16 | +9.94e-17 | +1.67e+00 | +2.07e-14 | +0.00e+00 |
| 4 | +6.21e+02 | +1.09e-16 | +1.04e-16 | +1.59e+00 | +1.13e-14 | +2.20e-14 |
| | +6.21e+02 | +1.09e-16 | +1.04e-16 | +1.59e+00 | +1.99e-14 | +0.00e+00 |
| 5 | +2.96e+03 | +7.50e-16 | +3.05e-17 | +1.34e-01 | +0.00e+00 | +0.00e+00 |
| | +2.96e+03 | +7.50e-16 | +3.05e-17 | +1.34e-01 | +0.00e+00 | +0.00e+00 |
| 6 | +2.95e+03 | +7.51e-16 | +2.53e-17 | +4.56e-01 | +0.00e+00 | +0.00e+00 |
| | +2.95e+03 | +7.51e-16 | +2.53e-17 | +4.56e-01 | +0.00e+00 | +0.00e+00 |
| 7 | +2.87e+03 | +7.32e-16 | +2.53e-17 | +4.22e-01 | +0.00e+00 | +0.00e+00 |
| | +2.87e+03 | +7.32e-16 | +2.53e-17 | +4.22e-01 | +0.00e+00 | +0.00e+00 |
| 8 | +2.88e+03 | +7.31e-16 | +3.05e-17 | +1.16e-01 | +0.00e+00 | +0.00e+00 |
| | +2.88e+03 | +7.31e-16 | +3.05e-17 | +1.16e-01 | +0.00e+00 | +0.00e+00 |

**FORZE / MOMENTI ELEMENTO FINITO TRAVE (λ*EX+EY)**
**Gruppo: 1 - Descrizione: MONTANTI**

| Asta | Fx (l/J) | Fy (l/J) | Fz (l/J) | Mx (l/J) | My (l/J) | Mz (l/J) |
|---|---|---|---|---|---|---|
| 1 | +5.23e+01 | +2.36e+01 | +8.09e+01 | +1.30e+00 | +1.44e+04 | +5.86e+03 |
| | +5.23e+01 | +2.36e+01 | +8.09e+01 | +1.30e+00 | +1.27e+04 | +2.06e+03 |
| 2 | +1.06e+03 | +2.30e+01 | +9.10e+01 | +1.30e+00 | +1.55e+04 | +4.61e+03 |
| | +1.06e+03 | +2.30e+01 | +9.10e+01 | +1.30e+00 | +1.50e+04 | +3.11e+03 |
| 3 | +1.02e+03 | +1.35e+01 | +9.91e+01 | +1.30e+00 | +1.76e+04 | +2.97e+03 |
| | +1.02e+03 | +1.35e+01 | +9.91e+01 | +1.30e+00 | +1.56e+04 | +1.55e+03 |
| 4 | +6.31e+01 | +3.00e+01 | +8.48e+01 | +1.30e+00 | +1.43e+04 | +6.60e+03 |
| | +6.31e+01 | +3.00e+01 | +8.48e+01 | +1.30e+00 | +1.41e+04 | +3.46e+03 |
| 5 | +8.61e+01 | +1.34e+01 | +1.03e+02 | +1.30e+00 | +1.79e+04 | +3.60e+03 |
| | +8.61e+01 | +1.34e+01 | +1.03e+02 | +1.30e+00 | +1.68e+04 | +9.32e+02 |
| 6 | +7.90e+01 | +1.41e+01 | +1.01e+02 | +1.30e+00 | +1.75e+04 | +3.78e+03 |
| | +7.90e+01 | +1.41e+01 | +1.01e+02 | +1.30e+00 | +1.64e+04 | +9.44e+02 |
| 7 | +1.61e+01 | +1.56e+01 | +9.67e+01 | +1.30e+00 | +1.65e+04 | +3.94e+03 |
| | +1.61e+01 | +1.56e+01 | +9.67e+01 | +1.30e+00 | +1.59e+04 | +1.28e+03 |
| 8 | +2.59e+01 | +1.60e+01 | +8.53e+01 | +1.30e+00 | +1.41e+04 | +4.00e+03 |
| | +2.59e+01 | +1.60e+01 | +8.53e+01 | +1.30e+00 | +1.44e+04 | +1.37e+03 |
| 9 | +1.03e+03 | +1.44e+01 | +7.73e+01 | +1.30e+00 | +1.35e+04 | +3.80e+03 |
| | +1.03e+03 | +1.44e+01 | +7.73e+01 | +1.30e+00 | +1.24e+04 | +1.04e+03 |
| 10 | +5.47e+01 | +1.62e+01 | +8.03e+01 | +1.30e+00 | +1.31e+04 | +4.01e+03 |
| | +5.47e+01 | +1.62e+01 | +8.03e+01 | +1.30e+00 | +1.38e+04 | +1.44e+03 |
| 11 | +9.77e+02 | +1.39e+01 | +7.54e+01 | +1.30e+00 | +1.31e+04 | +3.65e+03 |
| | +9.77e+02 | +1.39e+01 | +7.54e+01 | +1.30e+00 | +1.22e+04 | +1.03e+03 |
| 12 | +5.41e+01 | +2.63e+01 | +1.17e+02 | +1.30e+00 | +2.00e+04 | +5.10e+03 |
| | +5.41e+01 | +2.63e+01 | +1.17e+02 | +1.30e+00 | +1.93e+04 | +3.73e+03 |
| 13 | +3.06e+01 | +2.36e+01 | +1.06e+02 | +1.30e+00 | +1.82e+04 | +5.29e+03 |
| | +3.06e+01 | +2.36e+01 | +1.06e+02 | +1.30e+00 | +1.73e+04 | +2.62e+03 |
| 14 | +2.55e+01 | +3.02e+01 | +1.03e+02 | +1.30e+00 | +1.75e+04 | +6.00e+03 |
| | +2.55e+01 | +3.02e+01 | +1.03e+02 | +1.30e+00 | +1.71e+04 | +4.13e+03 |
| 15 | +5.69e+01 | +2.24e+01 | +8.91e+01 | +1.30e+00 | +1.50e+04 | +5.82e+03 |
| | +5.69e+01 | +2.24e+01 | +8.91e+01 | +1.30e+00 | +1.48e+04 | +1.68e+03 |
| 16 | +5.52e+01 | +1.99e+01 | +8.54e+01 | +1.30e+00 | +1.52e+04 | +5.51e+03 |
| | +5.52e+01 | +1.99e+01 | +8.54e+01 | +1.30e+00 | +1.34e+04 | +1.16e+03 |
| 17 | +1.10e+03 | +1.55e+01 | +9.06e+01 | +1.30e+00 | +1.58e+04 | +3.82e+03 |
| | +1.10e+03 | +1.55e+01 | +9.06e+01 | +1.30e+00 | +1.46e+04 | +1.38e+03 |
| 18 | +1.04e+03 | +1.01e+01 | +1.04e+02 | +1.30e+00 | +1.85e+04 | +2.63e+03 |
| | +1.04e+03 | +1.01e+01 | +1.04e+02 | +1.30e+00 | +1.64e+04 | +7.62e+02 |
| 19 | +6.53e+01 | +1.59e+01 | +8.99e+01 | +1.30e+00 | +1.56e+04 | +3.98e+03 |
| | +6.53e+01 | +1.59e+01 | +8.99e+01 | +1.30e+00 | +1.45e+04 | +1.36e+03 |
| 20 | +3.41e+01 | +1.64e+01 | +8.24e+01 | +1.30e+00 | +1.34e+04 | +4.03e+03 |
| | +3.41e+01 | +1.64e+01 | +8.24e+01 | +1.30e+00 | +1.42e+04 | +1.48e+03 |
| 21 | +3.82e+01 | +1.61e+01 | +9.02e+01 | +1.30e+00 | +1.54e+04 | +3.99e+03 |
| | +3.82e+01 | +1.61e+01 | +9.02e+01 | +1.30e+00 | +1.48e+04 | +1.40e+03 |
| 22 | +3.58e+01 | +1.45e+01 | +8.11e+01 | +1.30e+00 | +1.39e+04 | +3.74e+03 |
| | +3.58e+01 | +1.45e+01 | +8.11e+01 | +1.30e+00 | +1.33e+04 | +1.15e+03 |
| 23 | +9.29e+02 | +1.31e+01 | +7.71e+01 | +1.30e+00 | +1.34e+04 | +3.23e+03 |
| | +9.29e+02 | +1.31e+01 | +7.71e+01 | +1.30e+00 | +1.24e+04 | +1.16e+03 |
| 24 | +9.80e+02 | +1.27e+01 | +7.86e+01 | +1.30e+00 | +1.37e+04 | +3.48e+03 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| | +9.80e+02 | +1.27e+01 | +7.86e+01 | +1.30e+00 | +1.27e+04 | +7.99e+02 |
| 25 | +4.05e+01 | +2.21e+01 | +8.21e+01 | +1.30e+00 | +1.42e+04 | +5.54e+03 |
| | +4.05e+01 | +2.21e+01 | +8.21e+01 | +1.30e+00 | +1.35e+04 | +1.85e+03 |
| 26 | +4.25e+01 | +4.19e+01 | +8.21e+01 | +1.30e+00 | +1.40e+04 | +7.68e+03 |
| | +4.25e+01 | +4.19e+01 | +8.21e+01 | +1.30e+00 | +1.37e+04 | +6.36e+03 |
| 27 | +6.14e+00 | +2.36e+01 | +9.98e+01 | +1.30e+00 | +1.72e+04 | +5.24e+03 |
| | +6.14e+00 | +2.36e+01 | +9.98e+01 | +1.30e+00 | +1.63e+04 | +2.66e+03 |
| 28 | +2.96e+01 | +3.03e+01 | +1.00e+02 | +1.30e+00 | +1.69e+04 | +5.95e+03 |
| | +2.96e+01 | +3.03e+01 | +1.00e+02 | +1.30e+00 | +1.68e+04 | +4.20e+03 |
| 29 | +3.98e+01 | +2.63e+01 | +1.13e+02 | +1.30e+00 | +1.93e+04 | +5.04e+03 |
| | +3.98e+01 | +2.63e+01 | +1.13e+02 | +1.30e+00 | +1.85e+04 | +3.79e+03 |

**FORZE / MOMENTI ELEMENTO FINITO TRAVE (λ*EX+EY)**
**Gruppo: 2 - Descrizione: TRAVI DI COPERTURA**

| Asta | Fx (l/J) | Fy (l/J) | Fz (l/J) | Mx (l/J) | My (l/J) | Mz (l/J) |
|---|---|---|---|---|---|---|
| 1 | +1.54e+02 | +2.07e-15 | +6.27e-16 | +8.53e-01 | +0.00e+00 | +0.00e+00 |
| | +1.54e+02 | +2.07e-15 | +6.27e-16 | +8.53e-01 | +0.00e+00 | +0.00e+00 |
| 2 | +3.43e+02 | +3.19e+01 | +2.19e-02 | +4.82e-01 | +0.00e+00 | +1.97e-13 |
| | +3.43e+02 | +3.19e+01 | +2.19e-02 | +4.82e-01 | +3.95e+00 | +5.75e+03 |
| 3 | +2.30e+02 | +2.06e+01 | +1.56e-02 | +4.12e-01 | +3.08e+00 | +4.06e+03 |
| | +2.30e+02 | +2.06e+01 | +1.56e-02 | +4.12e-01 | +0.00e+00 | +0.00e+00 |
| 4 | +9.03e+01 | +3.07e-14 | +2.14e-16 | +1.46e+00 | +0.00e+00 | +0.00e+00 |
| | +9.03e+01 | +3.07e-14 | +2.14e-16 | +1.46e+00 | +0.00e+00 | +0.00e+00 |
| 5 | +3.75e+00 | +1.07e-15 | +6.30e-16 | +2.19e-01 | +0.00e+00 | +0.00e+00 |
| | +3.75e+00 | +1.07e-15 | +6.30e-16 | +2.19e-01 | +0.00e+00 | +0.00e+00 |
| 6 | +2.98e+01 | +7.73e-14 | +2.81e-16 | +4.69e-01 | +0.00e+00 | +4.71e-13 |
| | +2.98e+01 | +7.73e-14 | +2.81e-16 | +4.69e-01 | +1.68e-14 | +0.00e+00 |
| 7 | +2.69e+01 | +1.28e-15 | +0.00e+00 | +3.49e-01 | +0.00e+00 | +0.00e+00 |
| | +2.69e+01 | +1.28e-15 | +0.00e+00 | +3.49e-01 | +0.00e+00 | +0.00e+00 |
| 8 | +1.37e+01 | +2.51e-14 | +2.24e-16 | +1.33e+00 | +0.00e+00 | +0.00e+00 |
| | +1.37e+01 | +2.51e-14 | +2.24e-16 | +1.33e+00 | +0.00e+00 | +0.00e+00 |
| 9 | +1.76e+02 | +8.43e-16 | +6.29e-16 | +4.05e-01 | +0.00e+00 | +0.00e+00 |
| | +1.76e+02 | +8.43e-16 | +6.29e-16 | +4.05e-01 | +0.00e+00 | +0.00e+00 |
| 10 | +3.31e+02 | +1.41e-14 | +2.79e-16 | +6.13e-01 | +0.00e+00 | +6.14e-13 |
| | +3.31e+02 | +1.41e-14 | +2.79e-16 | +6.13e-01 | +1.68e-14 | +0.00e+00 |
| 11 | +2.53e+01 | +1.59e-15 | +0.00e+00 | +1.73e-01 | +0.00e+00 | +0.00e+00 |
| | +2.53e+01 | +1.59e-15 | +0.00e+00 | +1.73e-01 | +0.00e+00 | +0.00e+00 |
| 12 | +2.93e+02 | +1.71e-14 | +2.19e-16 | +1.18e+00 | +0.00e+00 | +0.00e+00 |
| | +2.93e+02 | +1.71e-14 | +2.19e-16 | +1.18e+00 | +0.00e+00 | +0.00e+00 |
| 13 | +2.00e+00 | +1.04e-15 | +6.30e-16 | +1.82e-01 | +0.00e+00 | +0.00e+00 |
| | +2.00e+00 | +1.04e-15 | +6.30e-16 | +1.82e-01 | +0.00e+00 | +0.00e+00 |
| 14 | +2.02e+01 | +5.24e-14 | +2.75e-16 | +5.59e-01 | +0.00e+00 | +4.38e-13 |
| | +2.02e+01 | +5.24e-14 | +2.75e-16 | +5.59e-01 | +1.68e-14 | +0.00e+00 |
| 15 | +2.15e+01 | +1.21e-15 | +0.00e+00 | +3.13e-01 | +0.00e+00 | +0.00e+00 |
| | +2.15e+01 | +1.21e-15 | +0.00e+00 | +3.13e-01 | +0.00e+00 | +0.00e+00 |
| 16 | +1.03e+01 | +9.39e-15 | +2.25e-16 | +1.01e+00 | +0.00e+00 | +0.00e+00 |
| | +1.03e+01 | +9.39e-15 | +2.25e-16 | +1.01e+00 | +0.00e+00 | +0.00e+00 |
| 17 | +3.80e+01 | +1.77e-15 | +6.27e-16 | +9.43e-02 | +0.00e+00 | +0.00e+00 |
| | +3.80e+01 | +1.77e-15 | +6.27e-16 | +9.43e-02 | +0.00e+00 | +0.00e+00 |
| 18 | +2.19e+01 | +1.37e-14 | +2.74e-16 | +6.35e-01 | +0.00e+00 | +1.10e-13 |
| | +2.19e+01 | +1.37e-14 | +2.74e-16 | +6.35e-01 | +1.68e-14 | +0.00e+00 |
| 19 | +1.14e+01 | +5.71e-16 | +0.00e+00 | +3.02e-01 | +0.00e+00 | +0.00e+00 |
| | +1.14e+01 | +5.71e-16 | +0.00e+00 | +3.02e-01 | +0.00e+00 | +0.00e+00 |
| 20 | +2.78e+01 | +4.92e-15 | +2.23e-16 | +7.28e-01 | +0.00e+00 | +0.00e+00 |
| | +2.78e+01 | +4.92e-15 | +2.23e-16 | +7.28e-01 | +0.00e+00 | +0.00e+00 |
| 21 | +3.61e+01 | +3.79e-15 | +6.24e-16 | +3.56e-01 | +0.00e+00 | +0.00e+00 |
| | +3.61e+01 | +3.79e-15 | +6.24e-16 | +3.56e-01 | +0.00e+00 | +0.00e+00 |
| 22 | +9.03e+01 | +1.31e-14 | +2.78e-16 | +8.75e-01 | +0.00e+00 | +2.53e-13 |
| | +9.03e+01 | +1.31e-14 | +2.78e-16 | +8.75e-01 | +1.68e-14 | +0.00e+00 |
| 23 | +1.65e+01 | +2.70e-16 | +0.00e+00 | +1.75e-01 | +0.00e+00 | +0.00e+00 |
| | +1.65e+01 | +2.70e-16 | +0.00e+00 | +1.75e-01 | +0.00e+00 | +0.00e+00 |
| 24 | +7.40e+01 | +1.19e-14 | +2.16e-16 | +9.14e-01 | +0.00e+00 | +0.00e+00 |
| | +7.40e+01 | +1.19e-14 | +2.16e-16 | +9.14e-01 | +0.00e+00 | +0.00e+00 |
| 25 | +1.92e+01 | +1.23e-15 | +6.27e-16 | +1.10e+00 | +0.00e+00 | +0.00e+00 |
| | +1.92e+01 | +1.23e-15 | +6.27e-16 | +1.10e+00 | +0.00e+00 | +0.00e+00 |
| 26 | +1.31e+01 | +2.16e-14 | +2.76e-16 | +4.81e-01 | +0.00e+00 | +5.49e-14 |
| | +1.31e+01 | +2.16e-14 | +2.76e-16 | +4.81e-01 | +1.68e-14 | +0.00e+00 |
| 27 | +2.44e+00 | +2.33e-16 | +0.00e+00 | +1.74e-01 | +0.00e+00 | +0.00e+00 |
| | +2.44e+00 | +2.33e-16 | +0.00e+00 | +1.74e-01 | +0.00e+00 | +0.00e+00 |
| 28 | +1.32e+01 | +3.88e-15 | +2.16e-16 | +1.23e+00 | +0.00e+00 | +0.00e+00 |
| | +1.32e+01 | +3.88e-15 | +2.16e-16 | +1.23e+00 | +0.00e+00 | +0.00e+00 |
| 29 | +3.51e+01 | +3.36e-15 | +6.26e-16 | +9.05e-01 | +0.00e+00 | +0.00e+00 |
| | +3.51e+01 | +3.36e-15 | +6.26e-16 | +9.05e-01 | +0.00e+00 | +0.00e+00 |
| 30 | +1.94e+01 | +1.35e-14 | +2.69e-16 | +4.79e-01 | +0.00e+00 | +1.18e-13 |
| | +1.94e+01 | +1.35e-14 | +2.69e-16 | +4.79e-01 | +1.68e-14 | +0.00e+00 |
| 31 | +1.05e+01 | +4.47e-16 | +0.00e+00 | +2.52e-01 | +0.00e+00 | +0.00e+00 |
| | +1.05e+01 | +4.47e-16 | +0.00e+00 | +2.52e-01 | +0.00e+00 | +0.00e+00 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| 32 | +2.67e+01 | +7.08e-15 | +2.22e-16 | +8.27e-01 | +0.00e+00 | +0.00e+00 |
| | +2.67e+01 | +7.08e-15 | +2.22e-16 | +8.27e-01 | +0.00e+00 | +0.00e+00 |
| 33 | +1.91e+00 | +3.22e-15 | +6.28e-16 | +3.01e-01 | +0.00e+00 | +0.00e+00 |
| | +1.91e+00 | +3.22e-15 | +6.28e-16 | +3.01e-01 | +0.00e+00 | +0.00e+00 |
| 34 | +1.99e+01 | +5.16e-14 | +2.70e-16 | +4.69e-01 | +0.00e+00 | +3.78e-13 |
| | +1.99e+01 | +5.16e-14 | +2.70e-16 | +4.69e-01 | +1.68e-14 | +0.00e+00 |
| 35 | +2.13e+01 | +9.59e-16 | +0.00e+00 | +2.67e-01 | +0.00e+00 | +0.00e+00 |
| | +2.13e+01 | +9.59e-16 | +0.00e+00 | +2.67e-01 | +0.00e+00 | +0.00e+00 |
| 36 | +1.03e+01 | +8.49e-15 | +2.31e-16 | +8.32e-01 | +0.00e+00 | +0.00e+00 |
| | +1.03e+01 | +8.49e-15 | +2.31e-16 | +8.32e-01 | +0.00e+00 | +0.00e+00 |
| 37 | +1.73e+02 | +1.49e-15 | +6.23e-16 | +1.89e-01 | +0.00e+00 | +0.00e+00 |
| | +1.73e+02 | +1.49e-15 | +6.23e-16 | +1.89e-01 | +0.00e+00 | +0.00e+00 |
| 38 | +3.26e+02 | +1.36e-14 | +2.77e-16 | +6.19e-01 | +0.00e+00 | +5.68e-13 |
| | +3.26e+02 | +1.36e-14 | +2.77e-16 | +6.19e-01 | +1.68e-14 | +0.00e+00 |
| 39 | +2.64e+01 | +1.30e-15 | +0.00e+00 | +1.50e-01 | +0.00e+00 | +0.00e+00 |
| | +2.64e+01 | +1.30e-15 | +0.00e+00 | +1.50e-01 | +0.00e+00 | +0.00e+00 |
| 40 | +2.88e+02 | +1.42e-14 | +2.30e-16 | +1.05e+00 | +0.00e+00 | +0.00e+00 |
| | +2.88e+02 | +1.42e-14 | +2.30e-16 | +1.05e+00 | +0.00e+00 | +0.00e+00 |
| 41 | +2.16e+00 | +1.21e-15 | +6.21e-16 | +2.55e-01 | +0.00e+00 | +0.00e+00 |
| | +2.16e+00 | +1.21e-15 | +6.21e-16 | +2.55e-01 | +0.00e+00 | +0.00e+00 |
| 42 | +2.63e+01 | +7.28e-14 | +2.82e-16 | +3.47e-01 | +0.00e+00 | +5.02e-13 |
| | +2.63e+01 | +7.28e-14 | +2.82e-16 | +3.47e-01 | +1.68e-14 | +0.00e+00 |
| 43 | +3.01e+01 | +1.07e-15 | +0.00e+00 | +2.83e-01 | +0.00e+00 | +0.00e+00 |
| | +3.01e+01 | +1.07e-15 | +0.00e+00 | +2.83e-01 | +0.00e+00 | +0.00e+00 |
| 44 | +1.54e+01 | +2.37e-14 | +2.35e-16 | +1.13e+00 | +0.00e+00 | +0.00e+00 |
| | +1.54e+01 | +2.37e-14 | +2.35e-16 | +1.13e+00 | +0.00e+00 | +0.00e+00 |
| 45 | +5.46e+01 | +2.20e-15 | +6.16e-16 | +8.87e-01 | +0.00e+00 | +0.00e+00 |
| | +5.46e+01 | +2.20e-15 | +6.16e-16 | +8.87e-01 | +0.00e+00 | +0.00e+00 |
| 46 | +4.53e+01 | +2.11e-14 | +2.82e-16 | +4.49e-01 | +0.00e+00 | +2.30e-13 |
| | +4.53e+01 | +2.11e-14 | +2.82e-16 | +4.49e-01 | +1.68e-14 | +0.00e+00 |
| 47 | +5.07e+01 | +4.72e-16 | +0.00e+00 | +3.37e-01 | +0.00e+00 | +0.00e+00 |
| | +5.07e+01 | +4.72e-16 | +0.00e+00 | +3.37e-01 | +0.00e+00 | +0.00e+00 |
| 48 | +2.03e+01 | +3.11e-14 | +2.25e-16 | +1.16e+00 | +0.00e+00 | +0.00e+00 |
| | +2.03e+01 | +3.11e-14 | +2.25e-16 | +1.16e+00 | +0.00e+00 | +0.00e+00 |
| 49 | +3.78e+02 | +5.05e+01 | +2.35e+01 | +9.63e+01 | +2.14e+03 | +7.75e+03 |
| | +3.78e+02 | +5.05e+01 | +2.35e+01 | +9.63e+01 | +2.14e+03 | +1.47e+03 |
| 50 | +1.14e+02 | +5.04e+01 | +2.23e+01 | +9.12e+01 | +2.03e+03 | +3.66e+03 |
| | +1.14e+02 | +5.04e+01 | +2.23e+01 | +9.12e+01 | +2.03e+03 | +5.54e+03 |
| 51 | +2.29e+02 | +4.83e+01 | +1.62e+01 | +6.61e+01 | +1.47e+03 | +6.30e+03 |
| | +2.29e+02 | +4.83e+01 | +1.62e+01 | +6.61e+01 | +1.47e+03 | +2.51e+03 |
| 52 | +2.22e+02 | +4.25e+01 | +1.64e+01 | +6.73e+01 | +1.50e+03 | +2.07e+03 |
| | +2.22e+02 | +4.25e+01 | +1.64e+01 | +6.73e+01 | +1.50e+03 | +5.69e+03 |
| 53 | +2.00e+02 | +1.11e+02 | +2.60e-01 | +1.34e+00 | +2.67e+01 | +9.71e+03 |
| | +2.00e+02 | +1.11e+02 | +2.60e-01 | +1.34e+00 | +2.67e+01 | +1.30e+04 |
| 54 | +9.31e+01 | +2.32e+01 | +1.87e+01 | +4.25e+01 | +1.26e+03 | +2.34e+03 |
| | +9.31e+01 | +2.32e+01 | +1.87e+01 | +4.25e+01 | +1.26e+03 | +7.92e+02 |
| 55 | +5.49e+01 | +2.45e+01 | +1.01e+01 | +3.58e+01 | +8.56e+02 | +1.63e+03 |
| | +5.49e+01 | +2.45e+01 | +1.01e+01 | +3.58e+01 | +8.56e+02 | +2.54e+03 |
| 56 | +4.67e+02 | +5.94e+01 | +1.62e+01 | +6.64e+01 | +1.48e+03 | +9.29e+03 |
| | +4.67e+02 | +5.94e+01 | +1.62e+01 | +6.64e+01 | +1.48e+03 | +1.61e+03 |
| 57 | +1.68e+02 | +7.12e+01 | +1.61e+01 | +6.59e+01 | +1.47e+03 | +5.17e+03 |
| | +1.68e+02 | +7.12e+01 | +1.61e+01 | +6.59e+01 | +1.47e+03 | +7.84e+03 |
| 58 | +1.06e+02 | +5.12e+01 | +2.13e+01 | +8.74e+01 | +1.95e+03 | +5.56e+03 |
| | +1.06e+02 | +5.12e+01 | +2.13e+01 | +8.74e+01 | +1.95e+03 | +3.79e+03 |
| 59 | +4.01e+02 | +5.31e+01 | +2.31e+01 | +9.47e+01 | +2.11e+03 | +1.52e+03 |
| | +4.01e+02 | +5.31e+01 | +2.31e+01 | +9.47e+01 | +2.11e+03 | +8.17e+03 |
| 60 | +3.49e+02 | +4.75e+01 | +5.99e+01 | +1.46e+02 | +5.47e+03 | +7.93e+03 |
| | +3.49e+02 | +4.75e+01 | +5.99e+01 | +1.46e+02 | +5.47e+03 | +7.67e+02 |
| 61 | +7.82e+01 | +4.96e+01 | +5.63e+01 | +1.37e+02 | +5.14e+03 | +3.73e+03 |
| | +7.82e+01 | +4.96e+01 | +5.63e+01 | +1.37e+02 | +5.14e+03 | +5.31e+03 |
| 62 | +2.18e+02 | +6.09e+01 | +4.01e+01 | +9.76e+01 | +3.66e+03 | +7.80e+03 |
| | +2.18e+02 | +6.09e+01 | +4.01e+01 | +9.76e+01 | +3.66e+03 | +3.35e+03 |
| 63 | +2.89e+02 | +5.39e+01 | +4.29e+01 | +1.04e+02 | +3.91e+03 | +2.11e+03 |
| | +2.89e+02 | +5.39e+01 | +4.29e+01 | +1.04e+02 | +3.91e+03 | +7.73e+03 |
| 64 | +1.43e+02 | +5.22e+01 | +2.88e-01 | +1.48e+00 | +2.95e+01 | +4.17e+03 |
| | +1.43e+02 | +5.22e+01 | +2.88e-01 | +1.48e+00 | +2.95e+01 | +6.54e+03 |
| 65 | +1.57e+02 | +1.15e+01 | +1.85e+01 | +4.20e+01 | +1.25e+03 | +2.08e+03 |
| | +1.57e+02 | +1.15e+01 | +1.85e+01 | +4.20e+01 | +1.25e+03 | +5.49e+02 |
| 66 | +7.68e+00 | +1.32e+01 | +9.96e+00 | +3.55e+01 | +8.47e+02 | +1.14e+03 |
| | +7.68e+00 | +1.32e+01 | +9.96e+00 | +3.55e+01 | +8.47e+02 | +1.12e+03 |
| 67 | +3.13e+02 | +4.70e+01 | +4.23e+01 | +1.03e+02 | +3.86e+03 | +7.30e+03 |
| | +3.13e+02 | +4.70e+01 | +4.23e+01 | +1.03e+02 | +3.86e+03 | +1.31e+03 |
| 68 | +1.62e+02 | +5.70e+01 | +4.00e+01 | +9.72e+01 | +3.65e+03 | +3.67e+03 |
| | +1.62e+02 | +5.70e+01 | +4.00e+01 | +9.72e+01 | +3.65e+03 | +6.84e+03 |
| 69 | +1.30e+02 | +5.51e+01 | +5.39e+01 | +1.31e+02 | +4.92e+03 | +6.37e+03 |
| | +1.30e+02 | +5.51e+01 | +5.39e+01 | +1.31e+02 | +4.92e+03 | +3.68e+03 |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | |
|---|---|---|---|---|---|---|
| 70 | +3.46e+02 | +5.59e+01 | +6.03e+01 | +1.46e+02 | +5.50e+03 | +1.55e+03 |
| | +3.46e+02 | +5.59e+01 | +6.03e+01 | +1.46e+02 | +5.50e+03 | +8.68e+03 |
| 71 | +4.05e+02 | +4.04e+01 | +5.54e+01 | +1.35e+02 | +5.05e+03 | +7.09e+03 |
| | +4.05e+02 | +4.04e+01 | +5.54e+01 | +1.35e+02 | +5.05e+03 | +3.40e+03 |
| 72 | +2.09e+02 | +3.03e+01 | +5.19e+01 | +1.26e+02 | +4.74e+03 | +4.07e+03 |
| | +2.09e+02 | +3.03e+01 | +5.19e+01 | +1.26e+02 | +4.74e+03 | +2.83e+03 |
| 73 | +2.14e+02 | +2.83e+01 | +3.56e+01 | +8.65e+01 | +3.25e+03 | +2.84e+03 |
| | +2.14e+02 | +2.83e+01 | +3.56e+01 | +8.65e+01 | +3.25e+03 | +3.73e+03 |
| 74 | +3.57e+02 | +3.18e+01 | +4.29e+01 | +1.04e+02 | +3.92e+03 | +3.85e+03 |
| | +3.57e+02 | +3.18e+01 | +4.29e+01 | +1.04e+02 | +3.92e+03 | +5.59e+03 |
| 75 | +1.71e+02 | +9.93e+00 | +5.85e-01 | +3.02e+00 | +6.00e+01 | +2.27e+03 |
| | +1.71e+02 | +9.93e+00 | +5.85e-01 | +3.02e+00 | +6.00e+01 | +8.48e+02 |
| 76 | +4.55e+01 | +9.30e+00 | +1.76e+01 | +3.99e+01 | +1.19e+03 | +9.41e+02 |
| | +4.55e+01 | +9.30e+00 | +1.76e+01 | +3.99e+01 | +1.19e+03 | +8.80e+02 |
| 77 | +1.58e+02 | +1.15e+01 | +9.96e+00 | +3.55e+01 | +8.47e+02 | +6.69e+02 |
| | +1.58e+02 | +1.15e+01 | +9.96e+00 | +3.55e+01 | +8.47e+02 | +2.14e+03 |
| 78 | +3.32e+02 | +3.06e+01 | +4.24e+01 | +1.03e+02 | +3.87e+03 | +5.58e+03 |
| | +3.32e+02 | +3.06e+01 | +4.24e+01 | +1.03e+02 | +3.87e+03 | +3.10e+03 |
| 79 | +1.64e+02 | +2.88e+01 | +3.55e+01 | +8.63e+01 | +3.24e+03 | +3.38e+03 |
| | +1.64e+02 | +2.88e+01 | +3.55e+01 | +8.63e+01 | +3.24e+03 | +2.73e+03 |
| 80 | +2.24e+02 | +2.76e+01 | +4.95e+01 | +1.20e+02 | +4.51e+03 | +2.10e+03 |
| | +2.24e+02 | +2.76e+01 | +4.95e+01 | +1.20e+02 | +4.51e+03 | +4.27e+03 |
| 81 | +4.20e+02 | +3.42e+01 | +6.00e+01 | +1.46e+02 | +5.47e+03 | +3.53e+03 |
| | +4.20e+02 | +3.42e+01 | +6.00e+01 | +1.46e+02 | +5.47e+03 | +6.70e+03 |
| 82 | +3.93e+02 | +5.81e+01 | +5.94e+01 | +1.44e+02 | +5.42e+03 | +8.39e+03 |
| | +3.93e+02 | +5.81e+01 | +5.94e+01 | +1.44e+02 | +5.42e+03 | +4.09e+03 |
| 83 | +2.40e+02 | +3.64e+01 | +5.19e+01 | +1.26e+02 | +4.74e+03 | +3.79e+03 |
| | +2.40e+02 | +3.64e+01 | +5.19e+01 | +1.26e+02 | +4.74e+03 | +4.74e+03 |
| 84 | +3.29e+02 | +2.73e+01 | +3.55e+01 | +8.64e+01 | +3.24e+03 | +4.28e+03 |
| | +3.29e+02 | +2.73e+01 | +3.55e+01 | +8.64e+01 | +3.24e+03 | +4.16e+03 |
| 85 | +3.78e+02 | +4.47e+01 | +4.33e+01 | +1.05e+02 | +3.95e+03 | +5.92e+03 |
| | +3.78e+02 | +4.47e+01 | +4.33e+01 | +1.05e+02 | +3.95e+03 | +5.37e+03 |
| 86 | +1.89e+02 | +1.33e+01 | +6.44e-01 | +3.32e+00 | +6.60e+01 | +2.79e+03 |
| | +1.89e+02 | +1.33e+01 | +6.44e-01 | +3.32e+00 | +6.60e+01 | +7.95e+02 |
| 87 | +4.25e+01 | +1.27e+01 | +1.75e+01 | +3.97e+01 | +1.18e+03 | +1.12e+03 |
| | +4.25e+01 | +1.27e+01 | +1.75e+01 | +3.97e+01 | +1.18e+03 | +1.03e+03 |
| 88 | +1.68e+02 | +1.47e+01 | +9.99e+00 | +3.56e+01 | +8.49e+02 | +6.76e+02 |
| | +1.68e+02 | +1.47e+01 | +9.99e+00 | +3.56e+01 | +8.49e+02 | +2.53e+03 |
| 89 | +3.45e+02 | +3.63e+01 | +4.28e+01 | +1.04e+02 | +3.90e+03 | +5.20e+03 |
| | +3.45e+02 | +3.63e+01 | +4.28e+01 | +1.04e+02 | +3.90e+03 | +4.72e+03 |
| 90 | +2.52e+02 | +2.68e+01 | +3.55e+01 | +8.62e+01 | +3.24e+03 | +3.64e+03 |
| | +2.52e+02 | +2.68e+01 | +3.55e+01 | +8.62e+01 | +3.24e+03 | +3.37e+03 |
| 91 | +2.10e+02 | +3.17e+01 | +4.96e+01 | +1.20e+02 | +4.52e+03 | +3.59e+03 |
| | +2.10e+02 | +3.17e+01 | +4.96e+01 | +1.20e+02 | +4.52e+03 | +3.98e+03 |
| 92 | +4.09e+02 | +4.81e+01 | +5.96e+01 | +1.45e+02 | +5.44e+03 | +3.50e+03 |
| | +4.09e+02 | +4.81e+01 | +5.96e+01 | +1.45e+02 | +5.44e+03 | +7.69e+03 |
| 93 | +4.54e+02 | +6.48e+01 | +2.32e+01 | +9.50e+01 | +2.12e+03 | +9.68e+03 |
| | +4.54e+02 | +6.48e+01 | +2.32e+01 | +9.50e+01 | +2.12e+03 | +2.15e+03 |
| 94 | +2.07e+02 | +7.20e+01 | +2.17e+01 | +8.89e+01 | +1.98e+03 | +4.86e+03 |
| | +2.07e+02 | +7.20e+01 | +2.17e+01 | +8.89e+01 | +1.98e+03 | +8.28e+03 |
| 95 | +2.75e+02 | +5.31e+01 | +1.55e+01 | +6.34e+01 | +1.41e+03 | +7.13e+03 |
| | +2.75e+02 | +5.31e+01 | +1.55e+01 | +6.34e+01 | +1.41e+03 | +2.96e+03 |
| 96 | +2.77e+02 | +4.42e+01 | +1.66e+01 | +6.82e+01 | +1.52e+03 | +2.30e+03 |
| | +2.77e+02 | +4.42e+01 | +1.66e+01 | +6.82e+01 | +1.52e+03 | +5.81e+03 |
| 97 | +2.26e+02 | +1.10e+02 | +4.27e-01 | +2.20e+00 | +4.37e+01 | +9.59e+03 |
| | +2.26e+02 | +1.10e+02 | +4.27e-01 | +2.20e+00 | +4.37e+01 | +1.31e+04 |
| 98 | +1.23e+02 | +2.75e+01 | +1.84e+01 | +4.17e+01 | +1.24e+03 | +2.81e+03 |
| | +1.23e+02 | +2.75e+01 | +1.84e+01 | +4.17e+01 | +1.24e+03 | +9.64e+02 |
| 99 | +7.31e+01 | +3.02e+01 | +1.01e+01 | +3.60e+01 | +8.58e+02 | +2.08e+03 |
| | +7.31e+01 | +3.02e+01 | +1.01e+01 | +3.60e+01 | +8.58e+02 | +3.16e+03 |
| 100 | +5.15e+02 | +5.78e+01 | +1.64e+01 | +6.73e+01 | +1.50e+03 | +9.11e+03 |
| | +5.15e+02 | +5.78e+01 | +1.64e+01 | +6.73e+01 | +1.50e+03 | +1.61e+03 |
| 101 | +1.98e+02 | +7.36e+01 | +1.54e+01 | +6.31e+01 | +1.41e+03 | +5.56e+03 |
| | +1.98e+02 | +7.36e+01 | +1.54e+01 | +6.31e+01 | +1.41e+03 | +8.34e+03 |
| 102 | +2.18e+02 | +7.39e+01 | +2.08e+01 | +8.51e+01 | +1.90e+03 | +8.55e+03 |
| | +2.18e+02 | +7.39e+01 | +2.08e+01 | +8.51e+01 | +1.90e+03 | +4.94e+03 |
| 103 | +4.72e+02 | +6.93e+01 | +2.27e+01 | +9.31e+01 | +2.07e+03 | +2.42e+03 |
| | +4.72e+02 | +6.93e+01 | +2.27e+01 | +9.31e+01 | +2.07e+03 | +1.02e+04 |

**FORZE / MOMENTI ELEMENTO FINITO TRAVE (λ*EX+EY)**
**Gruppo: 3 - Descrizione: DIAGONALI DI PARETE**

| Asta | Fx (l/J) | Fy (l/J) | Fz (l/J) | Mx (l/J) | My (l/J) | Mz (l/J) |
|---|---|---|---|---|---|---|
| 1 | +1.48e+03 | +2.47e-16 | +3.25e-17 | +5.83e-01 | +3.94e-15 | +4.91e-14 |
| | +1.48e+03 | +2.47e-16 | +3.25e-17 | +5.83e-01 | +6.98e-15 | +0.00e+00 |
| 2 | +1.49e+03 | +2.45e-16 | +3.22e-17 | +6.05e-01 | +3.48e-15 | +4.86e-14 |
| | +1.49e+03 | +2.45e-16 | +3.22e-17 | +6.05e-01 | +6.15e-15 | +0.00e+00 |
| 3 | +1.41e+03 | +2.50e-16 | +3.23e-17 | +5.34e-01 | +3.94e-15 | +4.95e-14 |



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| | | | | | | |
|---|---|---|---|---|---|---|
| | +1.41e+03 | +2.50e-16 | +3.23e-17 | +5.34e-01 | +6.98e-15 | +0.00e+00 |
| 4 | +1.42e+03 | +2.46e-16 | +3.29e-17 | +5.50e-01 | +3.48e-15 | +4.85e-14 |
| | +1.42e+03 | +2.46e-16 | +3.29e-17 | +5.50e-01 | +6.15e-15 | +0.00e+00 |
| 5 | +1.27e+03 | +3.20e-16 | +7.26e-17 | +1.46e-01 | +0.00e+00 | +0.00e+00 |
| | +1.27e+03 | +3.20e-16 | +7.26e-17 | +1.46e-01 | +0.00e+00 | +0.00e+00 |
| 6 | +1.26e+03 | +3.20e-16 | +7.09e-17 | +2.89e-01 | +0.00e+00 | +0.00e+00 |
| | +1.26e+03 | +3.20e-16 | +7.09e-17 | +2.89e-01 | +0.00e+00 | +0.00e+00 |
| 7 | +1.23e+03 | +3.16e-16 | +7.08e-17 | +2.57e-01 | +0.00e+00 | +0.00e+00 |
| | +1.23e+03 | +3.16e-16 | +7.08e-17 | +2.57e-01 | +0.00e+00 | +0.00e+00 |
| 8 | +1.24e+03 | +3.15e-16 | +7.26e-17 | +1.38e-01 | +0.00e+00 | +0.00e+00 |
| | +1.24e+03 | +3.15e-16 | +7.26e-17 | +1.38e-01 | +0.00e+00 | +0.00e+00 |

**FORZE / MOMENTI ELEMENTO FINITO TRAVE DI FONDAZIONE (EX+λ*EY)**
**Gruppo: 1 - Descrizione: CORDOLI DI FONDAZIONE**

**Trave numero: 1 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +9.670e+02 | +7.340e+04 | +1.540e+05 | +2.926e-02 | +7.060e-05 | +1.846e-04 | 0.07023 |
| 35.000 | +1.120e+03 | +7.340e+04 | +1.210e+05 | +3.565e-02 | +6.513e-05 | +1.981e-04 | 0.08556 |
| 70.000 | +1.310e+03 | +7.340e+04 | +8.340e+04 | +4.251e-02 | +5.966e-05 | +2.080e-04 | 0.10203 |
| 105.000 | +1.530e+03 | +7.340e+04 | +3.930e+04 | +4.972e-02 | +5.420e-05 | +2.136e-04 | 0.11933 |
| 140.000 | +1.800e+03 | +7.340e+04 | +2.250e+04 | +5.711e-02 | +4.958e-05 | +2.143e-04 | 0.13706 |
| 175.000 | +1.800e+03 | +7.340e+04 | +8.330e+04 | +6.449e-02 | +4.569e-05 | +2.092e-04 | 0.15478 |

**Trave numero: 2 lunghezza: 180.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +3.530e+03 | +2.040e+05 | +1.070e+04 | +6.449e-02 | +4.569e-05 | +2.092e-04 | 0.15478 |
| 36.000 | +3.870e+03 | +2.040e+05 | +1.260e+05 | +7.208e-02 | +4.409e-05 | +2.028e-04 | 0.17299 |
| 72.000 | +4.260e+03 | +2.040e+05 | +2.640e+05 | +7.926e-02 | +7.173e-05 | +1.826e-04 | 0.19022 |
| 108.000 | +4.670e+03 | +2.040e+05 | +4.170e+05 | +8.551e-02 | +9.947e-05 | +1.472e-04 | 0.20522 |
| 144.000 | +5.110e+03 | +2.040e+05 | +5.850e+05 | +9.025e-02 | +1.272e-04 | +9.517e-05 | 0.21660 |
| 180.000 | +5.110e+03 | +2.040e+05 | +7.690e+05 | +9.285e-02 | +1.552e-04 | +2.528e-05 | 0.22285 |

**Trave numero: 3 lunghezza: 197.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +5.550e+03 | +2.070e+05 | +7.010e+05 | +9.285e-02 | +1.552e-04 | +2.528e-05 | 0.22285 |
| 39.400 | +6.040e+03 | +2.070e+05 | +9.200e+05 | +9.258e-02 | +1.845e-04 | +6.769e-05 | 0.22220 |
| 78.800 | +6.510e+03 | +2.070e+05 | +1.160e+06 | +8.826e-02 | +2.138e-04 | +1.856e-04 | 0.21181 |
| 118.200 | +6.920e+03 | +2.070e+05 | +1.410e+06 | +7.880e-02 | +2.432e-04 | +3.316e-04 | 0.18913 |
| 157.600 | +7.260e+03 | +2.070e+05 | +1.690e+06 | +6.310e-02 | +2.726e-04 | +5.078e-04 | 0.15144 |
| 197.000 | +7.260e+03 | +2.070e+05 | +1.970e+06 | +3.998e-02 | +3.020e-04 | +7.157e-04 | 0.09595 |

**Trave numero: 4 lunghezza: 215.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.110e+04 | +2.380e+05 | +1.930e+06 | +3.998e-02 | +3.020e-04 | +7.157e-04 | 0.09595 |
| 43.000 | +1.110e+04 | +2.380e+05 | +1.460e+06 | +4.341e-03 | +3.349e-04 | +9.259e-04 | 0.01042 |
| 86.000 | +1.130e+04 | +2.380e+05 | +9.820e+05 | +4.379e-02 | +3.678e-04 | +1.077e-03 | 0.10509 |
| 129.000 | +1.180e+04 | +2.380e+05 | +4.960e+05 | +9.250e-02 | +4.009e-04 | +1.169e-03 | 0.22199 |
| 172.000 | +1.270e+04 | +2.380e+05 | +1.590e+04 | +1.442e-01 | +4.341e-04 | +1.199e-03 | 0.34618 |
| 215.000 | +1.270e+04 | +2.380e+05 | +5.580e+05 | +1.964e-01 | +4.676e-04 | +1.163e-03 | 0.47143 |

**Trave numero: 5 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +5.900e+01 | +4.540e+04 | +3.650e+04 | +9.531e-03 | +3.831e-05 | +4.826e-05 | 0.02288 |
| 35.000 | +7.290e+01 | +4.540e+04 | +3.790e+04 | +9.765e-03 | +3.224e-05 | +4.450e-05 | 0.02344 |
| 70.000 | +1.070e+02 | +4.540e+04 | +4.040e+04 | +1.017e-02 | +2.617e-05 | +4.055e-05 | 0.02441 |
| 105.000 | +1.480e+02 | +4.540e+04 | +4.410e+04 | +1.090e-02 | +2.011e-05 | +3.629e-05 | 0.02617 |
| 140.000 | +1.950e+02 | +4.540e+04 | +4.920e+04 | +1.158e-02 | +1.404e-05 | +3.158e-05 | 0.02779 |
| 175.000 | +1.950e+02 | +4.540e+04 | +5.600e+04 | +1.221e-02 | +7.996e-06 | +2.627e-05 | 0.02931 |

**Trave numero: 6 lunghezza: 592.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +4.900e+02 | +1.130e+05 | +3.230e+04 | +1.221e-02 | +7.996e-06 | +2.627e-05 | 0.02443 |
| 118.400 | +6.720e+02 | +1.130e+05 | +8.840e+04 | +1.380e-02 | +4.725e-05 | +5.747e-06 | 0.02759 |
| 236.800 | +8.340e+02 | +1.130e+05 | +1.650e+05 | +1.239e-02 | +9.801e-05 | +3.764e-05 | 0.02477 |
| 355.200 | +8.950e+02 | +1.130e+05 | +2.600e+05 | +4.772e-03 | +1.489e-04 | +1.102e-04 | 0.00954 |
| 473.600 | +8.950e+02 | +1.130e+05 | +3.630e+05 | +1.539e-02 | +1.998e-04 | +2.163e-04 | 0.03079 |
| 592.000 | +7.210e+02 | +1.130e+05 | +4.450e+05 | +4.856e-02 | +2.507e-04 | +3.531e-04 | 0.09711 |

**Trave numero: 7 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +4.490e+02 | +2.400e+04 | +4.470e+04 | +1.589e-02 | +1.871e-05 | +4.106e-05 | 0.03814 |
| 35.000 | +4.490e+02 | +2.400e+04 | +3.260e+04 | +1.446e-02 | +1.630e-05 | +3.926e-05 | 0.03472 |
| 70.000 | +4.150e+02 | +2.400e+04 | +3.400e+04 | +1.313e-02 | +1.390e-05 | +3.661e-05 | 0.03151 |
| 105.000 | +3.860e+02 | +2.400e+04 | +3.740e+04 | +1.191e-02 | +1.150e-05 | +3.594e-05 | 0.02858 |
| 140.000 | +3.630e+02 | +2.400e+04 | +4.110e+04 | +1.082e-02 | +9.118e-06 | +3.542e-05 | 0.02598 |
| 175.000 | +3.460e+02 | +2.400e+04 | +4.310e+04 | +9.895e-03 | +6.778e-06 | +3.369e-05 | 0.02375 |

**Trave numero: 8 lunghezza: 180.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +5.290e+02 | +3.340e+04 | +8.720e+04 | +9.895e-03 | +6.778e-06 | +3.369e-05 | 0.02375 |
| 36.000 | +5.290e+02 | +3.340e+04 | +7.330e+04 | +9.229e-03 | +2.807e-06 | +3.521e-05 | 0.02215 |
| 72.000 | +5.350e+02 | +3.340e+04 | +5.790e+04 | +8.845e-03 | +5.386e-06 | +3.493e-05 | 0.02123 |



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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 108.000 | +5.560e+02 | +3.340e+04 | +4.140e+04 | +8.688e-03 | +8.626e-06 | +3.321e-05 | 0.02085 |
| 144.000 | +5.920e+02 | +3.340e+04 | +5.250e+04 | +9.485e-03 | +1.201e-05 | +3.106e-05 | 0.02276 |
| 180.000 | +5.920e+02 | +3.340e+04 | +7.150e+04 | +1.042e-02 | +1.652e-05 | +2.858e-05 | 0.02500 |

**Trave numero: 9 lunghezza: 197.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +5.340e+02 | +2.530e+04 | +4.290e+04 | +1.042e-02 | +1.652e-05 | +2.858e-05 | 0.02500 |
| 39.400 | +5.930e+02 | +2.530e+04 | +4.850e+04 | +1.151e-02 | +1.872e-05 | +2.996e-05 | 0.02761 |
| 78.800 | +6.580e+02 | +2.530e+04 | +6.750e+04 | +1.267e-02 | +2.094e-05 | +2.967e-05 | 0.03041 |
| 118.200 | +7.290e+02 | +2.530e+04 | +8.760e+04 | +1.381e-02 | +2.326e-05 | +2.697e-05 | 0.03315 |
| 157.600 | +8.050e+02 | +2.530e+04 | +1.090e+05 | +1.481e-02 | +2.560e-05 | +3.256e-05 | 0.03554 |
| 197.000 | +8.050e+02 | +2.530e+04 | +1.310e+05 | +1.554e-02 | +2.799e-05 | +4.456e-05 | 0.03729 |

**Trave numero: 10 lunghezza: 215.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +7.990e+02 | +4.440e+04 | +9.020e+04 | +1.554e-02 | +2.799e-05 | +4.456e-05 | 0.03729 |
| 43.000 | +8.860e+02 | +4.440e+04 | +1.140e+05 | +1.596e-02 | +3.161e-05 | +5.557e-05 | 0.03831 |
| 86.000 | +9.730e+02 | +4.440e+04 | +1.390e+05 | +1.595e-02 | +3.832e-05 | +6.898e-05 | 0.03828 |
| 129.000 | +1.060e+03 | +4.440e+04 | +1.700e+05 | +1.530e-02 | +4.540e-05 | +8.452e-05 | 0.03671 |
| 172.000 | +1.130e+03 | +4.440e+04 | +2.130e+05 | +1.483e-02 | +5.255e-05 | +1.019e-04 | 0.03559 |
| 215.000 | +1.130e+03 | +4.440e+04 | +2.610e+05 | +1.952e-02 | +5.974e-05 | +1.208e-04 | 0.04686 |

**Trave numero: 11 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +6.360e+02 | +1.360e+04 | +5.650e+04 | +1.527e-02 | +5.172e-05 | +4.990e-05 | 0.03666 |
| 35.000 | +6.360e+02 | +1.360e+04 | +3.430e+04 | +1.344e-02 | +5.070e-05 | +5.370e-05 | 0.03226 |
| 70.000 | +6.010e+02 | +1.360e+04 | +2.540e+04 | +1.149e-02 | +4.968e-05 | +5.664e-05 | 0.02759 |
| 105.000 | +5.700e+02 | +1.360e+04 | +1.970e+04 | +9.463e-03 | +4.866e-05 | +5.891e-05 | 0.02271 |
| 140.000 | +5.410e+02 | +1.360e+04 | +2.570e+04 | +7.370e-03 | +4.764e-05 | +6.069e-05 | 0.01769 |
| 175.000 | +5.160e+02 | +1.360e+04 | +4.380e+04 | +5.248e-03 | +4.663e-05 | +6.209e-05 | 0.01259 |

**Trave numero: 12 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +7.980e+02 | +1.660e+04 | +8.530e+04 | +1.422e-02 | +4.931e-05 | +3.133e-05 | 0.03412 |
| 35.000 | +7.980e+02 | +1.660e+04 | +5.750e+04 | +1.324e-02 | +4.807e-05 | +3.847e-05 | 0.03178 |
| 70.000 | +7.550e+02 | +1.660e+04 | +3.150e+04 | +1.226e-02 | +4.692e-05 | +4.290e-05 | 0.02942 |
| 105.000 | +7.190e+02 | +1.660e+04 | +2.610e+04 | +1.132e-02 | +4.576e-05 | +4.475e-05 | 0.02718 |
| 140.000 | +6.900e+02 | +1.660e+04 | +3.440e+04 | +1.048e-02 | +4.461e-05 | +4.413e-05 | 0.02514 |
| 175.000 | +6.690e+02 | +1.660e+04 | +4.320e+04 | +9.757e-03 | +4.346e-05 | +4.114e-05 | 0.02342 |

**Trave numero: 13 lunghezza: 180.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +5.130e+02 | +4.310e+04 | +7.410e+04 | +9.757e-03 | +4.346e-05 | +4.114e-05 | 0.02342 |
| 36.000 | +5.130e+02 | +4.310e+04 | +6.160e+04 | +9.285e-03 | +4.679e-05 | +4.215e-05 | 0.02228 |
| 72.000 | +5.130e+02 | +4.310e+04 | +4.760e+04 | +9.058e-03 | +5.015e-05 | +4.136e-05 | 0.02174 |
| 108.000 | +5.300e+02 | +4.310e+04 | +3.720e+04 | +9.015e-03 | +5.353e-05 | +3.880e-05 | 0.02164 |
| 144.000 | +5.600e+02 | +4.310e+04 | +5.500e+04 | +9.509e-03 | +5.694e-05 | +3.492e-05 | 0.02282 |
| 180.000 | +5.600e+02 | +4.310e+04 | +7.360e+04 | +1.046e-02 | +6.187e-05 | +3.056e-05 | 0.02511 |

**Trave numero: 14 lunghezza: 197.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +5.010e+02 | +2.890e+04 | +3.770e+04 | +1.046e-02 | +6.187e-05 | +3.056e-05 | 0.02511 |
| 39.400 | +5.610e+02 | +2.890e+04 | +4.910e+04 | +1.155e-02 | +6.589e-05 | +3.034e-05 | 0.02772 |
| 78.800 | +6.260e+02 | +2.890e+04 | +6.760e+04 | +1.268e-02 | +6.990e-05 | +2.912e-05 | 0.03044 |
| 118.200 | +6.970e+02 | +2.890e+04 | +8.750e+04 | +1.378e-02 | +7.393e-05 | +2.583e-05 | 0.03306 |
| 157.600 | +7.730e+02 | +2.890e+04 | +1.090e+05 | +1.471e-02 | +7.796e-05 | +2.555e-05 | 0.03531 |
| 197.000 | +7.730e+02 | +2.890e+04 | +1.310e+05 | +1.537e-02 | +8.199e-05 | +3.748e-05 | 0.03689 |

**Trave numero: 15 lunghezza: 215.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +7.710e+02 | +3.030e+04 | +8.950e+04 | +1.537e-02 | +8.199e-05 | +3.748e-05 | 0.03689 |
| 43.000 | +8.570e+02 | +3.030e+04 | +1.130e+05 | +1.572e-02 | +8.347e-05 | +4.829e-05 | 0.03773 |
| 86.000 | +9.430e+02 | +3.030e+04 | +1.380e+05 | +1.563e-02 | +8.495e-05 | +6.176e-05 | 0.03751 |
| 129.000 | +1.020e+03 | +3.030e+04 | +1.680e+05 | +1.491e-02 | +8.644e-05 | +7.758e-05 | 0.03578 |
| 172.000 | +1.100e+03 | +3.030e+04 | +2.080e+05 | +1.336e-02 | +8.793e-05 | +9.557e-05 | 0.03206 |
| 215.000 | +1.100e+03 | +3.030e+04 | +2.550e+05 | +1.555e-02 | +8.942e-05 | +1.155e-04 | 0.03731 |

**Trave numero: 16 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.580e+02 | +5.000e+04 | +3.450e+04 | +1.317e-02 | +4.819e-05 | +6.590e-05 | 0.03161 |
| 35.000 | +2.600e+02 | +5.000e+04 | +3.350e+04 | +1.328e-02 | +4.151e-05 | +6.299e-05 | 0.03186 |
| 70.000 | +2.720e+02 | +5.000e+04 | +4.230e+04 | +1.331e-02 | +3.484e-05 | +5.918e-05 | 0.03196 |
| 105.000 | +2.930e+02 | +5.000e+04 | +5.170e+04 | +1.331e-02 | +2.817e-05 | +5.444e-05 | 0.03194 |
| 140.000 | +3.230e+02 | +5.000e+04 | +6.190e+04 | +1.327e-02 | +2.153e-05 | +4.871e-05 | 0.03184 |
| 175.000 | +3.230e+02 | +5.000e+04 | +7.320e+04 | +1.357e-02 | +1.498e-05 | +4.190e-05 | 0.03257 |

**Trave numero: 17 lunghezza: 592.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +4.810e+02 | +1.170e+05 | +4.830e+04 | +1.357e-02 | +1.498e-05 | +4.190e-05 | 0.02714 |
| 118.400 | +6.670e+02 | +1.170e+05 | +1.050e+05 | +1.544e-02 | +5.540e-05 | +1.599e-05 | 0.03087 |
| 236.800 | +8.590e+02 | +1.170e+05 | +1.800e+05 | +1.496e-02 | +1.073e-04 | +3.856e-05 | 0.02993 |
| 355.200 | +9.680e+02 | +1.170e+05 | +2.730e+05 | +8.704e-03 | +1.597e-04 | +1.103e-04 | 0.01741 |



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|---|---|---|---|---|---|---|---|
| 473.600 | +9.680e+02 | +1.170e+05 | +3.730e+05 | +1.802e-02 | +2.123e-04 | +2.200e-04 | 0.03604 |
| 592.000 | +8.620e+02 | +1.170e+05 | +4.650e+05 | +5.010e-02 | +2.649e-04 | +3.593e-04 | 0.10019 |

**Trave numero: 18 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +8.840e+02 | +7.560e+04 | +1.550e+05 | +2.580e-02 | +5.570e-05 | +2.022e-04 | 0.06192 |
| 35.000 | +1.020e+03 | +7.560e+04 | +1.260e+05 | +3.251e-02 | +5.029e-05 | +2.153e-04 | 0.07803 |
| 70.000 | +1.190e+03 | +7.560e+04 | +9.180e+04 | +3.985e-02 | +4.489e-05 | +2.252e-04 | 0.09563 |
| 105.000 | +1.410e+03 | +7.560e+04 | +5.180e+04 | +4.756e-02 | +3.950e-05 | +2.315e-04 | 0.11415 |
| 140.000 | +1.670e+03 | +7.560e+04 | +1.100e+04 | +5.552e-02 | +3.427e-05 | +2.333e-04 | 0.13324 |
| 175.000 | +1.670e+03 | +7.560e+04 | +6.690e+04 | +6.353e-02 | +3.070e-05 | +2.297e-04 | 0.15248 |

**Trave numero: 19 lunghezza: 180.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +3.700e+03 | +2.050e+05 | +2.600e+04 | +6.353e-02 | +3.070e-05 | +2.297e-04 | 0.15248 |
| 36.000 | +4.050e+03 | +2.050e+05 | +1.220e+05 | +7.186e-02 | +4.369e-05 | +2.242e-04 | 0.17247 |
| 72.000 | +4.430e+03 | +2.050e+05 | +2.650e+05 | +7.982e-02 | +7.151e-05 | +2.043e-04 | 0.19157 |
| 108.000 | +4.860e+03 | +2.050e+05 | +4.240e+05 | +8.686e-02 | +9.948e-05 | +1.686e-04 | 0.20846 |
| 144.000 | +5.300e+03 | +2.050e+05 | +5.980e+05 | +9.237e-02 | +1.276e-04 | +1.156e-04 | 0.22170 |
| 180.000 | +5.300e+03 | +2.050e+05 | +7.880e+05 | +9.571e-02 | +1.557e-04 | +4.371e-05 | 0.22970 |

**Trave numero: 20 lunghezza: 197.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +5.660e+03 | +2.090e+05 | +7.410e+05 | +9.571e-02 | +1.557e-04 | +4.371e-05 | 0.22970 |
| 39.400 | +6.170e+03 | +2.090e+05 | +9.630e+05 | +9.611e-02 | +1.850e-04 | +5.339e-05 | 0.23065 |
| 78.800 | +6.660e+03 | +2.090e+05 | +1.210e+06 | +9.225e-02 | +2.144e-04 | +1.766e-04 | 0.22140 |
| 118.200 | +7.100e+03 | +2.090e+05 | +1.470e+06 | +8.305e-02 | +2.438e-04 | +3.285e-04 | 0.19933 |
| 157.600 | +7.460e+03 | +2.090e+05 | +1.750e+06 | +6.736e-02 | +2.733e-04 | +5.113e-04 | 0.16167 |
| 197.000 | +7.460e+03 | +2.090e+05 | +2.040e+06 | +4.397e-02 | +3.028e-04 | +7.266e-04 | 0.10553 |

**Trave numero: 21 lunghezza: 215.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.160e+04 | +2.410e+05 | +2.010e+06 | +4.397e-02 | +3.028e-04 | +7.266e-04 | 0.10553 |
| 43.000 | +1.160e+04 | +2.410e+05 | +1.510e+06 | +7.379e-03 | +3.358e-04 | +9.450e-04 | 0.01771 |
| 86.000 | +1.180e+04 | +2.410e+05 | +1.020e+06 | +4.155e-02 | +3.690e-04 | +1.102e-03 | 0.09971 |
| 129.000 | +1.230e+04 | +2.410e+05 | +5.120e+05 | +9.144e-02 | +4.026e-04 | +1.197e-03 | 0.21945 |
| 172.000 | +1.310e+04 | +2.410e+05 | +2.080e+04 | +1.444e-01 | +4.365e-04 | +1.227e-03 | 0.34658 |
| 215.000 | +1.310e+04 | +2.410e+05 | +5.810e+05 | +1.979e-01 | +4.728e-04 | +1.190e-03 | 0.47484 |

**Trave numero: 22 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +7.240e+02 | +1.030e+05 | +9.770e+04 | +2.926e-02 | +7.060e-05 | +1.846e-04 | 0.07023 |
| 73.000 | +7.240e+02 | +1.030e+05 | +4.610e+04 | +2.389e-02 | +7.287e-05 | +1.571e-04 | 0.05734 |
| 146.000 | +5.210e+02 | +1.030e+05 | +5.620e+04 | +1.867e-02 | +6.718e-05 | +1.298e-04 | 0.04481 |
| 219.000 | +3.680e+02 | +1.030e+05 | +7.000e+04 | +1.417e-02 | +5.709e-05 | +1.025e-04 | 0.03402 |
| 292.000 | +2.570e+02 | +1.030e+05 | +7.700e+04 | +1.084e-02 | +4.789e-05 | +7.535e-05 | 0.02602 |
| 365.000 | +1.830e+02 | +1.030e+05 | +7.900e+04 | +9.531e-03 | +3.831e-05 | +4.826e-05 | 0.02288 |

**Trave numero: 23 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.100e+02 | +3.400e+04 | +8.240e+04 | +9.531e-03 | +3.831e-05 | +4.826e-05 | 0.02288 |
| 73.000 | +2.820e+02 | +3.400e+04 | +6.850e+04 | +9.418e-03 | +4.100e-05 | +4.439e-05 | 0.02260 |
| 146.000 | +3.800e+02 | +3.400e+04 | +4.810e+04 | +1.039e-02 | +4.062e-05 | +4.054e-05 | 0.02493 |
| 219.000 | +4.940e+02 | +3.400e+04 | +2.600e+04 | +1.210e-02 | +3.715e-05 | +3.673e-05 | 0.02903 |
| 292.000 | +6.260e+02 | +3.400e+04 | +4.260e+04 | +1.412e-02 | +3.012e-05 | +3.301e-05 | 0.03388 |
| 365.000 | +6.260e+02 | +3.400e+04 | +6.580e+04 | +1.589e-02 | +1.871e-05 | +4.106e-05 | 0.03814 |

**Trave numero: 24 lunghezza: 205.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +9.390e+02 | +1.990e+04 | +2.340e+04 | +1.589e-02 | +1.871e-05 | +4.106e-05 | 0.03814 |
| 41.000 | +1.030e+03 | +1.990e+04 | +5.370e+04 | +1.666e-02 | +1.444e-05 | +4.281e-05 | 0.03998 |
| 82.000 | +1.120e+03 | +1.990e+04 | +9.140e+04 | +1.719e-02 | +6.176e-06 | +4.456e-05 | 0.04127 |
| 123.000 | +1.210e+03 | +1.990e+04 | +1.370e+05 | +1.729e-02 | +7.406e-06 | +4.633e-05 | 0.04150 |
| 164.000 | +1.290e+03 | +1.990e+04 | +1.860e+05 | +1.673e-02 | +2.653e-05 | +4.811e-05 | 0.04016 |
| 205.000 | +1.290e+03 | +1.990e+04 | +2.400e+05 | +1.527e-02 | +5.172e-05 | +4.990e-05 | 0.03666 |

**Trave numero: 25 lunghezza: 305.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.560e+03 | +6.940e+04 | +2.260e+05 | +1.527e-02 | +5.172e-05 | +4.990e-05 | 0.03666 |
| 61.000 | +1.560e+03 | +6.940e+04 | +1.300e+05 | +1.086e-02 | +8.305e-05 | +3.376e-05 | 0.02607 |
| 122.000 | +1.480e+03 | +6.940e+04 | +4.110e+04 | +5.080e-03 | +9.805e-05 | +1.769e-05 | 0.01219 |
| 183.000 | +1.450e+03 | +6.940e+04 | +4.770e+04 | +5.288e-03 | +9.739e-05 | +1.010e-05 | 0.01269 |
| 244.000 | +1.500e+03 | +6.940e+04 | +1.360e+05 | +1.033e-02 | +8.125e-05 | +1.816e-05 | 0.02480 |
| 305.000 | +1.500e+03 | +6.940e+04 | +2.270e+05 | +1.422e-02 | +4.931e-05 | +3.133e-05 | 0.03412 |

**Trave numero: 26 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.020e+03 | +2.640e+04 | +2.390e+05 | +1.422e-02 | +4.931e-05 | +3.133e-05 | 0.03412 |
| 73.000 | +1.020e+03 | +2.640e+04 | +1.710e+05 | +1.607e-02 | +1.209e-05 | +3.812e-05 | 0.03857 |
| 146.000 | +8.740e+02 | +2.640e+04 | +1.110e+05 | +1.599e-02 | +2.361e-05 | +4.502e-05 | 0.03838 |
| 219.000 | +7.260e+02 | +2.640e+04 | +5.980e+04 | +1.496e-02 | +4.160e-05 | +5.196e-05 | 0.03591 |
| 292.000 | +6.210e+02 | +2.640e+04 | +3.430e+04 | +1.380e-02 | +4.944e-05 | +5.893e-05 | 0.03312 |



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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 365.000 | +5.680e+02 | +2.640e+04 | +6.740e+04 | +1.317e-02 | +4.819e-05 | +6.590e-05 | 0.03161 |

**Trave numero: 27 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +3.000e+02 | +1.080e+05 | +6.820e+04 | +1.317e-02 | +4.819e-05 | +6.590e-05 | 0.03161 |
| 73.000 | +3.210e+02 | +1.080e+05 | +6.630e+04 | +1.350e-02 | +5.723e-05 | +9.298e-05 | 0.03240 |
| 146.000 | +3.860e+02 | +1.080e+05 | +6.330e+04 | +1.482e-02 | +6.160e-05 | +1.201e-04 | 0.03557 |
| 219.000 | +4.960e+02 | +1.080e+05 | +5.240e+04 | +1.727e-02 | +6.115e-05 | +1.474e-04 | 0.04146 |
| 292.000 | +6.600e+02 | +1.080e+05 | +5.590e+04 | +2.146e-02 | +6.029e-05 | +1.747e-04 | 0.05152 |
| 365.000 | +6.600e+02 | +1.080e+05 | +1.030e+05 | +2.580e-02 | +5.570e-05 | +2.022e-04 | 0.06192 |

**Trave numero: 28 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.360e+03 | +2.730e+04 | +1.520e+05 | +6.449e-02 | +4.569e-05 | +2.092e-04 | 0.15478 |
| 73.000 | +1.360e+03 | +2.730e+04 | +5.400e+04 | +5.497e-02 | +1.902e-04 | +1.720e-04 | 0.13192 |
| 146.000 | +8.150e+02 | +2.730e+04 | +1.540e+04 | +3.949e-02 | +2.141e-04 | +1.350e-04 | 0.09478 |
| 219.000 | +4.250e+02 | +2.730e+04 | +4.200e+04 | +2.510e-02 | +1.691e-04 | +9.862e-05 | 0.06025 |
| 292.000 | +1.790e+02 | +2.730e+04 | +5.150e+04 | +1.553e-02 | +9.325e-05 | +6.236e-05 | 0.03727 |
| 365.000 | +6.070e+01 | +2.730e+04 | +5.170e+04 | +1.221e-02 | +7.996e-06 | +2.627e-05 | 0.02931 |

**Trave numero: 29 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.420e+02 | +3.820e+03 | +2.860e+04 | +1.221e-02 | +7.996e-06 | +2.627e-05 | 0.02931 |
| 73.000 | +2.420e+02 | +3.820e+03 | +1.140e+04 | +1.088e-02 | +4.169e-05 | +2.772e-05 | 0.02611 |
| 146.000 | +1.470e+02 | +3.820e+03 | +6.700e+03 | +9.043e-03 | +5.186e-05 | +2.919e-05 | 0.02170 |
| 219.000 | +9.340e+01 | +3.820e+03 | +7.330e+03 | +8.628e-03 | +4.726e-05 | +3.067e-05 | 0.02071 |
| 292.000 | +1.740e+02 | +3.820e+03 | +1.180e+04 | +9.249e-03 | +3.217e-05 | +3.217e-05 | 0.02220 |
| 365.000 | +1.740e+02 | +3.820e+03 | +1.850e+04 | +9.895e-03 | +6.778e-06 | +3.369e-05 | 0.02375 |

**Trave numero: 30 lunghezza: 205.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.310e+02 | +1.000e+04 | +1.830e+04 | +9.895e-03 | +6.778e-06 | +3.369e-05 | 0.02375 |
| 41.000 | +2.490e+02 | +1.000e+04 | +1.070e+04 | +9.686e-03 | +1.927e-05 | +3.261e-05 | 0.02325 |
| 82.000 | +2.740e+02 | +1.000e+04 | +8.370e+03 | +9.073e-03 | +2.416e-05 | +3.987e-05 | 0.02177 |
| 123.000 | +3.040e+02 | +1.000e+04 | +1.320e+04 | +8.137e-03 | +2.719e-05 | +4.723e-05 | 0.01953 |
| 164.000 | +3.350e+02 | +1.000e+04 | +2.570e+04 | +6.885e-03 | +3.561e-05 | +5.464e-05 | 0.01652 |
| 205.000 | +3.350e+02 | +1.000e+04 | +3.940e+04 | +5.248e-03 | +4.663e-05 | +6.209e-05 | 0.01259 |

**Trave numero: 31 lunghezza: 305.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +7.510e+01 | +1.790e+04 | +1.250e+04 | +5.248e-03 | +4.663e-05 | +6.209e-05 | 0.01259 |
| 61.000 | +8.740e+01 | +1.790e+04 | +8.780e+03 | +2.916e-03 | +4.507e-05 | +4.153e-05 | 0.00700 |
| 122.000 | +9.850e+01 | +1.790e+04 | +4.470e+03 | +1.356e-03 | +5.117e-05 | +2.111e-05 | 0.00326 |
| 183.000 | +1.090e+02 | +1.790e+04 | +3.500e+03 | +3.610e-03 | +5.378e-05 | +7.132e-06 | 0.00866 |
| 244.000 | +1.320e+02 | +1.790e+04 | +1.020e+04 | +6.865e-03 | +5.166e-05 | +2.067e-05 | 0.01648 |
| 305.000 | +1.320e+02 | +1.790e+04 | +1.750e+04 | +9.757e-03 | +4.346e-05 | +4.114e-05 | 0.02342 |

**Trave numero: 32 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.590e+02 | +2.200e+03 | +4.010e+04 | +9.757e-03 | +4.346e-05 | +4.114e-05 | 0.02342 |
| 73.000 | +2.590e+02 | +2.200e+03 | +2.450e+04 | +1.133e-02 | +1.713e-05 | +4.127e-05 | 0.02719 |
| 146.000 | +1.700e+02 | +2.200e+03 | +1.220e+04 | +1.168e-02 | +4.254e-05 | +4.141e-05 | 0.02804 |
| 219.000 | +1.640e+02 | +2.200e+03 | +3.990e+03 | +1.212e-02 | +5.389e-05 | +4.156e-05 | 0.02908 |
| 292.000 | +2.500e+02 | +2.200e+03 | +1.060e+04 | +1.290e-02 | +4.611e-05 | +4.173e-05 | 0.03096 |
| 365.000 | +2.500e+02 | +2.200e+03 | +2.670e+04 | +1.357e-02 | +1.498e-05 | +4.190e-05 | 0.03257 |

**Trave numero: 33 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +8.020e+01 | +2.890e+04 | +5.550e+04 | +1.357e-02 | +1.498e-05 | +4.190e-05 | 0.03257 |
| 73.000 | +2.040e+02 | +2.890e+04 | +5.230e+04 | +1.623e-02 | +1.031e-04 | +7.897e-05 | 0.03896 |
| 146.000 | +4.340e+02 | +2.890e+04 | +4.200e+04 | +2.520e-02 | +1.747e-04 | +1.162e-04 | 0.06048 |
| 219.000 | +8.170e+02 | +2.890e+04 | +1.420e+04 | +3.934e-02 | +2.129e-04 | +1.536e-04 | 0.09442 |
| 292.000 | +1.370e+03 | +2.890e+04 | +5.590e+04 | +5.460e-02 | +1.830e-04 | +1.911e-04 | 0.13105 |
| 365.000 | +1.370e+03 | +2.890e+04 | +1.530e+05 | +6.353e-02 | +3.070e-05 | +2.297e-04 | 0.15248 |

**Trave numero: 34 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +4.270e+03 | +5.830e+05 | +2.960e+05 | +1.964e-01 | +4.676e-04 | +1.163e-03 | 0.47143 |
| 73.000 | +4.270e+03 | +5.830e+05 | +7.960e+04 | +1.607e-01 | +4.864e-04 | +1.001e-03 | 0.38566 |
| 146.000 | +2.690e+03 | +5.830e+05 | +2.600e+05 | +1.256e-01 | +4.572e-04 | +8.382e-04 | 0.30137 |
| 219.000 | +1.460e+03 | +5.830e+05 | +3.580e+05 | +9.405e-02 | +3.983e-04 | +6.759e-04 | 0.22572 |
| 292.000 | +5.470e+02 | +5.830e+05 | +3.890e+05 | +6.804e-02 | +3.255e-04 | +5.140e-04 | 0.16330 |
| 365.000 | +2.580e+02 | +5.830e+05 | +3.720e+05 | +4.856e-02 | +2.507e-04 | +3.531e-04 | 0.11653 |

**Trave numero: 35 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.150e+02 | +1.840e+05 | +2.560e+05 | +4.856e-02 | +2.507e-04 | +3.531e-04 | 0.11653 |
| 73.000 | +5.000e+02 | +1.840e+05 | +2.510e+05 | +3.414e-02 | +2.094e-04 | +3.051e-04 | 0.08194 |
| 146.000 | +7.430e+02 | +1.840e+05 | +2.210e+05 | +2.514e-02 | +1.677e-04 | +2.576e-04 | 0.06033 |
| 219.000 | +9.490e+02 | +1.840e+05 | +1.830e+05 | +2.153e-02 | +1.283e-04 | +2.103e-04 | 0.05168 |
| 292.000 | +1.140e+03 | +1.840e+05 | +1.620e+05 | +2.002e-02 | +9.236e-05 | +1.635e-04 | 0.04805 |
| 365.000 | +1.140e+03 | +1.840e+05 | +1.480e+05 | +1.952e-02 | +5.974e-05 | +1.208e-04 | 0.04686 |



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**Trave numero: 36 lunghezza: 205.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.000e+03 | +4.220e+04 | +7.620e+04 | +1.952e-02 | +5.974e-05 | +1.208e-04 | 0.04686 |
| 41.000 | +1.100e+03 | +4.220e+04 | +1.110e+05 | +1.929e-02 | +4.875e-05 | +1.212e-04 | 0.04631 |
| 82.000 | +1.200e+03 | +4.220e+04 | +1.500e+05 | +1.897e-02 | +3.334e-05 | +1.216e-04 | 0.04553 |
| 123.000 | +1.290e+03 | +4.220e+04 | +1.930e+05 | +1.834e-02 | +2.456e-05 | +1.219e-04 | 0.04401 |
| 164.000 | +1.380e+03 | +4.220e+04 | +2.400e+05 | +1.714e-02 | +4.122e-05 | +1.223e-04 | 0.04115 |
| 205.000 | +1.380e+03 | +4.220e+04 | +2.900e+05 | +1.540e-02 | +6.452e-05 | +1.230e-04 | 0.03696 |

**Trave numero: 37 lunghezza: 305.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.710e+03 | +3.700e+04 | +2.690e+05 | +1.540e-02 | +6.452e-05 | +1.230e-04 | 0.03696 |
| 61.000 | +1.710e+03 | +3.700e+04 | +1.780e+05 | +1.120e-02 | +9.168e-05 | +1.147e-04 | 0.02688 |
| 122.000 | +1.630e+03 | +3.700e+04 | +9.260e+04 | +5.109e-03 | +1.073e-04 | +1.141e-04 | 0.01226 |
| 183.000 | +1.620e+03 | +3.700e+04 | +9.660e+04 | +2.462e-03 | +1.162e-04 | +1.144e-04 | 0.00591 |
| 244.000 | +1.680e+03 | +3.700e+04 | +1.950e+05 | +9.180e-03 | +1.103e-04 | +1.150e-04 | 0.02203 |
| 305.000 | +1.680e+03 | +3.700e+04 | +2.970e+05 | +1.555e-02 | +8.942e-05 | +1.155e-04 | 0.03731 |

**Trave numero: 38 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.550e+03 | +1.840e+05 | +3.350e+05 | +1.555e-02 | +8.942e-05 | +1.155e-04 | 0.03731 |
| 73.000 | +1.550e+03 | +1.840e+05 | +3.050e+05 | +2.078e-02 | +6.879e-05 | +1.612e-04 | 0.04987 |
| 146.000 | +1.360e+03 | +1.840e+05 | +2.840e+05 | +2.515e-02 | +1.077e-04 | +2.103e-04 | 0.06036 |
| 219.000 | +1.120e+03 | +1.840e+05 | +2.640e+05 | +3.019e-02 | +1.651e-04 | +2.599e-04 | 0.07245 |
| 292.000 | +8.300e+02 | +1.840e+05 | +2.430e+05 | +3.716e-02 | +2.182e-04 | +3.095e-04 | 0.08919 |
| 365.000 | +5.560e+02 | +1.840e+05 | +2.450e+05 | +5.010e-02 | +2.649e-04 | +3.593e-04 | 0.12023 |

**Trave numero: 39 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +4.010e+02 | +6.030e+05 | +3.740e+05 | +5.010e-02 | +2.649e-04 | +3.593e-04 | 0.12023 |
| 73.000 | +6.390e+02 | +6.030e+05 | +3.870e+05 | +6.929e-02 | +3.424e-04 | +5.221e-04 | 0.16629 |
| 146.000 | +1.520e+03 | +6.030e+05 | +3.570e+05 | +9.468e-02 | +4.154e-04 | +6.879e-04 | 0.22722 |
| 219.000 | +2.730e+03 | +6.030e+05 | +2.600e+05 | +1.258e-01 | +4.727e-04 | +8.550e-04 | 0.30192 |
| 292.000 | +4.300e+03 | +6.030e+05 | +8.350e+04 | +1.613e-01 | +4.987e-04 | +1.023e-03 | 0.38724 |
| 365.000 | +4.300e+03 | +6.030e+05 | +3.020e+05 | +1.979e-01 | +4.728e-04 | +1.190e-03 | 0.47484 |

**Pressione massima nel gruppo: 0.475 Trave numero: 21 Distanza: 215.000**

**FORZE / MOMENTI ELEMENTO FINITO TRAVE DI FONDAZIONE (λ*EX+EY)**
**Gruppo: 1 - Descrizione: CORDOLI DI FONDAZIONE**

**Trave numero: 1 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +4.550e+02 | +7.150e+04 | +6.710e+04 | +2.004e-02 | +7.846e-05 | +8.605e-05 | 0.04810 |
| 35.000 | +4.910e+02 | +7.150e+04 | +5.550e+04 | +2.186e-02 | +8.336e-05 | +9.104e-05 | 0.05246 |
| 70.000 | +5.660e+02 | +7.150e+04 | +4.210e+04 | +2.399e-02 | +8.828e-05 | +9.449e-05 | 0.05758 |
| 105.000 | +6.660e+02 | +7.150e+04 | +2.740e+04 | +2.641e-02 | +9.319e-05 | +9.620e-05 | 0.06337 |
| 140.000 | +7.880e+02 | +7.150e+04 | +2.280e+04 | +2.903e-02 | +9.837e-05 | +9.587e-05 | 0.06966 |
| 175.000 | +7.880e+02 | +7.150e+04 | +4.300e+04 | +3.176e-02 | +1.038e-04 | +9.315e-05 | 0.07622 |

**Trave numero: 2 lunghezza: 180.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.520e+03 | +9.790e+04 | +1.730e+04 | +3.176e-02 | +1.038e-04 | +9.315e-05 | 0.07622 |
| 36.000 | +1.670e+03 | +9.790e+04 | +6.140e+04 | +3.466e-02 | +1.075e-04 | +8.991e-05 | 0.08319 |
| 72.000 | +1.830e+03 | +9.790e+04 | +1.180e+05 | +3.748e-02 | +1.199e-04 | +8.081e-05 | 0.08995 |
| 108.000 | +2.010e+03 | +9.790e+04 | +1.820e+05 | +3.998e-02 | +1.324e-04 | +6.529e-05 | 0.09595 |
| 144.000 | +2.200e+03 | +9.790e+04 | +2.540e+05 | +4.190e-02 | +1.449e-04 | +4.278e-05 | 0.10056 |
| 180.000 | +2.200e+03 | +9.790e+04 | +3.320e+05 | +4.296e-02 | +1.580e-04 | +1.361e-05 | 0.10311 |

**Trave numero: 3 lunghezza: 197.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.330e+03 | +9.000e+04 | +3.030e+05 | +4.296e-02 | +1.580e-04 | +1.361e-05 | 0.10311 |
| 39.400 | +2.540e+03 | +9.000e+04 | +3.950e+05 | +4.283e-02 | +1.656e-04 | +2.884e-05 | 0.10280 |
| 78.800 | +2.750e+03 | +9.000e+04 | +4.940e+05 | +4.104e-02 | +1.733e-04 | +7.882e-05 | 0.09849 |
| 118.200 | +2.930e+03 | +9.000e+04 | +6.020e+05 | +3.714e-02 | +1.810e-04 | +1.410e-04 | 0.08915 |
| 157.600 | +3.080e+03 | +9.000e+04 | +7.170e+05 | +3.074e-02 | +1.888e-04 | +2.160e-04 | 0.07378 |
| 197.000 | +3.080e+03 | +9.000e+04 | +8.380e+05 | +2.151e-02 | +1.967e-04 | +3.043e-04 | 0.05161 |

**Trave numero: 4 lunghezza: 215.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +4.760e+03 | +1.400e+05 | +8.210e+05 | +2.151e-02 | +1.967e-04 | +3.043e-04 | 0.05161 |
| 43.000 | +4.760e+03 | +1.400e+05 | +6.170e+05 | +8.624e-03 | +1.988e-04 | +3.935e-04 | 0.02070 |
| 86.000 | +4.830e+03 | +1.400e+05 | +4.130e+05 | +2.210e-02 | +2.012e-04 | +4.573e-04 | 0.05304 |
| 129.000 | +5.030e+03 | +1.400e+05 | +2.070e+05 | +4.009e-02 | +2.040e-04 | +4.957e-04 | 0.09622 |
| 172.000 | +5.360e+03 | +1.400e+05 | +1.980e+04 | +6.038e-02 | +2.074e-04 | +5.079e-04 | 0.14492 |
| 215.000 | +5.360e+03 | +1.400e+05 | +2.430e+05 | +8.218e-02 | +2.114e-04 | +4.923e-04 | 0.19723 |

**Trave numero: 5 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.670e+02 | +3.870e+04 | +2.870e+04 | +9.555e-03 | +3.607e-05 | +4.817e-05 | 0.02293 |
| 35.000 | +1.670e+02 | +3.870e+04 | +3.400e+04 | +8.550e-03 | +3.090e-05 | +4.501e-05 | 0.02052 |
| 70.000 | +1.480e+02 | +3.870e+04 | +3.890e+04 | +7.674e-03 | +2.573e-05 | +4.133e-05 | 0.01842 |
| 105.000 | +1.380e+02 | +3.870e+04 | +4.360e+04 | +6.987e-03 | +2.056e-05 | +3.716e-05 | 0.01677 |
| 140.000 | +1.370e+02 | +3.870e+04 | +4.830e+04 | +6.470e-03 | +1.540e-05 | +3.253e-05 | 0.01553 |



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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 175.000 | +1.370e+02 | +3.870e+04 | +5.300e+04 | +6.221e-03 | +1.030e-05 | +2.742e-05 | 0.01493 |

**Trave numero: 6 lunghezza: 592.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.910e+02 | +5.700e+04 | +4.850e+04 | +6.221e-03 | +1.030e-05 | +2.742e-05 | 0.01244 |
| 118.400 | +2.700e+02 | +5.700e+04 | +6.450e+04 | +6.332e-03 | +2.984e-05 | +8.255e-06 | 0.01266 |
| 236.800 | +3.460e+02 | +5.700e+04 | +8.720e+04 | +6.041e-03 | +5.505e-05 | +1.780e-05 | 0.01208 |
| 355.200 | +3.920e+02 | +5.700e+04 | +1.170e+05 | +4.022e-03 | +8.059e-05 | +5.238e-05 | 0.00804 |
| 473.600 | +3.920e+02 | +5.700e+04 | +1.520e+05 | +9.327e-03 | +1.063e-04 | +9.715e-05 | 0.01865 |
| 592.000 | +3.690e+02 | +5.700e+04 | +1.860e+05 | +2.356e-02 | +1.320e-04 | +1.505e-04 | 0.04711 |

**Trave numero: 7 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +9.940e+02 | +5.820e+04 | +4.110e+04 | +3.149e-02 | +4.479e-05 | +7.996e-05 | 0.07557 |
| 35.000 | +9.940e+02 | +5.820e+04 | +1.840e+04 | +2.860e-02 | +3.731e-05 | +8.070e-05 | 0.06864 |
| 70.000 | +8.820e+02 | +5.820e+04 | +4.060e+04 | +2.576e-02 | +2.984e-05 | +7.837e-05 | 0.06182 |
| 105.000 | +7.810e+02 | +5.820e+04 | +6.480e+04 | +2.306e-02 | +2.238e-05 | +7.418e-05 | 0.05534 |
| 140.000 | +6.920e+02 | +5.820e+04 | +8.620e+04 | +2.059e-02 | +1.495e-05 | +6.790e-05 | 0.04943 |
| 175.000 | +6.130e+02 | +5.820e+04 | +1.050e+05 | +1.846e-02 | +7.662e-06 | +5.945e-05 | 0.04431 |

**Trave numero: 8 lunghezza: 180.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +3.310e+02 | +4.450e+04 | +1.220e+05 | +1.846e-02 | +7.662e-06 | +5.945e-05 | 0.04431 |
| 36.000 | +3.310e+02 | +4.450e+04 | +1.230e+05 | +1.677e-02 | +3.039e-06 | +5.048e-05 | 0.04025 |
| 72.000 | +2.850e+02 | +4.450e+04 | +1.220e+05 | +1.555e-02 | +6.549e-06 | +4.083e-05 | 0.03732 |
| 108.000 | +2.610e+02 | +4.450e+04 | +1.180e+05 | +1.480e-02 | +1.203e-05 | +3.193e-05 | 0.03551 |
| 144.000 | +2.970e+02 | +4.450e+04 | +1.210e+05 | +1.473e-02 | +1.776e-05 | +2.742e-05 | 0.03534 |
| 180.000 | +2.970e+02 | +4.450e+04 | +1.240e+05 | +1.510e-02 | +2.383e-05 | +2.784e-05 | 0.03623 |

**Trave numero: 9 lunghezza: 197.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.610e+02 | +2.410e+04 | +1.160e+05 | +1.510e-02 | +2.383e-05 | +2.784e-05 | 0.03623 |
| 39.400 | +3.390e+02 | +2.410e+04 | +1.130e+05 | +1.596e-02 | +2.214e-05 | +3.446e-05 | 0.03829 |
| 78.800 | +4.230e+02 | +2.410e+04 | +1.130e+05 | +1.727e-02 | +2.051e-05 | +4.250e-05 | 0.04146 |
| 118.200 | +5.150e+02 | +2.410e+04 | +1.100e+05 | +1.900e-02 | +1.918e-05 | +4.998e-05 | 0.04559 |
| 157.600 | +6.180e+02 | +2.410e+04 | +1.050e+05 | +2.104e-02 | +1.794e-05 | +5.928e-05 | 0.05051 |
| 197.000 | +6.180e+02 | +2.410e+04 | +9.790e+04 | +2.333e-02 | +1.685e-05 | +6.931e-05 | 0.05600 |

**Trave numero: 10 lunghezza: 215.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +6.290e+02 | +7.910e+04 | +8.660e+04 | +2.333e-02 | +1.685e-05 | +6.931e-05 | 0.05600 |
| 43.000 | +7.610e+02 | +7.910e+04 | +7.760e+04 | +2.601e-02 | +1.761e-05 | +7.855e-05 | 0.06243 |
| 86.000 | +9.100e+02 | +7.910e+04 | +6.700e+04 | +2.879e-02 | +2.864e-05 | +8.652e-05 | 0.06909 |
| 129.000 | +1.070e+03 | +7.910e+04 | +7.150e+04 | +3.150e-02 | +4.091e-05 | +9.221e-05 | 0.07560 |
| 172.000 | +1.250e+03 | +7.910e+04 | +1.100e+05 | +3.424e-02 | +5.344e-05 | +9.480e-05 | 0.08219 |
| 215.000 | +1.250e+03 | +7.910e+04 | +1.620e+05 | +3.835e-02 | +6.605e-05 | +9.342e-05 | 0.09204 |

**Trave numero: 11 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.150e+03 | +2.050e+04 | +1.200e+05 | +3.054e-02 | +1.155e-04 | +8.164e-05 | 0.07330 |
| 35.000 | +1.150e+03 | +2.050e+04 | +8.030e+04 | +2.742e-02 | +1.131e-04 | +9.154e-05 | 0.06580 |
| 70.000 | +1.040e+03 | +2.050e+04 | +4.770e+04 | +2.402e-02 | +1.107e-04 | +9.798e-05 | 0.05765 |
| 105.000 | +9.390e+02 | +2.050e+04 | +1.910e+04 | +2.046e-02 | +1.082e-04 | +1.014e-04 | 0.04910 |
| 140.000 | +8.560e+02 | +2.050e+04 | +1.880e+04 | +1.684e-02 | +1.058e-04 | +1.020e-04 | 0.04041 |
| 175.000 | +7.860e+02 | +2.050e+04 | +4.630e+04 | +1.326e-02 | +1.034e-04 | +1.002e-04 | 0.03181 |

**Trave numero: 12 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.630e+03 | +2.110e+04 | +1.310e+05 | +3.096e-02 | +1.211e-04 | +6.328e-05 | 0.07430 |
| 35.000 | +1.630e+03 | +2.110e+04 | +7.430e+04 | +2.852e-02 | +1.215e-04 | +7.363e-05 | 0.06844 |
| 70.000 | +1.520e+03 | +2.110e+04 | +2.280e+04 | +2.588e-02 | +1.222e-04 | +7.845e-05 | 0.06211 |
| 105.000 | +1.410e+03 | +2.110e+04 | +3.930e+04 | +2.322e-02 | +1.229e-04 | +7.814e-05 | 0.05573 |
| 140.000 | +1.320e+03 | +2.110e+04 | +8.060e+04 | +2.071e-02 | +1.235e-04 | +7.305e-05 | 0.04970 |
| 175.000 | +1.240e+03 | +2.110e+04 | +1.190e+05 | +1.849e-02 | +1.242e-04 | +6.354e-05 | 0.04436 |

**Trave numero: 13 lunghezza: 180.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +3.460e+02 | +6.630e+04 | +1.030e+05 | +1.849e-02 | +1.242e-04 | +6.354e-05 | 0.04436 |
| 36.000 | +3.460e+02 | +6.630e+04 | +1.060e+05 | +1.671e-02 | +1.326e-04 | +5.563e-05 | 0.04011 |
| 72.000 | +2.960e+02 | +6.630e+04 | +1.060e+05 | +1.538e-02 | +1.409e-04 | +4.679e-05 | 0.03690 |
| 108.000 | +2.590e+02 | +6.630e+04 | +1.060e+05 | +1.445e-02 | +1.492e-04 | +3.737e-05 | 0.03467 |
| 144.000 | +2.590e+02 | +6.630e+04 | +1.110e+05 | +1.404e-02 | +1.575e-04 | +2.902e-05 | 0.03369 |
| 180.000 | +2.590e+02 | +6.630e+04 | +1.160e+05 | +1.412e-02 | +1.663e-04 | +2.491e-05 | 0.03389 |

**Trave numero: 14 lunghezza: 197.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.250e+02 | +2.560e+04 | +1.050e+05 | +1.412e-02 | +1.663e-04 | +2.491e-05 | 0.03389 |
| 39.400 | +2.960e+02 | +2.560e+04 | +1.060e+05 | +1.462e-02 | +1.691e-04 | +2.749e-05 | 0.03510 |
| 78.800 | +3.720e+02 | +2.560e+04 | +1.060e+05 | +1.555e-02 | +1.718e-04 | +3.340e-05 | 0.03732 |
| 118.200 | +4.540e+02 | +2.560e+04 | +1.050e+05 | +1.685e-02 | +1.746e-04 | +3.968e-05 | 0.04043 |
| 157.600 | +5.440e+02 | +2.560e+04 | +1.020e+05 | +1.845e-02 | +1.774e-04 | +4.663e-05 | 0.04427 |
| 197.000 | +5.440e+02 | +2.560e+04 | +9.700e+04 | +2.027e-02 | +1.801e-04 | +5.637e-05 | 0.04865 |



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**Trave numero: 15 lunghezza: 215.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +5.720e+02 | +4.190e+04 | +8.540e+04 | +2.027e-02 | +1.801e-04 | +5.637e-05 | 0.04865 |
| 43.000 | +6.870e+02 | +4.190e+04 | +7.830e+04 | +2.245e-02 | +1.754e-04 | +6.514e-05 | 0.05388 |
| 86.000 | +8.150e+02 | +4.190e+04 | +7.000e+04 | +2.472e-02 | +1.707e-04 | +7.348e-05 | 0.05933 |
| 129.000 | +9.560e+02 | +4.190e+04 | +6.690e+04 | +2.695e-02 | +1.659e-04 | +7.997e-05 | 0.06469 |
| 172.000 | +1.110e+03 | +4.190e+04 | +9.710e+04 | +2.896e-02 | +1.612e-04 | +8.398e-05 | 0.06951 |
| 215.000 | +1.110e+03 | +4.190e+04 | +1.420e+05 | +3.197e-02 | +1.564e-04 | +8.477e-05 | 0.07673 |

**Trave numero: 16 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +6.790e+02 | +4.580e+04 | +2.640e+04 | +2.133e-02 | +6.350e-05 | +7.241e-05 | 0.05119 |
| 35.000 | +6.790e+02 | +4.580e+04 | +1.680e+04 | +1.954e-02 | +5.742e-05 | +7.193e-05 | 0.04690 |
| 70.000 | +6.130e+02 | +4.580e+04 | +3.750e+04 | +1.777e-02 | +5.134e-05 | +6.921e-05 | 0.04265 |
| 105.000 | +5.580e+02 | +4.580e+04 | +5.680e+04 | +1.607e-02 | +4.528e-05 | +6.446e-05 | 0.03857 |
| 140.000 | +5.140e+02 | +4.580e+04 | +7.470e+04 | +1.451e-02 | +3.930e-05 | +5.784e-05 | 0.03482 |
| 175.000 | +4.780e+02 | +4.580e+04 | +9.130e+04 | +1.325e-02 | +3.360e-05 | +4.950e-05 | 0.03180 |

**Trave numero: 17 lunghezza: 592.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.880e+02 | +5.980e+04 | +8.220e+04 | +1.325e-02 | +3.360e-05 | +4.950e-05 | 0.02650 |
| 118.400 | +2.730e+02 | +5.980e+04 | +1.040e+05 | +1.117e-02 | +5.185e-05 | +1.841e-05 | 0.02233 |
| 236.800 | +4.080e+02 | +5.980e+04 | +1.230e+05 | +1.150e-02 | +7.601e-05 | +2.436e-05 | 0.02299 |
| 355.200 | +5.480e+02 | +5.980e+04 | +1.410e+05 | +1.207e-02 | +1.017e-04 | +6.603e-05 | 0.02414 |
| 473.600 | +6.660e+02 | +5.980e+04 | +1.570e+05 | +1.961e-02 | +1.278e-04 | +1.152e-04 | 0.03922 |
| 592.000 | +6.660e+02 | +5.980e+04 | +2.040e+05 | +3.496e-02 | +1.543e-04 | +1.646e-04 | 0.06992 |

**Trave numero: 18 lunghezza: 175.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +4.210e+02 | +7.640e+04 | +7.100e+04 | +1.961e-02 | +4.858e-05 | +9.815e-05 | 0.04705 |
| 35.000 | +4.490e+02 | +7.640e+04 | +6.210e+04 | +2.088e-02 | +5.404e-05 | +1.014e-04 | 0.05011 |
| 70.000 | +5.160e+02 | +7.640e+04 | +5.110e+04 | +2.295e-02 | +5.950e-05 | +1.034e-04 | 0.05507 |
| 105.000 | +6.110e+02 | +7.640e+04 | +3.900e+04 | +2.536e-02 | +6.496e-05 | +1.048e-04 | 0.06086 |
| 140.000 | +7.290e+02 | +7.640e+04 | +2.630e+04 | +2.805e-02 | +7.048e-05 | +1.045e-04 | 0.06732 |
| 175.000 | +7.290e+02 | +7.640e+04 | +4.380e+04 | +3.093e-02 | +7.650e-05 | +1.020e-04 | 0.07422 |

**Trave numero: 19 lunghezza: 180.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.570e+03 | +9.590e+04 | +3.120e+04 | +3.093e-02 | +7.650e-05 | +1.020e-04 | 0.07422 |
| 36.000 | +1.720e+03 | +9.590e+04 | +6.710e+04 | +3.405e-02 | +8.405e-05 | +9.882e-05 | 0.08173 |
| 72.000 | +1.880e+03 | +9.590e+04 | +1.200e+05 | +3.715e-02 | +9.608e-05 | +8.964e-05 | 0.08915 |
| 108.000 | +2.070e+03 | +9.590e+04 | +1.850e+05 | +3.995e-02 | +1.085e-04 | +7.392e-05 | 0.09587 |
| 144.000 | +2.260e+03 | +9.590e+04 | +2.570e+05 | +4.218e-02 | +1.213e-04 | +5.099e-05 | 0.10123 |
| 180.000 | +2.260e+03 | +9.590e+04 | +3.370e+05 | +4.355e-02 | +1.341e-04 | +2.027e-05 | 0.10453 |

**Trave numero: 20 lunghezza: 197.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.350e+03 | +9.470e+04 | +3.170e+05 | +4.355e-02 | +1.341e-04 | +2.027e-05 | 0.10453 |
| 39.400 | +2.570e+03 | +9.470e+04 | +4.080e+05 | +4.374e-02 | +1.412e-04 | +2.173e-05 | 0.10497 |
| 78.800 | +2.790e+03 | +9.470e+04 | +5.090e+05 | +4.219e-02 | +1.485e-04 | +7.359e-05 | 0.10126 |
| 118.200 | +2.980e+03 | +9.470e+04 | +6.180e+05 | +3.848e-02 | +1.558e-04 | +1.376e-04 | 0.09235 |
| 157.600 | +3.140e+03 | +9.470e+04 | +7.350e+05 | +3.218e-02 | +1.632e-04 | +2.145e-04 | 0.07724 |
| 197.000 | +3.140e+03 | +9.470e+04 | +8.580e+05 | +2.295e-02 | +1.708e-04 | +3.050e-04 | 0.05507 |

**Trave numero: 21 lunghezza: 215.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +4.930e+03 | +1.460e+05 | +8.440e+05 | +2.295e-02 | +1.708e-04 | +3.050e-04 | 0.05507 |
| 43.000 | +4.930e+03 | +1.460e+05 | +6.320e+05 | +9.472e-03 | +1.728e-04 | +3.965e-04 | 0.02273 |
| 86.000 | +4.980e+03 | +1.460e+05 | +4.230e+05 | +2.110e-02 | +1.755e-04 | +4.619e-04 | 0.05064 |
| 129.000 | +5.180e+03 | +1.460e+05 | +2.110e+05 | +3.932e-02 | +1.791e-04 | +5.010e-04 | 0.09438 |
| 172.000 | +5.510e+03 | +1.460e+05 | +2.870e+04 | +5.974e-02 | +1.841e-04 | +5.131e-04 | 0.14338 |
| 215.000 | +5.510e+03 | +1.460e+05 | +2.550e+05 | +8.175e-02 | +1.970e-04 | +4.969e-04 | 0.19621 |

**Trave numero: 22 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +3.060e+02 | +4.600e+04 | +1.240e+05 | +2.004e-02 | +7.846e-05 | +8.605e-05 | 0.04810 |
| 73.000 | +3.060e+02 | +4.600e+04 | +1.060e+05 | +1.510e-02 | +5.972e-05 | +7.778e-05 | 0.03624 |
| 146.000 | +2.690e+02 | +4.600e+04 | +1.020e+05 | +1.140e-02 | +4.193e-05 | +6.999e-05 | 0.02736 |
| 219.000 | +2.690e+02 | +4.600e+04 | +9.560e+04 | +9.225e-03 | +2.815e-05 | +6.247e-05 | 0.02214 |
| 292.000 | +2.930e+02 | +4.600e+04 | +8.420e+04 | +8.615e-03 | +2.926e-05 | +5.520e-05 | 0.02068 |
| 365.000 | +2.930e+02 | +4.600e+04 | +6.780e+04 | +9.555e-03 | +3.607e-05 | +4.817e-05 | 0.02293 |

**Trave numero: 23 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +5.130e+02 | +3.510e+04 | +1.450e+05 | +9.555e-03 | +3.607e-05 | +4.817e-05 | 0.02293 |
| 73.000 | +6.170e+02 | +3.510e+04 | +1.080e+05 | +1.213e-02 | +5.848e-05 | +5.377e-05 | 0.02911 |
| 146.000 | +7.650e+02 | +3.510e+04 | +6.320e+04 | +1.644e-02 | +7.255e-05 | +5.940e-05 | 0.03947 |
| 219.000 | +9.600e+02 | +3.510e+04 | +1.250e+04 | +2.172e-02 | +7.661e-05 | +6.505e-05 | 0.05213 |
| 292.000 | +1.200e+03 | +3.510e+04 | +7.150e+04 | +2.709e-02 | +6.837e-05 | +7.074e-05 | 0.06503 |
| 365.000 | +1.200e+03 | +3.510e+04 | +1.530e+05 | +3.149e-02 | +4.479e-05 | +7.996e-05 | 0.07557 |

**Trave numero: 24 lunghezza: 205.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|



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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.140e+03 | +1.170e+04 | +3.460e+04 | +3.149e-02 | +4.479e-05 | +7.996e-05 | 0.07557 |
| 41.000 | +2.310e+03 | +1.170e+04 | +1.190e+05 | +3.337e-02 | +3.579e-05 | +8.028e-05 | 0.08010 |
| 82.000 | +2.480e+03 | +1.170e+04 | +2.130e+05 | +3.470e-02 | +1.642e-05 | +8.061e-05 | 0.08328 |
| 123.000 | +2.660e+03 | +1.170e+04 | +3.140e+05 | +3.500e-02 | +1.499e-05 | +8.094e-05 | 0.08401 |
| 164.000 | +2.830e+03 | +1.170e+04 | +4.230e+05 | +3.379e-02 | +5.860e-05 | +8.129e-05 | 0.08110 |
| 205.000 | +2.830e+03 | +1.170e+04 | +5.390e+05 | +3.054e-02 | +1.155e-04 | +8.164e-05 | 0.07330 |

**Trave numero: 25 lunghezza: 305.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +3.400e+03 | +1.240e+05 | +5.080e+05 | +3.054e-02 | +1.155e-04 | +8.164e-05 | 0.07330 |
| 61.000 | +3.400e+03 | +1.240e+05 | +3.010e+05 | +2.066e-02 | +1.867e-04 | +5.271e-05 | 0.04958 |
| 122.000 | +3.240e+03 | +1.240e+05 | +1.030e+05 | +7.592e-03 | +2.222e-04 | +2.386e-05 | 0.01822 |
| 183.000 | +3.230e+03 | +1.240e+05 | +9.120e+04 | +7.898e-03 | +2.233e-04 | +8.937e-06 | 0.01896 |
| 244.000 | +3.380e+03 | +1.240e+05 | +2.880e+05 | +2.093e-02 | +1.899e-04 | +3.525e-05 | 0.05023 |
| 305.000 | +3.380e+03 | +1.240e+05 | +4.950e+05 | +3.096e-02 | +1.211e-04 | +6.328e-05 | 0.07430 |

**Trave numero: 26 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.410e+03 | +1.090e+04 | +5.440e+05 | +3.096e-02 | +1.211e-04 | +6.328e-05 | 0.07430 |
| 73.000 | +2.410e+03 | +1.090e+04 | +3.710e+05 | +3.568e-02 | +2.693e-05 | +6.506e-05 | 0.08562 |
| 146.000 | +2.090e+03 | +1.090e+04 | +2.200e+05 | +3.490e-02 | +3.746e-05 | +6.688e-05 | 0.08376 |
| 219.000 | +1.770e+03 | +1.090e+04 | +9.050e+04 | +3.097e-02 | +7.008e-05 | +6.871e-05 | 0.07433 |
| 292.000 | +1.510e+03 | +1.090e+04 | +3.450e+04 | +2.589e-02 | +7.756e-05 | +7.056e-05 | 0.06213 |
| 365.000 | +1.300e+03 | +1.090e+04 | +1.270e+05 | +2.133e-02 | +6.350e-05 | +7.241e-05 | 0.05119 |

**Trave numero: 27 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +5.240e+02 | +5.250e+04 | +4.500e+04 | +2.133e-02 | +6.350e-05 | +7.241e-05 | 0.05119 |
| 73.000 | +5.240e+02 | +5.250e+04 | +7.340e+04 | +1.811e-02 | +5.896e-05 | +7.705e-05 | 0.04345 |
| 146.000 | +4.070e+02 | +5.250e+04 | +9.450e+04 | +1.601e-02 | +4.756e-05 | +8.189e-05 | 0.03843 |
| 219.000 | +3.260e+02 | +5.250e+04 | +1.060e+05 | +1.542e-02 | +3.255e-05 | +8.698e-05 | 0.03702 |
| 292.000 | +2.810e+02 | +5.250e+04 | +1.150e+05 | +1.674e-02 | +3.414e-05 | +9.238e-05 | 0.04018 |
| 365.000 | +2.810e+02 | +5.250e+04 | +1.320e+05 | +1.961e-02 | +4.858e-05 | +9.815e-05 | 0.04705 |

**Trave numero: 28 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +5.830e+02 | +1.170e+04 | +7.760e+04 | +3.176e-02 | +1.038e-04 | +9.315e-05 | 0.07622 |
| 73.000 | +5.830e+02 | +1.170e+04 | +3.960e+04 | +2.486e-02 | +1.126e-04 | +7.817e-05 | 0.05966 |
| 146.000 | +3.710e+02 | +1.170e+04 | +2.060e+04 | +1.727e-02 | +9.979e-05 | +6.360e-05 | 0.04146 |
| 219.000 | +2.380e+02 | +1.170e+04 | +2.310e+04 | +1.087e-02 | +7.413e-05 | +5.105e-05 | 0.02610 |
| 292.000 | +1.590e+02 | +1.170e+04 | +2.280e+04 | +7.005e-03 | +4.509e-05 | +3.899e-05 | 0.01681 |
| 365.000 | +1.330e+02 | +1.170e+04 | +2.510e+04 | +6.221e-03 | +1.030e-05 | +2.742e-05 | 0.01493 |

**Trave numero: 29 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +9.930e+01 | +5.480e+03 | +2.070e+04 | +6.221e-03 | +1.030e-05 | +2.742e-05 | 0.01493 |
| 73.000 | +9.930e+01 | +5.480e+03 | +1.490e+04 | +6.751e-03 | +4.020e-05 | +3.382e-05 | 0.01620 |
| 146.000 | +1.230e+02 | +5.480e+03 | +1.070e+04 | +8.781e-03 | +6.016e-05 | +4.022e-05 | 0.02107 |
| 219.000 | +2.120e+02 | +5.480e+03 | +4.070e+03 | +1.224e-02 | +6.753e-05 | +4.662e-05 | 0.02939 |
| 292.000 | +3.680e+02 | +5.480e+03 | +1.540e+04 | +1.615e-02 | +5.446e-05 | +5.303e-05 | 0.03876 |
| 365.000 | +3.680e+02 | +5.480e+03 | +4.050e+04 | +1.846e-02 | +7.662e-06 | +5.945e-05 | 0.04431 |

**Trave numero: 30 lunghezza: 205.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.800e+02 | +1.190e+04 | +9.060e+03 | +1.846e-02 | +7.662e-06 | +5.945e-05 | 0.04431 |
| 41.000 | +2.680e+02 | +1.190e+04 | +6.650e+03 | +1.862e-02 | +1.162e-05 | +6.544e-05 | 0.04468 |
| 82.000 | +3.610e+02 | +1.190e+04 | +1.340e+04 | +1.854e-02 | +1.247e-05 | +7.401e-05 | 0.04449 |
| 123.000 | +4.540e+02 | +1.190e+04 | +2.620e+04 | +1.794e-02 | +2.629e-05 | +8.267e-05 | 0.04305 |
| 164.000 | +5.410e+02 | +1.190e+04 | +4.480e+04 | +1.638e-02 | +5.654e-05 | +9.140e-05 | 0.03930 |
| 205.000 | +5.410e+02 | +1.190e+04 | +6.700e+04 | +1.326e-02 | +1.034e-04 | +1.002e-04 | 0.03181 |

**Trave numero: 31 lunghezza: 305.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +4.790e+01 | +2.850e+04 | +8.720e+03 | +1.326e-02 | +1.034e-04 | +1.002e-04 | 0.03181 |
| 61.000 | +1.010e+02 | +2.850e+04 | +6.160e+03 | +7.323e-03 | +9.729e-05 | +6.755e-05 | 0.01757 |
| 122.000 | +1.170e+02 | +2.850e+04 | +2.720e+03 | +1.908e-03 | +9.732e-05 | +3.518e-05 | 0.00458 |
| 183.000 | +1.170e+02 | +2.850e+04 | +7.440e+03 | +4.767e-03 | +1.028e-04 | +7.813e-06 | 0.01144 |
| 244.000 | +9.190e+01 | +2.850e+04 | +1.300e+04 | +1.131e-02 | +1.134e-04 | +3.106e-05 | 0.02715 |
| 305.000 | +6.710e+01 | +2.850e+04 | +1.470e+04 | +1.849e-02 | +1.242e-04 | +6.354e-05 | 0.04436 |

**Trave numero: 32 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +6.420e+02 | +2.750e+03 | +9.360e+04 | +1.849e-02 | +1.242e-04 | +6.354e-05 | 0.04436 |
| 73.000 | +6.420e+02 | +2.750e+03 | +4.770e+04 | +2.268e-02 | +1.463e-05 | +6.072e-05 | 0.05443 |
| 146.000 | +4.290e+02 | +2.750e+03 | +1.640e+04 | +2.135e-02 | +5.037e-05 | +5.790e-05 | 0.05125 |
| 219.000 | +2.490e+02 | +2.750e+03 | +3.560e+03 | +1.829e-02 | +6.241e-05 | +5.510e-05 | 0.04389 |
| 292.000 | +1.270e+02 | +2.750e+03 | +1.040e+04 | +1.543e-02 | +5.205e-05 | +5.229e-05 | 0.03703 |
| 365.000 | +1.270e+02 | +2.750e+03 | +1.240e+04 | +1.325e-02 | +3.360e-05 | +4.950e-05 | 0.03180 |

**Trave numero: 33 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.080e+02 | +1.290e+04 | +2.990e+04 | +1.325e-02 | +3.360e-05 | +4.950e-05 | 0.03180 |



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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 73.000 | +2.080e+02 | +1.290e+04 | +2.350e+04 | +1.149e-02 | +6.988e-05 | +5.849e-05 | 0.02758 |
| 146.000 | +2.250e+02 | +1.290e+04 | +2.500e+04 | +1.269e-02 | +8.495e-05 | +6.790e-05 | 0.03045 |
| 219.000 | +3.480e+02 | +1.290e+04 | +2.160e+04 | +1.786e-02 | +9.389e-05 | +7.780e-05 | 0.04286 |
| 292.000 | +5.770e+02 | +1.290e+04 | +3.870e+04 | +2.494e-02 | +9.675e-05 | +8.828e-05 | 0.05985 |
| 365.000 | +5.770e+02 | +1.290e+04 | +7.320e+04 | +3.093e-02 | +7.650e-05 | +1.020e-04 | 0.07422 |

**Trave numero: 34 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +1.790e+03 | +2.540e+05 | +2.040e+05 | +8.218e-02 | +2.114e-04 | +4.923e-04 | 0.19723 |
| 73.000 | +1.790e+03 | +2.540e+05 | +1.250e+05 | +6.723e-02 | +2.046e-04 | +4.223e-04 | 0.16135 |
| 146.000 | +1.160e+03 | +2.540e+05 | +1.720e+05 | +5.248e-02 | +1.933e-04 | +3.525e-04 | 0.12596 |
| 219.000 | +6.910e+02 | +2.540e+05 | +1.960e+05 | +3.917e-02 | +1.746e-04 | +2.832e-04 | 0.09400 |
| 292.000 | +3.730e+02 | +2.540e+05 | +1.950e+05 | +2.896e-02 | +1.532e-04 | +2.151e-04 | 0.06950 |
| 365.000 | +3.120e+02 | +2.540e+05 | +1.750e+05 | +2.356e-02 | +1.320e-04 | +1.505e-04 | 0.05654 |

**Trave numero: 35 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +5.120e+02 | +9.230e+04 | +1.960e+05 | +2.356e-02 | +1.320e-04 | +1.505e-04 | 0.05654 |
| 73.000 | +6.990e+02 | +9.230e+04 | +1.630e+05 | +2.180e-02 | +1.346e-04 | +1.363e-04 | 0.05233 |
| 146.000 | +9.190e+02 | +9.230e+04 | +1.170e+05 | +2.407e-02 | +1.316e-04 | +1.231e-04 | 0.05776 |
| 219.000 | +1.180e+03 | +9.230e+04 | +8.180e+04 | +2.871e-02 | +1.211e-04 | +1.110e-04 | 0.06890 |
| 292.000 | +1.480e+03 | +9.230e+04 | +1.270e+05 | +3.391e-02 | +1.005e-04 | +1.006e-04 | 0.08138 |
| 365.000 | +1.480e+03 | +9.230e+04 | +2.010e+05 | +3.835e-02 | +6.605e-05 | +9.342e-05 | 0.09204 |

**Trave numero: 36 lunghezza: 205.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.390e+03 | +6.780e+04 | +6.480e+04 | +3.835e-02 | +6.605e-05 | +9.342e-05 | 0.09204 |
| 41.000 | +2.590e+03 | +6.780e+04 | +1.550e+05 | +4.026e-02 | +5.338e-05 | +8.489e-05 | 0.09663 |
| 82.000 | +2.800e+03 | +6.780e+04 | +2.570e+05 | +4.159e-02 | +2.917e-05 | +7.636e-05 | 0.09981 |
| 123.000 | +3.010e+03 | +6.780e+04 | +3.680e+05 | +4.181e-02 | +1.946e-05 | +6.783e-05 | 0.10035 |
| 164.000 | +3.210e+03 | +6.780e+04 | +4.890e+05 | +4.038e-02 | +6.726e-05 | +5.931e-05 | 0.09692 |
| 205.000 | +3.210e+03 | +6.780e+04 | +6.190e+05 | +3.677e-02 | +1.303e-04 | +5.087e-05 | 0.08825 |

**Trave numero: 37 lunghezza: 305.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +3.710e+03 | +6.600e+04 | +5.700e+05 | +3.677e-02 | +1.303e-04 | +5.087e-05 | 0.08825 |
| 61.000 | +3.710e+03 | +6.600e+04 | +3.480e+05 | +2.601e-02 | +2.075e-04 | +3.578e-05 | 0.06243 |
| 122.000 | +3.520e+03 | +6.600e+04 | +1.380e+05 | +1.153e-02 | +2.478e-04 | +4.602e-05 | 0.02767 |
| 183.000 | +3.470e+03 | +6.600e+04 | +1.040e+05 | +4.711e-03 | +2.539e-04 | +5.890e-05 | 0.01131 |
| 244.000 | +3.610e+03 | +6.600e+04 | +3.150e+05 | +1.968e-02 | +2.238e-04 | +7.183e-05 | 0.04724 |
| 305.000 | +3.610e+03 | +6.600e+04 | +5.350e+05 | +3.197e-02 | +1.564e-04 | +8.477e-05 | 0.07673 |

**Trave numero: 38 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +2.640e+03 | +8.030e+04 | +6.140e+05 | +3.197e-02 | +1.564e-04 | +8.477e-05 | 0.07673 |
| 73.000 | +2.640e+03 | +8.030e+04 | +4.490e+05 | +3.909e-02 | +5.880e-05 | +9.775e-05 | 0.09382 |
| 146.000 | +2.290e+03 | +8.030e+04 | +3.090e+05 | +4.049e-02 | +6.176e-05 | +1.131e-04 | 0.09717 |
| 219.000 | +1.920e+03 | +8.030e+04 | +1.910e+05 | +3.873e-02 | +1.135e-04 | +1.299e-04 | 0.09296 |
| 292.000 | +1.570e+03 | +8.030e+04 | +1.020e+05 | +3.599e-02 | +1.435e-04 | +1.470e-04 | 0.08638 |
| 365.000 | +1.270e+03 | +8.030e+04 | +1.510e+05 | +3.496e-02 | +1.543e-04 | +1.646e-04 | 0.08391 |

**Trave numero: 39 lunghezza: 365.00**

| Dist. | Fy | Mx | Mz | Spost.Z | Rotaz.X | Rotaz.Y | Press. suolo |
|---|---|---|---|---|---|---|---|
| 0.000 | +6.400e+02 | +2.640e+05 | +1.570e+05 | +3.496e-02 | +1.543e-04 | +1.646e-04 | 0.08391 |
| 73.000 | +6.400e+02 | +2.640e+05 | +1.740e+05 | +3.737e-02 | +1.803e-04 | +2.196e-04 | 0.08968 |
| 146.000 | +8.160e+02 | +2.640e+05 | +1.860e+05 | +4.327e-02 | +2.000e-04 | +2.845e-04 | 0.10386 |
| 219.000 | +1.220e+03 | +2.640e+05 | +1.710e+05 | +5.291e-02 | +2.120e-04 | +3.539e-04 | 0.12698 |
| 292.000 | +1.820e+03 | +2.640e+05 | +1.300e+05 | +6.664e-02 | +2.127e-04 | +4.250e-04 | 0.15994 |
| 365.000 | +1.820e+03 | +2.640e+05 | +2.130e+05 | +8.175e-02 | +1.970e-04 | +4.969e-04 | 0.19621 |

**Pressione massima nel gruppo: 0.197 Trave numero: 4 Distanza: 215.000**



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

## 2g) VERIFICHE ELEMENTI STRUTTURALI

**ELEMENTI IN C.C.A.**

**TRAVI DI FONDAZIONE ALLO SLU**

Elemento: **TRAVE DI FONDAZIONE** Gruppo: **1** Tabella: **Tabella fondazioni**
Descrizione: **CORDOLI DI FONDAZIONE**
Spunt. I **30.0** cm Spunt. J **30.0** cm
Rck: **300.00** kg/cm² fyk: **4580.0** kg/cm² Copriferro: **3.0** cm
Verifica in ottemperanza alle NTC2018
Per le combinazioni sismiche la capacità è valutata in campo elastico o sostanzialmente elastico (§7.2.5,7.4.1 NTC2018)
Diametro staffe: **8** mm Numero braccia: **2**

Nome travata: **CORDOLI DI FONDAZIONE01_IP1** Descrizione: **CORDOLI DI FONDAZIONE 1-2-3-4-5**
**ASTA NUM. 1** NI 1 NF 18 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 0 | -0 | -1681 | 0 | 0 | 0 | 1500 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | 252 | 0 | 0 | 0 | -1726 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | -1169 | 0 | 0 | 0 | 632 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | -260 | 0 | 0 | 0 | -878 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | -600 | 0 | 0 | 0 | -865 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | -764 | 0 | 0 | 0 | -509 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | -551 | 0 | 0 | 0 | -853 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0 | | | | | | | | | | | | | | |
| 1A | 18 | -0 | -1681 | 0 | 0 | 0 | 1500 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 1B | 18 | -0 | 252 | 0 | 0 | 0 | -1702 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 18 | -0 | -1169 | 0 | 0 | 0 | 632 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 1J | 18 | -0 | -260 | 0 | 0 | 0 | -945 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 2 | 18 | -0 | -600 | 0 | 0 | 0 | -970 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 7 | 18 | -0 | -764 | 0 | 0 | 0 | -643 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 8 | 18 | -0 | -551 | 0 | 0 | 0 | -950 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0 | | | | | | | | | | | | | | |
| 1A | 35 | -0 | -1729 | 0 | 0 | 0 | 1500 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 1B | 35 | -0 | 502 | 0 | 0 | 0 | -1726 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1I | 35 | -0 | -1169 | 0 | 0 | 0 | 632 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 1J | 35 | -0 | -260 | 0 | 0 | 0 | -1012 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 2 | 35 | -0 | -600 | 0 | 0 | 0 | -1011 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 7 | 35 | -0 | -764 | 0 | 0 | 0 | -777 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 8 | 35 | -0 | -551 | 0 | 0 | 0 | -981 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0 | | | | | | | | | | | | | | |
| 1A | 52 | -0 | -1729 | 0 | 0 | 0 | 1500 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 1B | 52 | -0 | 502 | 0 | 0 | 0 | -1726 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1I | 52 | -0 | -1104 | 0 | 0 | 0 | 632 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 1J | 52 | -0 | -122 | 0 | 0 | 0 | -963 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 2 | 52 | -0 | -462 | 0 | 0 | 0 | -1011 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 52 | -0 | -653 | 0 | 0 | 0 | -820 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 8 | 52 | -0 | -422 | 0 | 0 | 0 | -981 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0 | | | | | | | | | | | | | | |
| 1A | 70 | -0 | -1805 | 0 | 0 | 0 | 1487 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 1B | 70 | -0 | 805 | 0 | 0 | 0 | -1726 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1I | 70 | -0 | -1104 | 0 | 0 | 0 | -582 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 1J | 70 | -0 | -122 | 0 | 0 | 0 | -1003 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 2 | 70 | -0 | -462 | 0 | 0 | 0 | -1011 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 70 | -0 | -653 | 0 | 0 | 0 | -929 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 8 | 70 | -0 | -422 | 0 | 0 | 0 | -981 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0 | | | | | | | | | | | | | | |
| 1A | 88 | -0 | -1805 | 0 | 0 | 0 | 1179 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 1B | 88 | -0 | 805 | 0 | 0 | 0 | -1722 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1I | 88 | -0 | -1065 | 0 | 0 | 0 | -582 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 1J | 88 | -0 | 65 | 0 | 0 | 0 | -981 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 2 | 88 | -0 | -311 | 0 | 0 | 0 | -1011 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 7 | 88 | -0 | -531 | 0 | 0 | 0 | -929 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 8 | 88 | -0 | -280 | 0 | 0 | 0 | -981 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0 | | | | | | | | | | | | | | |
| 1A | 105 | -0 | -1909 | 0 | 0 | 0 | -1035 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.03 | 0.16 | 0.00 | 0.00 | -- |
| 1B | 105 | -0 | 1159 | 0 | 0 | 0 | -1726 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 1I | 105 | -0 | -1065 | 0 | 0 | 0 | -582 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 1J | 105 | -0 | 292 | 0 | 0 | 0 | -1141 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 2 | 105 | -0 | -311 | 0 | 0 | 0 | -1011 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 7 | 105 | -0 | -531 | 0 | 0 | 0 | -929 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 8 | 105 | -0 | -280 | 0 | 0 | 0 | -981 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0 | | | | | | | | | | | | | | |
| 1A | 122 | -0 | -1909 | 0 | 0 | 0 | -1035 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.03 | 0.16 | 0.00 | 0.00 | -- |
| 1B | 122 | -0 | 1159 | 0 | 0 | 0 | -1572 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 1I | 122 | -0 | -1041 | 0 | 0 | 0 | -582 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 1J | 122 | -0 | 292 | 0 | 0 | 0 | -1183 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 2 | 122 | -0 | -145 | 0 | 0 | 0 | -1011 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 7 | 122 | -0 | -398 | 0 | 0 | 0 | -929 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 122 | -0 | -122 | 0 | 0 | 0 | -981 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0 | | | | | | | | | | | | | | |
| 1A | 140 | -0 | -2036 | 0 | 0 | 0 | -1035 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.03 | 0.17 | 0.00 | 0.00 | -- |
| 1B | 140 | -0 | 1565 | 0 | 0 | 0 | -1726 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1I | 140 | -0 | -1041 | 0 | 0 | 0 | -582 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 1J | 140 | -0 | 553 | 0 | 0 | 0 | -1323 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 2 | 140 | -0 | -145 | 0 | 0 | 0 | -1011 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.01 | 0.00 | 0.00 | -- |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 140 | -0 | -398 | 0 | 0 | 0 | -929 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 140 | -0 | -122 | 0 | 0 | 0 | -981 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.01 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 158 | -0 | -2036 | 0 | 0 | 0 | -1035 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.03 | 0.17 | 0.00 | 0.00 | -- |
| 1B | 158 | -0 | 1565 | 0 | 0 | 0 | -1726 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1I | 158 | -0 | -1024 | 0 | 0 | 0 | -582 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1J | 158 | -0 | 553 | 0 | 0 | 0 | -1323 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 2 | 158 | -0 | 36 | 0 | 0 | 0 | -1011 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 7 | 158 | -0 | -252 | 0 | 0 | 0 | -929 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 8 | 158 | -0 | 52 | 0 | 0 | 0 | -981 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 175 | -0 | -2036 | 0 | 0 | 0 | -1035 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.03 | 0.17 | 0.00 | 0.00 | -- |
| 1B | 175 | -0 | 1565 | 0 | 0 | 0 | -1726 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1I | 175 | -0 | -1024 | 0 | 0 | 0 | -582 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1J | 175 | -0 | 553 | 0 | 0 | 0 | -1323 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 2 | 175 | -0 | 36 | 0 | 0 | 0 | -1011 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 7 | 175 | -0 | -252 | 0 | 0 | 0 | -929 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 8 | 175 | -0 | 52 | 0 | 0 | 0 | -981 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE01_IP1** Descrizione: **CORDOLI DI FONDAZIONE 1-2-3-4-5**
**ASTA NUM. 2** NI 18 NF 94 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice resistenza | | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | Fx,M | Bielle V,Mx | | cmq/m | cm |
| 1A | 0 | -0 | -2710 | 0 | 0 | 0 | -1937 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.04 | 0.22 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | 4346 | 0 | 0 | 0 | -3865 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.23 | 0.06 | 0.36 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | -699 | 0 | 0 | 0 | -799 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | 2335 | 0 | 0 | 0 | -2360 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | 1305 | 0 | 0 | 0 | -1198 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | 786 | 0 | 0 | 0 | -1002 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | 1337 | 0 | 0 | 0 | -1167 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.11 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 18 | -0 | -2710 | 0 | 0 | 0 | -1937 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.04 | 0.22 | 0.00 | 0.00 | -- |
| 1B | 18 | -0 | 4346 | 0 | 0 | 0 | -3035 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.18 | 0.06 | 0.36 | 0.00 | 0.00 | -- |
| 1I | 18 | -0 | -699 | 0 | 0 | 0 | -799 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1J | 18 | -0 | 2335 | 0 | 0 | 0 | -2360 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 2 | 18 | -0 | 1305 | 0 | 0 | 0 | -1198 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 7 | 18 | -0 | 786 | 0 | 0 | 0 | -1002 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 8 | 18 | -0 | 1337 | 0 | 0 | 0 | -1167 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.11 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 36 | -0 | -2879 | 0 | 0 | 0 | -1937 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.04 | 0.24 | 0.00 | 0.00 | -- |
| 1B | 36 | -0 | 4869 | 0 | 0 | 0 | -5059 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.30 | 0.07 | 0.40 | 0.00 | 0.00 | -- |
| 1I | 36 | -0 | -699 | 0 | 0 | 0 | -512 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1J | 36 | -0 | 2660 | 0 | 0 | 0 | -2360 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.04 | 0.22 | 0.00 | 0.00 | -- |
| 2 | 36 | -0 | 1531 | 0 | 0 | 0 | -1198 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 7 | 36 | -0 | 968 | 0 | 0 | 0 | -1002 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 8 | 36 | -0 | 1558 | 0 | 0 | 0 | -1167 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.13 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 54 | -0 | -2879 | 0 | 0 | 0 | 3299 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.04 | 0.24 | 0.00 | 0.00 | -- |
| 1B | 54 | -0 | 4869 | 0 | 0 | 0 | -5572 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.33 | 0.07 | 0.40 | 0.00 | 0.00 | -- |
| 1I | 54 | -0 | -671 | 0 | 0 | 0 | 826 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1J | 54 | -0 | 2660 | 0 | 0 | 0 | -2360 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.04 | 0.22 | 0.00 | 0.00 | -- |
| 2 | 54 | -0 | 1531 | 0 | 0 | 0 | -1198 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 7 | 54 | -0 | 968 | 0 | 0 | 0 | -1002 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 8 | 54 | -0 | 1558 | 0 | 0 | 0 | -1167 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.13 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 72 | -0 | -3065 | 0 | 0 | 0 | 4289 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.25 | 0.04 | 0.25 | 0.00 | 0.00 | -- |
| 1B | 72 | -0 | 5447 | 0 | 0 | 0 | -6455 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.38 | 0.07 | 0.45 | 0.00 | 0.00 | -- |
| 1I | 72 | -0 | -671 | 0 | 0 | 0 | 1287 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1J | 72 | -0 | 3022 | 0 | 0 | 0 | -2360 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.04 | 0.25 | 0.00 | 0.00 | -- |
| 2 | 72 | -0 | 1781 | 0 | 0 | 0 | -1198 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 7 | 72 | -0 | 1170 | 0 | 0 | 0 | -1002 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 8 | 72 | -0 | 1802 | 0 | 0 | 0 | -1167 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.15 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 90 | -0 | -3065 | 0 | 0 | 0 | 5267 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.31 | 0.04 | 0.25 | 0.00 | 0.00 | -- |
| 1B | 90 | -0 | 5447 | 0 | 0 | 0 | -6723 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.40 | 0.07 | 0.45 | 0.00 | 0.00 | -- |
| 1I | 90 | -0 | -640 | 0 | 0 | 0 | 1804 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1J | 90 | -0 | 3022 | 0 | 0 | 0 | -2360 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.04 | 0.25 | 0.00 | 0.00 | -- |
| 2 | 90 | -0 | 1781 | 0 | 0 | 0 | 1286 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 7 | 90 | -0 | 1170 | 0 | 0 | 0 | -910 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 8 | 90 | -0 | 1802 | 0 | 0 | 0 | 1354 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.02 | 0.15 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 108 | -0 | -3261 | 0 | 0 | 0 | 6372 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.38 | 0.04 | 0.27 | 0.00 | 0.00 | -- |
| 1B | 108 | -0 | 6075 | 0 | 0 | 0 | -6723 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.40 | 0.08 | 0.50 | 0.00 | 0.00 | -- |
| 1I | 108 | -0 | -640 | 0 | 0 | 0 | 2341 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1J | 108 | -0 | 3418 | 0 | 0 | 0 | -2360 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.05 | 0.28 | 0.00 | 0.00 | -- |
| 2 | 108 | -0 | 2055 | 0 | 0 | 0 | 1782 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.03 | 0.17 | 0.00 | 0.00 | -- |
| 7 | 108 | -0 | 1390 | 0 | 0 | 0 | 942 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 8 | 108 | -0 | 2071 | 0 | 0 | 0 | 1851 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.03 | 0.17 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 126 | -0 | -3262 | 0 | 0 | 0 | 7464 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.44 | 0.04 | 0.27 | 0.00 | 0.00 | -- |
| 1B | 126 | -0 | 6075 | 0 | 0 | 0 | -6723 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.40 | 0.08 | 0.50 | 0.00 | 0.00 | -- |
| 1I | 126 | -0 | -605 | 0 | 0 | 0 | 2928 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1J | 126 | -0 | 3418 | 0 | 0 | 0 | -2360 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.05 | 0.28 | 0.00 | 0.00 | -- |
| 2 | 126 | -0 | 2055 | 0 | 0 | 0 | 2050 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.03 | 0.17 | 0.00 | 0.00 | -- |
| 7 | 126 | -0 | 1390 | 0 | 0 | 0 | 1138 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 8 | 126 | -0 | 2071 | 0 | 0 | 0 | 2119 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.03 | 0.17 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 144 | -0 | -3462 | 0 | 0 | 0 | 8492 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.50 | 0.05 | 0.29 | 0.00 | 0.00 | -- |
| 1B | 144 | -0 | 6748 | 0 | 0 | 0 | -6723 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.40 | 0.09 | 0.56 | 0.00 | 0.00 | -- |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1I | 144 | -0 | -605 | 0 | 0 | 0 | 3539 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1J | 144 | -0 | 3846 | 0 | 0 | 0 | -2360 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.05 | 0.32 | 0.00 | 0.00 | -- |
| 2 | 144 | -0 | 2351 | 0 | 0 | 0 | 1697 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 7 | 144 | -0 | 1631 | 0 | 0 | 0 | 894 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 8 | 144 | -0 | 2363 | 0 | 0 | 0 | 1765 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.03 | 0.20 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 162 | -0 | -3463 | 0 | 0 | 0 | 8492 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.50 | 0.05 | 0.29 | 0.00 | 0.00 | -- |
| 1B | 162 | -0 | 6748 | 0 | 0 | 0 | -6723 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.40 | 0.09 | 0.56 | 0.00 | 0.00 | -- |
| 1I | 162 | -0 | -560 | 0 | 0 | 0 | 4199 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.25 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1J | 162 | -0 | 3846 | 0 | 0 | 0 | -2360 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.05 | 0.32 | 0.00 | 0.00 | -- |
| 2 | 162 | -0 | 2351 | 0 | 0 | 0 | 1697 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 7 | 162 | -0 | 1631 | 0 | 0 | 0 | 894 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 8 | 162 | -0 | 2363 | 0 | 0 | 0 | 1765 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.03 | 0.19 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 180 | -0 | -3463 | 0 | 0 | 0 | 8492 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.50 | 0.05 | 0.29 | 0.00 | 0.00 | -- |
| 1B | 180 | -0 | 6748 | 0 | 0 | 0 | -6723 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.40 | 0.09 | 0.56 | 0.00 | 0.00 | -- |
| 1I | 180 | -0 | -560 | 0 | 0 | 0 | 4216 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.25 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1J | 180 | -0 | 3846 | 0 | 0 | 0 | -2360 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.05 | 0.32 | 0.00 | 0.00 | -- |
| 2 | 180 | -0 | 2351 | 0 | 0 | 0 | 1697 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 7 | 180 | -0 | 1631 | 0 | 0 | 0 | 893 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 8 | 180 | -0 | 2363 | 0 | 0 | 0 | 1765 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.03 | 0.19 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE01_IP1** Descrizione: **CORDOLI DI FONDAZIONE 1-2-3-4-5**
**ASTA NUM. 3** NI 94 NF 20 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 0 | -0 | -6963 | 0 | 0 | 0 | 8049 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.47 | 0.09 | 0.57 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | 4133 | 0 | 0 | 0 | -5755 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.34 | 0.06 | 0.34 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | -3740 | 0 | 0 | 0 | 4072 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.24 | 0.05 | 0.31 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | 910 | 0 | 0 | 0 | -1779 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | -616 | 0 | 0 | 0 | 1914 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | -1410 | 0 | 0 | 0 | 974 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | -621 | 0 | 0 | 0 | 1982 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.05 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 20 | -0 | -6963 | 0 | 0 | 0 | 13540 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.80 | 0.09 | 0.57 | 0.00 | 0.00 | -- |
| 1B | 20 | -0 | 4133 | 0 | 0 | 0 | -9777 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.58 | 0.06 | 0.34 | 0.00 | 0.00 | -- |
| 1I | 20 | -0 | -3740 | 0 | 0 | 0 | 6861 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.40 | 0.05 | 0.31 | 0.00 | 0.00 | -- |
| 1J | 20 | -0 | 910 | 0 | 0 | 0 | -3098 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.18 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 2 | 20 | -0 | -616 | 0 | 0 | 0 | 1914 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 7 | 20 | -0 | -1410 | 0 | 0 | 0 | 974 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 8 | 20 | -0 | -621 | 0 | 0 | 0 | 1982 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.05 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 39 | -0 | -7155 | 0 | 0 | 0 | 14477 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.85 | 0.10 | 0.59 | 0.00 | 0.00 | -- |
| 1B | 39 | -0 | 4921 | 0 | 0 | 0 | -11653 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.69 | 0.07 | 0.41 | 0.00 | 0.00 | -- |
| 1I | 39 | -0 | -3740 | 0 | 0 | 0 | 7039 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.41 | 0.05 | 0.31 | 0.00 | 0.00 | -- |
| 1J | 39 | -0 | 1422 | 0 | 0 | 0 | -4161 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.25 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 2 | 39 | -0 | -616 | 0 | 0 | 0 | 2006 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 7 | 39 | -0 | -1410 | 0 | 0 | 0 | 1185 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 8 | 39 | -0 | -621 | 0 | 0 | 0 | 2075 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.05 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 59 | -0 | -7155 | 0 | 0 | 0 | 15448 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.91 | 0.10 | 0.59 | 0.00 | 0.00 | -- |
| 1B | 59 | -0 | 4921 | 0 | 0 | 0 | -13064 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.77 | 0.07 | 0.41 | 0.00 | 0.00 | -- |
| 1I | 59 | -0 | -3656 | 0 | 0 | 0 | 7264 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.43 | 0.05 | 0.30 | 0.00 | 0.00 | -- |
| 1J | 59 | -0 | 1422 | 0 | 0 | 0 | -4880 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.29 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 2 | 59 | -0 | -251 | 0 | 0 | 0 | 1875 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 7 | 59 | -0 | -1108 | 0 | 0 | 0 | 1121 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 8 | 59 | -0 | -260 | 0 | 0 | 0 | 1946 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 79 | -0 | -7308 | 0 | 0 | 0 | 16517 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.97 | 0.10 | 0.60 | 0.00 | 0.00 | -- |
| 1B | 79 | -0 | 5703 | 0 | 0 | 0 | -14976 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.88 | 0.08 | 0.47 | 0.00 | 0.00 | -- |
| 1I | 79 | -0 | -3657 | 0 | 0 | 0 | 7543 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.44 | 0.05 | 0.30 | 0.00 | 0.00 | -- |
| 1J | 79 | -0 | 1942 | 0 | 0 | 0 | -5933 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.35 | 0.03 | 0.16 | 0.00 | 0.00 | -- |
| 2 | 79 | -0 | -251 | 0 | 0 | 0 | 1825 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 7 | 79 | -0 | -1108 | 0 | 0 | 0 | 903 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 8 | 79 | -0 | -260 | 0 | 0 | 0 | 1894 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 98 | -0 | -7309 | 0 | 0 | 0 | 17640 | 4.02 | 4.02 | 10.05 | 8.04 | 0.24 | 0.84 | 0.10 | 0.57 | 0.00 | 0.00 | -- |
| 1B | 98 | -0 | 5703 | 0 | 0 | 0 | -16415 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.97 | 0.08 | 0.47 | 0.00 | 0.00 | -- |
| 1I | 98 | -0 | -3548 | 0 | 0 | 0 | 7854 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.46 | 0.05 | 0.29 | 0.00 | 0.00 | -- |
| 1J | 98 | -0 | 1942 | 0 | 0 | 0 | -6630 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.39 | 0.03 | 0.16 | 0.00 | 0.00 | -- |
| 2 | 98 | -0 | 127 | 0 | 0 | 0 | 1771 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 7 | 98 | -0 | -790 | 0 | 0 | 0 | 543 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 8 | 98 | -0 | 114 | 0 | 0 | 0 | 1823 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.00 | 0.01 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 6.03 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 118 | -0 | -7395 | 0 | 0 | 0 | 18818 | 4.02 | 4.02 | 10.05 | 8.04 | 0.24 | 0.89 | 0.10 | 0.58 | 0.00 | 0.00 | -- |
| 1B | 118 | -0 | 6450 | 0 | 0 | 0 | -18334 | 4.02 | 4.02 | 8.04 | 10.05 | 0.24 | 0.87 | 0.09 | 0.50 | 0.00 | 0.00 | -- |
| 1I | 118 | -0 | -3548 | 0 | 0 | 0 | 8082 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.48 | 0.05 | 0.29 | 0.00 | 0.00 | -- |
| 1J | 118 | -0 | 2459 | 0 | 0 | 0 | -7657 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.45 | 0.03 | 0.20 | 0.00 | 0.00 | -- |
| 2 | 118 | -0 | 516 | 0 | 0 | 0 | 2045 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 118 | -0 | -790 | 0 | 0 | 0 | -338 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 8 | 118 | -0 | 498 | 0 | 0 | 0 | 2092 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.04 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 138 | -0 | -7395 | 0 | 0 | 0 | 19416 | 4.02 | 4.02 | 10.05 | 8.04 | 0.24 | 0.92 | 0.10 | 0.58 | 0.00 | 0.00 | -- |
| 1B | 138 | -0 | 6450 | 0 | 0 | 0 | -19786 | 4.02 | 4.02 | 8.04 | 10.05 | 0.24 | 0.94 | 0.09 | 0.50 | 0.00 | 0.00 | -- |
| 1I | 138 | -0 | -3403 | 0 | 0 | 0 | 8082 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.48 | 0.05 | 0.28 | 0.00 | 0.00 | -- |
| 1J | 138 | -0 | 2459 | 0 | 0 | 0 | -8325 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.49 | 0.03 | 0.20 | 0.00 | 0.00 | -- |
| 2 | 138 | -0 | 516 | 0 | 0 | 0 | 2147 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 138 | -0 | -455 | 0 | 0 | 0 | -338 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 8 | 138 | -0 | 498 | 0 | 0 | 0 | 2190 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.04 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 158 | -0 | -7395 | 0 | 0 | 0 | 19416 | 4.02 | 4.02 | 10.05 | 8.04 | 0.24 | 0.92 | 0.10 | 0.58 | 0.00 | 0.00 | -- |
| 1B | 158 | -0 | 7131 | 0 | 0 | 0 | -20009 | 4.02 | 4.02 | 8.04 | 10.05 | 0.24 | 0.95 | 0.10 | 0.55 | 0.00 | 0.00 | -- |
| 1I | 158 | -0 | -3403 | 0 | 0 | 0 | 8082 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.48 | 0.05 | 0.28 | 0.00 | 0.00 | -- |
| 1J | 158 | -0 | 2958 | 0 | 0 | 0 | -8674 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.51 | 0.04 | 0.24 | 0.00 | 0.00 | -- |
| 2 | 158 | -0 | 911 | 0 | 0 | 0 | 2139 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 7 | 158 | -0 | -455 | 0 | 0 | 0 | -338 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 8 | 158 | -0 | 888 | 0 | 0 | 0 | 2186 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.07 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 177 | -0 | -7381 | 0 | 0 | 0 | 19416 | 4.02 | 4.02 | 10.05 | 8.04 | 0.24 | 0.92 | 0.10 | 0.57 | 0.00 | 0.00 | -- |
| 1B | 177 | -0 | 7131 | 0 | 0 | 0 | -20009 | 4.02 | 4.02 | 8.04 | 10.05 | 0.24 | 0.95 | 0.10 | 0.55 | 0.00 | 0.00 | -- |
| 1I | 177 | -0 | -3208 | 0 | 0 | 0 | 8082 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.48 | 0.04 | 0.26 | 0.00 | 0.00 | -- |
| 1J | 177 | -0 | 2958 | 0 | 0 | 0 | -8674 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.51 | 0.04 | 0.24 | 0.00 | 0.00 | -- |
| 2 | 177 | -0 | 911 | 0 | 0 | 0 | 2139 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 7 | 177 | -0 | -103 | 0 | 0 | 0 | -338 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 8 | 177 | -0 | 888 | 0 | 0 | 0 | 2186 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.07 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 197 | -0 | -7381 | 0 | 0 | 0 | 19416 | 4.02 | 4.02 | 10.05 | 8.04 | 0.24 | 0.92 | 0.10 | 0.57 | 0.00 | 0.00 | -- |
| 1B | 197 | -0 | 7131 | 0 | 0 | 0 | -20009 | 4.02 | 4.02 | 8.04 | 10.05 | 0.24 | 0.95 | 0.10 | 0.55 | 0.00 | 0.00 | -- |
| 1I | 197 | -0 | -3208 | 0 | 0 | 0 | 8082 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.48 | 0.04 | 0.26 | 0.00 | 0.00 | -- |
| 1J | 197 | -0 | 2958 | 0 | 0 | 0 | -8674 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.51 | 0.04 | 0.24 | 0.00 | 0.00 | -- |
| 2 | 197 | -0 | 911 | 0 | 0 | 0 | 2139 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 7 | 197 | -0 | -103 | 0 | 0 | 0 | -338 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 8 | 197 | -0 | 888 | 0 | 0 | 0 | 2186 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.07 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE01_IP1** Descrizione: **CORDOLI DI FONDAZIONE 1-2-3-4-5**
**ASTA NUM. 4** NI 20 NF 2 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | | Fx,M | Bielle | V,Mx | | cmq/m | cm |
| 1A | 0 | -0 | -11835 | 0 | 0 | 0 | 19073 | 4.02 | 4.02 | 10.05 | 8.04 | 0.24 | 0.91 | 0.16 | 0.92 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | 10291 | 0 | 0 | 0 | -19575 | 4.02 | 4.02 | 8.04 | 10.05 | 0.24 | 0.93 | 0.14 | 0.80 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | -5526 | 0 | 0 | 0 | 7955 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.47 | 0.07 | 0.46 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | 3982 | 0 | 0 | 0 | -8457 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.50 | 0.05 | 0.33 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | -2144 | 0 | 0 | 0 | 1942 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | -760 | 0 | 0 | 0 | -763 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | -2157 | 0 | 0 | 0 | 1982 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.03 | 0.18 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 22 | -0 | -11835 | 0 | 0 | 0 | 19073 | 4.02 | 4.02 | 10.05 | 8.04 | 0.24 | 0.91 | 0.16 | 0.92 | 0.00 | 0.00 | -- |
| 1B | 22 | -0 | 10291 | 0 | 0 | 0 | -19575 | 4.02 | 4.02 | 8.04 | 10.05 | 0.24 | 0.93 | 0.14 | 0.80 | 0.00 | 0.00 | -- |
| 1I | 22 | -0 | -5526 | 0 | 0 | 0 | 7955 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.47 | 0.07 | 0.46 | 0.00 | 0.00 | -- |
| 1J | 22 | -0 | 3982 | 0 | 0 | 0 | -8457 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.50 | 0.05 | 0.33 | 0.00 | 0.00 | -- |
| 2 | 22 | -0 | -2144 | 0 | 0 | 0 | 1942 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 7 | 22 | -0 | -760 | 0 | 0 | 0 | -763 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 8 | 22 | -0 | -2157 | 0 | 0 | 0 | 1982 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.03 | 0.18 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 43 | -0 | -11835 | 0 | 0 | 0 | 19073 | 4.02 | 4.02 | 10.05 | 8.04 | 0.24 | 0.91 | 0.16 | 0.92 | 0.00 | 0.00 | -- |
| 1B | 43 | -0 | 10695 | 0 | 0 | 0 | -19575 | 4.02 | 4.02 | 8.04 | 10.05 | 0.24 | 0.93 | 0.14 | 0.83 | 0.00 | 0.00 | -- |
| 1I | 43 | -0 | -5526 | 0 | 0 | 0 | 7955 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.47 | 0.07 | 0.46 | 0.00 | 0.00 | -- |
| 1J | 43 | -0 | 4381 | 0 | 0 | 0 | -8457 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.50 | 0.06 | 0.36 | 0.00 | 0.00 | -- |
| 2 | 43 | -0 | -2144 | 0 | 0 | 0 | 2264 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.13 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 7 | 43 | -0 | -760 | 0 | 0 | 0 | -763 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 8 | 43 | -0 | -2157 | 0 | 0 | 0 | 2306 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.13 | 0.03 | 0.18 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 64 | -0 | -11401 | 0 | 0 | 0 | 18839 | 4.02 | 4.02 | 10.05 | 8.04 | 0.24 | 0.89 | 0.15 | 0.89 | 0.00 | 0.00 | -- |
| 1B | 64 | -0 | 10695 | 0 | 0 | 0 | -19575 | 4.02 | 4.02 | 8.04 | 10.05 | 0.24 | 0.93 | 0.14 | 0.83 | 0.00 | 0.00 | -- |
| 1I | 64 | -0 | -5087 | 0 | 0 | 0 | 7752 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.46 | 0.07 | 0.42 | 0.00 | 0.00 | -- |
| 1J | 64 | -0 | 4381 | 0 | 0 | 0 | -8457 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.50 | 0.06 | 0.36 | 0.00 | 0.00 | -- |
| 2 | 64 | -0 | -1720 | 0 | 0 | 0 | 2075 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 7 | 64 | -0 | -335 | 0 | 0 | 0 | -763 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 64 | -0 | -1738 | 0 | 0 | 0 | 2120 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.02 | 0.14 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 86 | -0 | -11401 | 0 | 0 | 0 | 16389 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.96 | 0.15 | 0.94 | 0.00 | 0.00 | -- |
| 1B | 86 | -0 | 11381 | 0 | 0 | 0 | -17845 | 4.02 | 4.02 | 8.04 | 10.05 | 0.24 | 0.85 | 0.15 | 0.89 | 0.00 | 0.00 | -- |
| 1I | 86 | -0 | -5087 | 0 | 0 | 0 | 6661 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.39 | 0.07 | 0.42 | 0.00 | 0.00 | -- |
| 1J | 86 | -0 | 4910 | 0 | 0 | 0 | -8016 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.47 | 0.07 | 0.41 | 0.00 | 0.00 | -- |
| 2 | 86 | -0 | -1720 | 0 | 0 | 0 | 1705 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 7 | 86 | -0 | -335 | 0 | 0 | 0 | -763 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 86 | -0 | -1738 | 0 | 0 | 0 | 1746 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.02 | 0.14 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 6.03 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 108 | -0 | -11204 | 0 | 0 | 0 | 13854 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.82 | 0.15 | 0.92 | 0.00 | 0.00 | -- |
| 1B | 108 | -0 | 11381 | 0 | 0 | 0 | -15399 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.91 | 0.15 | 0.94 | 0.00 | 0.00 | -- |
| 1I | 108 | -0 | -4732 | 0 | 0 | 0 | 5420 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.32 | 0.06 | 0.39 | 0.00 | 0.00 | -- |
| 1J | 108 | -0 | 4910 | 0 | 0 | 0 | -6965 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.41 | 0.07 | 0.41 | 0.00 | 0.00 | -- |
| 2 | 108 | -0 | -1307 | 0 | 0 | 0 | 1159 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 7 | 108 | -0 | 115 | 0 | 0 | 0 | -763 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 8 | 108 | -0 | -1333 | 0 | 0 | 0 | 1199 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.11 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 129 | -0 | -11271 | 0 | 0 | 0 | 5576 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.33 | 0.15 | 0.93 | 0.00 | 0.00 | -- |
| 1B | 129 | -0 | 12385 | 0 | 0 | 0 | -13597 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.80 | 0.17 | 1.02 | 2.42 | 0.00 | -- |
| 1I | 129 | -0 | -4732 | 0 | 0 | 0 | 2421 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.06 | 0.39 | 0.00 | 0.00 | -- |
| 1J | 129 | -0 | 5586 | 0 | 0 | 0 | -6348 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.37 | 0.07 | 0.46 | 0.00 | 0.00 | -- |
| 2 | 129 | -0 | -1307 | 0 | 0 | 0 | 879 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 7 | 129 | -0 | 591 | 0 | 0 | 0 | -763 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 8 | 129 | -0 | -1333 | 0 | 0 | 0 | 913 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.02 | 0.11 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 150 | -0 | -11271 | 0 | 0 | 0 | 5576 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.33 | 0.15 | 0.93 | 0.00 | 0.00 | -- |
| 1B | 150 | -0 | 12385 | 0 | 0 | 0 | -10919 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.64 | 0.17 | 1.02 | 2.42 | 0.00 | -- |
| 1I | 150 | -0 | -4472 | 0 | 0 | 0 | 2421 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.06 | 0.37 | 0.00 | 0.00 | -- |
| 1J | 150 | -0 | 5586 | 0 | 0 | 0 | -5095 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.30 | 0.07 | 0.46 | 0.00 | 0.00 | -- |
| 2 | 150 | -0 | -907 | 0 | 0 | 0 | -573 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 7 | 150 | -0 | 591 | 0 | 0 | 0 | -763 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.05 | 0.00 | 0.00 | -- |



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| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 150 | -0 | -941 | 0 | 0 | 0 | -588 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.08 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 172 | -0 | -11612 | 0 | 0 | 0 | -616 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.16 | 0.96 | 0.00 | 0.00 | -- |
| 1B | 172 | -0 | 13718 | 0 | 0 | 0 | -9412 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.55 | 0.18 | 1.13 | 2.69 | 0.00 | -- |
| 1I | 172 | -0 | -4472 | 0 | 0 | 0 | -655 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.06 | 0.37 | 0.00 | 0.00 | -- |
| 1J | 172 | -0 | 6415 | 0 | 0 | 0 | -4769 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.28 | 0.09 | 0.53 | 0.00 | 0.00 | -- |
| 2 | 172 | -0 | -907 | 0 | 0 | 0 | -573 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 7 | 172 | -0 | 1096 | 0 | 0 | 0 | -763 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 8 | 172 | -0 | -941 | 0 | 0 | 0 | -588 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.08 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 194 | -0 | -11612 | 0 | 0 | 0 | 5576 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.33 | 0.16 | 0.96 | 0.00 | 0.00 | -- |
| 1B | 194 | -0 | 13718 | 0 | 0 | 0 | -11896 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.70 | 0.18 | 1.13 | 2.69 | 0.00 | -- |
| 1I | 194 | -0 | -4309 | 0 | 0 | 0 | 2421 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.06 | 0.36 | 0.00 | 0.00 | -- |
| 1J | 194 | -0 | 6415 | 0 | 0 | 0 | -5656 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.33 | 0.09 | 0.53 | 0.00 | 0.00 | -- |
| 2 | 194 | -0 | -521 | 0 | 0 | 0 | -573 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 194 | -0 | 1096 | 0 | 0 | 0 | -763 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 8 | 194 | -0 | -563 | 0 | 0 | 0 | -588 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.05 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 215 | -0 | -11612 | 0 | 0 | 0 | 5576 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.33 | 0.16 | 0.96 | 0.00 | 0.00 | -- |
| 1B | 215 | -0 | 13718 | 0 | 0 | 0 | -14380 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.85 | 0.18 | 1.13 | 2.69 | 0.00 | -- |
| 1I | 215 | -0 | -4309 | 0 | 0 | 0 | 2421 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.06 | 0.36 | 0.00 | 0.00 | -- |
| 1J | 215 | -0 | 6415 | 0 | 0 | 0 | -6543 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.39 | 0.09 | 0.53 | 0.00 | 0.00 | -- |
| 2 | 215 | -0 | -521 | 0 | 0 | 0 | -573 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 215 | -0 | 1096 | 0 | 0 | 0 | -703 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 8 | 215 | -0 | -563 | 0 | 0 | 0 | -588 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.05 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE02_IP1** Descrizione: **CORDOLI DI FONDAZIONE 6-7-8**
**ASTA NUM. 5** NI 95 NF 96 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | | | | | | | | | | | | | | | | | |
| | cm | kg | | | kg*m | | | cmq | | | | | Fx,M | Bielle | V,Mx | cmq/m | | cm |
| 1A | 0 | -0 | -1699 | -0 | 0 | -0 | 1726 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | -1581 | -0 | 0 | -0 | 998 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | -1807 | -0 | 0 | -0 | 1649 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | -1473 | -0 | 0 | -0 | 1075 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | -1509 | -0 | 0 | -0 | 976 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | -1617 | -0 | 0 | -0 | 1324 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | -1532 | -0 | 0 | -0 | 1013 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.02 | 0.13 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 18 | -0 | -1699 | -0 | 0 | -0 | 1726 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 1B | 18 | -0 | -1581 | -0 | 0 | -0 | 998 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1I | 18 | -0 | -1807 | -0 | 0 | -0 | 1649 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 1J | 18 | -0 | -1473 | -0 | 0 | -0 | 1075 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 2 | 18 | -0 | -1509 | -0 | 0 | -0 | 976 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 7 | 18 | -0 | -1617 | -0 | 0 | -0 | 1324 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 8 | 18 | -0 | -1532 | -0 | 0 | -0 | 1013 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.02 | 0.13 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 35 | -0 | -1699 | -0 | 0 | -0 | 1972 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 1B | 35 | -0 | -1581 | -0 | 0 | -0 | 1244 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1I | 35 | -0 | -1807 | -0 | 0 | -0 | 1895 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 1J | 35 | -0 | -1473 | -0 | 0 | -0 | 1321 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 2 | 35 | -0 | -1509 | -0 | 0 | -0 | 1202 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 7 | 35 | -0 | -1617 | -0 | 0 | -0 | 1567 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.09 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 8 | 35 | -0 | -1532 | -0 | 0 | -0 | 1243 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.13 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 52 | -0 | -1509 | -0 | 0 | -0 | 1972 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 1B | 52 | -0 | -1363 | -0 | 0 | -0 | 1244 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1I | 52 | -0 | -1584 | -0 | 0 | -0 | 1895 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1J | 52 | -0 | -1288 | -0 | 0 | -0 | 1244 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 2 | 52 | -0 | -1293 | -0 | 0 | -0 | 1202 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 7 | 52 | -0 | -1412 | -0 | 0 | -0 | 1567 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.09 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 8 | 52 | -0 | -1316 | -0 | 0 | -0 | 1243 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.11 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 70 | -0 | -1509 | -0 | 0 | -0 | 1903 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 1B | 70 | -0 | -1363 | -0 | 0 | -0 | 1002 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1I | 70 | -0 | -1584 | -0 | 0 | -0 | 1895 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1J | 70 | -0 | -1288 | -0 | 0 | -0 | 969 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 2 | 70 | -0 | -1293 | -0 | 0 | -0 | 1050 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 7 | 70 | -0 | -1412 | -0 | 0 | -0 | 1412 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 8 | 70 | -0 | -1316 | -0 | 0 | -0 | 1090 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.02 | 0.11 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 88 | -0 | -1338 | -0 | 0 | 0 | 1597 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1B | 88 | -0 | -1124 | -0 | 0 | 0 | -826 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.02 | 0.09 | 0.00 | 0.00 | -- |
| 1I | 88 | -0 | -1369 | -0 | 0 | 0 | 1607 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1J | 88 | -0 | -1093 | -0 | 0 | 0 | -797 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 2 | 88 | -0 | -1079 | -0 | 0 | -0 | 724 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 7 | 88 | -0 | -1208 | -0 | 0 | -0 | 1070 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 8 | 88 | -0 | -1103 | -0 | 0 | -0 | 761 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.09 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 105 | -0 | -1338 | -0 | 0 | 0 | 1400 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1B | 105 | -0 | -1124 | -0 | 0 | 0 | -1060 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.02 | 0.09 | 0.00 | 0.00 | -- |
| 1I | 105 | -0 | -1369 | -0 | 0 | 0 | 1415 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1J | 105 | -0 | -1093 | -0 | 0 | 0 | -1036 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 2 | 105 | -0 | -1079 | -0 | 0 | 0 | -692 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 7 | 105 | -0 | -1208 | -0 | 0 | -0 | 858 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 8 | 105 | -0 | -1103 | -0 | 0 | 0 | -691 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.09 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 122 | -0 | -1176 | -0 | 0 | 0 | 1142 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 1B | 122 | -0 | -880 | -0 | 0 | 0 | -1109 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1I | 122 | -0 | -1163 | -0 | 0 | 0 | 1126 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.02 | 0.10 | 0.00 | 0.00 | -- |



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| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1J | 122 | -0 | -893 | -0 | 0 | 0 | -1079 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 2 | 122 | -0 | -869 | -0 | 0 | 0 | -692 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 7 | 122 | -0 | -1005 | -0 | 0 | 0 | -549 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 8 | 122 | -0 | -892 | -0 | 0 | 0 | -691 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.07 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 140 | -0 | -1176 | -0 | 0 | 0 | 988 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 1B | 140 | -0 | -880 | -0 | 0 | 0 | -1109 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1I | 140 | -0 | -1163 | -0 | 0 | 0 | 969 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 1J | 140 | -0 | -893 | -0 | 0 | 0 | -1079 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 2 | 140 | -0 | -869 | -0 | 0 | 0 | -692 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 7 | 140 | -0 | -1005 | -0 | 0 | 0 | -549 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 8 | 140 | -0 | -892 | -0 | 0 | 0 | -691 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.07 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 158 | -0 | -1021 | -0 | 0 | 0 | 777 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1B | 158 | -0 | -632 | -0 | 0 | 0 | -1109 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1I | 158 | -0 | -964 | -0 | 0 | 0 | 721 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1J | 158 | -0 | -690 | -0 | 0 | 0 | -1079 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 2 | 158 | -0 | -661 | -0 | 0 | 0 | -692 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 7 | 158 | -0 | -803 | -0 | 0 | 0 | -549 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 8 | 158 | -0 | -684 | -0 | 0 | 0 | -691 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.06 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 175 | -0 | -1021 | -0 | 0 | 0 | 12 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.00 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1B | 175 | -0 | -632 | -0 | 0 | 0 | -1109 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1I | 175 | -0 | -964 | -0 | 0 | 0 | -18 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.00 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1J | 175 | -0 | -690 | -0 | 0 | 0 | -1079 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 2 | 175 | -0 | -661 | -0 | 0 | 0 | -692 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 7 | 175 | -0 | -803 | -0 | 0 | 0 | -549 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 8 | 175 | -0 | -684 | -0 | 0 | 0 | -691 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.06 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE02_IP1** Descrizione: **CORDOLI DI FONDAZIONE 6-7-8**
**ASTA NUM. 6** NI 96 NF 97 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | | kg | | | kg*m | | | | cmq | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 0 | -0 | -1132 | -0 | 0 | 0 | 307 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.02 | 0.09 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | -151 | -0 | 0 | 0 | -436 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | -832 | -0 | 0 | 0 | 469 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | -451 | -0 | 0 | 0 | -790 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | -481 | -0 | 0 | 0 | -554 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | -641 | -0 | 0 | 0 | -435 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | -482 | -0 | 0 | 0 | -546 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.04 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 59 | -0 | -1132 | -0 | 0 | 0 | 307 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.02 | 0.09 | 0.00 | 0.00 | -- |
| 1B | 59 | -0 | -151 | -0 | 0 | 0 | -1096 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1I | 59 | -0 | -832 | -0 | 0 | 0 | 469 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1J | 59 | -0 | -451 | -0 | 0 | 0 | -1250 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 59 | -0 | -481 | -0 | 0 | 0 | -838 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 59 | -0 | -641 | -0 | 0 | 0 | -814 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 8 | 59 | -0 | -482 | -0 | 0 | 0 | -831 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.04 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 118 | -0 | -1132 | 0 | 0 | 0 | 307 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.02 | 0.09 | 0.00 | 0.00 | -- |
| 1B | 118 | -0 | 372 | 0 | 0 | 0 | -1898 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 1I | 118 | -0 | -832 | -0 | 0 | 0 | -259 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1J | 118 | -0 | -451 | -0 | 0 | 0 | -1710 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 118 | -0 | -481 | -0 | 0 | 0 | -966 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 118 | -0 | -641 | -0 | 0 | 0 | -1139 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 8 | 118 | -0 | -482 | -0 | 0 | 0 | -958 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.04 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 178 | -0 | -971 | 0 | 0 | 0 | 936 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1B | 178 | -0 | 372 | 0 | 0 | 0 | -2458 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 1I | 178 | -0 | -570 | -0 | 0 | 0 | -259 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1J | 178 | -0 | -29 | -0 | 0 | 0 | -1731 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 2 | 178 | -0 | -128 | -0 | 0 | 0 | -966 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 7 | 178 | -0 | -301 | -0 | 0 | 0 | -1139 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 8 | 178 | -0 | -127 | -0 | 0 | 0 | -958 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.00 | 0.01 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 237 | -0 | -971 | 0 | 0 | 0 | 1142 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1B | 237 | -0 | 924 | 0 | 0 | 0 | -3373 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.20 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1I | 237 | -0 | -570 | 0 | 0 | 0 | -259 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1J | 237 | -0 | 436 | 0 | 0 | 0 | -2190 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 237 | -0 | 272 | 0 | 0 | 0 | -966 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 7 | 237 | -0 | -301 | -0 | 0 | 0 | -1139 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 8 | 237 | -0 | 276 | 0 | 0 | 0 | -958 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 296 | -0 | -744 | 0 | 0 | 0 | 1525 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1B | 296 | -0 | 924 | 0 | 0 | 0 | -3796 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1I | 296 | -0 | -256 | 0 | 0 | 0 | -223 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1J | 296 | -0 | 436 | 0 | 0 | 0 | -2190 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 296 | -0 | 272 | 0 | 0 | 0 | -966 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 7 | 296 | -0 | 86 | 0 | 0 | 0 | -1139 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 8 | 296 | -0 | 276 | 0 | 0 | 0 | -958 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 355 | -0 | -744 | 0 | 0 | 0 | 2055 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1B | 355 | -0 | 1484 | 0 | 0 | 0 | -3954 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.23 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 1I | 355 | -0 | -256 | 0 | 0 | 0 | 306 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1J | 355 | -0 | 981 | 0 | 0 | 0 | -2190 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 2 | 355 | -0 | 771 | 0 | 0 | 0 | -966 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 7 | 355 | -0 | 583 | 0 | 0 | 0 | -1139 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 8 | 355 | -0 | 777 | 0 | 0 | 0 | -958 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.06 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 414 | -0 | -305 | 0 | 0 | 0 | 2635 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.16 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 1B | 414 | -0 | 1484 | 0 | 0 | 0 | -3954 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.23 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 1I | 414 | -0 | 198 | 0 | 0 | 0 | 794 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1J | 414 | -0 | 981 | 0 | 0 | 0 | -2190 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 2 | 414 | -0 | 771 | 0 | 0 | 0 | -682 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 7 | 414 | -0 | 583 | 0 | 0 | 0 | -1065 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 8 | 414 | -0 | 777 | 0 | 0 | 0 | -670 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.06 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 474 | -0 | 533 | 0 | 0 | 0 | 3643 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1B | 474 | -0 | 1975 | 0 | 0 | 0 | -3954 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.23 | 0.03 | 0.16 | 0.00 | 0.00 | -- |
| 1I | 474 | -0 | 885 | 0 | 0 | 0 | 1759 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1J | 474 | -0 | 1623 | 0 | 0 | 0 | -2190 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 2 | 474 | -0 | 1402 | 0 | 0 | -0 | 1168 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 7 | 474 | -0 | 1245 | 0 | 0 | 0 | -1139 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 8 | 474 | -0 | 1411 | 0 | 0 | -0 | 1194 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.12 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 533 | -0 | 533 | 0 | 0 | 0 | 4798 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.28 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1B | 533 | -0 | 1975 | 0 | 0 | 0 | -3954 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.23 | 0.03 | 0.16 | 0.00 | 0.00 | -- |
| 1I | 533 | -0 | 885 | 0 | 0 | 0 | 2672 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.16 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1J | 533 | -0 | 1623 | 0 | 0 | 0 | -2190 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 2 | 533 | -0 | 1402 | 0 | 0 | -0 | 1719 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 7 | 533 | -0 | 1245 | 0 | 0 | -0 | 941 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 8 | 533 | -0 | 1411 | 0 | 0 | -0 | 1748 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.02 | 0.12 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 592 | -0 | 533 | 0 | 0 | 0 | 5403 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.32 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1B | 592 | -0 | 1975 | 0 | 0 | 0 | -3954 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.23 | 0.03 | 0.16 | 0.00 | 0.00 | -- |
| 1I | 592 | -0 | 885 | 0 | 0 | 0 | 2820 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1J | 592 | -0 | 1623 | 0 | 0 | 0 | -1928 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 2 | 592 | -0 | 1402 | 0 | 0 | -0 | 1719 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 7 | 592 | -0 | 1245 | 0 | 0 | -0 | 941 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 8 | 592 | -0 | 1411 | 0 | 0 | -0 | 1748 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.02 | 0.12 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE03_IP1** Descrizione: **CORDOLI DI FONDAZIONE 9-10-11-12-13**
**ASTA NUM. 7** NI 5 NF 29 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | cmq | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 0 | -0 | -1618 | -0 | 0 | 0 | -1253 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | -720 | -0 | 0 | 0 | -1572 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | -2163 | -0 | 0 | 0 | -996 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | -175 | -0 | 0 | 0 | -1187 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | -1165 | -0 | 0 | 0 | -1786 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | -1245 | -0 | 0 | 0 | -1442 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | -1089 | -0 | 0 | 0 | -1756 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.01 | 0.09 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 18 | -0 | -1618 | -0 | 0 | 0 | -1387 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1B | 18 | -0 | -720 | -0 | 0 | 0 | -1716 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1I | 18 | -0 | -2163 | -0 | 0 | 0 | -996 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 1J | 18 | -0 | -175 | -0 | 0 | 0 | -1278 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 2 | 18 | -0 | -1165 | -0 | 0 | 0 | -1990 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 7 | 18 | -0 | -1245 | -0 | 0 | 0 | -1660 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.09 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 8 | 18 | -0 | -1089 | -0 | 0 | 0 | -1947 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.09 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 35 | -0 | -1618 | -0 | 0 | 0 | -1387 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1B | 35 | -0 | -720 | -0 | 0 | 0 | -1860 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1I | 35 | -0 | -2163 | -0 | 0 | 0 | -996 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 1J | 35 | -0 | -175 | -0 | 0 | 0 | -1368 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 2 | 35 | -0 | -1165 | -0 | 0 | 0 | -2135 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 7 | 35 | -0 | -1245 | -0 | 0 | 0 | -1878 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 8 | 35 | -0 | -1089 | -0 | 0 | 0 | -2054 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.09 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 52 | -0 | -1357 | -0 | 0 | 0 | -1387 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1B | 52 | -0 | -527 | -0 | 0 | 0 | -1908 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1I | 52 | -0 | -1823 | -0 | 0 | 0 | -996 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 1J | 52 | -0 | -60 | -0 | 0 | 0 | -1570 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 2 | 52 | -0 | -919 | -0 | 0 | 0 | -2135 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 7 | 52 | -0 | -1008 | -0 | 0 | 0 | -1901 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 8 | 52 | -0 | -853 | -0 | 0 | 0 | -2054 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.07 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 70 | -0 | -1357 | -0 | 0 | 0 | -1387 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1B | 70 | -0 | -527 | -0 | 0 | 0 | -2080 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1I | 70 | -0 | -1823 | 0 | 0 | 0 | -996 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 1J | 70 | -0 | 92 | 0 | 0 | 0 | -1867 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 2 | 70 | -0 | -919 | -0 | 0 | 0 | -2135 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 7 | 70 | -0 | -1008 | -0 | 0 | 0 | -1901 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 8 | 70 | -0 | -853 | -0 | 0 | 0 | -2054 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.07 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 88 | -0 | -1075 | -0 | 0 | 0 | -1387 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 1B | 88 | -0 | -302 | -0 | 0 | 0 | -2073 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 88 | -0 | -1469 | 0 | 0 | 0 | -996 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 1J | 88 | -0 | 92 | 0 | 0 | 0 | -2108 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 2 | 88 | -0 | -651 | -0 | 0 | 0 | -2135 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 7 | 88 | -0 | -746 | -0 | 0 | 0 | -1901 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 8 | 88 | -0 | -594 | -0 | 0 | 0 | -2054 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.05 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 105 | -0 | -1075 | -0 | 0 | 0 | -1387 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 1B | 105 | -0 | -302 | -0 | 0 | 0 | -2211 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 105 | -0 | -1469 | 0 | 0 | 0 | -996 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 1J | 105 | -0 | 285 | 0 | 0 | 0 | -2473 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.15 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 2 | 105 | -0 | -651 | -0 | 0 | 0 | -2135 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 7 | 105 | -0 | -746 | -0 | 0 | 0 | -1901 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 8 | 105 | -0 | -594 | -0 | 0 | 0 | -2054 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.05 | 0.00 | 0.00 | -- |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 122 | -0 | -770 | -0 | 0 | 0 | -1387 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1B | 122 | -0 | -44 | -0 | 0 | 0 | -2135 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 1I | 122 | -0 | -1099 | 0 | 0 | 0 | -996 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 1J | 122 | -0 | 285 | 0 | 0 | 0 | -2652 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.16 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 2 | 122 | -0 | -358 | -0 | 0 | 0 | -2135 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 7 | 122 | -0 | -457 | -0 | 0 | 0 | -1901 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 8 | 122 | -0 | -309 | -0 | 0 | 0 | -2054 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.00 | 0.03 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 140 | -0 | -770 | 0 | 0 | 0 | -1387 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1B | 140 | -0 | 252 | 0 | 0 | 0 | -2249 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 140 | -0 | -1099 | 0 | 0 | 0 | -996 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 1J | 140 | -0 | 519 | 0 | 0 | 0 | -2865 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 140 | -0 | -358 | -0 | 0 | 0 | -2135 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 7 | 140 | -0 | -457 | -0 | 0 | 0 | -1901 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 8 | 140 | -0 | -309 | -0 | 0 | 0 | -2054 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.00 | 0.03 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 158 | -0 | -439 | 0 | 0 | 0 | -1387 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1B | 158 | -0 | 252 | 0 | 0 | 0 | -2249 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 158 | -0 | -707 | 0 | 0 | 0 | -996 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1J | 158 | -0 | 519 | 0 | 0 | 0 | -2865 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 158 | -0 | -37 | -0 | 0 | 0 | -2135 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 7 | 158 | -0 | -136 | -0 | 0 | 0 | -1901 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 8 | 158 | -0 | 6 | 0 | 0 | 0 | -2054 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.00 | 0.00 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 175 | -0 | -439 | 0 | 0 | 0 | -1387 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1B | 175 | -0 | 252 | 0 | 0 | 0 | -2249 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 175 | -0 | -707 | 0 | 0 | 0 | -996 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1J | 175 | -0 | 519 | 0 | 0 | 0 | -2865 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 175 | -0 | -37 | -0 | 0 | 0 | -2135 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 7 | 175 | -0 | -136 | -0 | 0 | 0 | -1901 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 8 | 175 | -0 | 6 | 0 | 0 | 0 | -2054 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.00 | 0.00 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE03_IP1**  Descrizione: **CORDOLI DI FONDAZIONE 9-10-11-12-13**
**ASTA NUM. 8**  NI 29  NF 56  SEZ.  Rp  B= 60.0  H= 60.0  (trave di fondazione)

armatura base = 4 X 2.01  per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 0 | -0 | 2278 | 0 | 0 | 0 | -1439 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | 3334 | 0 | 0 | 0 | -3183 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.04 | 0.28 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | 2475 | 0 | 0 | 0 | -1094 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.03 | 0.20 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | 3137 | 0 | 0 | 0 | -3528 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.04 | 0.26 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | 2986 | 0 | 0 | 0 | -2750 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.16 | 0.04 | 0.25 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | 2807 | 0 | 0 | 0 | -2399 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.14 | 0.04 | 0.23 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | 2985 | 0 | 0 | 0 | -2662 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.15 | 0.04 | 0.25 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 18 | -0 | 2278 | 0 | 0 | 0 | -1439 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 1B | 18 | -0 | 3334 | 0 | 0 | 0 | -3183 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.04 | 0.28 | 0.00 | 0.00 | -- |
| 1I | 18 | -0 | 2475 | 0 | 0 | 0 | -1094 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.03 | 0.20 | 0.00 | 0.00 | -- |
| 1J | 18 | -0 | 3137 | 0 | 0 | 0 | -3528 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.04 | 0.26 | 0.00 | 0.00 | -- |
| 2 | 18 | -0 | 2986 | 0 | 0 | 0 | -2750 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.16 | 0.04 | 0.25 | 0.00 | 0.00 | -- |
| 7 | 18 | -0 | 2807 | 0 | 0 | 0 | -2399 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.14 | 0.04 | 0.23 | 0.00 | 0.00 | -- |
| 8 | 18 | -0 | 2985 | 0 | 0 | 0 | -2662 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.15 | 0.04 | 0.25 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 36 | -0 | 2678 | 0 | 0 | 0 | -1439 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.04 | 0.22 | 0.00 | 0.00 | -- |
| 1B | 36 | -0 | 3732 | 0 | 0 | 0 | -3183 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.05 | 0.31 | 0.00 | 0.00 | -- |
| 1I | 36 | -0 | 2920 | 0 | 0 | 0 | -1094 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.04 | 0.24 | 0.00 | 0.00 | -- |
| 1J | 36 | -0 | 3490 | 0 | 0 | 0 | -3528 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.05 | 0.29 | 0.00 | 0.00 | -- |
| 2 | 36 | -0 | 3391 | 0 | 0 | 0 | -2750 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.16 | 0.05 | 0.28 | 0.00 | 0.00 | -- |
| 7 | 36 | -0 | 3213 | 0 | 0 | 0 | -2399 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.14 | 0.04 | 0.27 | 0.00 | 0.00 | -- |
| 8 | 36 | -0 | 3383 | 0 | 0 | 0 | -2662 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.15 | 0.05 | 0.28 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 54 | -0 | 2678 | 0 | 0 | 0 | -1439 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.04 | 0.22 | 0.00 | 0.00 | -- |
| 1B | 54 | -0 | 3732 | 0 | 0 | 0 | -3183 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.05 | 0.31 | 0.00 | 0.00 | -- |
| 1I | 54 | -0 | 2920 | 0 | 0 | 0 | 2371 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.04 | 0.24 | 0.00 | 0.00 | -- |
| 1J | 54 | -0 | 3490 | 0 | 0 | 0 | -3528 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.05 | 0.29 | 0.00 | 0.00 | -- |
| 2 | 54 | -0 | 3391 | 0 | 0 | 0 | -2750 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.16 | 0.05 | 0.28 | 0.00 | 0.00 | -- |
| 7 | 54 | -0 | 3213 | 0 | 0 | 0 | -2399 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.14 | 0.04 | 0.27 | 0.00 | 0.00 | -- |
| 8 | 54 | -0 | 3383 | 0 | 0 | 0 | -2662 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.15 | 0.05 | 0.28 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 72 | -0 | 3114 | 0 | 0 | 0 | 2429 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.04 | 0.26 | 0.00 | 0.00 | -- |
| 1B | 72 | -0 | 4184 | 0 | 0 | 0 | -3183 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.06 | 0.35 | 0.00 | 0.00 | -- |
| 1I | 72 | -0 | 3390 | 0 | 0 | 0 | 3243 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.05 | 0.28 | 0.00 | 0.00 | -- |
| 1J | 72 | -0 | 3908 | 0 | 0 | 0 | -3528 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.05 | 0.32 | 0.00 | 0.00 | -- |
| 2 | 72 | -0 | 3839 | 0 | 0 | 0 | -2750 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.16 | 0.05 | 0.32 | 0.00 | 0.00 | -- |
| 7 | 72 | -0 | 3662 | 0 | 0 | 0 | -2399 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.14 | 0.05 | 0.30 | 0.00 | 0.00 | -- |
| 8 | 72 | -0 | 3826 | 0 | 0 | 0 | -2662 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.15 | 0.05 | 0.32 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 90 | -0 | 3114 | 0 | 0 | -0 | 3003 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.18 | 0.04 | 0.26 | 0.00 | 0.00 | -- |
| 1B | 90 | -0 | 4184 | 0 | 0 | -0 | 2697 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.16 | 0.06 | 0.35 | 0.00 | 0.00 | -- |
| 1I | 90 | -0 | 3390 | 0 | 0 | 0 | 3882 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.23 | 0.05 | 0.28 | 0.00 | 0.00 | -- |
| 1J | 90 | -0 | 3908 | 0 | 0 | 0 | -3193 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.05 | 0.32 | 0.00 | 0.00 | -- |
| 2 | 90 | -0 | 3839 | 0 | 0 | -0 | 2698 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.15 | 0.05 | 0.32 | 0.00 | 0.00 | -- |
| 7 | 90 | -0 | 3662 | 0 | 0 | -0 | 2776 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.16 | 0.05 | 0.30 | 0.00 | 0.00 | -- |
| 8 | 90 | -0 | 3826 | 0 | 0 | -0 | 2772 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.16 | 0.05 | 0.32 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 108 | -0 | 3581 | 0 | 0 | -0 | 3877 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.23 | 0.05 | 0.30 | 0.00 | 0.00 | -- |
| 1B | 108 | -0 | 4693 | 0 | 0 | -0 | 3622 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.06 | 0.39 | 0.00 | 0.00 | -- |
| 1I | 108 | -0 | 3876 | 0 | 0 | 0 | 4832 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.28 | 0.05 | 0.32 | 0.00 | 0.00 | -- |
| 1J | 108 | -0 | 4398 | 0 | 0 | 0 | -2833 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.06 | 0.36 | 0.00 | 0.00 | -- |



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| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 108 | -0 | 4331 | 0 | 0 | -0 | 3704 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.21 | 0.06 | 0.36 | 0.00 | 0.00 | -- |
| 7 | 108 | -0 | 4156 | 0 | 0 | -0 | 3752 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.21 | 0.06 | 0.34 | 0.00 | 0.00 | -- |
| 8 | 108 | -0 | 4313 | 0 | 0 | -0 | 3773 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.21 | 0.06 | 0.36 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 126 | -0 | 3581 | 0 | 0 | -0 | 4677 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.28 | 0.05 | 0.30 | 0.00 | 0.00 | -- |
| 1B | 126 | -0 | 4693 | 0 | 0 | -0 | 3622 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.06 | 0.39 | 0.00 | 0.00 | -- |
| 1I | 126 | -0 | 3876 | 0 | 0 | -0 | 5578 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.33 | 0.05 | 0.32 | 0.00 | 0.00 | -- |
| 1J | 126 | -0 | 4398 | 0 | 0 | -0 | 3096 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.18 | 0.06 | 0.36 | 0.00 | 0.00 | -- |
| 2 | 126 | -0 | 4331 | 0 | 0 | -0 | 4238 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.24 | 0.06 | 0.36 | 0.00 | 0.00 | -- |
| 7 | 126 | -0 | 4156 | 0 | 0 | -0 | 4272 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.24 | 0.06 | 0.34 | 0.00 | 0.00 | -- |
| 8 | 126 | -0 | 4313 | 0 | 0 | -0 | 4303 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.24 | 0.06 | 0.36 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 144 | -0 | 4076 | 0 | 0 | -0 | 4336 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.26 | 0.05 | 0.34 | 0.00 | 0.00 | -- |
| 1B | 144 | -0 | 5260 | 0 | 0 | -0 | 2938 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.07 | 0.43 | 0.00 | 0.00 | -- |
| 1I | 144 | -0 | 4372 | 0 | 0 | -0 | 4875 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.29 | 0.06 | 0.36 | 0.00 | 0.00 | -- |
| 1J | 144 | -0 | 4964 | 0 | 0 | -0 | 2399 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.07 | 0.41 | 0.00 | 0.00 | -- |
| 2 | 144 | -0 | 4867 | 0 | 0 | -0 | 3508 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.20 | 0.07 | 0.40 | 0.00 | 0.00 | -- |
| 7 | 144 | -0 | 4692 | 0 | 0 | -0 | 3568 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.20 | 0.06 | 0.39 | 0.00 | 0.00 | -- |
| 8 | 144 | -0 | 4843 | 0 | 0 | -0 | 3577 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.20 | 0.06 | 0.40 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 162 | -0 | 4076 | 0 | 0 | -0 | 4336 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.26 | 0.05 | 0.34 | 0.00 | 0.00 | -- |
| 1B | 162 | -0 | 5260 | 0 | 0 | -0 | 2938 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.07 | 0.43 | 0.00 | 0.00 | -- |
| 1I | 162 | -0 | 4372 | 0 | 0 | -0 | 4875 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.29 | 0.06 | 0.36 | 0.00 | 0.00 | -- |
| 1J | 162 | -0 | 4964 | 0 | 0 | -0 | 2399 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.07 | 0.41 | 0.00 | 0.00 | -- |
| 2 | 162 | -0 | 4867 | 0 | 0 | -0 | 3508 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.20 | 0.07 | 0.40 | 0.00 | 0.00 | -- |
| 7 | 162 | -0 | 4692 | 0 | 0 | -0 | 3568 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.20 | 0.06 | 0.39 | 0.00 | 0.00 | -- |
| 8 | 162 | -0 | 4843 | 0 | 0 | -0 | 3577 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.20 | 0.06 | 0.40 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 180 | -0 | 4076 | 0 | 0 | -0 | 4336 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.26 | 0.05 | 0.34 | 0.00 | 0.00 | -- |
| 1B | 180 | -0 | 5260 | 0 | 0 | -0 | 2921 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.07 | 0.43 | 0.00 | 0.00 | -- |
| 1I | 180 | -0 | 4372 | 0 | 0 | -0 | 4875 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.29 | 0.06 | 0.36 | 0.00 | 0.00 | -- |
| 1J | 180 | -0 | 4964 | 0 | 0 | -0 | 2395 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.07 | 0.41 | 0.00 | 0.00 | -- |
| 2 | 180 | -0 | 4867 | 0 | 0 | -0 | 3508 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.20 | 0.07 | 0.40 | 0.00 | 0.00 | -- |
| 7 | 180 | -0 | 4692 | 0 | 0 | -0 | 3568 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.20 | 0.06 | 0.39 | 0.00 | 0.00 | -- |
| 8 | 180 | -0 | 4843 | 0 | 0 | -0 | 3577 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.20 | 0.06 | 0.40 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE03_IP1** Descrizione: **CORDOLI DI FONDAZIONE 9-10-11-12-13**
**ASTA NUM. 9** NI 56 NF 36 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 0 | -0 | -1602 | -0 | 0 | -0 | 4631 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.27 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | -534 | -0 | 0 | -0 | 3775 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | -1329 | -0 | 0 | -0 | 5357 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.32 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | -807 | -0 | 0 | -0 | 3047 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.18 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | -892 | -0 | 0 | -0 | 4060 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.23 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | -1064 | -0 | 0 | -0 | 4139 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.23 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | -896 | -0 | 0 | -0 | 4125 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.23 | 0.01 | 0.07 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 20 | -0 | -1602 | -0 | 0 | -0 | 4631 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.27 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1B | 20 | -0 | -534 | -0 | 0 | -0 | 3775 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1I | 20 | -0 | -1329 | -0 | 0 | -0 | 5357 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.32 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1J | 20 | -0 | -807 | -0 | 0 | -0 | 3049 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.18 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 2 | 20 | -0 | -892 | -0 | 0 | -0 | 4060 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.23 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 7 | 20 | -0 | -1064 | -0 | 0 | -0 | 4139 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.23 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 8 | 20 | -0 | -896 | -0 | 0 | -0 | 4125 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.23 | 0.01 | 0.07 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 39 | -0 | -1602 | -0 | 0 | -0 | 4791 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.28 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1B | 39 | -0 | -534 | -0 | 0 | -0 | 3800 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1I | 39 | -0 | -1329 | -0 | 0 | -0 | 5519 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.32 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1J | 39 | -0 | -807 | -0 | 0 | -0 | 3207 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 2 | 39 | -0 | -892 | -0 | 0 | -0 | 4194 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.24 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 7 | 39 | -0 | -1064 | -0 | 0 | -0 | 4299 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.24 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 8 | 39 | -0 | -896 | -0 | 0 | -0 | 4259 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.24 | 0.01 | 0.07 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 59 | -0 | -1007 | 0 | 0 | -0 | 4791 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.28 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1B | 59 | -0 | 180 | 0 | 0 | -0 | 3396 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.20 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1I | 59 | -0 | -752 | -0 | 0 | -0 | 5475 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.32 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1J | 59 | -0 | -75 | -0 | 0 | -0 | 2776 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.16 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 2 | 59 | -0 | -231 | -0 | 0 | -0 | 3945 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.22 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 7 | 59 | -0 | -403 | -0 | 0 | -0 | 4058 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.23 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 59 | -0 | -241 | -0 | 0 | -0 | 4013 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.23 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 79 | -0 | -1007 | 0 | 0 | -0 | 4791 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.28 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1B | 79 | -0 | 922 | 0 | 0 | -0 | 3697 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1I | 79 | -0 | -752 | 0 | 0 | -0 | 5392 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.32 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1J | 79 | -0 | 686 | 0 | 0 | -0 | 3090 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.18 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 2 | 79 | -0 | 455 | 0 | 0 | -0 | 4044 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.23 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 79 | -0 | -403 | -0 | 0 | -0 | 3979 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.23 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 79 | -0 | 437 | 0 | 0 | -0 | 4091 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.23 | 0.01 | 0.04 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 98 | -0 | -394 | 0 | 0 | -0 | 4791 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.28 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 1B | 98 | -0 | 922 | 0 | 0 | -0 | 3648 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1I | 98 | -0 | -159 | 0 | 0 | -0 | 5050 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.30 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1J | 98 | -0 | 686 | 0 | 0 | -0 | 3156 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 2 | 98 | -0 | 455 | 0 | 0 | -0 | 4133 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.23 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 98 | -0 | 282 | 0 | 0 | -0 | 3957 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.22 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 8 | 98 | -0 | 437 | 0 | 0 | -0 | 4177 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.24 | 0.01 | 0.04 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 118 | -0 | -394 | 0 | 0 | -0 | 5012 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.30 | 0.01 | 0.03 | 0.00 | 0.00 | -- |



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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1B | 118 | -0 | 1683 | 0 | 0 | -0 | 3601 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 1I | 118 | -0 | 439 | 0 | 0 | -0 | 5269 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.31 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1J | 118 | -0 | 1469 | 0 | 0 | -0 | 3723 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 2 | 118 | -0 | 1155 | 0 | 0 | -0 | 4672 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.26 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 7 | 118 | -0 | 979 | 0 | 0 | -0 | 4460 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.25 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 8 | 118 | -0 | 1130 | 0 | 0 | -0 | 4708 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.27 | 0.02 | 0.09 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 138 | -0 | 225 | 0 | 0 | -0 | 5197 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.31 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1B | 138 | -0 | 1683 | 0 | 0 | -0 | 3601 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 1I | 138 | -0 | 439 | 0 | 0 | -0 | 5431 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.32 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1J | 138 | -0 | 1469 | 0 | 0 | -0 | 3930 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.23 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 2 | 138 | -0 | 1155 | 0 | 0 | -0 | 4899 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.28 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 7 | 138 | -0 | 979 | 0 | 0 | -0 | 4653 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.26 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 8 | 138 | -0 | 1130 | 0 | 0 | -0 | 4930 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.28 | 0.02 | 0.09 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 158 | -0 | 843 | 0 | 0 | -0 | 5887 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.35 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1B | 158 | -0 | 2453 | 0 | 0 | -0 | 3370 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.20 | 0.03 | 0.20 | 0.00 | 0.00 | -- |
| 1I | 158 | -0 | 1031 | 0 | 0 | -0 | 5640 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.33 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 1J | 158 | -0 | 2265 | 0 | 0 | -0 | 3683 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 2 | 158 | -0 | 1860 | 0 | 0 | -0 | 4840 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.27 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 7 | 158 | -0 | 1682 | 0 | 0 | -0 | 4628 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.26 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 8 | 158 | -0 | 1826 | 0 | 0 | -0 | 4874 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.28 | 0.02 | 0.15 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 177 | -0 | 843 | 0 | 0 | -0 | 5953 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.35 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1B | 177 | -0 | 2453 | 0 | 0 | -0 | 3370 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.20 | 0.03 | 0.20 | 0.00 | 0.00 | -- |
| 1I | 177 | -0 | 1031 | 0 | 0 | -0 | 5640 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.33 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 1J | 177 | -0 | 2265 | 0 | 0 | -0 | 3683 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 2 | 177 | -0 | 1860 | 0 | 0 | -0 | 4840 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.27 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 7 | 177 | -0 | 1682 | 0 | 0 | -0 | 4628 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.26 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 8 | 177 | -0 | 1826 | 0 | 0 | -0 | 4874 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.28 | 0.02 | 0.15 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 197 | -0 | 843 | 0 | 0 | -0 | 5953 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.35 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1B | 197 | -0 | 2453 | 0 | 0 | -0 | 3353 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.20 | 0.03 | 0.20 | 0.00 | 0.00 | -- |
| 1I | 197 | -0 | 1031 | 0 | 0 | -0 | 5640 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.33 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 1J | 197 | -0 | 2265 | 0 | 0 | -0 | 3683 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 2 | 197 | -0 | 1860 | 0 | 0 | -0 | 4840 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.27 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 7 | 197 | -0 | 1682 | 0 | 0 | -0 | 4628 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.26 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 8 | 197 | -0 | 1826 | 0 | 0 | -0 | 4874 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.28 | 0.02 | 0.15 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE03_IP1** Descrizione: **CORDOLI DI FONDAZIONE 9-10-11-12-13**
**ASTA NUM. 10** NI 36 NF 6 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 0 | -0 | -5304 | -0 | 0 | -0 | 5210 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.31 | 0.07 | 0.44 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | -3706 | -0 | 0 | -0 | 3407 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.20 | 0.05 | 0.31 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | -5134 | -0 | 0 | -0 | 5168 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.30 | 0.07 | 0.42 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | -3876 | -0 | 0 | -0 | 3442 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.20 | 0.05 | 0.32 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | -4308 | -0 | 0 | -0 | 4476 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.25 | 0.06 | 0.36 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | -4489 | -0 | 0 | -0 | 4282 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.24 | 0.06 | 0.37 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | -4324 | -0 | 0 | -0 | 4502 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.25 | 0.06 | 0.36 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 22 | -0 | -5304 | -0 | 0 | -0 | 5210 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.31 | 0.07 | 0.44 | 0.00 | 0.00 | -- |
| 1B | 22 | -0 | -3706 | -0 | 0 | -0 | 3407 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.20 | 0.05 | 0.31 | 0.00 | 0.00 | -- |
| 1I | 22 | -0 | -5134 | -0 | 0 | -0 | 5168 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.30 | 0.07 | 0.42 | 0.00 | 0.00 | -- |
| 1J | 22 | -0 | -3876 | -0 | 0 | -0 | 3448 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.20 | 0.05 | 0.32 | 0.00 | 0.00 | -- |
| 2 | 22 | -0 | -4308 | -0 | 0 | -0 | 4476 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.25 | 0.06 | 0.36 | 0.00 | 0.00 | -- |
| 7 | 22 | -0 | -4489 | -0 | 0 | -0 | 4282 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.24 | 0.06 | 0.37 | 0.00 | 0.00 | -- |
| 8 | 22 | -0 | -4324 | -0 | 0 | -0 | 4502 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.25 | 0.06 | 0.36 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 43 | -0 | -5304 | -0 | 0 | -0 | 5885 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.35 | 0.07 | 0.44 | 0.00 | 0.00 | -- |
| 1B | 43 | -0 | -3706 | -0 | 0 | -0 | 4083 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.24 | 0.05 | 0.31 | 0.00 | 0.00 | -- |
| 1I | 43 | -0 | -5134 | -0 | 0 | -0 | 5850 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.34 | 0.07 | 0.42 | 0.00 | 0.00 | -- |
| 1J | 43 | -0 | -3876 | -0 | 0 | -0 | 4118 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.24 | 0.05 | 0.32 | 0.00 | 0.00 | -- |
| 2 | 43 | -0 | -4308 | -0 | 0 | -0 | 5122 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.29 | 0.06 | 0.36 | 0.00 | 0.00 | -- |
| 7 | 43 | -0 | -4489 | -0 | 0 | -0 | 4955 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.28 | 0.06 | 0.37 | 0.00 | 0.00 | -- |
| 8 | 43 | -0 | -4324 | -0 | 0 | -0 | 5151 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.29 | 0.06 | 0.36 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 64 | -0 | -4667 | -0 | 0 | -0 | 5885 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.35 | 0.06 | 0.39 | 0.00 | 0.00 | -- |
| 1B | 64 | -0 | -2895 | -0 | 0 | -0 | 2829 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.04 | 0.24 | 0.00 | 0.00 | -- |
| 1I | 64 | -0 | -4542 | -0 | 0 | -0 | 5850 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.34 | 0.06 | 0.37 | 0.00 | 0.00 | -- |
| 1J | 64 | -0 | -3020 | -0 | 0 | -0 | 3448 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.20 | 0.04 | 0.25 | 0.00 | 0.00 | -- |
| 2 | 64 | -0 | -3571 | -0 | 0 | -0 | 4791 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.27 | 0.05 | 0.29 | 0.00 | 0.00 | -- |
| 7 | 64 | -0 | -3754 | -0 | 0 | -0 | 4625 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.26 | 0.05 | 0.31 | 0.00 | 0.00 | -- |
| 8 | 64 | -0 | -3598 | -0 | 0 | -0 | 4826 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.27 | 0.05 | 0.30 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 86 | -0 | -4667 | -0 | 0 | -0 | 5800 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.34 | 0.06 | 0.39 | 0.00 | 0.00 | -- |
| 1B | 86 | -0 | -2895 | -0 | 0 | -0 | 1891 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.04 | 0.24 | 0.00 | 0.00 | -- |
| 1I | 86 | -0 | -4542 | -0 | 0 | -0 | 5004 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.29 | 0.06 | 0.37 | 0.00 | 0.00 | -- |
| 1J | 86 | -0 | -3020 | -0 | 0 | -0 | 2688 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.16 | 0.04 | 0.25 | 0.00 | 0.00 | -- |
| 2 | 86 | -0 | -3571 | -0 | 0 | -0 | 4024 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.23 | 0.05 | 0.29 | 0.00 | 0.00 | -- |
| 7 | 86 | -0 | -3754 | -0 | 0 | -0 | 3818 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.22 | 0.05 | 0.31 | 0.00 | 0.00 | -- |
| 8 | 86 | -0 | -3598 | -0 | 0 | -0 | 4052 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.23 | 0.05 | 0.30 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 108 | -0 | -4066 | -0 | 0 | 0 | 4907 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.29 | 0.05 | 0.34 | 0.00 | 0.00 | -- |
| 1B | 108 | -0 | -2122 | -0 | 0 | 0 | -2148 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 1I | 108 | -0 | -4004 | -0 | 0 | -0 | 4016 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.24 | 0.05 | 0.33 | 0.00 | 0.00 | -- |
| 1J | 108 | -0 | -2184 | -0 | 0 | -0 | 1464 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 2 | 108 | -0 | -2871 | -0 | 0 | -0 | 2958 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.17 | 0.04 | 0.24 | 0.00 | 0.00 | -- |
| 7 | 108 | -0 | -3055 | -0 | 0 | -0 | 2712 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.15 | 0.04 | 0.25 | 0.00 | 0.00 | -- |
| 8 | 108 | -0 | -2910 | -0 | 0 | -0 | 2985 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.17 | 0.04 | 0.24 | 0.00 | 0.00 | -- |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 129 | -0 | -4066 | -0 | 0 | 0 | 4399 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.26 | 0.05 | 0.34 | 0.00 | 0.00 | -- |
| 1B | 129 | -0 | -2122 | -0 | 0 | 0 | -2970 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 1I | 129 | -0 | -4004 | -0 | 0 | 0 | 3373 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.20 | 0.05 | 0.33 | 0.00 | 0.00 | -- |
| 1J | 129 | -0 | -2184 | -0 | 0 | 0 | -2025 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 2 | 129 | -0 | -2871 | -0 | 0 | -0 | 2340 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.13 | 0.04 | 0.24 | 0.00 | 0.00 | -- |
| 7 | 129 | -0 | -3055 | -0 | 0 | -0 | 2055 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.04 | 0.25 | 0.00 | 0.00 | -- |
| 8 | 129 | -0 | -2910 | -0 | 0 | -0 | 2360 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.13 | 0.04 | 0.24 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 150 | -0 | -3502 | -0 | 0 | 0 | 3726 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.05 | 0.29 | 0.00 | 0.00 | -- |
| 1B | 150 | -0 | -1392 | -0 | 0 | 0 | -3244 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1I | 150 | -0 | -3520 | -0 | 0 | 0 | 2731 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.16 | 0.05 | 0.29 | 0.00 | 0.00 | -- |
| 1J | 150 | -0 | -1374 | -0 | 0 | 0 | -2225 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 2 | 150 | -0 | -2212 | -0 | 0 | -0 | 1442 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 7 | 150 | -0 | -2395 | -0 | 0 | 0 | -1697 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.03 | 0.20 | 0.00 | 0.00 | -- |
| 8 | 150 | -0 | -2264 | -0 | 0 | -0 | 1459 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.03 | 0.19 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 172 | -0 | -3502 | -0 | 0 | 0 | 3416 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.20 | 0.05 | 0.29 | 0.00 | 0.00 | -- |
| 1B | 172 | -0 | -1392 | -0 | 0 | 0 | -3986 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.23 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1I | 172 | -0 | -3520 | -0 | 0 | 0 | 2399 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.05 | 0.29 | 0.00 | 0.00 | -- |
| 1J | 172 | -0 | -1374 | -0 | 0 | 0 | -2946 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 2 | 172 | -0 | -2212 | -0 | 0 | 0 | -1138 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 7 | 172 | -0 | -2395 | -0 | 0 | 0 | -1697 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.03 | 0.20 | 0.00 | 0.00 | -- |
| 8 | 172 | -0 | -2264 | -0 | 0 | 0 | -1195 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.03 | 0.19 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 194 | -0 | -2969 | -0 | 0 | 0 | 2918 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.04 | 0.25 | 0.00 | 0.00 | -- |
| 1B | 194 | -0 | -713 | -0 | 0 | 0 | -4186 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.25 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1I | 194 | -0 | -3091 | -0 | 0 | 0 | 1988 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.04 | 0.26 | 0.00 | 0.00 | -- |
| 1J | 194 | -0 | -591 | -0 | 0 | 0 | -3100 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.18 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 2 | 194 | -0 | -1596 | -0 | 0 | 0 | -1138 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 7 | 194 | -0 | -1775 | -0 | 0 | 0 | -1697 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 8 | 194 | -0 | -1663 | -0 | 0 | 0 | -1195 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.14 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 215 | -0 | -2969 | -0 | 0 | 0 | 859 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.04 | 0.25 | 0.00 | 0.00 | -- |
| 1B | 215 | -0 | -713 | -0 | 0 | 0 | -4365 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.26 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1I | 215 | -0 | -3091 | -0 | 0 | 0 | -130 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.04 | 0.26 | 0.00 | 0.00 | -- |
| 1J | 215 | -0 | -591 | -0 | 0 | 0 | -3377 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.20 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 2 | 215 | -0 | -1596 | -0 | 0 | 0 | -1138 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 7 | 215 | -0 | -1775 | -0 | 0 | 0 | -1697 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 8 | 215 | -0 | -1663 | -0 | 0 | 0 | -1195 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.14 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE04_IP1**  Descrizione: **CORDOLI DI FONDAZIONE 14-15**
**ASTA NUM. 11**  NI 54  NF 86  SEZ.  Rp  B= 60.0  H= 60.0  (trave di fondazione)

armatura base = 4 X 2.01  per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 0 | -0 | -1981 | -0 | 0 | -0 | 1278 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.03 | 0.16 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | -709 | -0 | 0 | -0 | 167 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | -2491 | -0 | 0 | 0 | 1902 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.03 | 0.21 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | -199 | -0 | 0 | 0 | -270 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | -1284 | -0 | 0 | -0 | 582 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | -1433 | -0 | 0 | -0 | 812 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | -1197 | -0 | 0 | -0 | 502 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.02 | 0.10 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 18 | -0 | -1981 | -0 | 0 | -0 | 1278 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.03 | 0.16 | 0.00 | 0.00 | -- |
| 1B | 18 | -0 | -709 | -0 | 0 | -0 | 186 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1I | 18 | -0 | -2491 | -0 | 0 | 0 | 1902 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.03 | 0.21 | 0.00 | 0.00 | -- |
| 1J | 18 | -0 | -199 | -0 | 0 | 0 | -432 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 2 | 18 | -0 | -1284 | -0 | 0 | -0 | 582 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 7 | 18 | -0 | -1433 | -0 | 0 | -0 | 812 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 8 | 18 | -0 | -1197 | -0 | 0 | -0 | 502 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.02 | 0.10 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 35 | -0 | -1981 | -0 | 0 | -0 | 1499 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.03 | 0.16 | 0.00 | 0.00 | -- |
| 1B | 35 | -0 | -709 | -0 | 0 | -0 | 368 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1I | 35 | -0 | -2491 | -0 | 0 | 0 | 2138 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.03 | 0.21 | 0.00 | 0.00 | -- |
| 1J | 35 | -0 | -199 | -0 | 0 | 0 | -467 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 2 | 35 | -0 | -1284 | -0 | 0 | -0 | 775 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 7 | 35 | -0 | -1433 | -0 | 0 | -0 | 1027 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 8 | 35 | -0 | -1197 | -0 | 0 | -0 | 682 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.02 | 0.10 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 52 | -0 | -1706 | -0 | 0 | 0 | 1499 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 1B | 52 | -0 | -504 | -0 | 0 | 0 | -352 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1I | 52 | -0 | -2141 | -0 | 0 | 0 | 2138 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 1J | 52 | -0 | -69 | -0 | 0 | 0 | -414 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 2 | 52 | -0 | -1025 | -0 | 0 | -0 | 775 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 7 | 52 | -0 | -1182 | -0 | 0 | -0 | 1027 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 8 | 52 | -0 | -948 | -0 | 0 | -0 | 682 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.08 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 70 | -0 | -1706 | -0 | 0 | 0 | 1424 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 1B | 70 | -0 | -504 | -0 | 0 | 0 | -500 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1I | 70 | -0 | -2141 | 0 | 0 | 0 | 1926 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 1J | 70 | -0 | 94 | 0 | 0 | 0 | -460 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 2 | 70 | -0 | -1025 | -0 | 0 | 0 | -519 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 7 | 70 | -0 | -1182 | -0 | 0 | -0 | 870 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 8 | 70 | -0 | -948 | -0 | 0 | 0 | -489 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.08 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 88 | -0 | -1415 | -0 | 0 | 0 | 1061 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 1B | 88 | -0 | -276 | -0 | 0 | 0 | -474 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 88 | -0 | -1785 | 0 | 0 | 0 | 1406 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 1J | 88 | -0 | 94 | 0 | 0 | 0 | -465 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 2 | 88 | -0 | -753 | -0 | 0 | 0 | -519 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.06 | 0.00 | 0.00 | -- |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 88 | -0 | -914 | -0 | 0 | 0 | -542 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 8 | 88 | -0 | -684 | -0 | 0 | 0 | -489 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.06 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 105 | -0 | -1415 | -0 | 0 | 0 | -160 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 1B | 105 | -0 | -276 | -0 | 0 | 0 | -593 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 105 | -0 | -1785 | 0 | 0 | 0 | -606 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 1J | 105 | -0 | 289 | 0 | 0 | 0 | -595 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 2 | 105 | -0 | -753 | -0 | 0 | 0 | -519 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 7 | 105 | -0 | -914 | -0 | 0 | 0 | -542 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 8 | 105 | -0 | -684 | -0 | 0 | 0 | -489 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.06 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 122 | -0 | -1108 | -0 | 0 | 0 | -160 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 1B | 122 | -0 | -26 | -0 | 0 | 0 | -562 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 1I | 122 | -0 | -1423 | 0 | 0 | 0 | -606 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 1J | 122 | -0 | 289 | 0 | 0 | 0 | -505 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 2 | 122 | -0 | -467 | -0 | 0 | 0 | -519 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 122 | -0 | -628 | -0 | 0 | 0 | -542 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 8 | 122 | -0 | -406 | -0 | 0 | 0 | -489 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.03 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 140 | -0 | -1108 | 0 | 0 | 0 | -160 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 1B | 140 | -0 | 247 | 0 | 0 | 0 | -834 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 140 | -0 | -1423 | 0 | 0 | 0 | -606 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 1J | 140 | -0 | 517 | 0 | 0 | 0 | -938 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 140 | -0 | -467 | -0 | 0 | 0 | -519 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 140 | -0 | -628 | -0 | 0 | 0 | -542 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 8 | 140 | -0 | -406 | -0 | 0 | 0 | -489 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.03 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 158 | -0 | -785 | 0 | 0 | 0 | -160 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1B | 158 | -0 | 247 | 0 | 0 | 0 | -950 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 158 | -0 | -1055 | 0 | 0 | 0 | -606 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 1J | 158 | -0 | 517 | 0 | 0 | 0 | -975 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 158 | -0 | -167 | -0 | 0 | 0 | -519 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 7 | 158 | -0 | -324 | -0 | 0 | 0 | -542 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 158 | -0 | -112 | -0 | 0 | 0 | -489 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.00 | 0.01 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 175 | -0 | -785 | 0 | 0 | 0 | -160 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1B | 175 | -0 | 247 | 0 | 0 | 0 | -950 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 175 | -0 | -1055 | 0 | 0 | 0 | -606 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 1J | 175 | -0 | 517 | 0 | 0 | 0 | -975 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 175 | -0 | -167 | -0 | 0 | 0 | -519 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 7 | 175 | -0 | -324 | -0 | 0 | 0 | -542 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 175 | -0 | -112 | -0 | 0 | 0 | -489 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.00 | 0.01 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE05_IP1** Descrizione: **CORDOLI DI FONDAZIONE 19-20-21-22-23**
**ASTA NUM. 12** NI 8 NF 23 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | Fx,M | Bielle | V,Mx | cmq/m | | cm |
| 1A | 0 | -0 | -1494 | 0 | 0 | 0 | -1160 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | 102 | 0 | 0 | 0 | -1974 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | -2327 | 0 | 0 | 0 | 257 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | 936 | 0 | 0 | 0 | -2968 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | -448 | -0 | 0 | 0 | -1880 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | -568 | -0 | 0 | 0 | -1510 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.09 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | -575 | -0 | 0 | 0 | -1871 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.05 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 18 | -0 | -1494 | 0 | 0 | 0 | -1421 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 1B | 18 | -0 | 102 | 0 | 0 | 0 | -1956 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1I | 18 | -0 | -2327 | 0 | 0 | 0 | -1641 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 1J | 18 | -0 | 936 | 0 | 0 | 0 | -2805 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 2 | 18 | -0 | -447 | -0 | 0 | 0 | -1958 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 18 | -0 | -568 | -0 | 0 | 0 | -1610 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.09 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 8 | 18 | -0 | -575 | -0 | 0 | 0 | -1971 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.05 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 35 | -0 | -1494 | 0 | 0 | 0 | -1464 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 1B | 35 | -0 | 142 | 0 | 0 | 0 | -1964 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1I | 35 | -0 | -2327 | 0 | 0 | 0 | -2048 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 1J | 35 | -0 | 936 | 0 | 0 | 0 | -2641 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.16 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 2 | 35 | -0 | -447 | -0 | 0 | 0 | -2006 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 35 | -0 | -568 | -0 | 0 | 0 | -1709 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 8 | 35 | -0 | -575 | -0 | 0 | 0 | -2072 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.05 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 52 | -0 | -1368 | 0 | 0 | 0 | -1464 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1B | 52 | -0 | 142 | 0 | 0 | 0 | -1941 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1I | 52 | -0 | -2127 | 0 | 0 | 0 | -2080 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 1J | 52 | -0 | 901 | 0 | 0 | 0 | -2469 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.15 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 2 | 52 | -0 | -367 | -0 | 0 | 0 | -2006 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 7 | 52 | -0 | -496 | -0 | 0 | 0 | -1750 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 8 | 52 | -0 | -484 | -0 | 0 | 0 | -2078 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.04 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 70 | -0 | -1368 | 0 | 0 | 0 | -1464 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1B | 70 | -0 | 222 | 0 | 0 | 0 | -1970 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 70 | -0 | -2127 | 0 | 0 | 0 | -2080 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 1J | 70 | -0 | 911 | 0 | 0 | 0 | -2325 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 2 | 70 | -0 | -367 | -0 | 0 | 0 | -2006 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 7 | 70 | -0 | -496 | -0 | 0 | 0 | -1765 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 8 | 70 | -0 | -484 | -0 | 0 | 0 | -2078 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.04 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 88 | -0 | -1216 | 0 | 0 | 0 | -1464 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 1B | 88 | -0 | 222 | 0 | 0 | 0 | -2030 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.00 | 0.02 | 0.00 | 0.00 | -- |



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| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1I | 88 | -0 | -1906 | 0 | 0 | 0 | -2080 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.03 | 0.16 | 0.00 | 0.00 | -- |
| 1J | 88 | -0 | 911 | 0 | 0 | 0 | -2102 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 2 | 88 | -0 | -255 | -0 | 0 | 0 | -2006 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 7 | 88 | -0 | -390 | -0 | 0 | 0 | -1765 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 88 | -0 | -363 | -0 | 0 | 0 | -2078 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.00 | 0.03 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 105 | -0 | -1216 | 0 | 0 | 0 | -1464 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 1B | 105 | -0 | 344 | 0 | 0 | 0 | -2168 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 1I | 105 | -0 | -1906 | 0 | 0 | 0 | -2080 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.03 | 0.16 | 0.00 | 0.00 | -- |
| 1J | 105 | -0 | 970 | 0 | 0 | 0 | -2702 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.16 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 2 | 105 | -0 | -255 | -0 | 0 | 0 | -2006 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 7 | 105 | -0 | -390 | -0 | 0 | 0 | -1765 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 105 | -0 | -363 | -0 | 0 | 0 | -2078 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.00 | 0.03 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 122 | -0 | -1036 | 0 | 0 | 0 | -1464 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 1B | 122 | -0 | 344 | 0 | 0 | 0 | -2270 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 1I | 122 | -0 | -1663 | 0 | 0 | 0 | -2080 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 1J | 122 | -0 | 970 | 0 | 0 | 0 | -2969 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 2 | 122 | -0 | -109 | -0 | 0 | 0 | -2006 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 7 | 122 | -0 | -247 | -0 | 0 | 0 | -1765 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 8 | 122 | -0 | -209 | -0 | 0 | 0 | -2078 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 140 | -0 | -1036 | 0 | 0 | 0 | -1464 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 1B | 140 | -0 | 511 | 0 | 0 | 0 | -2294 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1I | 140 | -0 | -1663 | 0 | 0 | 0 | -2069 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 1J | 140 | -0 | 1078 | 0 | 0 | 0 | -3056 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.18 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 2 | 140 | -0 | -109 | -0 | 0 | 0 | -2006 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 7 | 140 | -0 | -247 | -0 | 0 | 0 | -1765 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 8 | 140 | -0 | -209 | -0 | 0 | 0 | -2078 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 158 | -0 | -825 | 0 | 0 | 0 | -1464 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1B | 158 | -0 | 511 | 0 | 0 | 0 | -2294 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1I | 158 | -0 | -1392 | 0 | 0 | 0 | -1729 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1J | 158 | -0 | 1078 | 0 | 0 | 0 | -3056 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.18 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 2 | 158 | -0 | 74 | 0 | 0 | 0 | -2006 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 7 | 158 | -0 | -65 | -0 | 0 | 0 | -1765 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 8 | 158 | -0 | -18 | -0 | 0 | 0 | -2078 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.00 | 0.00 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 175 | -0 | -825 | 0 | 0 | 0 | -1464 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1B | 175 | -0 | 511 | 0 | 0 | 0 | -2294 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1I | 175 | -0 | -1392 | 0 | 0 | 0 | -1563 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1J | 175 | -0 | 1078 | 0 | 0 | 0 | -3056 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.18 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 2 | 175 | -0 | 74 | 0 | 0 | 0 | -2006 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 7 | 175 | -0 | -65 | -0 | 0 | 0 | -1765 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 8 | 175 | -0 | -18 | -0 | 0 | 0 | -2078 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.00 | 0.00 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE05_IP1** Descrizione: **CORDOLI DI FONDAZIONE 19-20-21-22-23**
**ASTA NUM. 13** NI 23 NF 57 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | cmq | | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 0 | -0 | 2986 | 0 | 0 | 0 | -1670 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.04 | 0.25 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | 4010 | 0 | 0 | 0 | -3152 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.05 | 0.33 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | 3152 | 0 | 0 | 0 | -1378 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.04 | 0.26 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | 3844 | 0 | 0 | 0 | -3444 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.20 | 0.05 | 0.32 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | 3678 | 0 | 0 | 0 | -2665 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.15 | 0.05 | 0.30 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | 3506 | 0 | 0 | 0 | -2334 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.13 | 0.05 | 0.29 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | 3670 | 0 | 0 | 0 | -2741 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.16 | 0.05 | 0.30 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 18 | -0 | 2986 | 0 | 0 | 0 | -1670 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.04 | 0.25 | 0.00 | 0.00 | -- |
| 1B | 18 | -0 | 4010 | 0 | 0 | 0 | -3152 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.05 | 0.33 | 0.00 | 0.00 | -- |
| 1I | 18 | -0 | 3152 | 0 | 0 | 0 | -1378 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.04 | 0.26 | 0.00 | 0.00 | -- |
| 1J | 18 | -0 | 3844 | 0 | 0 | 0 | -3444 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.20 | 0.05 | 0.32 | 0.00 | 0.00 | -- |
| 2 | 18 | -0 | 3678 | 0 | 0 | 0 | -2665 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.15 | 0.05 | 0.30 | 0.00 | 0.00 | -- |
| 7 | 18 | -0 | 3506 | 0 | 0 | 0 | -2334 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.13 | 0.05 | 0.29 | 0.00 | 0.00 | -- |
| 8 | 18 | -0 | 3670 | 0 | 0 | 0 | -2741 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.16 | 0.05 | 0.30 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 36 | -0 | 3277 | 0 | 0 | 0 | -1670 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.04 | 0.27 | 0.00 | 0.00 | -- |
| 1B | 36 | -0 | 4293 | 0 | 0 | 0 | -3152 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.06 | 0.35 | 0.00 | 0.00 | -- |
| 1I | 36 | -0 | 3489 | 0 | 0 | 0 | -1378 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.05 | 0.29 | 0.00 | 0.00 | -- |
| 1J | 36 | -0 | 4081 | 0 | 0 | 0 | -3444 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.20 | 0.05 | 0.34 | 0.00 | 0.00 | -- |
| 2 | 36 | -0 | 3959 | 0 | 0 | 0 | -2665 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.15 | 0.05 | 0.33 | 0.00 | 0.00 | -- |
| 7 | 36 | -0 | 3787 | 0 | 0 | 0 | -2334 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.13 | 0.05 | 0.31 | 0.00 | 0.00 | -- |
| 8 | 36 | -0 | 3957 | 0 | 0 | 0 | -2741 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.16 | 0.05 | 0.33 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 54 | -0 | 3277 | 0 | 0 | 0 | 2178 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.04 | 0.27 | 0.00 | 0.00 | -- |
| 1B | 54 | -0 | 4293 | 0 | 0 | 0 | -3152 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.06 | 0.35 | 0.00 | 0.00 | -- |
| 1I | 54 | -0 | 3489 | 0 | 0 | 0 | 2829 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.05 | 0.29 | 0.00 | 0.00 | -- |
| 1J | 54 | -0 | 4081 | 0 | 0 | 0 | -3444 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.20 | 0.05 | 0.34 | 0.00 | 0.00 | -- |
| 2 | 54 | -0 | 3959 | 0 | 0 | 0 | -2665 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.15 | 0.05 | 0.33 | 0.00 | 0.00 | -- |
| 7 | 54 | -0 | 3787 | 0 | 0 | 0 | -2334 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.13 | 0.05 | 0.31 | 0.00 | 0.00 | -- |
| 8 | 54 | -0 | 3957 | 0 | 0 | 0 | -2741 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.16 | 0.05 | 0.33 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 72 | -0 | 3611 | 0 | 0 | 0 | 3003 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.18 | 0.05 | 0.30 | 0.00 | 0.00 | -- |
| 1B | 72 | -0 | 4637 | 0 | 0 | 0 | -3152 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.06 | 0.38 | 0.00 | 0.00 | -- |
| 1I | 72 | -0 | 3865 | 0 | 0 | 0 | 3752 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.05 | 0.32 | 0.00 | 0.00 | -- |
| 1J | 72 | -0 | 4383 | 0 | 0 | 0 | -3444 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.20 | 0.06 | 0.36 | 0.00 | 0.00 | -- |
| 2 | 72 | -0 | 4291 | 0 | 0 | -0 | 2837 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.16 | 0.06 | 0.35 | 0.00 | 0.00 | -- |
| 7 | 72 | -0 | 4121 | 0 | 0 | -0 | 2934 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.17 | 0.06 | 0.34 | 0.00 | 0.00 | -- |
| 8 | 72 | -0 | 4294 | 0 | 0 | -0 | 2758 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.16 | 0.06 | 0.35 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 90 | -0 | 3611 | 0 | 0 | -0 | 3693 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.05 | 0.30 | 0.00 | 0.00 | -- |
| 1B | 90 | -0 | 4637 | 0 | 0 | -0 | 3503 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.06 | 0.38 | 0.00 | 0.00 | -- |
| 1I | 90 | -0 | 3865 | 0 | 0 | 0 | 4490 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.26 | 0.05 | 0.32 | 0.00 | 0.00 | -- |
| 1J | 90 | -0 | 4383 | 0 | 0 | 0 | -2915 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.06 | 0.36 | 0.00 | 0.00 | -- |
| 2 | 90 | -0 | 4291 | 0 | 0 | -0 | 3609 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.20 | 0.06 | 0.35 | 0.00 | 0.00 | -- |
| 7 | 90 | -0 | 4121 | 0 | 0 | -0 | 3676 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.21 | 0.06 | 0.34 | 0.00 | 0.00 | -- |
| 8 | 90 | -0 | 4294 | 0 | 0 | -0 | 3531 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.20 | 0.06 | 0.35 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 108 | -0 | 3984 | 0 | 0 | -0 | 4622 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.27 | 0.05 | 0.33 | 0.00 | 0.00 | -- |
| 1B | 108 | -0 | 5044 | 0 | 0 | -0 | 4367 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.26 | 0.07 | 0.42 | 0.00 | 0.00 | -- |
| 1I | 108 | -0 | 4270 | 0 | 0 | -0 | 5488 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.32 | 0.06 | 0.35 | 0.00 | 0.00 | -- |
| 1J | 108 | -0 | 4758 | 0 | 0 | -0 | 3693 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.06 | 0.39 | 0.00 | 0.00 | -- |
| 2 | 108 | -0 | 4676 | 0 | 0 | -0 | 4628 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.26 | 0.06 | 0.39 | 0.00 | 0.00 | -- |
| 7 | 108 | -0 | 4506 | 0 | 0 | -0 | 4665 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.26 | 0.06 | 0.37 | 0.00 | 0.00 | -- |
| 8 | 108 | -0 | 4684 | 0 | 0 | -0 | 4554 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.26 | 0.06 | 0.39 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 126 | -0 | 3984 | 0 | 0 | -0 | 5524 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.33 | 0.05 | 0.33 | 0.00 | 0.00 | -- |
| 1B | 126 | -0 | 5044 | 0 | 0 | -0 | 4367 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.26 | 0.07 | 0.42 | 0.00 | 0.00 | -- |
| 1I | 126 | -0 | 4270 | 0 | 0 | -0 | 6261 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.37 | 0.06 | 0.35 | 0.00 | 0.00 | -- |
| 1J | 126 | -0 | 4758 | 0 | 0 | -0 | 3945 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.23 | 0.06 | 0.39 | 0.00 | 0.00 | -- |
| 2 | 126 | -0 | 4676 | 0 | 0 | -0 | 5152 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.29 | 0.06 | 0.39 | 0.00 | 0.00 | -- |
| 7 | 126 | -0 | 4506 | 0 | 0 | -0 | 5175 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.29 | 0.06 | 0.37 | 0.00 | 0.00 | -- |
| 8 | 126 | -0 | 4684 | 0 | 0 | -0 | 5080 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.29 | 0.06 | 0.39 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 144 | -0 | 4392 | 0 | 0 | -0 | 5081 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.30 | 0.06 | 0.36 | 0.00 | 0.00 | -- |
| 1B | 144 | -0 | 5512 | 0 | 0 | -0 | 3640 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.07 | 0.45 | 0.00 | 0.00 | -- |
| 1I | 144 | -0 | 4693 | 0 | 0 | -0 | 5515 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.32 | 0.06 | 0.39 | 0.00 | 0.00 | -- |
| 1J | 144 | -0 | 5211 | 0 | 0 | -0 | 3206 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.07 | 0.43 | 0.00 | 0.00 | -- |
| 2 | 144 | -0 | 5109 | 0 | 0 | -0 | 4386 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.25 | 0.07 | 0.42 | 0.00 | 0.00 | -- |
| 7 | 144 | -0 | 4939 | 0 | 0 | -0 | 4434 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.25 | 0.07 | 0.41 | 0.00 | 0.00 | -- |
| 8 | 144 | -0 | 5122 | 0 | 0 | -0 | 4312 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.24 | 0.07 | 0.42 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 162 | -0 | 4392 | 0 | 0 | -0 | 5081 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.30 | 0.06 | 0.36 | 0.00 | 0.00 | -- |
| 1B | 162 | -0 | 5512 | 0 | 0 | -0 | 3640 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.07 | 0.45 | 0.00 | 0.00 | -- |
| 1I | 162 | -0 | 4693 | 0 | 0 | -0 | 5515 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.32 | 0.06 | 0.39 | 0.00 | 0.00 | -- |
| 1J | 162 | -0 | 5211 | 0 | 0 | -0 | 3206 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.07 | 0.43 | 0.00 | 0.00 | -- |
| 2 | 162 | -0 | 5109 | 0 | 0 | -0 | 4386 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.25 | 0.07 | 0.42 | 0.00 | 0.00 | -- |
| 7 | 162 | -0 | 4939 | 0 | 0 | -0 | 4434 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.25 | 0.07 | 0.41 | 0.00 | 0.00 | -- |
| 8 | 162 | -0 | 5122 | 0 | 0 | -0 | 4312 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.24 | 0.07 | 0.42 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 180 | -0 | 4392 | 0 | 0 | -0 | 5081 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.30 | 0.06 | 0.36 | 0.00 | 0.00 | -- |
| 1B | 180 | -0 | 5512 | 0 | 0 | -0 | 3625 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.07 | 0.45 | 0.00 | 0.00 | -- |
| 1I | 180 | -0 | 4693 | 0 | 0 | -0 | 5515 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.32 | 0.06 | 0.39 | 0.00 | 0.00 | -- |
| 1J | 180 | -0 | 5211 | 0 | 0 | -0 | 3203 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.07 | 0.43 | 0.00 | 0.00 | -- |
| 2 | 180 | -0 | 5109 | 0 | 0 | -0 | 4385 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.25 | 0.07 | 0.42 | 0.00 | 0.00 | -- |
| 7 | 180 | -0 | 4939 | 0 | 0 | -0 | 4434 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.25 | 0.07 | 0.41 | 0.00 | 0.00 | -- |
| 8 | 180 | -0 | 5122 | 0 | 0 | -0 | 4312 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.24 | 0.07 | 0.42 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE05_IP1** Descrizione: **CORDOLI DI FONDAZIONE 19-20-21-22-23**
**ASTA NUM. 14** NI 57 NF 21 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | | kg | | | kg*m | | | | cmq | | | | Fx,M | Bielle | V,Mx | | cmq/m | cm |
| 1A | 0 | -0 | -1413 | -0 | 0 | -0 | 5370 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.32 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | -410 | -0 | 0 | -0 | 4617 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.27 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | -1136 | -0 | 0 | -0 | 6044 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.36 | 0.02 | 0.09 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | -687 | -0 | 0 | -0 | 3942 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.23 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | -748 | -0 | 0 | -0 | 4992 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.28 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | -915 | -0 | 0 | -0 | 5065 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.29 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | -744 | -0 | 0 | -0 | 4920 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.28 | 0.01 | 0.06 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 20 | -0 | -1413 | -0 | 0 | -0 | 5370 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.32 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 1B | 20 | -0 | -410 | -0 | 0 | -0 | 4617 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.27 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 1I | 20 | -0 | -1136 | -0 | 0 | -0 | 6044 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.36 | 0.02 | 0.09 | 0.00 | 0.00 | -- |
| 1J | 20 | -0 | -687 | -0 | 0 | -0 | 3942 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.23 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 2 | 20 | -0 | -748 | -0 | 0 | -0 | 4992 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.28 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 7 | 20 | -0 | -915 | -0 | 0 | -0 | 5065 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.29 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 8 | 20 | -0 | -744 | -0 | 0 | -0 | 4920 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.28 | 0.01 | 0.06 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 39 | -0 | -1413 | -0 | 0 | -0 | 5507 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.32 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 1B | 39 | -0 | -410 | -0 | 0 | -0 | 4544 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.27 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 1I | 39 | -0 | -1136 | -0 | 0 | -0 | 6181 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.36 | 0.02 | 0.09 | 0.00 | 0.00 | -- |
| 1J | 39 | -0 | -687 | -0 | 0 | -0 | 4079 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.24 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 2 | 39 | -0 | -748 | -0 | 0 | -0 | 5104 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.29 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 7 | 39 | -0 | -915 | -0 | 0 | -0 | 5202 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.29 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 8 | 39 | -0 | -744 | -0 | 0 | -0 | 5032 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.28 | 0.01 | 0.06 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 59 | -0 | -911 | 0 | 0 | -0 | 5507 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.32 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1B | 59 | -0 | 210 | 0 | 0 | -0 | 4254 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.25 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 59 | -0 | -646 | -0 | 0 | -0 | 6176 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.36 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1J | 59 | -0 | -55 | -0 | 0 | -0 | 3677 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 2 | 59 | -0 | -191 | -0 | 0 | -0 | 4894 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.28 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 7 | 59 | -0 | -359 | -0 | 0 | -0 | 5001 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.28 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 59 | -0 | -182 | -0 | 0 | -0 | 4820 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.27 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 79 | -0 | -911 | 0 | 0 | -0 | 5507 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.32 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1B | 79 | -0 | 861 | 0 | 0 | -0 | 4509 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.27 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1I | 79 | -0 | -646 | 0 | 0 | -0 | 6110 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.36 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1J | 79 | -0 | 606 | 0 | 0 | -0 | 3959 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.23 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 2 | 79 | -0 | 391 | 0 | 0 | -0 | 4985 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.28 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 7 | 79 | -0 | -359 | -0 | 0 | -0 | 4930 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.28 | 0.00 | 0.03 | 0.00 | 0.00 | -- |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

```
   8    79       -0      405         0         0       -0     4927     4.02   4.02   8.04   8.04 0.06   0.28    0.01    0.03    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A    98       -0     -391         0         0       -0     5507     4.02   4.02   8.04   8.04 0.22   0.32    0.01    0.03    0.00   0.00       --
 1B    98       -0      861         0         0       -0     4456     4.02   4.02   8.04   8.04 0.22   0.26    0.01    0.07    0.00   0.00       --
 1I    98       -0     -137         0         0       -0     5824     4.02   4.02   8.04   8.04 0.22   0.34    0.00    0.01    0.00   0.00       --
 1J    98       -0      606         0         0       -0     4011     4.02   4.02   8.04   8.04 0.22   0.24    0.01    0.05    0.00   0.00       --
   2   98       -0      391         0         0       -0     5062     4.02   4.02   8.04   8.04 0.06   0.29    0.01    0.03    0.00   0.00       --
   7   98       -0      220         0         0       -0     4884     4.02   4.02   8.04   8.04 0.06   0.28    0.00    0.02    0.00   0.00       --
   8   98       -0      405         0         0       -0     5007     4.02   4.02   8.04   8.04 0.06   0.28    0.01    0.03    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A   118       -0     -391         0         0       -0     5851     4.02   4.02   8.04   8.04 0.22   0.34    0.01    0.03    0.00   0.00       --
 1B   118       -0     1529         0         0       -0     4305     4.02   4.02   8.04   8.04 0.22   0.25    0.02    0.13    0.00   0.00       --
 1I   118       -0      378         0         0       -0     6019     4.02   4.02   8.04   8.04 0.22   0.35    0.01    0.03    0.00   0.00       --
 1J   118       -0     1286         0         0       -0     4498     4.02   4.02   8.04   8.04 0.22   0.26    0.02    0.11    0.00   0.00       --
   2  118       -0      985         0         0       -0     5520     4.02   4.02   8.04   8.04 0.06   0.31    0.01    0.08    0.00   0.00       --
   7  118       -0      811         0         0       -0     5307     4.02   4.02   8.04   8.04 0.06   0.30    0.01    0.07    0.00   0.00       --
   8  118       -0     1006         0         0       -0     5472     4.02   4.02   8.04   8.04 0.06   0.31    0.01    0.08    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A   138       -0      135         0         0       -0     5955     4.02   4.02   8.04   8.04 0.22   0.35    0.00    0.01    0.00   0.00       --
 1B   138       -0     1529         0         0       -0     4305     4.02   4.02   8.04   8.04 0.22   0.25    0.02    0.13    0.00   0.00       --
 1I   138       -0      378         0         0       -0     6168     4.02   4.02   8.04   8.04 0.22   0.36    0.01    0.03    0.00   0.00       --
 1J   138       -0     1286         0         0       -0     4646     4.02   4.02   8.04   8.04 0.22   0.27    0.02    0.11    0.00   0.00       --
   2  138       -0      985         0         0       -0     5713     4.02   4.02   8.04   8.04 0.06   0.32    0.01    0.08    0.00   0.00       --
   7  138       -0      811         0         0       -0     5466     4.02   4.02   8.04   8.04 0.06   0.31    0.01    0.07    0.00   0.00       --
   8  138       -0     1006         0         0       -0     5670     4.02   4.02   8.04   8.04 0.06   0.32    0.01    0.08    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A   158       -0      656         0         0       -0     6560     4.02   4.02   8.04   8.04 0.22   0.39    0.01    0.05    0.00   0.00       --
 1B   158       -0     2202         0         0       -0     4108     4.02   4.02   8.04   8.04 0.22   0.24    0.03    0.18    0.00   0.00       --
 1I   158       -0      885         0         0       -0     6372     4.02   4.02   8.04   8.04 0.22   0.38    0.01    0.07    0.00   0.00       --
 1J   158       -0     1973         0         0       -0     4431     4.02   4.02   8.04   8.04 0.22   0.26    0.03    0.16    0.00   0.00       --
   2  158       -0     1579         0         0       -0     5661     4.02   4.02   8.04   8.04 0.06   0.32    0.02    0.13    0.00   0.00       --
   7  158       -0     1402         0         0       -0     5448     4.02   4.02   8.04   8.04 0.06   0.31    0.02    0.12    0.00   0.00       --
   8  158       -0     1606         0         0       -0     5615     4.02   4.02   8.04   8.04 0.06   0.32    0.02    0.13    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A   177       -0      656         0         0       -0     6696     4.02   4.02   8.04   8.04 0.22   0.39    0.01    0.05    0.00   0.00       --
 1B   177       -0     2202         0         0       -0     4108     4.02   4.02   8.04   8.04 0.22   0.24    0.03    0.18    0.00   0.00       --
 1I   177       -0      885         0         0       -0     6372     4.02   4.02   8.04   8.04 0.22   0.38    0.01    0.07    0.00   0.00       --
 1J   177       -0     1973         0         0       -0     4431     4.02   4.02   8.04   8.04 0.22   0.26    0.03    0.16    0.00   0.00       --
   2  177       -0     1579         0         0       -0     5661     4.02   4.02   8.04   8.04 0.06   0.32    0.02    0.13    0.00   0.00       --
   7  177       -0     1402         0         0       -0     5448     4.02   4.02   8.04   8.04 0.06   0.31    0.02    0.12    0.00   0.00       --
   8  177       -0     1606         0         0       -0     5615     4.02   4.02   8.04   8.04 0.06   0.32    0.02    0.13    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A   197       -0      656         0         0       -0     6696     4.02   4.02   8.04   8.04 0.22   0.39    0.01    0.05    0.00   0.00       --
 1B   197       -0     2202         0         0       -0     4090     4.02   4.02   8.04   8.04 0.22   0.24    0.03    0.18    0.00   0.00       --
 1I   197       -0      885         0         0       -0     6372     4.02   4.02   8.04   8.04 0.22   0.38    0.01    0.07    0.00   0.00       --
 1J   197       -0     1973         0         0       -0     4431     4.02   4.02   8.04   8.04 0.22   0.26    0.03    0.16    0.00   0.00       --
   2  197       -0     1579         0         0       -0     5661     4.02   4.02   8.04   8.04 0.06   0.32    0.02    0.13    0.00   0.00       --
   7  197       -0     1402         0         0       -0     5448     4.02   4.02   8.04   8.04 0.06   0.31    0.02    0.12    0.00   0.00       --
   8  197       -0     1606         0         0       -0     5615     4.02   4.02   8.04   8.04 0.06   0.32    0.02    0.13    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

Nome travata: CORDOLI DI FONDAZIONE05_IP1   Descrizione: CORDOLI DI FONDAZIONE 19-20-21-22-23
ASTA NUM. 15       NI 21     NF 7     SEZ.   Rp   B= 60.0   H= 60.0   (trave di fondazione)

armatura base = 4 X 2.01       per le armature aggiuntive consultare il tabulato

-------------------------------------------------------------------------------------------------------------------------------------------
 NC     x        Fx        Fy        Fz        Mx        My        Mz    APOST   AANT   AINF   ASUP   x/d   Indice   resistenza   aswta aswto   PASSO
        --       ----------------------       ----------------------       ----------------------       ----------------  ----------  -----
        cm                 kg                          kg*m                          cmq                        Fx,M   Bielle   V,Mx       cmq/m          cm
-------------------------------------------------------------------------------------------------------------------------------------------

 1A     0       -0    -5648       -0         0       -0     5864     4.02   4.02   8.04   8.04 0.22   0.35    0.08    0.47    0.00   0.00       --
 1B     0       -0    -4108       -0         0       -0     4075     4.02   4.02   8.04   8.04 0.22   0.24    0.05    0.34    0.00   0.00       --
 1I     0       -0    -5450       -0         0       -0     5818     4.02   4.02   8.04   8.04 0.22   0.34    0.07    0.45    0.00   0.00       --
 1J     0       -0    -4306       -0         0       -0     4115     4.02   4.02   8.04   8.04 0.22   0.24    0.06    0.36    0.00   0.00       --
   2    0       -0    -4718       -0         0       -0     5200     4.02   4.02   8.04   8.04 0.06   0.29    0.06    0.39    0.00   0.00       --
   7    0       -0    -4898       -0         0       -0     5009     4.02   4.02   8.04   8.04 0.06   0.28    0.07    0.40    0.00   0.00       --
   8    0       -0    -4698       -0         0       -0     5160     4.02   4.02   8.04   8.04 0.06   0.29    0.06    0.39    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A    22       -0    -5648       -0         0       -0     5864     4.02   4.02   8.04   8.04 0.22   0.35    0.08    0.47    0.00   0.00       --
 1B    22       -0    -4108       -0         0       -0     4075     4.02   4.02   8.04   8.04 0.22   0.24    0.05    0.34    0.00   0.00       --
 1I    22       -0    -5450       -0         0       -0     5818     4.02   4.02   8.04   8.04 0.22   0.34    0.07    0.45    0.00   0.00       --
 1J    22       -0    -4306       -0         0       -0     4120     4.02   4.02   8.04   8.04 0.22   0.24    0.06    0.36    0.00   0.00       --
   2   22       -0    -4718       -0         0       -0     5200     4.02   4.02   8.04   8.04 0.06   0.29    0.06    0.39    0.00   0.00       --
   7   22       -0    -4898       -0         0       -0     5009     4.02   4.02   8.04   8.04 0.06   0.28    0.07    0.40    0.00   0.00       --
   8   22       -0    -4698       -0         0       -0     5160     4.02   4.02   8.04   8.04 0.06   0.29    0.06    0.39    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A    43       -0    -5648       -0         0       -0     6595     4.02   4.02   8.04   8.04 0.22   0.39    0.08    0.47    0.00   0.00       --
 1B    43       -0    -4108       -0         0       -0     4807     4.02   4.02   8.04   8.04 0.22   0.28    0.05    0.34    0.00   0.00       --
 1I    43       -0    -5450       -0         0       -0     6555     4.02   4.02   8.04   8.04 0.22   0.39    0.07    0.45    0.00   0.00       --
 1J    43       -0    -4306       -0         0       -0     4847     4.02   4.02   8.04   8.04 0.22   0.29    0.06    0.36    0.00   0.00       --
   2   43       -0    -4718       -0         0       -0     5908     4.02   4.02   8.04   8.04 0.06   0.33    0.06    0.39    0.00   0.00       --
   7   43       -0    -4898       -0         0       -0     5744     4.02   4.02   8.04   8.04 0.06   0.33    0.07    0.40    0.00   0.00       --
   8   43       -0    -4698       -0         0       -0     5865     4.02   4.02   8.04   8.04 0.06   0.33    0.06    0.39    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A    64       -0    -5131       -0         0       -0     6595     4.02   4.02   8.04   8.04 0.22   0.39    0.07    0.42    0.00   0.00       --
 1B    64       -0    -3417       -0         0       -0     3620     4.02   4.02   8.04   8.04 0.22   0.21    0.05    0.28    0.00   0.00       --
 1I    64       -0    -4960       -0         0       -0     6555     4.02   4.02   8.04   8.04 0.22   0.39    0.07    0.41    0.00   0.00       --
 1J    64       -0    -3588       -0         0       -0     4244     4.02   4.02   8.04   8.04 0.22   0.25    0.05    0.30    0.00   0.00       --
   2   64       -0    -4120       -0         0       -0     5635     4.02   4.02   8.04   8.04 0.06   0.32    0.06    0.34    0.00   0.00       --
   7   64       -0    -4303       -0         0       -0     5472     4.02   4.02   8.04   8.04 0.06   0.31    0.06    0.36    0.00   0.00       --
   8   64       -0    -4091       -0         0       -0     5589     4.02   4.02   8.04   8.04 0.06   0.32    0.05    0.34    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A    86       -0    -5131       -0         0       -0     6440     4.02   4.02   8.04   8.04 0.22   0.38    0.07    0.42    0.00   0.00       --
 1B    86       -0    -3417       -0         0       -0     2574     4.02   4.02   8.04   8.04 0.22   0.15    0.05    0.28    0.00   0.00       --
 1I    86       -0    -4960       -0         0       -0     5647     4.02   4.02   8.04   8.04 0.22   0.33    0.07    0.41    0.00   0.00       --
```



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1J | 86 | -0 | -3588 | -0 | 0 | -0 | 3367 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.20 | 0.05 | 0.30 | 0.00 | 0.00 | -- |
| 2 | 86 | -0 | -4120 | -0 | 0 | -0 | 4750 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.27 | 0.06 | 0.34 | 0.00 | 0.00 | -- |
| 7 | 86 | -0 | -4303 | -0 | 0 | -0 | 4547 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.26 | 0.06 | 0.36 | 0.00 | 0.00 | -- |
| 8 | 86 | -0 | -4091 | -0 | 0 | -0 | 4709 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.27 | 0.05 | 0.34 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 108 | -0 | -4660 | -0 | 0 | 0 | 5484 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.32 | 0.06 | 0.38 | 0.00 | 0.00 | -- |
| 1B | 108 | -0 | -2774 | -0 | 0 | 0 | -2342 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.04 | 0.23 | 0.00 | 0.00 | -- |
| 1I | 108 | -0 | -4532 | -0 | 0 | -0 | 4557 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.27 | 0.06 | 0.37 | 0.00 | 0.00 | -- |
| 1J | 108 | -0 | -2902 | -0 | 0 | -0 | 2143 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.04 | 0.24 | 0.00 | 0.00 | -- |
| 2 | 108 | -0 | -3571 | -0 | 0 | -0 | 3630 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.21 | 0.05 | 0.29 | 0.00 | 0.00 | -- |
| 7 | 108 | -0 | -3757 | -0 | 0 | -0 | 3389 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.19 | 0.05 | 0.31 | 0.00 | 0.00 | -- |
| 8 | 108 | -0 | -3531 | -0 | 0 | -0 | 3591 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.20 | 0.05 | 0.29 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 129 | -0 | -4660 | -0 | 0 | 0 | 4831 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.28 | 0.06 | 0.38 | 0.00 | 0.00 | -- |
| 1B | 129 | -0 | -2774 | -0 | 0 | 0 | -3286 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.04 | 0.23 | 0.00 | 0.00 | -- |
| 1I | 129 | -0 | -4532 | -0 | 0 | 0 | 3743 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.06 | 0.37 | 0.00 | 0.00 | -- |
| 1J | 129 | -0 | -2902 | -0 | 0 | 0 | -2363 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.04 | 0.24 | 0.00 | 0.00 | -- |
| 2 | 129 | -0 | -3571 | -0 | 0 | -0 | 2862 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.16 | 0.05 | 0.29 | 0.00 | 0.00 | -- |
| 7 | 129 | -0 | -3757 | -0 | 0 | -0 | 2582 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.15 | 0.05 | 0.31 | 0.00 | 0.00 | -- |
| 8 | 129 | -0 | -3531 | -0 | 0 | -0 | 2832 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.16 | 0.05 | 0.29 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 150 | -0 | -4237 | -0 | 0 | 0 | 4072 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.24 | 0.06 | 0.35 | 0.00 | 0.00 | -- |
| 1B | 150 | -0 | -2189 | -0 | 0 | 0 | -3805 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 1I | 150 | -0 | -4168 | -0 | 0 | 0 | 2970 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.06 | 0.34 | 0.00 | 0.00 | -- |
| 1J | 150 | -0 | -2258 | -0 | 0 | 0 | -2791 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.16 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 2 | 150 | -0 | -3078 | -0 | 0 | 0 | -1886 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.04 | 0.25 | 0.00 | 0.00 | -- |
| 7 | 150 | -0 | -3264 | -0 | 0 | 0 | -2445 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.14 | 0.04 | 0.27 | 0.00 | 0.00 | -- |
| 8 | 150 | -0 | -3027 | -0 | 0 | 0 | -1842 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.04 | 0.25 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 172 | -0 | -4237 | -0 | 0 | 0 | 3585 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.06 | 0.35 | 0.00 | 0.00 | -- |
| 1B | 172 | -0 | -2189 | -0 | 0 | 0 | -4700 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.28 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 1I | 172 | -0 | -4168 | -0 | 0 | 0 | -977 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.06 | 0.34 | 0.00 | 0.00 | -- |
| 1J | 172 | -0 | -2257 | -0 | 0 | 0 | -3632 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 2 | 172 | -0 | -3078 | -0 | 0 | 0 | -1886 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.04 | 0.25 | 0.00 | 0.00 | -- |
| 7 | 172 | -0 | -3264 | -0 | 0 | 0 | -2445 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.14 | 0.04 | 0.27 | 0.00 | 0.00 | -- |
| 8 | 172 | -0 | -3027 | -0 | 0 | 0 | -1842 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.04 | 0.25 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 194 | -0 | -3857 | -0 | 0 | 0 | 2980 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.18 | 0.05 | 0.32 | 0.00 | 0.00 | -- |
| 1B | 194 | -0 | -1665 | -0 | 0 | 0 | -4948 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.29 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 1I | 194 | -0 | -3867 | -0 | 0 | 0 | -977 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.05 | 0.32 | 0.00 | 0.00 | -- |
| 1J | 194 | -0 | -1655 | -0 | 0 | 0 | -3826 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.23 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 2 | 194 | -0 | -2642 | -0 | 0 | 0 | -1886 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.04 | 0.22 | 0.00 | 0.00 | -- |
| 7 | 194 | -0 | -2824 | -0 | 0 | 0 | -2445 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.14 | 0.04 | 0.23 | 0.00 | 0.00 | -- |
| 8 | 194 | -0 | -2579 | -0 | 0 | 0 | -1842 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.03 | 0.21 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 215 | -0 | -3857 | -0 | 0 | 0 | 146 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.05 | 0.32 | 0.00 | 0.00 | -- |
| 1B | 215 | -0 | -1665 | -0 | 0 | 0 | -4948 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.29 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 1I | 215 | -0 | -3867 | -0 | 0 | 0 | -977 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.05 | 0.32 | 0.00 | 0.00 | -- |
| 1J | 215 | -0 | -1655 | -0 | 0 | 0 | -3826 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.23 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 2 | 215 | -0 | -2642 | -0 | 0 | 0 | -1886 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.04 | 0.22 | 0.00 | 0.00 | -- |
| 7 | 215 | -0 | -2824 | -0 | 0 | 0 | -2445 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.14 | 0.04 | 0.23 | 0.00 | 0.00 | -- |
| 8 | 215 | -0 | -2579 | -0 | 0 | 0 | -1842 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.03 | 0.21 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE06_IP1** Descrizione: **CORDOLI DI FONDAZIONE 24-25-26**
**ASTA NUM. 16** NI 39 NF 34 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 0 | -0 | -2088 | -0 | 0 | -0 | 1871 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.03 | 0.17 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | -1572 | -0 | 0 | -0 | 1183 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | -2509 | -0 | 0 | -0 | 1783 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.03 | 0.21 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | -1151 | -0 | 0 | -0 | 1264 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | -1688 | -0 | 0 | -0 | 1188 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | -1796 | -0 | 0 | -0 | 1534 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.09 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | -1722 | -0 | 0 | -0 | 1182 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.14 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 18 | -0 | -2088 | -0 | 0 | -0 | 1871 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.03 | 0.17 | 0.00 | 0.00 | -- |
| 1B | 18 | -0 | -1572 | -0 | 0 | -0 | 1184 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1I | 18 | -0 | -2509 | -0 | 0 | -0 | 1783 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.03 | 0.21 | 0.00 | 0.00 | -- |
| 1J | 18 | -0 | -1151 | -0 | 0 | -0 | 1272 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 2 | 18 | -0 | -1688 | -0 | 0 | -0 | 1188 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 7 | 18 | -0 | -1796 | -0 | 0 | -0 | 1534 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.09 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 8 | 18 | -0 | -1722 | -0 | 0 | -0 | 1182 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.14 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 35 | -0 | -2088 | -0 | 0 | -0 | 2147 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.03 | 0.17 | 0.00 | 0.00 | -- |
| 1B | 35 | -0 | -1572 | -0 | 0 | -0 | 1457 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1I | 35 | -0 | -2509 | -0 | 0 | -0 | 2066 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.03 | 0.21 | 0.00 | 0.00 | -- |
| 1J | 35 | -0 | -1151 | -0 | 0 | -0 | 1538 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 2 | 35 | -0 | -1688 | -0 | 0 | -0 | 1441 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 7 | 35 | -0 | -1796 | -0 | 0 | -0 | 1803 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 8 | 35 | -0 | -1722 | -0 | 0 | -0 | 1440 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.02 | 0.14 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 52 | -0 | -1869 | -0 | 0 | -0 | 2147 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 1B | 52 | -0 | -1349 | -0 | 0 | -0 | 1366 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1I | 52 | -0 | -2222 | -0 | 0 | -0 | 2066 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 1J | 52 | -0 | -996 | -0 | 0 | -0 | 1246 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 2 | 52 | -0 | -1461 | -0 | 0 | -0 | 1441 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 7 | 52 | -0 | -1580 | -0 | 0 | -0 | 1803 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 8 | 52 | -0 | -1489 | -0 | 0 | -0 | 1440 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.02 | 0.12 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0



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| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 70 | -0 | -1869 | -0 | 0 | -0 | 2147 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 1B | 70 | -0 | -1349 | -0 | 0 | -0 | 1041 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1I | 70 | -0 | -2222 | -0 | 0 | -0 | 2066 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 1J | 70 | -0 | -996 | -0 | 0 | -0 | 862 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 2 | 70 | -0 | -1461 | -0 | 0 | -0 | 1276 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 7 | 70 | -0 | -1580 | -0 | 0 | -0 | 1634 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.09 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 8 | 70 | -0 | -1489 | -0 | 0 | -0 | 1271 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.12 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 88 | -0 | -1659 | -0 | 0 | 0 | 1889 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 1B | 88 | -0 | -1115 | -0 | 0 | 0 | -830 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 1I | 88 | -0 | -1945 | -0 | 0 | 0 | 2066 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.03 | 0.16 | 0.00 | 0.00 | -- |
| 1J | 88 | -0 | -829 | -0 | 0 | 0 | -647 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 2 | 88 | -0 | -1235 | -0 | 0 | -0 | 915 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 7 | 88 | -0 | -1363 | -0 | 0 | -0 | 1257 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 8 | 88 | -0 | -1260 | -0 | 0 | -0 | 904 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.02 | 0.10 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 105 | -0 | -1659 | -0 | 0 | 0 | 1693 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 1B | 105 | -0 | -1115 | -0 | 0 | 0 | -1120 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 1I | 105 | -0 | -1945 | -0 | 0 | 0 | 1928 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.03 | 0.16 | 0.00 | 0.00 | -- |
| 1J | 105 | -0 | -829 | -0 | 0 | 0 | -987 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 2 | 105 | -0 | -1235 | -0 | 0 | 0 | -724 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 7 | 105 | -0 | -1363 | -0 | 0 | -0 | 1018 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 8 | 105 | -0 | -1260 | -0 | 0 | 0 | -769 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.02 | 0.10 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 122 | -0 | -1461 | -0 | 0 | 0 | 1413 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 1B | 122 | -0 | -875 | -0 | 0 | 0 | -1221 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1I | 122 | -0 | -1681 | -0 | 0 | 0 | 1644 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 1J | 122 | -0 | -655 | -0 | 0 | 0 | -1169 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 2 | 122 | -0 | -1012 | -0 | 0 | 0 | -724 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 7 | 122 | -0 | -1148 | -0 | 0 | 0 | -584 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.02 | 0.09 | 0.00 | 0.00 | -- |
| 8 | 122 | -0 | -1033 | -0 | 0 | 0 | -769 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.09 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 140 | -0 | -1461 | -0 | 0 | 0 | 1260 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 1B | 140 | -0 | -875 | -0 | 0 | 0 | -1360 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1I | 140 | -0 | -1681 | -0 | 0 | 0 | 1529 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 1J | 140 | -0 | -655 | -0 | 0 | 0 | -1462 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 2 | 140 | -0 | -1012 | -0 | 0 | 0 | -724 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 7 | 140 | -0 | -1148 | -0 | 0 | 0 | -584 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.02 | 0.09 | 0.00 | 0.00 | -- |
| 8 | 140 | -0 | -1033 | -0 | 0 | 0 | -769 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.09 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 158 | -0 | -1273 | -0 | 0 | 0 | 1029 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1B | 158 | -0 | -627 | -0 | 0 | 0 | -1360 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1I | 158 | -0 | -1428 | -0 | 0 | 0 | 1283 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 1J | 158 | -0 | -472 | -0 | 0 | 0 | -1541 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 158 | -0 | -792 | -0 | 0 | 0 | -724 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 7 | 158 | -0 | -933 | -0 | 0 | 0 | -584 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 8 | 158 | -0 | -809 | -0 | 0 | 0 | -769 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.07 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 175 | -0 | -1273 | -0 | 0 | 0 | 103 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1B | 175 | -0 | -627 | -0 | 0 | 0 | -1360 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1I | 175 | -0 | -1428 | -0 | 0 | 0 | 284 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 1J | 175 | -0 | -472 | -0 | 0 | 0 | -1541 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 175 | -0 | -792 | -0 | 0 | 0 | -724 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 7 | 175 | -0 | -933 | -0 | 0 | 0 | -584 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 8 | 175 | -0 | -809 | -0 | 0 | 0 | -769 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.07 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE06_IP1** Descrizione: **CORDOLI DI FONDAZIONE 24-25-26**
**ASTA NUM. 17** NI 34 NF 40 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 0 | -0 | -1175 | -0 | 0 | 0 | 443 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | -212 | -0 | 0 | 0 | -659 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | -881 | -0 | 0 | 0 | 781 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | -506 | -0 | 0 | 0 | -1186 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | -532 | -0 | 0 | 0 | -551 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | -691 | -0 | 0 | -0 | 0 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.00 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | -535 | -0 | 0 | 0 | -599 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.04 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 59 | -0 | -1175 | -0 | 0 | 0 | 443 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 1B | 59 | -0 | -212 | -0 | 0 | 0 | -1353 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 59 | -0 | -881 | -0 | 0 | 0 | 781 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1J | 59 | -0 | -506 | -0 | 0 | 0 | -1704 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 59 | -0 | -532 | -0 | 0 | 0 | -866 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 59 | -0 | -691 | -0 | 0 | 0 | -846 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 8 | 59 | -0 | -535 | -0 | 0 | 0 | -915 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.04 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 118 | -0 | -1175 | 0 | 0 | 0 | 443 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 1B | 118 | -0 | 357 | 0 | 0 | 0 | -2140 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 1I | 118 | -0 | -881 | -0 | 0 | 0 | 741 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1J | 118 | -0 | -506 | -0 | 0 | 0 | -2222 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 118 | -0 | -532 | -0 | 0 | 0 | -1004 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 118 | -0 | -691 | -0 | 0 | 0 | -1180 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 8 | 118 | -0 | -535 | -0 | 0 | 0 | -1051 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.01 | 0.04 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 178 | -0 | -975 | 0 | 0 | 0 | 443 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1B | 178 | -0 | 357 | 0 | 0 | 0 | -2698 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.16 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 1I | 178 | -0 | -582 | -0 | 0 | 0 | 462 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1J | 178 | -0 | -36 | -0 | 0 | 0 | -2201 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 2 | 178 | -0 | -139 | -0 | 0 | 0 | -1004 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 7 | 178 | -0 | -311 | -0 | 0 | 0 | -1180 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 178 | -0 | -137 | -0 | 0 | 0 | -1051 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.01 | 0.00 | 0.00 | -- |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 237 | -0 | -975 | 0 | 0 | 0 | 1198 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1B | 237 | -0 | 986 | 0 | 0 | 0 | -3659 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1I | 237 | -0 | -582 | 0 | 0 | 0 | 376 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1J | 237 | -0 | 535 | 0 | 0 | 0 | -2488 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.15 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 237 | -0 | 306 | 0 | 0 | 0 | -1004 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 7 | 237 | -0 | -311 | -0 | 0 | 0 | -1180 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 237 | -0 | 312 | 0 | 0 | 0 | -1051 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.03 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 296 | -0 | -733 | 0 | 0 | 0 | 1580 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1B | 296 | -0 | 986 | 0 | 0 | 0 | -3997 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.24 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1I | 296 | -0 | -282 | 0 | 0 | 0 | 349 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1J | 296 | -0 | 535 | 0 | 0 | 0 | -2488 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.15 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 296 | -0 | 306 | 0 | 0 | 0 | -1004 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 7 | 296 | -0 | 120 | 0 | 0 | 0 | -1180 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 8 | 296 | -0 | 312 | 0 | 0 | 0 | -1051 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.03 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 355 | -0 | -733 | 0 | 0 | 0 | 2118 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1B | 355 | -0 | 1648 | 0 | 0 | 0 | -3997 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.24 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 1I | 355 | -0 | -282 | 0 | 0 | 0 | 515 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1J | 355 | -0 | 1228 | 0 | 0 | 0 | -2488 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.15 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 2 | 355 | -0 | 856 | 0 | 0 | 0 | -1004 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 7 | 355 | -0 | 667 | 0 | 0 | 0 | -1180 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 8 | 355 | -0 | 869 | 0 | 0 | 0 | -1051 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.01 | 0.07 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 414 | -0 | -288 | 0 | 0 | 0 | 2735 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.16 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1B | 414 | -0 | 1648 | 0 | 0 | 0 | -3997 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.24 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 1I | 414 | -0 | 133 | 0 | 0 | 0 | 900 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1J | 414 | -0 | 1228 | 0 | 0 | 0 | -2488 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.15 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 2 | 414 | -0 | 856 | 0 | 0 | 0 | -684 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 7 | 414 | -0 | 667 | 0 | 0 | 0 | -1070 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 8 | 414 | -0 | 869 | 0 | 0 | 0 | -725 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.07 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 474 | -0 | 547 | 0 | 0 | 0 | 3804 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1B | 474 | -0 | 2271 | 0 | 0 | 0 | -3997 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.24 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 1I | 474 | -0 | 744 | 0 | 0 | 0 | 1773 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1J | 474 | -0 | 2074 | 0 | 0 | 0 | -2488 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.15 | 0.03 | 0.17 | 0.00 | 0.00 | -- |
| 2 | 474 | -0 | 1545 | 0 | 0 | -0 | 1362 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 7 | 474 | -0 | 1385 | 0 | 0 | 0 | -1136 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 8 | 474 | -0 | 1569 | 0 | 0 | -0 | 1353 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.02 | 0.13 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 533 | -0 | 547 | 0 | 0 | 0 | 5100 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.30 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1B | 533 | -0 | 2271 | 0 | 0 | 0 | -3997 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.24 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 1I | 533 | -0 | 744 | 0 | 0 | 0 | 2841 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1J | 533 | -0 | 2074 | 0 | 0 | 0 | -2488 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.15 | 0.03 | 0.17 | 0.00 | 0.00 | -- |
| 2 | 533 | -0 | 1545 | 0 | 0 | -0 | 1968 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 7 | 533 | -0 | 1385 | 0 | 0 | -0 | 1185 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 8 | 533 | -0 | 1569 | 0 | 0 | -0 | 1969 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.02 | 0.13 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 592 | -0 | 547 | 0 | 0 | 0 | 5811 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.34 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1B | 592 | -0 | 2271 | 0 | 0 | 0 | -3997 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.24 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 1I | 592 | -0 | 744 | 0 | 0 | 0 | 3210 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1J | 592 | -0 | 2074 | 0 | 0 | 0 | -2182 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.03 | 0.17 | 0.00 | 0.00 | -- |
| 2 | 592 | -0 | 1545 | 0 | 0 | -0 | 1968 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 7 | 592 | -0 | 1385 | 0 | 0 | -0 | 1185 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 8 | 592 | -0 | 1569 | 0 | 0 | -0 | 1969 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.02 | 0.13 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE07_IP1**  Descrizione: **CORDOLI DI FONDAZIONE 27-28-29-30-31**
**ASTA NUM. 18**  NI 46  NF 41  SEZ.  Rp  B= 60.0  H= 60.0  (trave di fondazione)

armatura base = 4 X 2.01  per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 0 | -0 | -1651 | 0 | 0 | 0 | 1539 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | 117 | 0 | 0 | 0 | -1588 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | -1188 | -0 | 0 | 0 | 698 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | -346 | -0 | 0 | 0 | -943 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | -589 | -0 | 0 | 0 | -837 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | -739 | -0 | 0 | 0 | -484 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | -616 | -0 | 0 | 0 | -856 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.05 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 18 | -0 | -1651 | 0 | 0 | 0 | 1539 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 1B | 18 | -0 | 117 | 0 | 0 | 0 | -1588 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1I | 18 | -0 | -1188 | -0 | 0 | 0 | 698 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 1J | 18 | -0 | -346 | -0 | 0 | 0 | -1033 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 2 | 18 | -0 | -589 | -0 | 0 | 0 | -940 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 7 | 18 | -0 | -739 | -0 | 0 | 0 | -614 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 8 | 18 | -0 | -616 | -0 | 0 | 0 | -964 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.05 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 35 | -0 | -1670 | 0 | 0 | 0 | 1539 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 1B | 35 | -0 | 363 | 0 | 0 | 0 | -1588 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 1I | 35 | -0 | -1188 | -0 | 0 | 0 | 698 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 1J | 35 | -0 | -346 | -0 | 0 | 0 | -1122 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 2 | 35 | -0 | -589 | -0 | 0 | 0 | -988 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 7 | 35 | -0 | -739 | -0 | 0 | 0 | -743 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 8 | 35 | -0 | -616 | -0 | 0 | 0 | -1015 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.01 | 0.05 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 52 | -0 | -1670 | 0 | 0 | 0 | 1539 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 1B | 52 | -0 | 363 | 0 | 0 | 0 | -1588 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 1I | 52 | -0 | -1102 | -0 | 0 | 0 | 698 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 1J | 52 | -0 | -205 | -0 | 0 | 0 | -1091 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.00 | 0.02 | 0.00 | 0.00 | -- |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

```
   2    52       -0     -457        -0         0         0     -988     4.02   4.02   8.04   8.04 0.06   0.06    0.01    0.04    0.00   0.00       --
   7    52       -0     -633        -0         0         0     -786     4.02   4.02   8.04   8.04 0.06   0.04    0.01    0.05    0.00   0.00       --
   8    52       -0     -478        -0         0         0    -1015     4.02   4.02   8.04   8.04 0.06   0.06    0.01    0.04    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A    70       -0    -1723         0         0         0     1513     4.02   4.02   8.04   8.04 0.22   0.09    0.02    0.14    0.00   0.00       --
 1B    70       -0      663         0         0         0    -1588     4.02   4.02   8.04   8.04 0.22   0.09    0.01    0.05    0.00   0.00       --
 1I    70       -0    -1102        -0         0         0      698     4.02   4.02   8.04   8.04 0.22   0.04    0.01    0.09    0.00   0.00       --
 1J    70       -0     -205        -0         0         0    -1151     4.02   4.02   8.04   8.04 0.22   0.07    0.00    0.02    0.00   0.00       --
   2    70       -0     -457        -0         0         0     -988     4.02   4.02   8.04   8.04 0.06   0.06    0.01    0.04    0.00   0.00       --
   7    70       -0     -633        -0         0         0     -892     4.02   4.02   8.04   8.04 0.06   0.05    0.01    0.05    0.00   0.00       --
   8    70       -0     -478        -0         0         0    -1015     4.02   4.02   8.04   8.04 0.06   0.06    0.01    0.04    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A    88       -0    -1723         0         0         0     1221     4.02   4.02   8.04   8.04 0.22   0.07    0.02    0.14    0.00   0.00       --
 1B    88       -0      663         0         0         0    -1588     4.02   4.02   8.04   8.04 0.22   0.09    0.01    0.05    0.00   0.00       --
 1I    88       -0    -1046        -0         0         0     -570     4.02   4.02   8.04   8.04 0.22   0.03    0.01    0.09    0.00   0.00       --
 1J    88       -0      -14        -0         0         0    -1061     4.02   4.02   8.04   8.04 0.22   0.06    0.00    0.00    0.00   0.00       --
   2    88       -0     -312        -0         0         0     -988     4.02   4.02   8.04   8.04 0.06   0.06    0.00    0.03    0.00   0.00       --
   7    88       -0     -516        -0         0         0     -892     4.02   4.02   8.04   8.04 0.06   0.05    0.01    0.04    0.00   0.00       --
   8    88       -0     -327        -0         0         0    -1015     4.02   4.02   8.04   8.04 0.06   0.06    0.00    0.03    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A   105       -0    -1807         0         0         0     -723     4.02   4.02   8.04   8.04 0.22   0.04    0.02    0.15    0.00   0.00       --
 1B   105       -0     1017         0         0         0    -1588     4.02   4.02   8.04   8.04 0.22   0.09    0.01    0.08    0.00   0.00       --
 1I   105       -0    -1046         0         0         0     -570     4.02   4.02   8.04   8.04 0.22   0.03    0.01    0.09    0.00   0.00       --
 1J   105       -0      216         0         0         0    -1223     4.02   4.02   8.04   8.04 0.22   0.07    0.00    0.02    0.00   0.00       --
   2   105       -0     -312        -0         0         0     -988     4.02   4.02   8.04   8.04 0.06   0.06    0.00    0.03    0.00   0.00       --
   7   105       -0     -516        -0         0         0     -892     4.02   4.02   8.04   8.04 0.06   0.05    0.01    0.04    0.00   0.00       --
   8   105       -0     -327        -0         0         0    -1015     4.02   4.02   8.04   8.04 0.06   0.06    0.00    0.03    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A   122       -0    -1807         0         0         0     -723     4.02   4.02   8.04   8.04 0.22   0.04    0.02    0.15    0.00   0.00       --
 1B   122       -0     1017         0         0         0    -1588     4.02   4.02   8.04   8.04 0.22   0.09    0.01    0.08    0.00   0.00       --
 1I   122       -0    -1006         0         0         0     -570     4.02   4.02   8.04   8.04 0.22   0.03    0.01    0.08    0.00   0.00       --
 1J   122       -0      216         0         0         0    -1228     4.02   4.02   8.04   8.04 0.22   0.07    0.00    0.02    0.00   0.00       --
   2   122       -0     -152        -0         0         0     -988     4.02   4.02   8.04   8.04 0.06   0.06    0.00    0.01    0.00   0.00       --
   7   122       -0     -386        -0         0         0     -892     4.02   4.02   8.04   8.04 0.06   0.05    0.01    0.03    0.00   0.00       --
   8   122       -0     -161        -0         0         0    -1015     4.02   4.02   8.04   8.04 0.06   0.06    0.00    0.01    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A   140       -0    -1918         0         0         0     -723     4.02   4.02   8.04   8.04 0.22   0.04    0.03    0.16    0.00   0.00       --
 1B   140       -0     1424         0         0         0    -1588     4.02   4.02   8.04   8.04 0.22   0.09    0.02    0.12    0.00   0.00       --
 1I   140       -0    -1006         0         0         0     -570     4.02   4.02   8.04   8.04 0.22   0.03    0.01    0.08    0.00   0.00       --
 1J   140       -0      482         0         0         0    -1357     4.02   4.02   8.04   8.04 0.22   0.08    0.01    0.04    0.00   0.00       --
   2   140       -0     -152        -0         0         0     -988     4.02   4.02   8.04   8.04 0.06   0.06    0.00    0.01    0.00   0.00       --
   7   140       -0     -386        -0         0         0     -892     4.02   4.02   8.04   8.04 0.06   0.05    0.01    0.03    0.00   0.00       --
   8   140       -0     -161        -0         0         0    -1015     4.02   4.02   8.04   8.04 0.06   0.06    0.00    0.01    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A   158       -0    -1918         0         0         0     -723     4.02   4.02   8.04   8.04 0.22   0.04    0.03    0.16    0.00   0.00       --
 1B   158       -0     1424         0         0         0    -1588     4.02   4.02   8.04   8.04 0.22   0.09    0.02    0.12    0.00   0.00       --
 1I   158       -0     -976         0         0         0     -570     4.02   4.02   8.04   8.04 0.22   0.03    0.01    0.08    0.00   0.00       --
 1J   158       -0      482         0         0         0    -1357     4.02   4.02   8.04   8.04 0.22   0.08    0.01    0.04    0.00   0.00       --
   2   158       -0       25         0         0         0     -988     4.02   4.02   8.04   8.04 0.06   0.06    0.00    0.00    0.00   0.00       --
   7   158       -0     -244        -0         0         0     -892     4.02   4.02   8.04   8.04 0.06   0.05    0.00    0.02    0.00   0.00       --
   8   158       -0       21         0         0         0    -1015     4.02   4.02   8.04   8.04 0.06   0.06    0.00    0.00    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A   175       -0    -1918         0         0         0     -723     4.02   4.02   8.04   8.04 0.22   0.04    0.03    0.16    0.00   0.00       --
 1B   175       -0     1424         0         0         0    -1588     4.02   4.02   8.04   8.04 0.22   0.09    0.02    0.12    0.00   0.00       --
 1I   175       -0     -976         0         0         0     -570     4.02   4.02   8.04   8.04 0.22   0.03    0.01    0.08    0.00   0.00       --
 1J   175       -0      482         0         0         0    -1357     4.02   4.02   8.04   8.04 0.22   0.08    0.01    0.04    0.00   0.00       --
   2   175       -0       25         0         0         0     -988     4.02   4.02   8.04   8.04 0.06   0.06    0.00    0.00    0.00   0.00       --
   7   175       -0     -244        -0         0         0     -892     4.02   4.02   8.04   8.04 0.06   0.05    0.00    0.02    0.00   0.00       --
   8   175       -0       21         0         0         0    -1015     4.02   4.02   8.04   8.04 0.06   0.06    0.00    0.00    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

Nome travata: CORDOLI DI FONDAZIONE07_IP1   Descrizione: CORDOLI DI FONDAZIONE 27-28-29-30-31
ASTA NUM. 19       NI 41     NF 82     SEZ.   Rp   B= 60.0   H= 60.0   (trave di fondazione)

armatura base = 4 X 2.01      per le armature aggiuntive consultare il tabulato

-------------------------------------------------------------------------------------------------------------------------------
 NC      x        Fx        Fy        Fz        Mx        My        Mz    APOST   AANT   AINF   ASUP   x/d   Indice   resistenza   aswta aswto   PASSO
         --       ----------------------      ------------------------      ----------------------------  ----------   ----------   -----
         cm                 kg                          kg*m                          cmq                      Fx,M   Bielle   V,Mx       cmq/m          cm
-------------------------------------------------------------------------------------------------------------------------------

 1A     0       -0    -2929         0         0         0    -1933     4.02   4.02   8.04   8.04 0.22   0.11    0.04    0.24    0.00   0.00       --
 1B     0       -0     4478         0         0         0    -4128     4.02   4.02   8.04   8.04 0.22   0.24    0.06    0.37    0.00   0.00       --
 1I     0       -0     -796         0         0         0     -684     4.02   4.02   8.04   8.04 0.22   0.04    0.01    0.07    0.00   0.00       --
 1J     0       -0     2345         0         0         0    -2488     4.02   4.02   8.04   8.04 0.22   0.15    0.03    0.19    0.00   0.00       --
   2     0       -0     1323         0         0         0    -1175     4.02   4.02   8.04   8.04 0.06   0.07    0.02    0.11    0.00   0.00       --
   7     0       -0      792         0         0         0     -969     4.02   4.02   8.04   8.04 0.06   0.05    0.01    0.07    0.00   0.00       --
   8     0       -0     1306         0         0         0    -1202     4.02   4.02   8.04   8.04 0.06   0.07    0.02    0.11    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A    18       -0    -2929         0         0         0    -1933     4.02   4.02   8.04   8.04 0.22   0.11    0.04    0.24    0.00   0.00       --
 1B    18       -0     4478         0         0         0    -3250     4.02   4.02   8.04   8.04 0.22   0.19    0.06    0.37    0.00   0.00       --
 1I    18       -0     -796         0         0         0     -684     4.02   4.02   8.04   8.04 0.22   0.04    0.01    0.07    0.00   0.00       --
 1J    18       -0     2345         0         0         0    -2488     4.02   4.02   8.04   8.04 0.22   0.15    0.03    0.19    0.00   0.00       --
   2    18       -0     1323         0         0         0    -1175     4.02   4.02   8.04   8.04 0.06   0.07    0.02    0.11    0.00   0.00       --
   7    18       -0      792         0         0         0     -969     4.02   4.02   8.04   8.04 0.06   0.05    0.01    0.07    0.00   0.00       --
   8    18       -0     1306         0         0         0    -1202     4.02   4.02   8.04   8.04 0.06   0.07    0.02    0.11    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A    36       -0    -3089         0         0         0    -1933     4.02   4.02   8.04   8.04 0.22   0.11    0.04    0.25    0.00   0.00       --
 1B    36       -0     5007         0         0         0    -5144     4.02   4.02   8.04   8.04 0.22   0.30    0.07    0.41    0.00   0.00       --
 1I    36       -0     -796         0         0         0     -557     4.02   4.02   8.04   8.04 0.22   0.03    0.01    0.07    0.00   0.00       --
 1J    36       -0     2676         0         0         0    -2488     4.02   4.02   8.04   8.04 0.22   0.15    0.04    0.22    0.00   0.00       --
   2    36       -0     1546         0         0         0    -1175     4.02   4.02   8.04   8.04 0.06   0.07    0.02    0.13    0.00   0.00       --
   7    36       -0      971         0         0         0     -969     4.02   4.02   8.04   8.04 0.06   0.05    0.01    0.08    0.00   0.00       --
   8    36       -0     1533         0         0         0    -1202     4.02   4.02   8.04   8.04 0.06   0.07    0.02    0.13    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A    54       -0    -3089         0         0         0     3368     4.02   4.02   8.04   8.04 0.22   0.20    0.04    0.25    0.00   0.00       --
```



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1B | 54 | -0 | 5007 | 0 | 0 | 0 | -5687 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.33 | 0.07 | 0.41 | 0.00 | 0.00 | -- |
| 1I | 54 | -0 | -759 | 0 | 0 | 0 | 879 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1J | 54 | -0 | 2676 | 0 | 0 | 0 | -2488 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.15 | 0.04 | 0.22 | 0.00 | 0.00 | -- |
| 2 | 54 | -0 | 1546 | 0 | 0 | 0 | -1175 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 7 | 54 | -0 | 971 | 0 | 0 | 0 | -969 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 8 | 54 | -0 | 1533 | 0 | 0 | 0 | -1202 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.13 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 72 | -0 | -3273 | 0 | 0 | 0 | 4374 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.26 | 0.04 | 0.27 | 0.00 | 0.00 | -- |
| 1B | 72 | -0 | 5595 | 0 | 0 | 0 | -6607 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.39 | 0.07 | 0.46 | 0.00 | 0.00 | -- |
| 1I | 72 | -0 | -759 | 0 | 0 | 0 | 1317 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1J | 72 | -0 | 3045 | 0 | 0 | 0 | -2488 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.15 | 0.04 | 0.25 | 0.00 | 0.00 | -- |
| 2 | 72 | -0 | 1793 | 0 | 0 | 0 | -1175 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 7 | 72 | -0 | 1170 | 0 | 0 | 0 | -969 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 8 | 72 | -0 | 1784 | 0 | 0 | 0 | -1202 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.15 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 90 | -0 | -3273 | 0 | 0 | 0 | 5376 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.32 | 0.04 | 0.27 | 0.00 | 0.00 | -- |
| 1B | 90 | -0 | 5595 | 0 | 0 | 0 | -6995 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.41 | 0.07 | 0.46 | 0.00 | 0.00 | -- |
| 1I | 90 | -0 | -723 | 0 | 0 | 0 | 1827 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1J | 90 | -0 | 3045 | 0 | 0 | 0 | -2488 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.15 | 0.04 | 0.25 | 0.00 | 0.00 | -- |
| 2 | 90 | -0 | 1793 | 0 | 0 | -0 | 1330 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 7 | 90 | -0 | 1170 | 0 | 0 | 0 | -874 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 8 | 90 | -0 | 1784 | 0 | 0 | -0 | 1285 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.15 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 108 | -0 | -3471 | 0 | 0 | 0 | 6506 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.38 | 0.05 | 0.29 | 0.00 | 0.00 | -- |
| 1B | 108 | -0 | 6235 | 0 | 0 | 0 | -6995 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.41 | 0.08 | 0.51 | 0.00 | 0.00 | -- |
| 1I | 108 | -0 | -723 | 0 | 0 | 0 | 2359 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1J | 108 | -0 | 3448 | 0 | 0 | 0 | -2488 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.15 | 0.05 | 0.28 | 0.00 | 0.00 | -- |
| 2 | 108 | -0 | 2064 | 0 | 0 | -0 | 1827 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.03 | 0.17 | 0.00 | 0.00 | -- |
| 7 | 108 | -0 | 1388 | 0 | 0 | -0 | 977 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 8 | 108 | -0 | 2059 | 0 | 0 | -0 | 1782 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.03 | 0.17 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 126 | -0 | -3471 | 0 | 0 | 0 | 7625 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.45 | 0.05 | 0.29 | 0.00 | 0.00 | -- |
| 1B | 126 | -0 | 6235 | 0 | 0 | 0 | -6995 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.41 | 0.08 | 0.51 | 0.00 | 0.00 | -- |
| 1I | 126 | -0 | -684 | 0 | 0 | 0 | 2945 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1J | 126 | -0 | 3448 | 0 | 0 | 0 | -2488 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.15 | 0.05 | 0.28 | 0.00 | 0.00 | -- |
| 2 | 126 | -0 | 2064 | 0 | 0 | -0 | 2095 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.03 | 0.17 | 0.00 | 0.00 | -- |
| 7 | 126 | -0 | 1388 | 0 | 0 | -0 | 1171 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 8 | 126 | -0 | 2059 | 0 | 0 | -0 | 2051 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.03 | 0.17 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 144 | -0 | -3677 | 0 | 0 | 0 | 8604 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.51 | 0.05 | 0.30 | 0.00 | 0.00 | -- |
| 1B | 144 | -0 | 6925 | 0 | 0 | 0 | -6995 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.41 | 0.09 | 0.57 | 0.00 | 0.00 | -- |
| 1I | 144 | -0 | -684 | 0 | 0 | 0 | 3556 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1J | 144 | -0 | 3885 | 0 | 0 | 0 | -2488 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.15 | 0.05 | 0.32 | 0.00 | 0.00 | -- |
| 2 | 144 | -0 | 2358 | 0 | 0 | -0 | 1741 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 7 | 144 | -0 | 1626 | 0 | 0 | -0 | 927 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 8 | 144 | -0 | 2356 | 0 | 0 | -0 | 1698 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.03 | 0.19 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 162 | -0 | -3677 | 0 | 0 | 0 | 8604 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.51 | 0.05 | 0.30 | 0.00 | 0.00 | -- |
| 1B | 162 | -0 | 6925 | 0 | 0 | 0 | -6995 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.41 | 0.09 | 0.57 | 0.00 | 0.00 | -- |
| 1I | 162 | -0 | -637 | 0 | 0 | 0 | 4189 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.25 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1J | 162 | -0 | 3885 | 0 | 0 | 0 | -2488 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.15 | 0.05 | 0.32 | 0.00 | 0.00 | -- |
| 2 | 162 | -0 | 2358 | 0 | 0 | -0 | 1741 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 7 | 162 | -0 | 1626 | 0 | 0 | -0 | 927 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 8 | 162 | -0 | 2356 | 0 | 0 | -0 | 1698 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.03 | 0.19 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 180 | -0 | -3677 | 0 | 0 | 0 | 8604 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.51 | 0.05 | 0.30 | 0.00 | 0.00 | -- |
| 1B | 180 | -0 | 6925 | 0 | 0 | 0 | -6995 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.41 | 0.09 | 0.57 | 0.00 | 0.00 | -- |
| 1I | 180 | -0 | -637 | 0 | 0 | 0 | 4189 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.25 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1J | 180 | -0 | 3885 | 0 | 0 | 0 | -2488 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.15 | 0.05 | 0.32 | 0.00 | 0.00 | -- |
| 2 | 180 | -0 | 2358 | 0 | 0 | -0 | 1741 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 7 | 180 | -0 | 1626 | 0 | 0 | -0 | 927 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 8 | 180 | -0 | 2356 | 0 | 0 | -0 | 1698 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.03 | 0.19 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE07_IP1** Descrizione: **CORDOLI DI FONDAZIONE 27-28-29-30-31**
**ASTA NUM. 20** NI 82 NF 43 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 0 | -0 | -7083 | 0 | 0 | 0 | 8356 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.49 | 0.09 | 0.58 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | 4231 | 0 | 0 | 0 | -6238 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.37 | 0.06 | 0.35 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | -3777 | 0 | 0 | 0 | 4117 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.24 | 0.05 | 0.31 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | 925 | 0 | 0 | 0 | -1999 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | -634 | -0 | 0 | -0 | 1972 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | -1430 | -0 | 0 | -0 | 995 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | -630 | -0 | 0 | -0 | 1929 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.05 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 20 | -0 | -7083 | 0 | 0 | 0 | 13945 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.82 | 0.09 | 0.58 | 0.00 | 0.00 | -- |
| 1B | 20 | -0 | 4231 | 0 | 0 | 0 | -10346 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.61 | 0.06 | 0.35 | 0.00 | 0.00 | -- |
| 1I | 20 | -0 | -3777 | 0 | 0 | 0 | 6931 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.41 | 0.05 | 0.31 | 0.00 | 0.00 | -- |
| 1J | 20 | -0 | 925 | 0 | 0 | 0 | -3332 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.20 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 2 | 20 | -0 | -634 | -0 | 0 | -0 | 1972 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 7 | 20 | -0 | -1430 | -0 | 0 | -0 | 995 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 8 | 20 | -0 | -630 | -0 | 0 | -0 | 1929 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.05 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 39 | -0 | -7291 | 0 | 0 | 0 | 14910 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.88 | 0.10 | 0.60 | 0.00 | 0.00 | -- |
| 1B | 39 | -0 | 5043 | 0 | 0 | 0 | -12260 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.72 | 0.07 | 0.42 | 0.00 | 0.00 | -- |
| 1I | 39 | -0 | -3777 | 0 | 0 | 0 | 7109 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.42 | 0.05 | 0.31 | 0.00 | 0.00 | -- |
| 1J | 39 | -0 | 1448 | 0 | 0 | 0 | -4407 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.26 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 2 | 39 | -0 | -634 | -0 | 0 | -0 | 2067 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 7 | 39 | -0 | -1430 | -0 | 0 | -0 | 1210 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 8 | 39 | -0 | -630 | -0 | 0 | -0 | 2023 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.05 | 0.00 | 0.00 | -- |



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apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 59 | -0 | -7291 | 0 | 0 | 0 | 15901 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.94 | 0.10 | 0.60 | 0.00 | 0.00 | -- |
| 1B | 59 | -0 | 5043 | 0 | 0 | 0 | -13694 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.81 | 0.07 | 0.42 | 0.00 | 0.00 | -- |
| 1I | 59 | -0 | -3696 | 0 | 0 | 0 | 7338 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.43 | 0.05 | 0.30 | 0.00 | 0.00 | -- |
| 1J | 59 | -0 | 1448 | 0 | 0 | 0 | -5131 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.30 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 2 | 59 | -0 | -271 | -0 | 0 | -0 | 1937 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 7 | 59 | -0 | -1131 | -0 | 0 | -0 | 1149 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.09 | 0.00 | 0.00 | -- |
| 8 | 59 | -0 | -263 | -0 | 0 | -0 | 1892 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 79 | -0 | -7461 | 0 | 0 | 0 | 17001 | 4.02 | 4.02 | 10.05 | 8.04 | 0.24 | 0.81 | 0.10 | 0.58 | 0.00 | 0.00 | -- |
| 1B | 79 | -0 | 5851 | 0 | 0 | 0 | -15645 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.92 | 0.08 | 0.48 | 0.00 | 0.00 | -- |
| 1I | 79 | -0 | -3696 | 0 | 0 | 0 | 7620 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.45 | 0.05 | 0.30 | 0.00 | 0.00 | -- |
| 1J | 79 | -0 | 1980 | 0 | 0 | 0 | -6196 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.36 | 0.03 | 0.16 | 0.00 | 0.00 | -- |
| 2 | 79 | -0 | -271 | -0 | 0 | -0 | 1884 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 7 | 79 | -0 | -1131 | -0 | 0 | -0 | 926 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.02 | 0.09 | 0.00 | 0.00 | -- |
| 8 | 79 | -0 | -263 | -0 | 0 | -0 | 1840 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 6.03 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 98 | -0 | -7461 | 0 | 0 | 0 | 18153 | 4.02 | 4.02 | 10.05 | 8.04 | 0.24 | 0.86 | 0.10 | 0.58 | 0.00 | 0.00 | -- |
| 1B | 98 | -0 | 5851 | 0 | 0 | 0 | -17114 | 4.02 | 4.02 | 8.04 | 10.05 | 0.24 | 0.81 | 0.08 | 0.46 | 0.00 | 0.00 | -- |
| 1I | 98 | -0 | -3590 | 0 | 0 | 0 | 7939 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.47 | 0.05 | 0.30 | 0.00 | 0.00 | -- |
| 1J | 98 | -0 | 1980 | 0 | 0 | 0 | -6900 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.41 | 0.03 | 0.16 | 0.00 | 0.00 | -- |
| 2 | 98 | -0 | 107 | 0 | 0 | -0 | 1800 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 7 | 98 | -0 | -816 | -0 | 0 | -0 | 563 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 8 | 98 | -0 | 117 | 0 | 0 | -0 | 1769 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.00 | 0.01 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 118 | -0 | -7566 | 0 | 0 | 0 | 19372 | 4.02 | 4.02 | 10.05 | 8.04 | 0.24 | 0.92 | 0.10 | 0.59 | 0.00 | 0.00 | -- |
| 1B | 118 | -0 | 6627 | 0 | 0 | 0 | -19081 | 4.02 | 4.02 | 8.04 | 10.05 | 0.24 | 0.91 | 0.09 | 0.52 | 0.00 | 0.00 | -- |
| 1I | 118 | -0 | -3590 | 0 | 0 | 0 | 8191 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.48 | 0.05 | 0.30 | 0.00 | 0.00 | -- |
| 1J | 118 | -0 | 2510 | 0 | 0 | 0 | -7944 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.47 | 0.03 | 0.21 | 0.00 | 0.00 | -- |
| 2 | 118 | -0 | 494 | 0 | 0 | -0 | 2069 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 118 | -0 | -816 | -0 | 0 | 0 | -364 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 8 | 118 | -0 | 508 | 0 | 0 | -0 | 2043 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.04 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 138 | -0 | -7566 | 0 | 0 | 0 | 20022 | 4.02 | 4.02 | 10.05 | 8.04 | 0.24 | 0.95 | 0.10 | 0.59 | 0.00 | 0.00 | -- |
| 1B | 138 | -0 | 6627 | 0 | 0 | 0 | -20572 | 4.02 | 4.02 | 8.04 | 10.05 | 0.24 | 0.98 | 0.09 | 0.52 | 0.00 | 0.00 | -- |
| 1I | 138 | -0 | -3450 | 0 | 0 | 0 | 8191 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.48 | 0.05 | 0.28 | 0.00 | 0.00 | -- |
| 1J | 138 | -0 | 2510 | 0 | 0 | 0 | -8621 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.51 | 0.03 | 0.21 | 0.00 | 0.00 | -- |
| 2 | 138 | -0 | 494 | 0 | 0 | -0 | 2167 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 138 | -0 | -484 | -0 | 0 | 0 | -364 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 8 | 138 | -0 | 508 | 0 | 0 | -0 | 2143 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.04 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 158 | -0 | -7571 | 0 | 0 | 0 | 20022 | 4.02 | 4.02 | 10.05 | 8.04 | 0.24 | 0.95 | 0.10 | 0.59 | 0.00 | 0.00 | -- |
| 1B | 158 | -0 | 7336 | 0 | 0 | 0 | -20796 | 4.02 | 4.02 | 8.04 | 10.05 | 0.24 | 0.99 | 0.10 | 0.57 | 0.00 | 0.00 | -- |
| 1I | 158 | -0 | -3450 | 0 | 0 | 0 | 8191 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.48 | 0.05 | 0.28 | 0.00 | 0.00 | -- |
| 1J | 158 | -0 | 3023 | 0 | 0 | 0 | -8965 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.53 | 0.04 | 0.25 | 0.00 | 0.00 | -- |
| 2 | 158 | -0 | 888 | 0 | 0 | -0 | 2164 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 7 | 158 | -0 | -484 | -0 | 0 | 0 | -364 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 8 | 158 | -0 | 905 | 0 | 0 | -0 | 2138 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.07 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 177 | -0 | -7571 | 0 | 0 | 0 | 20022 | 4.02 | 4.02 | 10.05 | 8.04 | 0.24 | 0.95 | 0.10 | 0.59 | 0.00 | 0.00 | -- |
| 1B | 177 | -0 | 7336 | 0 | 0 | 0 | -20796 | 4.02 | 4.02 | 8.04 | 10.05 | 0.24 | 0.99 | 0.10 | 0.57 | 0.00 | 0.00 | -- |
| 1I | 177 | -0 | -3259 | 0 | 0 | 0 | 8191 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.48 | 0.04 | 0.27 | 0.00 | 0.00 | -- |
| 1J | 177 | -0 | 3023 | 0 | 0 | 0 | -8965 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.53 | 0.04 | 0.25 | 0.00 | 0.00 | -- |
| 2 | 177 | -0 | 888 | 0 | 0 | -0 | 2164 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 7 | 177 | -0 | -135 | -0 | 0 | 0 | -364 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 8 | 177 | -0 | 905 | 0 | 0 | -0 | 2138 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.07 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 197 | -0 | -7571 | 0 | 0 | 0 | 20022 | 4.02 | 4.02 | 10.05 | 8.04 | 0.24 | 0.95 | 0.10 | 0.59 | 0.00 | 0.00 | -- |
| 1B | 197 | -0 | 7336 | 0 | 0 | 0 | -20796 | 4.02 | 4.02 | 8.04 | 10.05 | 0.24 | 0.99 | 0.10 | 0.57 | 0.00 | 0.00 | -- |
| 1I | 197 | -0 | -3259 | 0 | 0 | 0 | 8191 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.48 | 0.04 | 0.27 | 0.00 | 0.00 | -- |
| 1J | 197 | -0 | 3023 | 0 | 0 | 0 | -8965 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.53 | 0.04 | 0.25 | 0.00 | 0.00 | -- |
| 2 | 197 | -0 | 888 | 0 | 0 | -0 | 2164 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 7 | 197 | -0 | -135 | -0 | 0 | 0 | -364 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 8 | 197 | -0 | 905 | 0 | 0 | -0 | 2138 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.07 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE07_IP1**  Descrizione: **CORDOLI DI FONDAZIONE 27-28-29-30-31**
**ASTA NUM. 21**  NI 43  NF 47  SEZ.  Rp  B= 60.0  H= 60.0  (trave di fondazione)

armatura base = 4 X 2.01  per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 0 | -0 | -12278 | 0 | 0 | 0 | 19739 | 4.02 | 4.02 | 10.05 | 8.04 | 0.24 | 0.94 | 0.16 | 0.96 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | 10825 | 0 | 0 | 0 | -20429 | 4.02 | 4.02 | 8.04 | 10.05 | 0.24 | 0.97 | 0.14 | 0.84 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | -5654 | 0 | 0 | 0 | 8088 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.48 | 0.08 | 0.47 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | 4200 | 0 | 0 | 0 | -8778 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.52 | 0.06 | 0.35 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | -2147 | -0 | 0 | -0 | 1968 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | -724 | -0 | 0 | 0 | -763 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | -2149 | -0 | 0 | -0 | 1945 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.03 | 0.18 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 22 | -0 | -12278 | 0 | 0 | 0 | 19739 | 4.02 | 4.02 | 10.05 | 8.04 | 0.24 | 0.94 | 0.16 | 0.96 | 0.00 | 0.00 | -- |
| 1B | 22 | -0 | 10825 | 0 | 0 | 0 | -20429 | 4.02 | 4.02 | 8.04 | 10.05 | 0.24 | 0.97 | 0.14 | 0.84 | 0.00 | 0.00 | -- |
| 1I | 22 | -0 | -5654 | 0 | 0 | 0 | 8088 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.48 | 0.08 | 0.47 | 0.00 | 0.00 | -- |
| 1J | 22 | -0 | 4200 | 0 | 0 | 0 | -8778 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.52 | 0.06 | 0.35 | 0.00 | 0.00 | -- |
| 2 | 22 | -0 | -2147 | -0 | 0 | -0 | 1968 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 7 | 22 | -0 | -724 | -0 | 0 | 0 | -763 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 8 | 22 | -0 | -2149 | -0 | 0 | -0 | 1945 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.03 | 0.18 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 43 | -0 | -12278 | 0 | 0 | 0 | 19739 | 4.02 | 4.02 | 10.05 | 8.04 | 0.24 | 0.94 | 0.16 | 0.96 | 0.00 | 0.00 | -- |
| 1B | 43 | -0 | 11225 | 0 | 0 | 0 | -20429 | 4.02 | 4.02 | 8.04 | 10.05 | 0.24 | 0.97 | 0.15 | 0.87 | 0.00 | 0.00 | -- |
| 1I | 43 | -0 | -5654 | 0 | 0 | 0 | 8088 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.48 | 0.08 | 0.47 | 0.00 | 0.00 | -- |
| 1J | 43 | -0 | 4599 | 0 | 0 | 0 | -8778 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.52 | 0.06 | 0.38 | 0.00 | 0.00 | -- |
| 2 | 43 | -0 | -2147 | -0 | 0 | -0 | 2290 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.13 | 0.03 | 0.18 | 0.00 | 0.00 | -- |



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```
   7    43       -0     -724        -0         0         0     -763     4.02   4.02   8.04   8.04 0.06   0.04    0.01    0.06    0.00   0.00       --
   8    43       -0    -2149        -0         0        -0     2267     4.02   4.02   8.04   8.04 0.06   0.13    0.03    0.18    0.00   0.00       --

apost= --       aant= --       ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A    64       -0   -11825         0         0         0    19503     4.02   4.02 10.05   8.04 0.24   0.93    0.16    0.92    0.00   0.00       --
 1B    64       -0    11225         0         0         0   -20429     4.02   4.02   8.04 10.05 0.24   0.97    0.15    0.87    0.00   0.00       --
 1I    64       -0    -5199         0         0         0     7884     4.02   4.02   8.04   8.04 0.22   0.46    0.07    0.43    0.00   0.00       --
 1J    64       -0     4599         0         0         0    -8778     4.02   4.02   8.04   8.04 0.22   0.52    0.06    0.38    0.00   0.00       --
   2    64       -0    -1724        -0         0        -0     2102     4.02   4.02   8.04   8.04 0.06   0.12    0.02    0.14    0.00   0.00       --
   7    64       -0     -302        -0         0         0     -763     4.02   4.02   8.04   8.04 0.06   0.04    0.00    0.02    0.00   0.00       --
   8    64       -0    -1722        -0         0        -0     2077     4.02   4.02   8.04   8.04 0.06   0.12    0.02    0.14    0.00   0.00       --

apost= --       aant= --       ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A    86       -0   -11825         0         0         0    16963     4.02   4.02 10.05   8.04 0.24   0.81    0.16    0.92    0.00   0.00       --
 1B    86       -0    11899         0         0         0   -18583     4.02   4.02   8.04 10.05 0.24   0.88    0.16    0.93    0.00   0.00       --
 1I    86       -0    -5199         0         0         0     6771     4.02   4.02   8.04   8.04 0.22   0.40    0.07    0.43    0.00   0.00       --
 1J    86       -0     5127         0         0         0    -8298     4.02   4.02   8.04   8.04 0.22   0.49    0.07    0.42    0.00   0.00       --
   2    86       -0    -1724        -0         0        -0     1732     4.02   4.02   8.04   8.04 0.06   0.10    0.02    0.14    0.00   0.00       --
   7    86       -0     -302        -0         0         0     -763     4.02   4.02   8.04   8.04 0.06   0.04    0.00    0.02    0.00   0.00       --
   8    86       -0    -1722        -0         0        -0     1707     4.02   4.02   8.04   8.04 0.06   0.10    0.02    0.14    0.00   0.00       --

apost= --       aant= --       ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A   108       -0   -11598         0         0         0    14327     4.02   4.02   8.04   8.04 0.22   0.84    0.15    0.96    0.00   0.00       --
 1B   108       -0    11899         0         0         0   -16028     4.02   4.02   8.04   8.04 0.22   0.94    0.16    0.98    0.00   0.00       --
 1I   108       -0    -4825         0         0         0     5506     4.02   4.02   8.04   8.04 0.22   0.32    0.06    0.40    0.00   0.00       --
 1J   108       -0     5127         0         0         0    -7207     4.02   4.02   8.04   8.04 0.22   0.42    0.07    0.42    0.00   0.00       --
   2   108       -0    -1313        -0         0        -0     1186     4.02   4.02   8.04   8.04 0.06   0.07    0.02    0.11    0.00   0.00       --
   7   108       -0      144         0         0         0     -763     4.02   4.02   8.04   8.04 0.06   0.04    0.00    0.01    0.00   0.00       --
   8   108       -0    -1306        -0         0        -0     1160     4.02   4.02   8.04   8.04 0.06   0.07    0.02    0.11    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A   129       -0   -11643         0         0         0     5850     4.02   4.02   8.04   8.04 0.22   0.34    0.16    0.96    0.00   0.00       --
 1B   129       -0    12901         0         0         0   -14116     4.02   4.02   8.04   8.04 0.22   0.83    0.17    1.06    2.53   0.00       --
 1I   129       -0    -4825         0         0         0     2583     4.02   4.02   8.04   8.04 0.22   0.15    0.06    0.40    0.00   0.00       --
 1J   129       -0     5804         0         0         0    -6551     4.02   4.02   8.04   8.04 0.22   0.39    0.08    0.48    0.00   0.00       --
   2   129       -0    -1313        -0         0        -0      903     4.02   4.02   8.04   8.04 0.06   0.05    0.02    0.11    0.00   0.00       --
   7   129       -0      616         0         0         0     -763     4.02   4.02   8.04   8.04 0.06   0.04    0.01    0.05    0.00   0.00       --
   8   129       -0    -1306        -0         0        -0      879     4.02   4.02   8.04   8.04 0.06   0.05    0.02    0.11    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A   150       -0   -11643         0         0         0     5850     4.02   4.02   8.04   8.04 0.22   0.34    0.16    0.96    0.00   0.00       --
 1B   150       -0    12901         0         0         0   -11316     4.02   4.02   8.04   8.04 0.22   0.67    0.17    1.06    2.53   0.00       --
 1I   150       -0    -4546         0         0         0     2583     4.02   4.02   8.04   8.04 0.22   0.15    0.06    0.38    0.00   0.00       --
 1J   150       -0     5804         0         0         0    -5219     4.02   4.02   8.04   8.04 0.22   0.31    0.08    0.48    0.00   0.00       --
   2   150       -0     -915        -0         0         0     -561     4.02   4.02   8.04   8.04 0.06   0.03    0.01    0.08    0.00   0.00       --
   7   150       -0      616         0         0         0     -763     4.02   4.02   8.04   8.04 0.06   0.04    0.01    0.05    0.00   0.00       --
   8   150       -0     -903        -0         0         0     -567     4.02   4.02   8.04   8.04 0.06   0.03    0.01    0.07    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A   172       -0   -11970         0         0         0     -659     4.02   4.02   8.04   8.04 0.22   0.04    0.16    0.99    0.00   0.00       --
 1B   172       -0    14244         0         0         0    -9793     4.02   4.02   8.04   8.04 0.22   0.58    0.19    1.18    2.79   0.00       --
 1I   172       -0    -4546         0         0         0     -738     4.02   4.02   8.04   8.04 0.22   0.04    0.06    0.38    0.00   0.00       --
 1J   172       -0     6639         0         0         0    -4995     4.02   4.02   8.04   8.04 0.22   0.29    0.09    0.55    0.00   0.00       --
   2   172       -0     -915        -0         0         0     -561     4.02   4.02   8.04   8.04 0.06   0.03    0.01    0.08    0.00   0.00       --
   7   172       -0     1118         0         0         0     -763     4.02   4.02   8.04   8.04 0.06   0.04    0.01    0.09    0.00   0.00       --
   8   172       -0     -903        -0         0         0     -567     4.02   4.02   8.04   8.04 0.06   0.03    0.01    0.07    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A   194       -0   -11970         0         0         0     5421     4.02   4.02   8.04   8.04 0.22   0.32    0.16    0.99    0.00   0.00       --
 1B   194       -0    14244         0         0         0   -12351     4.02   4.02   8.04   8.04 0.22   0.73    0.19    1.18    2.79   0.00       --
 1I   194       -0    -4365         0         0         0     2387     4.02   4.02   8.04   8.04 0.22   0.14    0.06    0.36    0.00   0.00       --
 1J   194       -0     6639         0         0         0    -5880     4.02   4.02   8.04   8.04 0.22   0.35    0.09    0.55    0.00   0.00       --
   2   194       -0     -532        -0         0         0     -561     4.02   4.02   8.04   8.04 0.06   0.03    0.01    0.04    0.00   0.00       --
   7   194       -0     1118         0         0         0     -763     4.02   4.02   8.04   8.04 0.06   0.04    0.01    0.09    0.00   0.00       --
   8   194       -0     -513        -0         0         0     -567     4.02   4.02   8.04   8.04 0.06   0.03    0.01    0.04    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A   215       -0   -11970         0         0         0     5421     4.02   4.02   8.04   8.04 0.22   0.32    0.16    0.99    0.00   0.00       --
 1B   215       -0    14244         0         0         0   -14946     4.02   4.02   8.04   8.04 0.22   0.88    0.19    1.18    2.79   0.00       --
 1I   215       -0    -4365         0         0         0     2387     4.02   4.02   8.04   8.04 0.22   0.14    0.06    0.36    0.00   0.00       --
 1J   215       -0     6639         0         0         0    -6802     4.02   4.02   8.04   8.04 0.22   0.40    0.09    0.55    0.00   0.00       --
   2   215       -0     -532        -0         0         0     -561     4.02   4.02   8.04   8.04 0.06   0.03    0.01    0.04    0.00   0.00       --
   7   215       -0     1118         0         0        -0     -717     4.02   4.02   8.04   8.04 0.06   0.04    0.01    0.09    0.00   0.00       --
   8   215       -0     -513        -0         0         0     -567     4.02   4.02   8.04   8.04 0.06   0.03    0.01    0.04    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

Nome travata: CORDOLI DI FONDAZIONE08_IP1   Descrizione: CORDOLI DI FONDAZIONE 1-6-9-14-19-24-27
ASTA NUM. 22       NI 1     NF 95     SEZ.   Rp   B= 60.0   H= 60.0   (trave di fondazione)

armatura base = 4 X 2.01      per le armature aggiuntive consultare il tabulato

-------------------------------------------------------------------------------------------------------------------------------------------------
 NC     x        Fx        Fy        Fz        Mx        My        Mz    APOST   AANT   AINF   ASUP   x/d   Indice   resistenza   aswta aswto   PASSO
        --
        cm                  kg                            kg*m                              cmq                          Fx,M   Bielle   V,Mx       cmq/m          cm
-------------------------------------------------------------------------------------------------------------------------------------------------

 1A     0        -0      -721         0         0         0     -496     4.02   4.02   8.04   8.04 0.22   0.03    0.01    0.06    0.00   0.00       --
 1B     0        -0       726         0         0         0    -1986     4.02   4.02   8.04   8.04 0.22   0.12    0.01    0.06    0.00   0.00       --
 1I     0        -0      -303         0         0         0      227     4.02   4.02   8.04   8.04 0.22   0.01    0.00    0.02    0.00   0.00       --
 1J     0        -0       308         0         0         0    -2247     4.02   4.02   8.04   8.04 0.22   0.13    0.00    0.03    0.00   0.00       --
   2     0        -0       -47         0         0         0    -1303     4.02   4.02   8.04   8.04 0.06   0.07    0.00    0.00    0.00   0.00       --
   7     0        -0        74         0         0         0    -1359     4.02   4.02   8.04   8.04 0.06   0.08    0.00    0.01    0.00   0.00       --
   8     0        -0      -119         0         0         0    -1000     4.02   4.02   8.04   8.04 0.06   0.06    0.00    0.01    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A    36        -0      -721         0         0         0     -547     4.02   4.02   8.04   8.04 0.22   0.03    0.01    0.06    0.00   0.00       --
 1B    36        -0       726         0         0         0    -1986     4.02   4.02   8.04   8.04 0.22   0.12    0.01    0.06    0.00   0.00       --
 1I    36        -0      -303         0         0         0      227     4.02   4.02   8.04   8.04 0.22   0.01    0.00    0.02    0.00   0.00       --
 1J    36        -0       308         0         0         0    -2247     4.02   4.02   8.04   8.04 0.22   0.13    0.00    0.03    0.00   0.00       --
   2    36        -0       -47         0         0         0    -1307     4.02   4.02   8.04   8.04 0.06   0.07    0.00    0.00    0.00   0.00       --
   7    36        -0        74         0         0         0    -1359     4.02   4.02   8.04   8.04 0.06   0.08    0.00    0.01    0.00   0.00       --
   8    36        -0      -119         0         0         0    -1011     4.02   4.02   8.04   8.04 0.06   0.06    0.00    0.01    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A    73        -0      -721         0         0         0     -547     4.02   4.02   8.04   8.04 0.22   0.03    0.01    0.06    0.00   0.00       --
 1B    73        -0       726         0         0         0    -1934     4.02   4.02   8.04   8.04 0.22   0.11    0.01    0.06    0.00   0.00       --
```



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1I | 73 | -0 | -303 | 0 | 0 | 0 | 227 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1J | 73 | -0 | 393 | 0 | 0 | 0 | -2247 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 2 | 73 | -0 | 132 | 0 | 0 | 0 | -1307 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 7 | 73 | -0 | 206 | 0 | 0 | 0 | -1359 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 8 | 73 | -0 | -119 | 0 | 0 | 0 | -1011 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.01 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 110 | -0 | -396 | 0 | 0 | 0 | -547 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 1B | 110 | -0 | 645 | 0 | 0 | 0 | -1888 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1I | 110 | -0 | -144 | 0 | 0 | 0 | 166 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1J | 110 | -0 | 393 | 0 | 0 | 0 | -2247 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 2 | 110 | -0 | 132 | 0 | 0 | 0 | -1307 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 7 | 110 | -0 | 206 | 0 | 0 | 0 | -1359 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 8 | 110 | -0 | 50 | 0 | 0 | 0 | -1011 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 146 | -0 | -396 | 0 | 0 | 0 | -547 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 1B | 146 | -0 | 645 | 0 | 0 | 0 | -1893 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1I | 146 | -0 | -144 | 0 | 0 | 0 | 194 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1J | 146 | -0 | 458 | 0 | 0 | 0 | -2229 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 146 | -0 | 246 | 0 | 0 | 0 | -1307 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 7 | 146 | -0 | 280 | 0 | 0 | 0 | -1333 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 8 | 146 | -0 | 162 | 0 | 0 | 0 | -1011 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.01 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 182 | -0 | -173 | 0 | 0 | 0 | -326 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1B | 182 | -0 | 563 | 0 | 0 | 0 | -1838 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1I | 182 | -0 | -68 | 0 | 0 | 0 | 185 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1J | 182 | -0 | 458 | 0 | 0 | 0 | -2127 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 182 | -0 | 246 | 0 | 0 | 0 | -1279 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 7 | 182 | -0 | 280 | 0 | 0 | 0 | -1231 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 8 | 182 | -0 | 162 | 0 | 0 | 0 | -1011 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.01 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 219 | -0 | -173 | 0 | 0 | 0 | -186 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1B | 219 | -0 | 563 | 0 | 0 | 0 | -1835 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1I | 219 | -0 | -68 | 0 | 0 | 0 | 225 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1J | 219 | -0 | 498 | 0 | 0 | 0 | -2050 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 219 | -0 | 316 | 0 | 0 | 0 | -1234 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 7 | 219 | -0 | 314 | 0 | 0 | 0 | -1151 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 219 | -0 | 232 | 0 | 0 | 0 | -1005 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 256 | -0 | -28 | 0 | 0 | 0 | 62 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 1B | 256 | -0 | 486 | 0 | 0 | 0 | -1737 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1I | 256 | -0 | -40 | 0 | 0 | 0 | 234 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 1J | 256 | -0 | 498 | 0 | 0 | 0 | -1909 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 256 | -0 | 316 | 0 | 0 | 0 | -1118 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 7 | 256 | -0 | 314 | 0 | 0 | 0 | -1036 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 256 | -0 | 232 | 0 | 0 | 0 | -920 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 292 | -0 | 56 | 0 | 0 | 0 | 198 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 1B | 292 | -0 | 486 | 0 | 0 | 0 | -1688 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1I | 292 | -0 | -53 | 0 | 0 | 0 | 245 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 1J | 292 | -0 | 532 | 0 | 0 | 0 | -1790 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 292 | -0 | 358 | 0 | 0 | 0 | -1030 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 7 | 292 | -0 | 324 | 0 | 0 | 0 | -928 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 292 | -0 | 274 | 0 | 0 | 0 | -862 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 328 | -0 | 56 | 0 | 0 | 0 | 296 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 1B | 328 | -0 | 422 | 0 | 0 | 0 | -1571 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 1I | 328 | -0 | -53 | 0 | 0 | 0 | 245 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 1J | 328 | -0 | 532 | 0 | 0 | 0 | -1621 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 328 | -0 | 358 | 0 | 0 | 0 | -899 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 7 | 328 | -0 | 324 | 0 | 0 | 0 | -810 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 328 | -0 | 274 | 0 | 0 | 0 | -763 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 365 | -0 | 56 | 0 | 0 | 0 | 357 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 1B | 365 | -0 | 422 | 0 | 0 | 0 | -1494 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 1I | 365 | -0 | -53 | 0 | 0 | 0 | 245 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 1J | 365 | -0 | 532 | 0 | 0 | 0 | -1452 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 365 | -0 | 358 | 0 | 0 | 0 | -769 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 7 | 365 | -0 | 324 | 0 | 0 | 0 | -692 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 365 | -0 | 274 | 0 | 0 | 0 | -663 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE08_IP1** Descrizione: **CORDOLI DI FONDAZIONE 1-6-9-14-19-24-27**
**ASTA NUM. 23** NI 95 NF 5 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | Fx,M | Bielle | V,Mx | cmq/m | | cm |
| 1A | 0 | -0 | -251 | 0 | 0 | 0 | 617 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | 170 | 0 | 0 | 0 | -1129 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | -553 | 0 | 0 | 0 | 1241 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | 472 | 0 | 0 | 0 | -1959 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | -41 | 0 | 0 | 0 | -351 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | -1 | 0 | 0 | 0 | -309 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | -81 | 0 | 0 | 0 | -275 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.01 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 36 | -0 | -251 | 0 | 0 | 0 | 617 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1B | 36 | -0 | 170 | 0 | 0 | 0 | -1085 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1I | 36 | -0 | -553 | 0 | 0 | 0 | 1241 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1J | 36 | -0 | 472 | 0 | 0 | 0 | -1789 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 36 | -0 | -41 | 0 | 0 | 0 | -366 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 7 | 36 | -0 | -1 | 0 | 0 | 0 | -309 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 8 | 36 | -0 | -81 | 0 | 0 | 0 | -305 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.01 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 73 | -0 | -336 | 0 | 0 | 0 | 617 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 1B | 73 | -0 | 228 | 0 | 0 | 0 | -1068 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 73 | -0 | -671 | 0 | 0 | 0 | 1241 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1J | 73 | -0 | 563 | 0 | 0 | 0 | -1678 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 2 | 73 | -0 | -41 | 0 | 0 | 0 | -376 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 7 | 73 | -0 | -9 | 0 | 0 | 0 | -315 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 8 | 73 | -0 | -81 | 0 | 0 | 0 | -335 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.01 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 110 | -0 | -336 | 0 | 0 | 0 | 541 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 1B | 110 | -0 | 228 | 0 | 0 | 0 | -986 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 110 | -0 | -671 | 0 | 0 | 0 | 1029 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1J | 110 | -0 | 563 | 0 | 0 | 0 | -1473 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 2 | 110 | -0 | -23 | 0 | 0 | 0 | -376 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 7 | 110 | -0 | -9 | 0 | 0 | 0 | -318 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 8 | 110 | -0 | -67 | 0 | 0 | 0 | -350 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.01 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 146 | -0 | -452 | 0 | 0 | 0 | 494 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1B | 146 | -0 | 308 | 0 | 0 | 0 | -954 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 1I | 146 | -0 | -837 | 0 | 0 | 0 | 892 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1J | 146 | -0 | 693 | 0 | 0 | 0 | -1352 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 2 | 146 | -0 | -23 | 0 | 0 | 0 | -376 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 7 | 146 | -0 | -19 | 0 | 0 | 0 | -328 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 8 | 146 | -0 | -67 | 0 | 0 | 0 | -375 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.01 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 182 | -0 | -452 | 0 | 0 | 0 | 358 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1B | 182 | -0 | 308 | 0 | 0 | 0 | -870 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 1I | 182 | -0 | -837 | 0 | 0 | 0 | 612 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1J | 182 | -0 | 693 | 0 | 0 | 0 | -1125 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 2 | 182 | -0 | -6 | 0 | 0 | 0 | -376 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 7 | 182 | -0 | -19 | 0 | 0 | 0 | -334 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 8 | 182 | -0 | -60 | 0 | 0 | 0 | -392 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 219 | -0 | -584 | 0 | 0 | 0 | -69 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.00 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1B | 219 | -0 | 403 | 0 | 0 | 0 | -847 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 1I | 219 | -0 | -1050 | 0 | 0 | 0 | -203 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 1J | 219 | -0 | 869 | 0 | 0 | 0 | -1011 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 2 | 219 | -0 | 14 | 0 | 0 | 0 | -376 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 7 | 219 | -0 | -24 | 0 | 0 | 0 | -345 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 8 | 219 | -0 | -60 | 0 | 0 | 0 | -414 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 256 | -0 | -584 | 0 | 0 | 0 | -69 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.00 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1B | 256 | -0 | 403 | 0 | 0 | 0 | -963 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 1I | 256 | -0 | -1050 | 0 | 0 | 0 | 732 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 1J | 256 | -0 | 869 | 0 | 0 | 0 | -1339 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 2 | 256 | -0 | 14 | 0 | 0 | 0 | -376 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 7 | 256 | -0 | -24 | 0 | 0 | 0 | -353 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 8 | 256 | -0 | -53 | 0 | 0 | 0 | -429 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 292 | -0 | -730 | 0 | 0 | 0 | 187 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1B | 292 | -0 | 521 | 0 | 0 | 0 | -1129 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1I | 292 | -0 | -1307 | 0 | 0 | 0 | 1054 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1J | 292 | -0 | 1098 | 0 | 0 | 0 | -1814 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 2 | 292 | -0 | 43 | 0 | 0 | 0 | -376 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 7 | 292 | -0 | -24 | 0 | 0 | 0 | -361 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 8 | 292 | -0 | -53 | 0 | 0 | 0 | -445 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 328 | -0 | -730 | 0 | 0 | 0 | 187 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1B | 328 | -0 | 521 | 0 | 0 | 0 | -1129 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1I | 328 | -0 | -1307 | 0 | 0 | 0 | 1054 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1J | 328 | -0 | 1098 | 0 | 0 | 0 | -1996 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 2 | 328 | -0 | 43 | 0 | 0 | 0 | -376 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 7 | 328 | -0 | -20 | 0 | 0 | 0 | -361 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 8 | 328 | -0 | -42 | 0 | 0 | 0 | -445 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 365 | -0 | -730 | 0 | 0 | 0 | 187 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1B | 365 | -0 | 521 | 0 | 0 | 0 | -1129 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1I | 365 | -0 | -1307 | 0 | 0 | 0 | 1054 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1J | 365 | -0 | 1098 | 0 | 0 | 0 | -1996 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 2 | 365 | -0 | 43 | 0 | 0 | 0 | -362 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 7 | 365 | -0 | -20 | 0 | 0 | 0 | -361 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 8 | 365 | -0 | -42 | 0 | 0 | 0 | -445 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE08_IP1** Descrizione: **CORDOLI DI FONDAZIONE 1-6-9-14-19-24-27**
**ASTA NUM. 24** NI 5 NF 54 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 0 | -0 | -1184 | 0 | 0 | 0 | 434 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | 692 | 0 | 0 | 0 | -34 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.00 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | -2385 | 0 | 0 | 0 | 546 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.03 | 0.20 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | 1893 | 0 | 0 | 0 | -108 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.03 | 0.16 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | -68 | 0 | 0 | 0 | 228 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | -77 | 0 | 0 | 0 | 239 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | -236 | 0 | 0 | 0 | 189 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.01 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 20 | -0 | -1184 | 0 | 0 | 0 | 1332 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 1B | 20 | -0 | 692 | 0 | 0 | 0 | -642 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1I | 20 | -0 | -2385 | 0 | 0 | 0 | 2486 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.15 | 0.03 | 0.20 | 0.00 | 0.00 | -- |
| 1J | 20 | -0 | 1893 | 0 | 0 | 0 | -1797 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.03 | 0.16 | 0.00 | 0.00 | -- |
| 2 | 20 | -0 | -68 | 0 | 0 | 0 | 228 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 7 | 20 | -0 | -77 | 0 | 0 | 0 | 239 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | -- |



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```
   8    20       -0     -237         0         0         0      189     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.02    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A    41       -0    -1269         0         0         0     1487     4.02   4.02   8.04   8.04 0.22   0.09    0.02    0.10    0.00   0.00       --
 1B    41       -0      782         0         0         0     -902     4.02   4.02   8.04   8.04 0.22   0.05    0.01    0.06    0.00   0.00       --
 1I    41       -0    -2550         0         0         0     2967     4.02   4.02   8.04   8.04 0.22   0.17    0.03    0.21    0.00   0.00       --
 1J    41       -0     2063         0         0         0    -2382     4.02   4.02   8.04   8.04 0.22   0.14    0.03    0.17    0.00   0.00       --
   2    41       -0      -68         0         0         0      238     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.01    0.00   0.00       --
   7    41       -0      -77         0         0         0      251     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.01    0.00   0.00       --
   8    41       -0     -237         0         0         0      225     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.02    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A    62       -0    -1269         0         0         0     1625     4.02   4.02   8.04   8.04 0.22   0.10    0.02    0.10    0.00   0.00       --
 1B    62       -0      782         0         0         0    -1140     4.02   4.02   8.04   8.04 0.22   0.07    0.01    0.06    0.00   0.00       --
 1I    62       -0    -2550         0         0         0     3383     4.02   4.02   8.04   8.04 0.22   0.20    0.03    0.21    0.00   0.00       --
 1J    62       -0     2063         0         0         0    -2897     4.02   4.02   8.04   8.04 0.22   0.17    0.03    0.17    0.00   0.00       --
   2    62       -0      -37         0         0         0      227     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.00    0.00   0.00       --
   7    62       -0      -61         0         0         0      246     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.01    0.00   0.00       --
   8    62       -0     -219         0         0         0      223     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.02    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A    82       -0    -1353         0         0         0     1817     4.02   4.02   8.04   8.04 0.22   0.11    0.02    0.11    0.00   0.00       --
 1B    82       -0      878         0         0         0    -1440     4.02   4.02   8.04   8.04 0.22   0.08    0.01    0.07    0.00   0.00       --
 1I    82       -0    -2719         0         0         0     3907     4.02   4.02   8.04   8.04 0.22   0.23    0.04    0.22    0.00   0.00       --
 1J    82       -0     2244         0         0         0    -3529     4.02   4.02   8.04   8.04 0.22   0.21    0.03    0.19    0.00   0.00       --
   2    82       -0      -37         0         0         0      219     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.00    0.00   0.00       --
   7    82       -0      -61         0         0         0      233     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.01    0.00   0.00       --
   8    82       -0     -219         0         0         0      179     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.02    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A   102       -0    -1353         0         0         0     1997     4.02   4.02   8.04   8.04 0.22   0.12    0.02    0.11    0.00   0.00       --
 1B   102       -0      878         0         0         0    -1717     4.02   4.02   8.04   8.04 0.22   0.10    0.01    0.07    0.00   0.00       --
 1I   102       -0    -2719         0         0         0     4366     4.02   4.02   8.04   8.04 0.22   0.26    0.04    0.22    0.00   0.00       --
 1J   102       -0     2244         0         0         0    -4086     4.02   4.02   8.04   8.04 0.22   0.24    0.03    0.19    0.00   0.00       --
   2   102       -0       -1         0         0         0      196     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.00    0.00   0.00       --
   7   102       -0      -41         0         0         0      212     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.00    0.00   0.00       --
   8   102       -0     -198         0         0         0     -129     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.02    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A   123       -0    -1433         0         0         0     2154     4.02   4.02   8.04   8.04 0.22   0.13    0.02    0.12    0.00   0.00       --
 1B   123       -0      979         0         0         0    -2058     4.02   4.02   8.04   8.04 0.22   0.12    0.01    0.08    0.00   0.00       --
 1I   123       -0    -2884         0         0         0     4932     4.02   4.02   8.04   8.04 0.22   0.29    0.04    0.24    0.00   0.00       --
 1J   123       -0     2430         0         0         0    -4762     4.02   4.02   8.04   8.04 0.22   0.28    0.03    0.20    0.00   0.00       --
   2   123       -0       39         0         0         0      220     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.00    0.00   0.00       --
   7   123       -0      -41         0         0         0      204     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.00    0.00   0.00       --
   8   123       -0     -198         0         0         0     -170     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.02    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A   144       -0    -1433         0         0         0     2154     4.02   4.02   8.04   8.04 0.22   0.13    0.02    0.12    0.00   0.00       --
 1B   144       -0      979         0         0         0    -2352     4.02   4.02   8.04   8.04 0.22   0.14    0.01    0.08    0.00   0.00       --
 1I   144       -0    -2884         0         0         0     5151     4.02   4.02   8.04   8.04 0.22   0.30    0.04    0.24    0.00   0.00       --
 1J   144       -0     2430         0         0         0    -5354     4.02   4.02   8.04   8.04 0.22   0.32    0.03    0.20    0.00   0.00       --
   2   144       -0       39         0         0         0      228     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.00    0.00   0.00       --
   7   144       -0      -16         0         0         0      176     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.00    0.00   0.00       --
   8   144       -0     -172         0         0         0     -172     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.01    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A   164       -0    -1506         0         0         0     2154     4.02   4.02   8.04   8.04 0.22   0.13    0.02    0.12    0.00   0.00       --
 1B   164       -0     1080         0         0         0    -2636     4.02   4.02   8.04   8.04 0.22   0.16    0.01    0.09    0.00   0.00       --
 1I   164       -0    -3040         0         0         0     5151     4.02   4.02   8.04   8.04 0.22   0.30    0.04    0.25    0.00   0.00       --
 1J   164       -0     2614         0         0         0    -5633     4.02   4.02   8.04   8.04 0.22   0.33    0.03    0.22    0.00   0.00       --
   2   164       -0       83         0         0         0      233     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.01    0.00   0.00       --
   7   164       -0      -16         0         0         0      174     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.00    0.00   0.00       --
   8   164       -0     -172         0         0         0     -172     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.01    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A   184       -0    -1506         0         0         0     2154     4.02   4.02   8.04   8.04 0.22   0.13    0.02    0.12    0.00   0.00       --
 1B   184       -0     1080         0         0         0    -2636     4.02   4.02   8.04   8.04 0.22   0.16    0.01    0.09    0.00   0.00       --
 1I   184       -0    -3040         0         0         0     5151     4.02   4.02   8.04   8.04 0.22   0.30    0.04    0.25    0.00   0.00       --
 1J   184       -0     2614         0         0         0    -5633     4.02   4.02   8.04   8.04 0.22   0.33    0.03    0.22    0.00   0.00       --
   2   184       -0       83         0         0         0      233     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.01    0.00   0.00       --
   7   184       -0       12         0         0         0      174     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.00    0.00   0.00       --
   8   184       -0     -143         0         0         0     -172     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.01    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A   205       -0    -1506         0         0         0     2153     4.02   4.02   8.04   8.04 0.22   0.13    0.02    0.12    0.00   0.00       --
 1B   205       -0     1080         0         0         0    -2636     4.02   4.02   8.04   8.04 0.22   0.16    0.01    0.09    0.00   0.00       --
 1I   205       -0    -3040         0         0         0     5151     4.02   4.02   8.04   8.04 0.22   0.30    0.04    0.25    0.00   0.00       --
 1J   205       -0     2614         0         0         0    -5633     4.02   4.02   8.04   8.04 0.22   0.33    0.03    0.22    0.00   0.00       --
   2   205       -0       83         0         0         0      233     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.01    0.00   0.00       --
   7   205       -0       12         0         0         0      174     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.00    0.00   0.00       --
   8   205       -0     -143         0         0         0     -172     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.01    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

Nome travata: CORDOLI DI FONDAZIONE08_IP1   Descrizione: CORDOLI DI FONDAZIONE 1-6-9-14-19-24-27
ASTA NUM. 25       NI 54     NF 8     SEZ.   Rp   B= 60.0   H= 60.0   (trave di fondazione)

armatura base = 4 X 2.01      per le armature aggiuntive consultare il tabulato

-------------------------------------------------------------------------------------------------------------------------------------
 NC     x        Fx        Fy        Fz        Mx        My        Mz    APOST   AANT   AINF   ASUP   x/d   Indice   resistenza   aswta aswto   PASSO
        --       ----------------------      ----------------------      ---------------------      -----------------  ----------  -----
        cm                 kg                          kg*m                          cmq                      Fx,M   Bielle   V,Mx       cmq/m          cm
-------------------------------------------------------------------------------------------------------------------------------------

 1A     0       -0    -1053         0         0         0     1639     4.02   4.02   8.04   8.04 0.22   0.10    0.01    0.09    0.00   0.00       --
 1B     0       -0     2073         0         0         0    -2874     4.02   4.02   8.04   8.04 0.22   0.17    0.03    0.17    0.00   0.00       --
 1I     0       -0    -2886         0         0         0     4462     4.02   4.02   8.04   8.04 0.22   0.26    0.04    0.24    0.00   0.00       --
 1J     0       -0     3906         0         0         0    -5697     4.02   4.02   8.04   8.04 0.22   0.34    0.05    0.32    0.00   0.00       --
   2     0       -0      191         0         0         0     -177     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.02    0.00   0.00       --
   7     0       -0      252         0         0         0     -230     4.02   4.02   8.04   8.04 0.06   0.01    0.00    0.02    0.00   0.00       --
   8     0       -0      450         0         0         0     -565     4.02   4.02   8.04   8.04 0.06   0.03    0.01    0.04    0.00   0.00       --

apost= --       aant= --       ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d   8 / 33.0

 1A    30       -0    -1053         0         0         0     1639     4.02   4.02   8.04   8.04 0.22   0.10    0.01    0.09    0.00   0.00       --
 1B    30       -0     2073         0         0         0    -2874     4.02   4.02   8.04   8.04 0.22   0.17    0.03    0.17    0.00   0.00       --
 1I    30       -0    -2886         0         0         0     4462     4.02   4.02   8.04   8.04 0.22   0.26    0.04    0.24    0.00   0.00       --
```



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| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1J | 30 | -0 | 3906 | 0 | 0 | 0 | -5697 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.34 | 0.05 | 0.32 | 0.00 | 0.00 | -- |
| 2 | 30 | -0 | 191 | 0 | 0 | 0 | -177 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.01 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 7 | 30 | -0 | 252 | 0 | 0 | 0 | -230 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.01 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 8 | 30 | -0 | 450 | 0 | 0 | 0 | -565 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.04 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 61 | -0 | -1053 | 0 | 0 | 0 | 1639 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 1B | 61 | -0 | 2073 | 0 | 0 | 0 | -2874 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.03 | 0.17 | 0.00 | 0.00 | -- |
| 1I | 61 | -0 | -2886 | 0 | 0 | 0 | 4462 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.26 | 0.04 | 0.24 | 0.00 | 0.00 | -- |
| 1J | 61 | -0 | 3906 | 0 | 0 | 0 | -5697 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.34 | 0.05 | 0.32 | 0.00 | 0.00 | -- |
| 2 | 61 | -0 | 268 | 0 | 0 | 0 | -177 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.01 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 7 | 61 | -0 | 306 | 0 | 0 | 0 | -230 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.01 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 61 | -0 | 513 | 0 | 0 | 0 | -565 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.04 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 92 | -0 | -927 | 0 | 0 | 0 | 1313 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1B | 92 | -0 | 2029 | 0 | 0 | 0 | -2297 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.03 | 0.17 | 0.00 | 0.00 | -- |
| 1I | 92 | -0 | -2690 | 0 | 0 | 0 | 3608 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.04 | 0.22 | 0.00 | 0.00 | -- |
| 1J | 92 | -0 | 3792 | 0 | 0 | 0 | -4592 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.27 | 0.05 | 0.31 | 0.00 | 0.00 | -- |
| 2 | 92 | -0 | 268 | 0 | 0 | 0 | 193 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.01 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 7 | 92 | -0 | 306 | 0 | 0 | 0 | 213 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.01 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 92 | -0 | 513 | 0 | 0 | 0 | -463 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.04 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 122 | -0 | -927 | 0 | 0 | 0 | 1035 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1B | 122 | -0 | 2047 | 0 | 0 | 0 | -1694 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.03 | 0.17 | 0.00 | 0.00 | -- |
| 1I | 122 | -0 | -2690 | 0 | 0 | 0 | 2789 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.16 | 0.04 | 0.22 | 0.00 | 0.00 | -- |
| 1J | 122 | -0 | 3793 | 0 | 0 | 0 | -3438 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.20 | 0.05 | 0.31 | 0.00 | 0.00 | -- |
| 2 | 122 | -0 | 352 | 0 | 0 | 0 | 329 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 7 | 122 | -0 | 368 | 0 | 0 | 0 | 346 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 122 | -0 | 593 | 0 | 0 | 0 | 402 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.01 | 0.05 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 152 | -0 | -830 | 0 | 0 | 0 | 714 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1B | 152 | -0 | 2047 | 0 | 0 | 0 | 1561 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.03 | 0.17 | 0.00 | 0.00 | -- |
| 1I | 152 | -0 | -2576 | 0 | 0 | 0 | 1929 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.03 | 0.21 | 0.00 | 0.00 | -- |
| 1J | 152 | -0 | 3793 | 0 | 0 | 0 | 2586 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.15 | 0.05 | 0.31 | 0.00 | 0.00 | -- |
| 2 | 152 | -0 | 352 | 0 | 0 | 0 | 436 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 7 | 152 | -0 | 368 | 0 | 0 | 0 | 459 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 152 | -0 | 593 | 0 | 0 | 0 | 583 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.05 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 183 | -0 | -830 | 0 | 0 | 0 | 1410 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1B | 183 | -0 | 2130 | 0 | 0 | 0 | 2243 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 1I | 183 | -0 | -2576 | 0 | 0 | 0 | 2964 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.03 | 0.21 | 0.00 | 0.00 | -- |
| 1J | 183 | -0 | 3916 | 0 | 0 | 0 | 3823 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.23 | 0.05 | 0.32 | 0.00 | 0.00 | -- |
| 2 | 183 | -0 | 443 | 0 | 0 | 0 | 602 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 183 | -0 | 438 | 0 | 0 | 0 | 615 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 8 | 183 | -0 | 688 | 0 | 0 | 0 | 825 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.06 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 214 | -0 | -764 | 0 | 0 | 0 | 2017 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1B | 214 | -0 | 2130 | 0 | 0 | 0 | -1674 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 1I | 214 | -0 | -2550 | 0 | 0 | 0 | 4142 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.24 | 0.03 | 0.21 | 0.00 | 0.00 | -- |
| 1J | 214 | -0 | 3916 | 0 | 0 | 0 | -3799 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.05 | 0.32 | 0.00 | 0.00 | -- |
| 2 | 214 | -0 | 443 | 0 | 0 | 0 | 737 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 214 | -0 | 438 | 0 | 0 | 0 | 749 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 8 | 214 | -0 | 688 | 0 | 0 | 0 | 1035 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.01 | 0.06 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 244 | -0 | -764 | 0 | 0 | 0 | 2666 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.16 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1B | 244 | -0 | 2269 | 0 | 0 | 0 | -1996 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 1I | 244 | -0 | -2613 | 0 | 0 | 0 | 5376 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.32 | 0.03 | 0.22 | 0.00 | 0.00 | -- |
| 1J | 244 | -0 | 4151 | 0 | 0 | 0 | -4727 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.28 | 0.06 | 0.34 | 0.00 | 0.00 | -- |
| 2 | 244 | -0 | 538 | 0 | 0 | 0 | 835 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 244 | -0 | 511 | 0 | 0 | 0 | 837 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 8 | 244 | -0 | 796 | 0 | 0 | 0 | 1170 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.01 | 0.07 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 274 | -0 | -730 | 0 | 0 | 0 | 3336 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.20 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1B | 274 | -0 | 2269 | 0 | 0 | 0 | -2219 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 1I | 274 | -0 | -2613 | 0 | 0 | 0 | 6016 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.35 | 0.03 | 0.22 | 0.00 | 0.00 | -- |
| 1J | 274 | -0 | 4151 | 0 | 0 | 0 | -5524 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.33 | 0.06 | 0.34 | 0.00 | 0.00 | -- |
| 2 | 274 | -0 | 538 | 0 | 0 | 0 | 835 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 274 | -0 | 511 | 0 | 0 | 0 | 837 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 8 | 274 | -0 | 796 | 0 | 0 | 0 | 1170 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.01 | 0.07 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 305 | -0 | -730 | 0 | 0 | 0 | 3400 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.20 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1B | 305 | -0 | 2269 | 0 | 0 | 0 | -2557 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.15 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 1I | 305 | -0 | -2613 | 0 | 0 | 0 | 6016 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.35 | 0.03 | 0.22 | 0.00 | 0.00 | -- |
| 1J | 305 | -0 | 4151 | 0 | 0 | 0 | -5697 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.34 | 0.06 | 0.34 | 0.00 | 0.00 | -- |
| 2 | 305 | -0 | 538 | 0 | 0 | 0 | 835 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 305 | -0 | 511 | 0 | 0 | 0 | 837 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 8 | 305 | -0 | 796 | 0 | 0 | 0 | 1170 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.01 | 0.07 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE08_IP1** Descrizione: **CORDOLI DI FONDAZIONE 1-6-9-14-19-24-27**
**ASTA NUM. 26** NI 8 NF 39 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | Fx,M | Bielle | V,Mx | cmq/m | | cm |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 0 | -0 | -1598 | 0 | 0 | 0 | 3200 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | 446 | 0 | 0 | 0 | -1463 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | -2981 | 0 | 0 | 0 | 6210 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.37 | 0.04 | 0.25 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | 1829 | 0 | 0 | 0 | -4515 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.27 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | -441 | 0 | 0 | 0 | 460 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | -385 | 0 | 0 | 0 | 449 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | -632 | 0 | 0 | 0 | 851 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.05 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 36 | -0 | -1598 | 0 | 0 | 0 | 3200 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1B | 36 | -0 | 446 | 0 | 0 | 0 | -1463 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1I | 36 | -0 | -2981 | 0 | 0 | 0 | 6210 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.37 | 0.04 | 0.25 | 0.00 | 0.00 | -- |
| 1J | 36 | -0 | 1829 | 0 | 0 | 0 | -4515 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.27 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 2 | 36 | -0 | -441 | 0 | 0 | 0 | 460 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 36 | -0 | -385 | 0 | 0 | 0 | 449 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 36 | -0 | -632 | 0 | 0 | 0 | 851 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.05 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 73 | -0 | -1598 | 0 | 0 | 0 | 3237 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1B | 73 | -0 | 446 | 0 | 0 | 0 | -1463 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1I | 73 | -0 | -2981 | 0 | 0 | 0 | 6123 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.36 | 0.04 | 0.25 | 0.00 | 0.00 | -- |
| 1J | 73 | -0 | 1829 | 0 | 0 | 0 | -4372 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.26 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 2 | 73 | -0 | -441 | 0 | 0 | 0 | 487 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 73 | -0 | -385 | 0 | 0 | 0 | 472 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 73 | -0 | -632 | 0 | 0 | 0 | 890 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.05 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 110 | -0 | -1349 | 0 | 0 | 0 | 2607 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.15 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1B | 110 | -0 | 398 | 0 | 0 | 0 | -1332 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 1I | 110 | -0 | -2562 | 0 | 0 | 0 | 4925 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.29 | 0.03 | 0.21 | 0.00 | 0.00 | -- |
| 1J | 110 | -0 | 1611 | 0 | 0 | 0 | -3651 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 2 | 110 | -0 | -343 | 0 | 0 | 0 | 299 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 7 | 110 | -0 | -312 | 0 | 0 | 0 | 311 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 110 | -0 | -507 | 0 | 0 | 0 | 625 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.04 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 146 | -0 | -1349 | 0 | 0 | 0 | 2135 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1B | 146 | -0 | 398 | 0 | 0 | 0 | -1208 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 1I | 146 | -0 | -2562 | 0 | 0 | 0 | 3996 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.24 | 0.03 | 0.21 | 0.00 | 0.00 | -- |
| 1J | 146 | -0 | 1611 | 0 | 0 | 0 | -3069 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.18 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 2 | 146 | -0 | -343 | 0 | 0 | 0 | -266 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 7 | 146 | -0 | -312 | 0 | 0 | 0 | -202 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.01 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 146 | -0 | -507 | 0 | 0 | 0 | 440 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.01 | 0.04 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 182 | -0 | -1119 | 0 | 0 | 0 | 1587 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 1B | 182 | -0 | 332 | 0 | 0 | 0 | -1053 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 1I | 182 | -0 | -2168 | 0 | 0 | 0 | 2954 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 1J | 182 | -0 | 1381 | 0 | 0 | 0 | -2420 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 2 | 182 | -0 | -262 | 0 | 0 | 0 | -309 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 7 | 182 | -0 | -255 | 0 | 0 | 0 | -258 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.01 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 8 | 182 | -0 | -400 | 0 | 0 | 0 | -288 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.01 | 0.03 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 219 | -0 | -1119 | 0 | 0 | 0 | 1187 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 1B | 219 | -0 | 332 | 0 | 0 | 0 | -939 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 1I | 219 | -0 | -2168 | 0 | 0 | 0 | 2166 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 1J | 219 | -0 | 1381 | 0 | 0 | 0 | -1919 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 2 | 219 | -0 | -262 | 0 | 0 | 0 | -405 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 7 | 219 | -0 | -255 | 0 | 0 | 0 | -351 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 8 | 219 | -0 | -400 | 0 | 0 | 0 | -434 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.01 | 0.03 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 256 | -0 | -952 | 0 | 0 | 0 | 831 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1B | 256 | -0 | 290 | 0 | 0 | 0 | -905 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 256 | -0 | -1838 | 0 | 0 | 0 | 687 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 1J | 256 | -0 | 1177 | 0 | 0 | 0 | -1283 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 2 | 256 | -0 | -196 | 0 | 0 | 0 | -434 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 7 | 256 | -0 | -214 | 0 | 0 | 0 | -403 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 8 | 256 | -0 | -313 | 0 | 0 | 0 | -493 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.00 | 0.03 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 292 | -0 | -952 | 0 | 0 | 0 | -28 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.00 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1B | 292 | -0 | 290 | 0 | 0 | 0 | -899 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 292 | -0 | -1838 | 0 | 0 | 0 | -715 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 1J | 292 | -0 | 1177 | 0 | 0 | 0 | -1470 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 2 | 292 | -0 | -196 | 0 | 0 | 0 | -484 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 7 | 292 | -0 | -214 | 0 | 0 | 0 | -480 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 8 | 292 | -0 | -313 | 0 | 0 | 0 | -584 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.00 | 0.03 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 328 | -0 | -854 | 0 | 0 | 0 | 95 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1B | 328 | -0 | 281 | 0 | 0 | 0 | -1163 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 328 | -0 | -1585 | 0 | 0 | 0 | 687 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1J | 328 | -0 | 1012 | 0 | 0 | 0 | -1929 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 2 | 328 | -0 | -143 | 0 | 0 | 0 | -484 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 7 | 328 | -0 | -186 | 0 | 0 | 0 | -480 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 8 | 328 | -0 | -243 | 0 | 0 | 0 | -584 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 365 | -0 | -854 | 0 | 0 | 0 | 95 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1B | 365 | -0 | 281 | 0 | 0 | 0 | -1434 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 365 | -0 | -1585 | 0 | 0 | 0 | 687 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1J | 365 | -0 | 1012 | 0 | 0 | 0 | -2494 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.15 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 2 | 365 | -0 | -143 | 0 | 0 | 0 | -484 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 7 | 365 | -0 | -186 | 0 | 0 | 0 | -480 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 8 | 365 | -0 | -243 | 0 | 0 | 0 | -584 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE08_IP1** Descrizione: **CORDOLI DI FONDAZIONE 1-6-9-14-19-24-27**
**ASTA NUM. 27** NI 39 NF 46 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | | Fx,M | Bielle | V,Mx | | cmq/m | cm |
| 1A | 0 | -0 | -655 | 0 | 0 | 0 | -447 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | -55 | 0 | 0 | 0 | -1425 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | -879 | 0 | 0 | 0 | -409 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | 169 | 0 | 0 | 0 | -1266 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | -320 | 0 | 0 | 0 | -924 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | -287 | 0 | 0 | 0 | -860 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | -388 | 0 | 0 | 0 | -1001 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.01 | 0.03 | 0.00 | 0.00 | -- |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 36 | -0 | -655 | 0 | 0 | 0 | -586 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1B | 36 | -0 | -55 | 0 | 0 | 0 | -1546 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 1I | 36 | -0 | -879 | 0 | 0 | 0 | -409 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1J | 36 | -0 | 169 | 0 | 0 | 0 | -1538 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 2 | 36 | -0 | -321 | 0 | 0 | 0 | -1041 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 7 | 36 | -0 | -287 | 0 | 0 | 0 | -965 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 8 | 36 | -0 | -388 | 0 | 0 | 0 | -1143 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.01 | 0.03 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 73 | -0 | -655 | 0 | 0 | 0 | -725 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1B | 73 | -0 | -55 | 0 | 0 | 0 | -1666 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 1I | 73 | -0 | -879 | 0 | 0 | 0 | -409 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1J | 73 | -0 | 169 | 0 | 0 | 0 | -1810 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 2 | 73 | -0 | -321 | 0 | 0 | 0 | -1158 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 7 | 73 | -0 | -287 | 0 | 0 | 0 | -1069 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 8 | 73 | -0 | -388 | 0 | 0 | 0 | -1284 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.01 | 0.03 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 110 | -0 | -646 | 0 | 0 | 0 | -852 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1B | 110 | -0 | -3 | 0 | 0 | 0 | -1737 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 1I | 110 | -0 | -731 | 0 | 0 | 0 | -409 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1J | 110 | -0 | 82 | 0 | 0 | 0 | -1978 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 2 | 110 | -0 | -269 | 0 | 0 | 0 | -1224 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 7 | 110 | -0 | -266 | 0 | 0 | 0 | -1153 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 8 | 110 | -0 | -328 | 0 | 0 | 0 | -1365 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.00 | 0.03 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 146 | -0 | -666 | 0 | 0 | 0 | -998 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1B | 146 | -0 | 105 | 0 | 0 | 0 | -1906 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1I | 146 | -0 | -731 | 0 | 0 | 0 | -409 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1J | 146 | -0 | 82 | 0 | 0 | 0 | -2202 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 2 | 146 | -0 | -269 | 0 | 0 | 0 | -1322 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 7 | 146 | -0 | -266 | 0 | 0 | 0 | -1250 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 8 | 146 | -0 | -328 | 0 | 0 | 0 | -1485 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.00 | 0.03 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 182 | -0 | -666 | 0 | 0 | 0 | -998 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1B | 182 | -0 | 105 | 0 | 0 | 0 | -1953 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1I | 182 | -0 | -607 | 0 | 0 | 0 | -409 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1J | 182 | -0 | 46 | 0 | 0 | 0 | -2338 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 2 | 182 | -0 | -198 | 0 | 0 | 0 | -1349 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 7 | 182 | -0 | -229 | 0 | 0 | 0 | -1309 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 8 | 182 | -0 | -250 | 0 | 0 | 0 | -1526 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.09 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 219 | -0 | -698 | 0 | 0 | 0 | -998 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1B | 219 | -0 | 293 | 0 | 0 | 0 | -2121 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 219 | -0 | -607 | 0 | 0 | 0 | -409 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1J | 219 | -0 | 74 | 0 | 0 | 0 | -2515 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.15 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 2 | 219 | -0 | -198 | 0 | 0 | 0 | -1359 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 7 | 219 | -0 | -229 | 0 | 0 | 0 | -1387 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 8 | 219 | -0 | -250 | 0 | 0 | 0 | -1555 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.09 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 256 | -0 | -698 | 0 | 0 | 0 | -998 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1B | 256 | -0 | 293 | 0 | 0 | 0 | -2212 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 256 | -0 | -479 | 0 | 0 | 0 | -409 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1J | 256 | -0 | 74 | 0 | 0 | 0 | -2633 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.16 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 2 | 256 | -0 | -90 | 0 | 0 | 0 | -1359 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 7 | 256 | -0 | -158 | 0 | 0 | 0 | -1387 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 8 | 256 | -0 | -134 | 0 | 0 | 0 | -1555 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.09 | 0.00 | 0.01 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 292 | -0 | -728 | 0 | 0 | 0 | -998 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1B | 292 | -0 | 591 | 0 | 0 | 0 | -2495 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.15 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1I | 292 | -0 | -479 | 0 | 0 | 0 | -409 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1J | 292 | -0 | 213 | 0 | 0 | 0 | -2841 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 2 | 292 | -0 | -90 | 0 | 0 | 0 | -1359 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 7 | 292 | -0 | -158 | 0 | 0 | 0 | -1387 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 8 | 292 | -0 | -134 | 0 | 0 | 0 | -1555 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.09 | 0.00 | 0.01 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 328 | -0 | -728 | 0 | 0 | 0 | -998 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1B | 328 | -0 | 591 | 0 | 0 | 0 | -2636 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.16 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1I | 328 | -0 | -350 | 0 | 0 | 0 | -409 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 1J | 328 | -0 | 213 | 0 | 0 | 0 | -2922 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 2 | 328 | -0 | 78 | 0 | 0 | 0 | -1359 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 7 | 328 | -0 | -34 | 0 | 0 | 0 | -1387 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 8 | 328 | -0 | 43 | 0 | 0 | 0 | -1555 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 365 | -0 | -728 | 0 | 0 | 0 | -998 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1B | 365 | -0 | 591 | 0 | 0 | 0 | -2636 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.16 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1I | 365 | -0 | -350 | 0 | 0 | 0 | -409 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 1J | 365 | -0 | 213 | 0 | 0 | 0 | -2922 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 2 | 365 | -0 | 78 | 0 | 0 | 0 | -1352 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 7 | 365 | -0 | -34 | 0 | 0 | 0 | -1387 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 8 | 365 | -0 | 43 | 0 | 0 | 0 | -1551 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE09_IP1**  Descrizione: **CORDOLI DI FONDAZIONE 2-7-10-15-20-2...**
**ASTA NUM. 28**  NI 18  NF 96  SEZ.  Rp  B= 60.0  H= 30.0  (trave di fondazione)

armatura base = 4 X 2.01  per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 0 | -0 | -3138 | 0 | 0 | 0 | 2255 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.57 | 0.09 | 0.43 | 0.00 | 0.00 | 21.6 |
| 1B | 0 | -0 | -412 | 0 | 0 | 0 | -483 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.12 | 0.01 | 0.06 | 0.00 | 0.00 | 21.6 |
| 1I | 0 | -0 | -2358 | 0 | 0 | 0 | 1533 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.39 | 0.07 | 0.33 | 0.00 | 0.00 | 21.6 |
| 1J | 0 | -0 | -1192 | 0 | 0 | 0 | 13 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.00 | 0.03 | 0.16 | 0.00 | 0.00 | 21.6 |



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```
   2     0       -0    -1888         0         0         0      807     4.02   4.02   4.02   4.02 0.10   0.19    0.05    0.26    0.00   0.00    21.6
   7     0       -0    -1714         0         0         0      642     4.02   4.02   4.02   4.02 0.10   0.15    0.05    0.24    0.00   0.00    21.6
   8     0       -0    -1949         0         0         0      937     4.02   4.02   4.02   4.02 0.10   0.22    0.05    0.27    0.00   0.00    21.6

apost= --       aant= --       ainf= --       asup= --       (e arm. base= 4 X 2.01) staffe= 2 d   8 / 21.6

 1A    36       -0    -3138         0         0         0     2255     4.02   4.02   4.02   4.02 0.23   0.57    0.09    0.43    0.00   0.00    21.6
 1B    36       -0     -412         0         0         0     -765     4.02   4.02   4.02   4.02 0.23   0.19    0.01    0.06    0.00   0.00    21.6
 1I    36       -0    -2358         0         0         0     1533     4.02   4.02   4.02   4.02 0.23   0.39    0.07    0.33    0.00   0.00    21.6
 1J    36       -0    -1192         0         0         0     -557     4.02   4.02   4.02   4.02 0.23   0.14    0.03    0.16    0.00   0.00    21.6
   2   36       -0    -1888         0         0         0      807     4.02   4.02   4.02   4.02 0.10   0.19    0.05    0.26    0.00   0.00    21.6
   7   36       -0    -1714         0         0         0      642     4.02   4.02   4.02   4.02 0.10   0.15    0.05    0.24    0.00   0.00    21.6
   8   36       -0    -1949         0         0         0      937     4.02   4.02   4.02   4.02 0.10   0.22    0.05    0.27    0.00   0.00    21.6

apost= --       aant= --       ainf= --       asup= --       (e arm. base= 4 X 2.01) staffe= 2 d   8 / 21.6

 1A    73       -0    -3138         0         0         0     1237     4.02   4.02   4.02   4.02 0.23   0.31    0.09    0.43    0.00   0.00    21.6
 1B    73       -0     -412         0         0         0     -922     4.02   4.02   4.02   4.02 0.23   0.23    0.01    0.06    0.00   0.00    21.6
 1I    73       -0    -2358         0         0         0      855     4.02   4.02   4.02   4.02 0.23   0.22    0.07    0.33    0.00   0.00    21.6
 1J    73       -0    -1192         0         0         0    -1014     4.02   4.02   4.02   4.02 0.23   0.26    0.03    0.16    0.00   0.00    21.6
   2   73       -0    -1888         0         0        -0     -862     4.02   4.02   4.02   4.02 0.10   0.21    0.05    0.26    0.00   0.00    21.6
   7   73       -0    -1714         0         0        -0     -873     4.02   4.02   4.02   4.02 0.10   0.21    0.05    0.24    0.00   0.00    21.6
   8   73       -0    -1949         0         0        -0     -786     4.02   4.02   4.02   4.02 0.10   0.19    0.05    0.27    0.00   0.00    21.6

apost= --       aant= --       ainf= --       asup= --       (e arm. base= 4 X 2.01) staffe= 2 d   8 / 21.6

 1A   110       -0    -1595         0         0        -0     -833     4.02   4.02   4.02   4.02 0.23   0.21    0.04    0.22    0.00   0.00    21.6
 1B   110       -0       35         0         0        -0     -745     4.02   4.02   4.02   4.02 0.23   0.19    0.00    0.00    0.00   0.00    21.6
 1I   110       -0    -1150         0         0        -0     -591     4.02   4.02   4.02   4.02 0.23   0.15    0.03    0.16    0.00   0.00    21.6
 1J   110       -0     -409         0         0        -0     -966     4.02   4.02   4.02   4.02 0.23   0.24    0.01    0.06    0.00   0.00    21.6
   2  110       -0     -827         0         0        -0     -841     4.02   4.02   4.02   4.02 0.10   0.20    0.02    0.11    0.00   0.00    21.6
   7  110       -0     -724         0         0        -0     -836     4.02   4.02   4.02   4.02 0.10   0.20    0.02    0.10    0.00   0.00    21.6
   8  110       -0     -883         0         0        -0     -784     4.02   4.02   4.02   4.02 0.10   0.19    0.02    0.12    0.00   0.00    21.6

apost= --       aant= --       ainf= --       asup= --       (e arm. base= 4 X 2.01) staffe= 2 d   8 / 21.6

 1A   146       -0    -1595         0         0        -0     -980     4.02   4.02   4.02   4.02 0.23   0.25    0.04    0.22    0.00   0.00    21.6
 1B   146       -0      482         0         0        -0    -1127     4.02   4.02   4.02   4.02 0.23   0.28    0.01    0.07    0.00   0.00    21.6
 1I   146       -0    -1150         0         0        -0     -621     4.02   4.02   4.02   4.02 0.23   0.16    0.03    0.16    0.00   0.00    21.6
 1J   146       -0     -409         0         0        -0    -1032     4.02   4.02   4.02   4.02 0.23   0.26    0.01    0.06    0.00   0.00    21.6
   2  146       -0     -827         0         0        -0     -892     4.02   4.02   4.02   4.02 0.10   0.21    0.02    0.11    0.00   0.00    21.6
   7  146       -0     -724         0         0        -0     -880     4.02   4.02   4.02   4.02 0.10   0.21    0.02    0.10    0.00   0.00    21.6
   8  146       -0     -883         0         0        -0     -838     4.02   4.02   4.02   4.02 0.10   0.20    0.02    0.12    0.00   0.00    21.6

apost= --       aant= --       ainf= --       asup= --       (e arm. base= 4 X 2.01) staffe= 2 d   8 / 21.6

 1A   182       -0     -369         0         0        -0     -631     4.02   4.02   4.02   4.02 0.23   0.16    0.01    0.05    0.00   0.00    21.6
 1B   182       -0      482         0         0        -0    -1205     4.02   4.02   4.02   4.02 0.23   0.30    0.01    0.07    0.00   0.00    21.6
 1I   182       -0     -181         0         0        -0     -621     4.02   4.02   4.02   4.02 0.23   0.16    0.01    0.03    0.00   0.00    21.6
 1J   182       -0      294         0         0        -0    -1032     4.02   4.02   4.02   4.02 0.23   0.26    0.01    0.04    0.00   0.00    21.6
   2  182       -0       49        -0         0        -0     -889     4.02   4.02   4.02   4.02 0.10   0.21    0.00    0.01    0.00   0.00    21.6
   7  182       -0      102        -0         0        -0     -874     4.02   4.02   4.02   4.02 0.10   0.21    0.00    0.01    0.00   0.00    21.6
   8  182       -0        3        -0         0        -0     -838     4.02   4.02   4.02   4.02 0.10   0.20    0.00    0.00    0.00   0.00    21.6

apost= --       aant= --       ainf= --       asup= --       (e arm. base= 4 X 2.01) staffe= 2 d   8 / 21.6

 1A   219       -0      652        -0         0        -0     -563     4.02   4.02   4.02   4.02 0.23   0.14    0.02    0.09    0.00   0.00    21.6
 1B   219       -0     1009        -0         0        -0    -1205     4.02   4.02   4.02   4.02 0.23   0.30    0.03    0.14    0.00   0.00    21.6
 1I   219       -0      671        -0         0        -0     -621     4.02   4.02   4.02   4.02 0.23   0.16    0.02    0.09    0.00   0.00    21.6
 1J   219       -0      989        -0         0        -0    -1032     4.02   4.02   4.02   4.02 0.23   0.26    0.03    0.14    0.00   0.00    21.6
   2  219       -0      844        -0         0        -0     -892     4.02   4.02   4.02   4.02 0.10   0.21    0.02    0.12    0.00   0.00    21.6
   7  219       -0      868        -0         0        -0     -880     4.02   4.02   4.02   4.02 0.10   0.21    0.02    0.12    0.00   0.00    21.6
   8  219       -0      807        -0         0        -0     -838     4.02   4.02   4.02   4.02 0.10   0.20    0.02    0.11    0.00   0.00    21.6

apost= --       aant= --       ainf= --       asup= --       (e arm. base= 4 X 2.01) staffe= 2 d   8 / 21.6

 1A   256       -0      652        -0         0        -0     -213     4.02   4.02   4.02   4.02 0.23   0.05    0.02    0.09    0.00   0.00    21.6
 1B   256       -0     1009        -0         0        -0    -1205     4.02   4.02   4.02   4.02 0.23   0.30    0.03    0.14    0.00   0.00    21.6
 1I   256       -0      671        -0         0        -0     -456     4.02   4.02   4.02   4.02 0.23   0.12    0.02    0.09    0.00   0.00    21.6
 1J   256       -0      989        -0         0        -0    -1012     4.02   4.02   4.02   4.02 0.23   0.26    0.03    0.14    0.00   0.00    21.6
   2  256       -0      844        -0         0        -0     -804     4.02   4.02   4.02   4.02 0.10   0.19    0.02    0.12    0.00   0.00    21.6
   7  256       -0      868        -0         0        -0     -752     4.02   4.02   4.02   4.02 0.10   0.18    0.02    0.12    0.00   0.00    21.6
   8  256       -0      807        -0         0        -0     -786     4.02   4.02   4.02   4.02 0.10   0.19    0.02    0.11    0.00   0.00    21.6

apost= --       aant= --       ainf= --       asup= --       (e arm. base= 4 X 2.01) staffe= 2 d   8 / 21.6

 1A   292       -0     1573        -0         0         0      814     4.02   4.02   4.02   4.02 0.23   0.21    0.04    0.22    0.00   0.00    21.6
 1B   292       -0     1695        -0         0         0    -1205     4.02   4.02   4.02   4.02 0.23   0.30    0.05    0.23    0.00   0.00    21.6
 1I   292       -0     1501        -0         0         0      505     4.02   4.02   4.02   4.02 0.23   0.13    0.04    0.21    0.00   0.00    21.6
 1J   292       -0     1767        -0         0         0     -943     4.02   4.02   4.02   4.02 0.23   0.24    0.05    0.24    0.00   0.00    21.6
   2  292       -0     1660        -0         0        -0     -744     4.02   4.02   4.02   4.02 0.10   0.18    0.05    0.23    0.00   0.00    21.6
   7  292       -0     1667        -0         0        -0     -678     4.02   4.02   4.02   4.02 0.10   0.16    0.05    0.23    0.00   0.00    21.6
   8  292       -0     1627        -0         0        -0     -741     4.02   4.02   4.02   4.02 0.10   0.18    0.05    0.22    0.00   0.00    21.6

apost= --       aant= --       ainf= --       asup= --       (e arm. base= 4 X 2.01) staffe= 2 d   8 / 21.6

 1A   328       -0     1573        -0         0         0     1286     4.02   4.02   4.02   4.02 0.23   0.32    0.04    0.22    0.00   0.00    21.6
 1B   328       -0     1695        -0         0         0     -613     4.02   4.02   4.02   4.02 0.23   0.15    0.05    0.23    0.00   0.00    21.6
 1I   328       -0     1501        -0         0         0     1018     4.02   4.02   4.02   4.02 0.23   0.26    0.04    0.21    0.00   0.00    21.6
 1J   328       -0     1767        -0         0         0      519     4.02   4.02   4.02   4.02 0.23   0.13    0.05    0.24    0.00   0.00    21.6
   2  328       -0     1660        -0         0         0      723     4.02   4.02   4.02   4.02 0.10   0.17    0.05    0.23    0.00   0.00    21.6
   7  328       -0     1667        -0         0         0      795     4.02   4.02   4.02   4.02 0.10   0.19    0.05    0.23    0.00   0.00    21.6
   8  328       -0     1627        -0         0         0      696     4.02   4.02   4.02   4.02 0.10   0.17    0.05    0.22    0.00   0.00    21.6

apost= --       aant= --       ainf= --       asup= --       (e arm. base= 4 X 2.01) staffe= 2 d   8 / 21.6

 1A   365       -0     1573        -0         0         0     1286     4.02   4.02   4.02   4.02 0.23   0.32    0.04    0.22    0.00   0.00    21.6
 1B   365       -0     1695        -0         0         0      252     4.02   4.02   4.02   4.02 0.23   0.06    0.05    0.23    0.00   0.00    21.6
 1I   365       -0     1501        -0         0         0     1018     4.02   4.02   4.02   4.02 0.23   0.26    0.04    0.21    0.00   0.00    21.6
 1J   365       -0     1767        -0         0         0      518     4.02   4.02   4.02   4.02 0.23   0.13    0.05    0.24    0.00   0.00    21.6
   2  365       -0     1660        -0         0         0      723     4.02   4.02   4.02   4.02 0.10   0.17    0.05    0.23    0.00   0.00    21.6
   7  365       -0     1667        -0         0         0      795     4.02   4.02   4.02   4.02 0.10   0.19    0.05    0.23    0.00   0.00    21.6
   8  365       -0     1627        -0         0         0      696     4.02   4.02   4.02   4.02 0.10   0.17    0.05    0.22    0.00   0.00    21.6

apost= --       aant= --       ainf= --       asup= --       (e arm. base= 4 X 2.01) staffe= 2 d   8 / 21.6

Nome travata: CORDOLI DI FONDAZIONE09_IP1   Descrizione: CORDOLI DI FONDAZIONE 2-7-10-15-20-2...
ASTA NUM. 29       NI 96      NF 29      SEZ.   Rp   B= 60.0   H= 30.0   (trave di fondazione)

armatura base = 4 X 2.01       per le armature aggiuntive consultare il tabulato

 NC      x        Fx         Fy         Fz         Mx         My         Mz     APOST   AANT   AINF   ASUP   x/d   Indice   resistenza   aswta aswto   PASSO
         --       ----------------------          ----------------------          ----------------------          ----------------   ----------   -----
         cm                  kg                          kg*m                            cmq                      Fx,M   Bielle   V,Mx        cmq/m          cm

 1A      0        -0    -1710         0         0         0      857     4.02   4.02   4.02   4.02 0.23   0.22    0.05    0.24    0.00   0.00    21.6
```



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| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1B | 0 | -0 | -1226 | 0 | 0 | 0 | 291 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.07 | 0.03 | 0.17 | 0.00 | 0.00 | 21.6 |
| 1I | 0 | -0 | -1567 | 0 | 0 | 0 | 782 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.20 | 0.04 | 0.22 | 0.00 | 0.00 | 21.6 |
| 1J | 0 | -0 | -1369 | 0 | 0 | 0 | 370 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.09 | 0.04 | 0.19 | 0.00 | 0.00 | 21.6 |
| 2 | 0 | -0 | -1491 | 0 | 0 | 0 | 594 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.14 | 0.04 | 0.21 | 0.00 | 0.00 | 21.6 |
| 7 | 0 | -0 | -1469 | 0 | 0 | 0 | 573 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.14 | 0.04 | 0.20 | 0.00 | 0.00 | 21.6 |
| 8 | 0 | -0 | -1489 | 0 | 0 | 0 | 598 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.14 | 0.04 | 0.21 | 0.00 | 0.00 | 21.6 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 36 | -0 | -1710 | 0 | 0 | 0 | 857 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.22 | 0.05 | 0.24 | 0.00 | 0.00 | 21.6 |
| 1B | 36 | -0 | -1226 | 0 | 0 | 0 | 298 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.08 | 0.03 | 0.17 | 0.00 | 0.00 | 21.6 |
| 1I | 36 | -0 | -1567 | 0 | 0 | 0 | 782 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.20 | 0.04 | 0.22 | 0.00 | 0.00 | 21.6 |
| 1J | 36 | -0 | -1369 | 0 | 0 | 0 | 372 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.09 | 0.04 | 0.19 | 0.00 | 0.00 | 21.6 |
| 2 | 36 | -0 | -1491 | 0 | 0 | 0 | 594 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.14 | 0.04 | 0.21 | 0.00 | 0.00 | 21.6 |
| 7 | 36 | -0 | -1469 | 0 | 0 | 0 | 573 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.14 | 0.04 | 0.20 | 0.00 | 0.00 | 21.6 |
| 8 | 36 | -0 | -1489 | 0 | 0 | 0 | 598 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.14 | 0.04 | 0.21 | 0.00 | 0.00 | 21.6 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 73 | -0 | -1710 | 0 | 0 | -0 | -680 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.17 | 0.05 | 0.24 | 0.00 | 0.00 | 21.6 |
| 1B | 73 | -0 | -1226 | 0 | 0 | -0 | -760 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.19 | 0.03 | 0.17 | 0.00 | 0.00 | 21.6 |
| 1I | 73 | -0 | -1567 | 0 | 0 | -0 | -602 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.15 | 0.04 | 0.22 | 0.00 | 0.00 | 21.6 |
| 1J | 73 | -0 | -1369 | 0 | 0 | -0 | -839 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.21 | 0.04 | 0.19 | 0.00 | 0.00 | 21.6 |
| 2 | 73 | -0 | -1491 | 0 | 0 | -0 | -723 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.04 | 0.21 | 0.00 | 0.00 | 21.6 |
| 7 | 73 | -0 | -1469 | 0 | 0 | -0 | -725 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.04 | 0.20 | 0.00 | 0.00 | 21.6 |
| 8 | 73 | -0 | -1489 | 0 | 0 | -0 | -718 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.04 | 0.21 | 0.00 | 0.00 | 21.6 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 110 | -0 | -804 | 0 | 0 | -0 | -668 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.17 | 0.02 | 0.11 | 0.00 | 0.00 | 21.6 |
| 1B | 110 | -0 | -510 | 0 | 0 | -0 | -759 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.19 | 0.01 | 0.07 | 0.00 | 0.00 | 21.6 |
| 1I | 110 | -0 | -741 | 0 | 0 | -0 | -611 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.15 | 0.02 | 0.10 | 0.00 | 0.00 | 21.6 |
| 1J | 110 | -0 | -574 | 0 | 0 | -0 | -816 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.21 | 0.02 | 0.08 | 0.00 | 0.00 | 21.6 |
| 2 | 110 | -0 | -669 | 0 | 0 | -0 | -718 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.02 | 0.09 | 0.00 | 0.00 | 21.6 |
| 7 | 110 | -0 | -657 | 0 | 0 | -0 | -718 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.02 | 0.09 | 0.00 | 0.00 | 21.6 |
| 8 | 110 | -0 | -669 | 0 | 0 | -0 | -713 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.02 | 0.09 | 0.00 | 0.00 | 21.6 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 146 | -0 | -804 | 0 | 0 | -0 | -687 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.17 | 0.02 | 0.11 | 0.00 | 0.00 | 21.6 |
| 1B | 146 | -0 | -510 | 0 | 0 | -0 | -821 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.21 | 0.01 | 0.07 | 0.00 | 0.00 | 21.6 |
| 1I | 146 | -0 | -741 | 0 | 0 | -0 | -647 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.16 | 0.02 | 0.10 | 0.00 | 0.00 | 21.6 |
| 1J | 146 | -0 | -574 | 0 | 0 | -0 | -861 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.22 | 0.02 | 0.08 | 0.00 | 0.00 | 21.6 |
| 2 | 146 | -0 | -669 | 0 | 0 | -0 | -759 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.18 | 0.02 | 0.09 | 0.00 | 0.00 | 21.6 |
| 7 | 146 | -0 | -657 | 0 | 0 | -0 | -758 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.18 | 0.02 | 0.09 | 0.00 | 0.00 | 21.6 |
| 8 | 146 | -0 | -669 | 0 | 0 | -0 | -754 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.18 | 0.02 | 0.09 | 0.00 | 0.00 | 21.6 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 182 | -0 | 49 | -0 | 0 | -0 | -647 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.16 | 0.00 | 0.01 | 0.00 | 0.00 | 21.6 |
| 1B | 182 | -0 | 236 | -0 | 0 | -0 | -821 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.21 | 0.01 | 0.03 | 0.00 | 0.00 | 21.6 |
| 1I | 182 | -0 | 19 | -0 | 0 | -0 | -634 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.16 | 0.00 | 0.00 | 0.00 | 0.00 | 21.6 |
| 1J | 182 | -0 | 265 | -0 | 0 | -0 | -856 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.22 | 0.01 | 0.04 | 0.00 | 0.00 | 21.6 |
| 2 | 182 | -0 | 142 | -0 | 0 | -0 | -750 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.18 | 0.00 | 0.02 | 0.00 | 0.00 | 21.6 |
| 7 | 182 | -0 | 147 | -0 | 0 | -0 | -749 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.18 | 0.00 | 0.02 | 0.00 | 0.00 | 21.6 |
| 8 | 182 | -0 | 137 | -0 | 0 | -0 | -746 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.18 | 0.00 | 0.02 | 0.00 | 0.00 | 21.6 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 219 | -0 | 935 | -0 | 0 | -0 | -687 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.17 | 0.03 | 0.13 | 0.00 | 0.00 | 21.6 |
| 1B | 219 | -0 | 1101 | -0 | 0 | -0 | -821 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.21 | 0.03 | 0.15 | 0.00 | 0.00 | 21.6 |
| 1I | 219 | -0 | 806 | -0 | 0 | -0 | -647 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.16 | 0.02 | 0.11 | 0.00 | 0.00 | 21.6 |
| 1J | 219 | -0 | 1230 | -0 | 0 | -0 | -861 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.22 | 0.03 | 0.17 | 0.00 | 0.00 | 21.6 |
| 2 | 219 | -0 | 1031 | -0 | 0 | -0 | -759 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.18 | 0.03 | 0.14 | 0.00 | 0.00 | 21.6 |
| 7 | 219 | -0 | 1031 | -0 | 0 | -0 | -758 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.18 | 0.03 | 0.14 | 0.00 | 0.00 | 21.6 |
| 8 | 219 | -0 | 1018 | -0 | 0 | -0 | -754 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.18 | 0.03 | 0.14 | 0.00 | 0.00 | 21.6 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 256 | -0 | 935 | -0 | 0 | -0 | -467 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.12 | 0.03 | 0.13 | 0.00 | 0.00 | 21.6 |
| 1B | 256 | -0 | 1101 | -0 | 0 | -0 | -708 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.18 | 0.03 | 0.15 | 0.00 | 0.00 | 21.6 |
| 1I | 256 | -0 | 806 | -0 | 0 | -0 | -580 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.15 | 0.02 | 0.11 | 0.00 | 0.00 | 21.6 |
| 1J | 256 | -0 | 1230 | -0 | 0 | -0 | -595 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.15 | 0.03 | 0.17 | 0.00 | 0.00 | 21.6 |
| 2 | 256 | -0 | 1031 | -0 | 0 | -0 | -592 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.14 | 0.03 | 0.14 | 0.00 | 0.00 | 21.6 |
| 7 | 256 | -0 | 1031 | -0 | 0 | -0 | -588 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.14 | 0.03 | 0.14 | 0.00 | 0.00 | 21.6 |
| 8 | 256 | -0 | 1018 | -0 | 0 | -0 | -592 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.14 | 0.03 | 0.14 | 0.00 | 0.00 | 21.6 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 292 | -0 | 1871 | -0 | 0 | 0 | 780 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.20 | 0.05 | 0.26 | 0.00 | 0.00 | 21.6 |
| 1B | 292 | -0 | 2219 | -0 | 0 | 0 | -699 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.18 | 0.06 | 0.31 | 0.00 | 0.00 | 21.6 |
| 1I | 292 | -0 | 1677 | -0 | 0 | 0 | 757 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.19 | 0.05 | 0.23 | 0.00 | 0.00 | 21.6 |
| 1J | 292 | -0 | 2413 | -0 | 0 | 0 | 885 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.22 | 0.07 | 0.33 | 0.00 | 0.00 | 21.6 |
| 2 | 292 | -0 | 2070 | -0 | 0 | 0 | 726 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.06 | 0.29 | 0.00 | 0.00 | 21.6 |
| 7 | 292 | -0 | 2069 | -0 | 0 | 0 | 731 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.06 | 0.29 | 0.00 | 0.00 | 21.6 |
| 8 | 292 | -0 | 2046 | -0 | 0 | 0 | 710 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.06 | 0.28 | 0.00 | 0.00 | 21.6 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 328 | -0 | 1871 | -0 | 0 | 0 | 1461 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.37 | 0.05 | 0.26 | 0.00 | 0.00 | 21.6 |
| 1B | 328 | -0 | 2219 | -0 | 0 | 0 | 1097 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.28 | 0.06 | 0.31 | 0.00 | 0.00 | 21.6 |
| 1I | 328 | -0 | 1677 | -0 | 0 | 0 | 1629 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.41 | 0.05 | 0.23 | 0.00 | 0.00 | 21.6 |
| 1J | 328 | -0 | 2413 | -0 | 0 | 0 | 885 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.22 | 0.07 | 0.33 | 0.00 | 0.00 | 21.6 |
| 2 | 328 | -0 | 2070 | -0 | 0 | 0 | 1298 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.31 | 0.06 | 0.29 | 0.00 | 0.00 | 21.6 |
| 7 | 328 | -0 | 2069 | -0 | 0 | 0 | 1303 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.31 | 0.06 | 0.29 | 0.00 | 0.00 | 21.6 |
| 8 | 328 | -0 | 2046 | -0 | 0 | 0 | 1275 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.30 | 0.06 | 0.28 | 0.00 | 0.00 | 21.6 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 365 | -0 | 1871 | -0 | 0 | 0 | 1461 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.37 | 0.05 | 0.26 | 0.00 | 0.00 | 21.6 |
| 1B | 365 | -0 | 2219 | -0 | 0 | 0 | 1095 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.28 | 0.06 | 0.31 | 0.00 | 0.00 | 21.6 |
| 1I | 365 | -0 | 1677 | -0 | 0 | 0 | 1674 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.42 | 0.05 | 0.23 | 0.00 | 0.00 | 21.6 |
| 1J | 365 | -0 | 2413 | -0 | 0 | 0 | 875 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.22 | 0.07 | 0.33 | 0.00 | 0.00 | 21.6 |
| 2 | 365 | -0 | 2070 | -0 | 0 | 0 | 1298 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.31 | 0.06 | 0.29 | 0.00 | 0.00 | 21.6 |
| 7 | 365 | -0 | 2069 | -0 | 0 | 0 | 1302 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.31 | 0.06 | 0.29 | 0.00 | 0.00 | 21.6 |
| 8 | 365 | -0 | 2046 | -0 | 0 | 0 | 1275 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.30 | 0.06 | 0.28 | 0.00 | 0.00 | 21.6 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6

Nome travata: **CORDOLI DI FONDAZIONE09_IP1** Descrizione: **CORDOLI DI FONDAZIONE 2-7-10-15-20-2...**
**ASTA NUM. 30** NI 29 NF 86 SEZ. Rp B= 60.0 H= 30.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | Fx,M | Bielle | V,Mx | | cmq/m | cm |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 0 | -0 | -2168 | 0 | 0 | 0 | 1232 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.31 | 0.06 | 0.30 | 0.00 | 0.00 | 21.6 |
| 1B | 0 | -0 | -1706 | 0 | 0 | 0 | 871 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.22 | 0.05 | 0.24 | 0.00 | 0.00 | 21.6 |
| 1I | 0 | -0 | -2117 | 0 | 0 | 0 | 1143 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.29 | 0.06 | 0.29 | 0.00 | 0.00 | 21.6 |
| 1J | 0 | -0 | -1757 | 0 | 0 | 0 | 964 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.24 | 0.05 | 0.24 | 0.00 | 0.00 | 21.6 |
| 2 | 0 | -0 | -1991 | 0 | 0 | 0 | 1112 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.27 | 0.06 | 0.27 | 0.00 | 0.00 | 21.6 |
| 7 | 0 | -0 | -1930 | 0 | 0 | 0 | 1057 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.25 | 0.05 | 0.27 | 0.00 | 0.00 | 21.6 |
| 8 | 0 | -0 | -1998 | 0 | 0 | 0 | 1110 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.26 | 0.06 | 0.28 | 0.00 | 0.00 | 21.6 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01) staffe= 2 d  8 / 21.6

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 20 | -0 | -2168 | 0 | 0 | 0 | 1232 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.31 | 0.06 | 0.30 | 0.00 | 0.00 | 21.6 |
| 1B | 20 | -0 | -1706 | 0 | 0 | 0 | 877 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.22 | 0.05 | 0.24 | 0.00 | 0.00 | 21.6 |
| 1I | 20 | -0 | -2117 | 0 | 0 | 0 | 1143 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.29 | 0.06 | 0.29 | 0.00 | 0.00 | 21.6 |
| 1J | 20 | -0 | -1757 | 0 | 0 | 0 | 966 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.24 | 0.05 | 0.24 | 0.00 | 0.00 | 21.6 |
| 2 | 20 | -0 | -1991 | 0 | 0 | 0 | 1112 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.27 | 0.06 | 0.27 | 0.00 | 0.00 | 21.6 |
| 7 | 20 | -0 | -1930 | 0 | 0 | 0 | 1057 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.25 | 0.05 | 0.27 | 0.00 | 0.00 | 21.6 |
| 8 | 20 | -0 | -1998 | 0 | 0 | 0 | 1110 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.26 | 0.06 | 0.28 | 0.00 | 0.00 | 21.6 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01) staffe= 2 d  8 / 21.6

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 41 | -0 | -2168 | 0 | 0 | 0 | 1317 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.33 | 0.06 | 0.30 | 0.00 | 0.00 | 21.6 |
| 1B | 41 | -0 | -1706 | 0 | 0 | 0 | 962 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.24 | 0.05 | 0.24 | 0.00 | 0.00 | 21.6 |
| 1I | 41 | -0 | -2117 | 0 | 0 | 0 | 1260 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.32 | 0.06 | 0.29 | 0.00 | 0.00 | 21.6 |
| 1J | 41 | -0 | -1757 | 0 | 0 | 0 | 1018 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.26 | 0.05 | 0.24 | 0.00 | 0.00 | 21.6 |
| 2 | 41 | -0 | -1991 | 0 | 0 | 0 | 1199 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.29 | 0.06 | 0.27 | 0.00 | 0.00 | 21.6 |
| 7 | 41 | -0 | -1930 | 0 | 0 | 0 | 1141 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.27 | 0.05 | 0.27 | 0.00 | 0.00 | 21.6 |
| 8 | 41 | -0 | -1998 | 0 | 0 | 0 | 1198 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.29 | 0.06 | 0.28 | 0.00 | 0.00 | 21.6 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01) staffe= 2 d  8 / 21.6

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 62 | -0 | -1538 | 0 | 0 | 0 | 850 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.21 | 0.04 | 0.21 | 0.00 | 0.00 | 21.6 |
| 1B | 62 | -0 | -1040 | 0 | 0 | 0 | 507 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.13 | 0.03 | 0.14 | 0.00 | 0.00 | 21.6 |
| 1I | 62 | -0 | -1557 | 0 | 0 | 0 | 860 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.22 | 0.04 | 0.21 | 0.00 | 0.00 | 21.6 |
| 1J | 62 | -0 | -1021 | 0 | 0 | 0 | 497 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.13 | 0.03 | 0.14 | 0.00 | 0.00 | 21.6 |
| 2 | 62 | -0 | -1337 | 0 | 0 | 0 | 726 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.04 | 0.18 | 0.00 | 0.00 | 21.6 |
| 7 | 62 | -0 | -1275 | 0 | 0 | 0 | 681 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.16 | 0.04 | 0.18 | 0.00 | 0.00 | 21.6 |
| 8 | 62 | -0 | -1351 | 0 | 0 | 0 | 724 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.04 | 0.19 | 0.00 | 0.00 | 21.6 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01) staffe= 2 d  8 / 21.6

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 82 | -0 | -1538 | 0 | 0 | 0 | 573 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.14 | 0.04 | 0.21 | 0.00 | 0.00 | 21.6 |
| 1B | 82 | -0 | -1040 | 0 | 0 | 0 | -377 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.10 | 0.03 | 0.14 | 0.00 | 0.00 | 21.6 |
| 1I | 82 | -0 | -1557 | 0 | 0 | 0 | 629 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.16 | 0.04 | 0.21 | 0.00 | 0.00 | 21.6 |
| 1J | 82 | -0 | -1021 | 0 | 0 | 0 | -422 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.11 | 0.03 | 0.14 | 0.00 | 0.00 | 21.6 |
| 2 | 82 | -0 | -1337 | 0 | 0 | 0 | 452 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.11 | 0.04 | 0.18 | 0.00 | 0.00 | 21.6 |
| 7 | 82 | -0 | -1275 | 0 | 0 | 0 | 419 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.10 | 0.04 | 0.18 | 0.00 | 0.00 | 21.6 |
| 8 | 82 | -0 | -1351 | 0 | 0 | 0 | 447 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.11 | 0.04 | 0.19 | 0.00 | 0.00 | 21.6 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01) staffe= 2 d  8 / 21.6

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 102 | -0 | -928 | 0 | 0 | -0 | -113 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.03 | 0.03 | 0.13 | 0.00 | 0.00 | 21.6 |
| 1B | 102 | -0 | -380 | 0 | 0 | -0 | -335 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.08 | 0.01 | 0.05 | 0.00 | 0.00 | 21.6 |
| 1I | 102 | -0 | -1015 | 0 | 0 | 0 | 395 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.10 | 0.03 | 0.14 | 0.00 | 0.00 | 21.6 |
| 1J | 102 | -0 | -293 | 0 | 0 | 0 | -399 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.10 | 0.01 | 0.04 | 0.00 | 0.00 | 21.6 |
| 2 | 102 | -0 | -697 | 0 | 0 | -0 | -269 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.06 | 0.02 | 0.10 | 0.00 | 0.00 | 21.6 |
| 7 | 102 | -0 | -632 | 0 | 0 | -0 | -227 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.05 | 0.02 | 0.09 | 0.00 | 0.00 | 21.6 |
| 8 | 102 | -0 | -719 | 0 | 0 | -0 | -300 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.07 | 0.02 | 0.10 | 0.00 | 0.00 | 21.6 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01) staffe= 2 d  8 / 21.6

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 123 | -0 | -928 | 0 | 0 | -0 | -113 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.03 | 0.03 | 0.13 | 0.00 | 0.00 | 21.6 |
| 1B | 123 | -0 | -380 | 0 | 0 | -0 | -493 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.12 | 0.01 | 0.05 | 0.00 | 0.00 | 21.6 |
| 1I | 123 | -0 | -1015 | 0 | 0 | 0 | 325 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.08 | 0.03 | 0.14 | 0.00 | 0.00 | 21.6 |
| 1J | 123 | -0 | 422 | 0 | 0 | 0 | -636 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.16 | 0.01 | 0.06 | 0.00 | 0.00 | 21.6 |
| 2 | 123 | -0 | -697 | 0 | 0 | -0 | -269 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.06 | 0.02 | 0.10 | 0.00 | 0.00 | 21.6 |
| 7 | 123 | -0 | -632 | 0 | 0 | -0 | -227 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.05 | 0.02 | 0.09 | 0.00 | 0.00 | 21.6 |
| 8 | 123 | -0 | -719 | 0 | 0 | -0 | -300 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.07 | 0.02 | 0.10 | 0.00 | 0.00 | 21.6 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01) staffe= 2 d  8 / 21.6

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 144 | -0 | -335 | 0 | 0 | -0 | -113 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.03 | 0.01 | 0.05 | 0.00 | 0.00 | 21.6 |
| 1B | 144 | -0 | 272 | 0 | 0 | -0 | -515 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.13 | 0.01 | 0.04 | 0.00 | 0.00 | 21.6 |
| 1I | 144 | -0 | -485 | 0 | 0 | 0 | 251 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.06 | 0.01 | 0.07 | 0.00 | 0.00 | 21.6 |
| 1J | 144 | -0 | 422 | 0 | 0 | 0 | -707 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.18 | 0.01 | 0.06 | 0.00 | 0.00 | 21.6 |
| 2 | 144 | -0 | -72 | 0 | 0 | -0 | -269 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.06 | 0.00 | 0.01 | 0.00 | 0.00 | 21.6 |
| 7 | 144 | -0 | -1 | 0 | 0 | -0 | -227 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 21.6 |
| 8 | 144 | -0 | -102 | 0 | 0 | -0 | -300 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.07 | 0.00 | 0.01 | 0.00 | 0.00 | 21.6 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01) staffe= 2 d  8 / 21.6

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 164 | -0 | -335 | 0 | 0 | 0 | -103 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.03 | 0.01 | 0.05 | 0.00 | 0.00 | 21.6 |
| 1B | 164 | -0 | 919 | 0 | 0 | 0 | -515 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.13 | 0.03 | 0.13 | 0.00 | 0.00 | 21.6 |
| 1I | 164 | -0 | -485 | 0 | 0 | 0 | 337 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.09 | 0.01 | 0.07 | 0.00 | 0.00 | 21.6 |
| 1J | 164 | -0 | 1124 | 0 | 0 | 0 | -707 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.18 | 0.03 | 0.16 | 0.00 | 0.00 | 21.6 |
| 2 | 164 | -0 | 542 | -0 | 0 | -0 | -269 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.06 | 0.02 | 0.07 | 0.00 | 0.00 | 21.6 |
| 7 | 164 | -0 | 620 | -0 | 0 | -0 | -227 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.05 | 0.02 | 0.09 | 0.00 | 0.00 | 21.6 |
| 8 | 164 | -0 | 505 | -0 | 0 | -0 | -300 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.07 | 0.01 | 0.07 | 0.00 | 0.00 | 21.6 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01) staffe= 2 d  8 / 21.6

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 184 | -0 | 248 | -0 | 0 | 0 | 262 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.07 | 0.01 | 0.03 | 0.00 | 0.00 | 21.6 |
| 1B | 184 | -0 | 919 | -0 | 0 | 0 | -515 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.13 | 0.03 | 0.13 | 0.00 | 0.00 | 21.6 |
| 1I | 184 | -0 | 43 | -0 | 0 | 0 | 433 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.11 | 0.00 | 0.01 | 0.00 | 0.00 | 21.6 |
| 1J | 184 | -0 | 1124 | -0 | 0 | 0 | -707 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.18 | 0.03 | 0.16 | 0.00 | 0.00 | 21.6 |
| 2 | 184 | -0 | 542 | -0 | 0 | -0 | -269 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.06 | 0.02 | 0.07 | 0.00 | 0.00 | 21.6 |
| 7 | 184 | -0 | 620 | -0 | 0 | -0 | -227 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.05 | 0.02 | 0.09 | 0.00 | 0.00 | 21.6 |
| 8 | 184 | -0 | 505 | -0 | 0 | -0 | -300 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.07 | 0.01 | 0.07 | 0.00 | 0.00 | 21.6 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01) staffe= 2 d  8 / 21.6

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 205 | -0 | 248 | -0 | 0 | 0 | 375 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.09 | 0.01 | 0.03 | 0.00 | 0.00 | 21.6 |
| 1B | 205 | -0 | 919 | -0 | 0 | 0 | -515 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.13 | 0.03 | 0.13 | 0.00 | 0.00 | 21.6 |
| 1I | 205 | -0 | 43 | -0 | 0 | 0 | 651 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.16 | 0.00 | 0.01 | 0.00 | 0.00 | 21.6 |
| 1J | 205 | -0 | 1124 | -0 | 0 | 0 | -707 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.18 | 0.03 | 0.16 | 0.00 | 0.00 | 21.6 |
| 2 | 205 | -0 | 542 | -0 | 0 | -0 | -212 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.05 | 0.02 | 0.07 | 0.00 | 0.00 | 21.6 |
| 7 | 205 | -0 | 620 | -0 | 0 | -0 | -188 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.04 | 0.02 | 0.09 | 0.00 | 0.00 | 21.6 |
| 8 | 205 | -0 | 505 | -0 | 0 | -0 | -246 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.06 | 0.01 | 0.07 | 0.00 | 0.00 | 21.6 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01) staffe= 2 d  8 / 21.6

Nome travata: **CORDOLI DI FONDAZIONE09_IP1**  Descrizione: **CORDOLI DI FONDAZIONE 2-7-10-15-20-2...**
**ASTA NUM. 31**  NI 86  NF 23  SEZ.  Rp  B= 60.0  H= 30.0  (trave di fondazione)

armatura base = 4 X 2.01  per le armature aggiuntive consultare il tabulato



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | cmq | | | | | | | Fx,M | Bielle | V,Mx | | cmq/m | cm |
| 1A | 0 | -0 | -1417 | 0 | 0 | 0 | 315 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.08 | 0.04 | 0.20 | 0.00 | 0.00 | 21.6 | |
| 1B | 0 | -0 | -1267 | 0 | 0 | 0 | 67 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.02 | 0.04 | 0.17 | 0.00 | 0.00 | 21.6 | |
| 1I | 0 | -0 | -1390 | 0 | 0 | 0 | 278 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.07 | 0.04 | 0.19 | 0.00 | 0.00 | 21.6 | |
| 1J | 0 | -0 | -1294 | 0 | 0 | 0 | 105 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.03 | 0.04 | 0.18 | 0.00 | 0.00 | 21.6 | |
| 2 | 0 | -0 | -1293 | 0 | 0 | 0 | 137 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.03 | 0.04 | 0.18 | 0.00 | 0.00 | 21.6 | |
| 7 | 0 | -0 | -1341 | 0 | 0 | 0 | 188 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.04 | 0.04 | 0.18 | 0.00 | 0.00 | 21.6 | |
| 8 | 0 | -0 | -1294 | 0 | 0 | 0 | 141 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.03 | 0.04 | 0.18 | 0.00 | 0.00 | 21.6 | |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | | |
| 1A | 30 | -0 | -1417 | 0 | 0 | 0 | 315 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.08 | 0.04 | 0.20 | 0.00 | 0.00 | 21.6 | |
| 1B | 30 | -0 | -1267 | 0 | 0 | 0 | -508 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.13 | 0.04 | 0.17 | 0.00 | 0.00 | 21.6 | |
| 1I | 30 | -0 | -1390 | 0 | 0 | 0 | 278 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.07 | 0.04 | 0.19 | 0.00 | 0.00 | 21.6 | |
| 1J | 30 | -0 | -1294 | 0 | 0 | 0 | -484 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.12 | 0.04 | 0.18 | 0.00 | 0.00 | 21.6 | |
| 2 | 30 | -0 | -1293 | 0 | 0 | -0 | -456 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.11 | 0.04 | 0.18 | 0.00 | 0.00 | 21.6 | |
| 7 | 30 | -0 | -1341 | 0 | 0 | -0 | -427 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.10 | 0.04 | 0.18 | 0.00 | 0.00 | 21.6 | |
| 8 | 30 | -0 | -1294 | 0 | 0 | -0 | -453 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.11 | 0.04 | 0.18 | 0.00 | 0.00 | 21.6 | |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | | |
| 1A | 61 | -0 | -1417 | 0 | 0 | -0 | -650 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.16 | 0.04 | 0.20 | 0.00 | 0.00 | 21.6 | |
| 1B | 61 | -0 | -1267 | 0 | 0 | -0 | -740 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.19 | 0.04 | 0.17 | 0.00 | 0.00 | 21.6 | |
| 1I | 61 | -0 | -1390 | 0 | 0 | -0 | -722 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.18 | 0.04 | 0.19 | 0.00 | 0.00 | 21.6 | |
| 1J | 61 | -0 | -1294 | 0 | 0 | -0 | -722 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.18 | 0.04 | 0.18 | 0.00 | 0.00 | 21.6 | |
| 2 | 61 | -0 | -1293 | 0 | 0 | -0 | -701 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.04 | 0.18 | 0.00 | 0.00 | 21.6 | |
| 7 | 61 | -0 | -1341 | 0 | 0 | -0 | -694 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.04 | 0.18 | 0.00 | 0.00 | 21.6 | |
| 8 | 61 | -0 | -1294 | 0 | 0 | -0 | -702 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.04 | 0.18 | 0.00 | 0.00 | 21.6 | |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | | |
| 1A | 92 | -0 | -529 | 0 | 0 | -0 | -650 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.16 | 0.01 | 0.07 | 0.00 | 0.00 | 21.6 | |
| 1B | 92 | -0 | -354 | 0 | 0 | -0 | -734 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.19 | 0.01 | 0.05 | 0.00 | 0.00 | 21.6 | |
| 1I | 92 | -0 | -543 | 0 | 0 | -0 | -708 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.18 | 0.02 | 0.07 | 0.00 | 0.00 | 21.6 | |
| 1J | 92 | -0 | -340 | 0 | 0 | -0 | -681 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.17 | 0.01 | 0.05 | 0.00 | 0.00 | 21.6 | |
| 2 | 92 | -0 | -400 | 0 | 0 | -0 | -701 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.01 | 0.06 | 0.00 | 0.00 | 21.6 | |
| 7 | 92 | -0 | -436 | 0 | 0 | -0 | -694 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.01 | 0.06 | 0.00 | 0.00 | 21.6 | |
| 8 | 92 | -0 | -406 | 0 | 0 | -0 | -702 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.01 | 0.06 | 0.00 | 0.00 | 21.6 | |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | | |
| 1A | 122 | -0 | -529 | 0 | 0 | -0 | -650 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.16 | 0.01 | 0.07 | 0.00 | 0.00 | 21.6 | |
| 1B | 122 | -0 | 573 | 0 | 0 | -0 | -740 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.19 | 0.02 | 0.08 | 0.00 | 0.00 | 21.6 | |
| 1I | 122 | -0 | -543 | 0 | 0 | -0 | -722 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.18 | 0.02 | 0.07 | 0.00 | 0.00 | 21.6 | |
| 1J | 122 | -0 | 591 | 0 | 0 | -0 | -722 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.18 | 0.02 | 0.08 | 0.00 | 0.00 | 21.6 | |
| 2 | 122 | -0 | 509 | -0 | 0 | -0 | -701 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.01 | 0.07 | 0.00 | 0.00 | 21.6 | |
| 7 | 122 | -0 | 482 | -0 | 0 | -0 | -694 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.01 | 0.07 | 0.00 | 0.00 | 21.6 | |
| 8 | 122 | -0 | 501 | -0 | 0 | -0 | -702 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.01 | 0.07 | 0.00 | 0.00 | 21.6 | |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | | |
| 1A | 152 | -0 | 376 | -0 | 0 | -0 | -650 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.16 | 0.01 | 0.05 | 0.00 | 0.00 | 21.6 | |
| 1B | 152 | -0 | 573 | -0 | 0 | -0 | -729 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.18 | 0.02 | 0.08 | 0.00 | 0.00 | 21.6 | |
| 1I | 152 | -0 | 358 | -0 | 0 | -0 | -608 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.15 | 0.01 | 0.05 | 0.00 | 0.00 | 21.6 | |
| 1J | 152 | -0 | 591 | -0 | 0 | -0 | -722 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.18 | 0.02 | 0.08 | 0.00 | 0.00 | 21.6 | |
| 2 | 152 | -0 | 509 | -0 | 0 | -0 | -701 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.01 | 0.07 | 0.00 | 0.00 | 21.6 | |
| 7 | 152 | -0 | 482 | -0 | 0 | -0 | -694 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.01 | 0.07 | 0.00 | 0.00 | 21.6 | |
| 8 | 152 | -0 | 501 | -0 | 0 | -0 | -702 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.01 | 0.07 | 0.00 | 0.00 | 21.6 | |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | | |
| 1A | 183 | -0 | 1345 | -0 | 0 | -0 | -650 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.16 | 0.04 | 0.19 | 0.00 | 0.00 | 21.6 | |
| 1B | 183 | -0 | 1563 | -0 | 0 | -0 | -740 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.19 | 0.04 | 0.22 | 0.00 | 0.00 | 21.6 | |
| 1I | 183 | -0 | 1362 | -0 | 0 | -0 | -722 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.18 | 0.04 | 0.19 | 0.00 | 0.00 | 21.6 | |
| 1J | 183 | -0 | 1546 | -0 | 0 | -0 | -722 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.18 | 0.04 | 0.21 | 0.00 | 0.00 | 21.6 | |
| 2 | 183 | -0 | 1481 | -0 | 0 | -0 | -701 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.04 | 0.20 | 0.00 | 0.00 | 21.6 | |
| 7 | 183 | -0 | 1459 | -0 | 0 | -0 | -694 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.04 | 0.20 | 0.00 | 0.00 | 21.6 | |
| 8 | 183 | -0 | 1476 | -0 | 0 | -0 | -702 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.04 | 0.20 | 0.00 | 0.00 | 21.6 | |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | | |
| 1A | 214 | -0 | 1345 | -0 | 0 | 0 | 515 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.13 | 0.04 | 0.19 | 0.00 | 0.00 | 21.6 | |
| 1B | 214 | -0 | 1563 | -0 | 0 | 0 | -505 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.13 | 0.04 | 0.22 | 0.00 | 0.00 | 21.6 | |
| 1I | 214 | -0 | 1362 | -0 | 0 | 0 | 554 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.14 | 0.04 | 0.19 | 0.00 | 0.00 | 21.6 | |
| 1J | 214 | -0 | 1546 | -0 | 0 | 0 | -534 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.13 | 0.04 | 0.21 | 0.00 | 0.00 | 21.6 | |
| 2 | 214 | -0 | 1481 | -0 | 0 | 0 | 510 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.12 | 0.04 | 0.20 | 0.00 | 0.00 | 21.6 | |
| 7 | 214 | -0 | 1459 | -0 | 0 | 0 | 488 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.12 | 0.04 | 0.20 | 0.00 | 0.00 | 21.6 | |
| 8 | 214 | -0 | 1476 | -0 | 0 | 0 | 502 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.12 | 0.04 | 0.20 | 0.00 | 0.00 | 21.6 | |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | | |
| 1A | 244 | -0 | 2391 | -0 | 0 | 0 | 1309 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.33 | 0.07 | 0.33 | 0.00 | 0.00 | 21.6 | |
| 1B | 244 | -0 | 2655 | -0 | 0 | 0 | 1186 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.30 | 0.07 | 0.37 | 0.00 | 0.00 | 21.6 | |
| 1I | 244 | -0 | 2456 | -0 | 0 | 0 | 1358 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.34 | 0.07 | 0.34 | 0.00 | 0.00 | 21.6 | |
| 1J | 244 | -0 | 2590 | -0 | 0 | 0 | 1138 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.29 | 0.07 | 0.36 | 0.00 | 0.00 | 21.6 | |
| 2 | 244 | -0 | 2542 | -0 | 0 | 0 | 1285 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.31 | 0.07 | 0.35 | 0.00 | 0.00 | 21.6 | |
| 7 | 244 | -0 | 2521 | -0 | 0 | 0 | 1255 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.30 | 0.07 | 0.35 | 0.00 | 0.00 | 21.6 | |
| 8 | 244 | -0 | 2544 | -0 | 0 | 0 | 1277 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.30 | 0.07 | 0.35 | 0.00 | 0.00 | 21.6 | |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | | |
| 1A | 274 | -0 | 2391 | -0 | 0 | 0 | 1813 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.46 | 0.07 | 0.33 | 0.00 | 0.00 | 21.6 | |
| 1B | 274 | -0 | 2655 | -0 | 0 | 0 | 1470 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.37 | 0.07 | 0.37 | 0.00 | 0.00 | 21.6 | |
| 1I | 274 | -0 | 2456 | -0 | 0 | 0 | 1788 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.45 | 0.07 | 0.34 | 0.00 | 0.00 | 21.6 | |
| 1J | 274 | -0 | 2590 | -0 | 0 | 0 | 1495 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.38 | 0.07 | 0.36 | 0.00 | 0.00 | 21.6 | |
| 2 | 274 | -0 | 2542 | -0 | 0 | 0 | 1682 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.40 | 0.07 | 0.35 | 0.00 | 0.00 | 21.6 | |
| 7 | 274 | -0 | 2521 | -0 | 0 | 0 | 1650 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.39 | 0.07 | 0.35 | 0.00 | 0.00 | 21.6 | |
| 8 | 274 | -0 | 2544 | -0 | 0 | 0 | 1674 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.40 | 0.07 | 0.35 | 0.00 | 0.00 | 21.6 | |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | | |
| 1A | 305 | -0 | 2391 | -0 | 0 | 0 | 1813 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.46 | 0.07 | 0.33 | 0.00 | 0.00 | 21.6 | |
| 1B | 305 | -0 | 2655 | -0 | 0 | 0 | 1467 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.37 | 0.07 | 0.37 | 0.00 | 0.00 | 21.6 | |
| 1I | 305 | -0 | 2456 | -0 | 0 | 0 | 1788 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.45 | 0.07 | 0.34 | 0.00 | 0.00 | 21.6 | |
| 1J | 305 | -0 | 2590 | -0 | 0 | 0 | 1494 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.38 | 0.07 | 0.36 | 0.00 | 0.00 | 21.6 | |
| 2 | 305 | -0 | 2542 | -0 | 0 | 0 | 1682 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.40 | 0.07 | 0.35 | 0.00 | 0.00 | 21.6 | |
| 7 | 305 | -0 | 2521 | -0 | 0 | 0 | 1649 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.39 | 0.07 | 0.35 | 0.00 | 0.00 | 21.6 | |
| 8 | 305 | -0 | 2544 | -0 | 0 | 0 | 1674 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.40 | 0.07 | 0.35 | 0.00 | 0.00 | 21.6 | |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | | |

Nome travata: **CORDOLI DI FONDAZIONE09_IP1** Descrizione: **CORDOLI DI FONDAZIONE 2-7-10-15-20-2...**
**ASTA NUM. 32** NI 23 NF 34 SEZ. Rp B= 60.0 H= 30.0 (trave di fondazione)



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

armatura base = 4 X 2.01  per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 0 | -0 | -2759 | 0 | 0 | 0 | 2174 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.55 | 0.08 | 0.38 | 0.00 | 0.00 | 21.6 |
| 1B | 0 | -0 | -2241 | 0 | 0 | 0 | 1379 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.35 | 0.06 | 0.31 | 0.00 | 0.00 | 21.6 |
| 1I | 0 | -0 | -3142 | 0 | 0 | 0 | 2697 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.68 | 0.09 | 0.43 | 0.00 | 0.00 | 21.6 |
| 1J | 0 | -0 | -1858 | 0 | 0 | 0 | 844 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.21 | 0.05 | 0.26 | 0.00 | 0.00 | 21.6 |
| 2 | 0 | -0 | -2450 | 0 | 0 | 0 | 1708 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.41 | 0.07 | 0.34 | 0.00 | 0.00 | 21.6 |
| 7 | 0 | -0 | -2452 | 0 | 0 | 0 | 1717 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.41 | 0.07 | 0.34 | 0.00 | 0.00 | 21.6 |
| 8 | 0 | -0 | -2498 | 0 | 0 | 0 | 1770 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.42 | 0.07 | 0.34 | 0.00 | 0.00 | 21.6 |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | |
| 1A | 36 | -0 | -2759 | 0 | 0 | 0 | 2174 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.55 | 0.08 | 0.38 | 0.00 | 0.00 | 21.6 |
| 1B | 36 | -0 | -2241 | 0 | 0 | 0 | 1386 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.35 | 0.06 | 0.31 | 0.00 | 0.00 | 21.6 |
| 1I | 36 | -0 | -3142 | 0 | 0 | 0 | 2697 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.68 | 0.09 | 0.43 | 0.00 | 0.00 | 21.6 |
| 1J | 36 | -0 | -1858 | 0 | 0 | 0 | 863 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.22 | 0.05 | 0.26 | 0.00 | 0.00 | 21.6 |
| 2 | 36 | -0 | -2450 | 0 | 0 | 0 | 1708 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.41 | 0.07 | 0.34 | 0.00 | 0.00 | 21.6 |
| 7 | 36 | -0 | -2452 | 0 | 0 | 0 | 1717 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.41 | 0.07 | 0.34 | 0.00 | 0.00 | 21.6 |
| 8 | 36 | -0 | -2498 | 0 | 0 | 0 | 1770 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.42 | 0.07 | 0.34 | 0.00 | 0.00 | 21.6 |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | |
| 1A | 73 | -0 | -2759 | 0 | 0 | 0 | 1413 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.36 | 0.08 | 0.38 | 0.00 | 0.00 | 21.6 |
| 1B | 73 | -0 | -2241 | 0 | 0 | 0 | 765 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.19 | 0.06 | 0.31 | 0.00 | 0.00 | 21.6 |
| 1I | 73 | -0 | -3142 | 0 | 0 | 0 | 1762 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.44 | 0.09 | 0.43 | 0.00 | 0.00 | 21.6 |
| 1J | 73 | -0 | -1858 | 0 | 0 | 0 | -712 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.18 | 0.05 | 0.26 | 0.00 | 0.00 | 21.6 |
| 2 | 73 | -0 | -2450 | 0 | 0 | 0 | 1031 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.25 | 0.07 | 0.34 | 0.00 | 0.00 | 21.6 |
| 7 | 73 | -0 | -2452 | 0 | 0 | 0 | 1040 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.25 | 0.07 | 0.34 | 0.00 | 0.00 | 21.6 |
| 8 | 73 | -0 | -2498 | 0 | 0 | 0 | 1080 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.26 | 0.07 | 0.34 | 0.00 | 0.00 | 21.6 |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | |
| 1A | 110 | -0 | -1466 | 0 | 0 | 0 | 485 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.12 | 0.04 | 0.20 | 0.00 | 0.00 | 21.6 |
| 1B | 110 | -0 | -1126 | 0 | 0 | 0 | -669 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.17 | 0.03 | 0.16 | 0.00 | 0.00 | 21.6 |
| 1I | 110 | -0 | -1725 | 0 | 0 | 0 | 701 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.18 | 0.05 | 0.24 | 0.00 | 0.00 | 21.6 |
| 1J | 110 | -0 | -867 | 0 | 0 | 0 | -727 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.18 | 0.02 | 0.12 | 0.00 | 0.00 | 21.6 |
| 2 | 110 | -0 | -1261 | 0 | 0 | -0 | -556 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.13 | 0.04 | 0.17 | 0.00 | 0.00 | 21.6 |
| 7 | 110 | -0 | -1264 | 0 | 0 | -0 | -550 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.13 | 0.04 | 0.17 | 0.00 | 0.00 | 21.6 |
| 8 | 110 | -0 | -1292 | 0 | 0 | -0 | -543 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.13 | 0.04 | 0.18 | 0.00 | 0.00 | 21.6 |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | |
| 1A | 146 | -0 | -1466 | 0 | 0 | -0 | -781 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.20 | 0.04 | 0.20 | 0.00 | 0.00 | 21.6 |
| 1B | 146 | -0 | -1126 | 0 | 0 | -0 | -861 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.22 | 0.03 | 0.16 | 0.00 | 0.00 | 21.6 |
| 1I | 146 | -0 | -1725 | 0 | 0 | -0 | -856 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.22 | 0.05 | 0.24 | 0.00 | 0.00 | 21.6 |
| 1J | 146 | -0 | -867 | 0 | 0 | -0 | -856 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.22 | 0.02 | 0.12 | 0.00 | 0.00 | 21.6 |
| 2 | 146 | -0 | -1261 | 0 | 0 | -0 | -821 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.20 | 0.04 | 0.17 | 0.00 | 0.00 | 21.6 |
| 7 | 146 | -0 | -1264 | 0 | 0 | -0 | -820 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.20 | 0.04 | 0.17 | 0.00 | 0.00 | 21.6 |
| 8 | 146 | -0 | -1292 | 0 | 0 | -0 | -821 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.20 | 0.04 | 0.18 | 0.00 | 0.00 | 21.6 |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | |
| 1A | 182 | -0 | -428 | 0 | 0 | -0 | -768 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.19 | 0.01 | 0.06 | 0.00 | 0.00 | 21.6 |
| 1B | 182 | -0 | -133 | 0 | 0 | -0 | -840 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.21 | 0.00 | 0.02 | 0.00 | 0.00 | 21.6 |
| 1I | 182 | -0 | -530 | 0 | 0 | -0 | -815 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.21 | 0.01 | 0.07 | 0.00 | 0.00 | 21.6 |
| 1J | 182 | -0 | -31 | 0 | 0 | -0 | -792 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.20 | 0.00 | 0.00 | 0.00 | 0.00 | 21.6 |
| 2 | 182 | -0 | -256 | 0 | 0 | -0 | -805 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.19 | 0.01 | 0.04 | 0.00 | 0.00 | 21.6 |
| 7 | 182 | -0 | -264 | 0 | 0 | -0 | -804 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.19 | 0.01 | 0.04 | 0.00 | 0.00 | 21.6 |
| 8 | 182 | -0 | -273 | 0 | 0 | -0 | -805 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.19 | 0.01 | 0.04 | 0.00 | 0.00 | 21.6 |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | |
| 1A | 219 | -0 | 450 | -0 | 0 | -0 | -781 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.20 | 0.01 | 0.06 | 0.00 | 0.00 | 21.6 |
| 1B | 219 | -0 | 778 | -0 | 0 | -0 | -861 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.22 | 0.02 | 0.11 | 0.00 | 0.00 | 21.6 |
| 1I | 219 | -0 | -530 | 0 | 0 | -0 | -856 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.22 | 0.01 | 0.07 | 0.00 | 0.00 | 21.6 |
| 1J | 219 | -0 | 729 | 0 | 0 | -0 | -856 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.22 | 0.02 | 0.10 | 0.00 | 0.00 | 21.6 |
| 2 | 219 | -0 | 632 | -0 | 0 | -0 | -821 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.20 | 0.02 | 0.09 | 0.00 | 0.00 | 21.6 |
| 7 | 219 | -0 | 619 | -0 | 0 | -0 | -820 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.20 | 0.02 | 0.09 | 0.00 | 0.00 | 21.6 |
| 8 | 219 | -0 | 628 | -0 | 0 | -0 | -821 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.20 | 0.02 | 0.09 | 0.00 | 0.00 | 21.6 |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | |
| 1A | 256 | -0 | 450 | -0 | 0 | -0 | -766 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.19 | 0.01 | 0.06 | 0.00 | 0.00 | 21.6 |
| 1B | 256 | -0 | 778 | -0 | 0 | -0 | -800 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.20 | 0.02 | 0.11 | 0.00 | 0.00 | 21.6 |
| 1I | 256 | -0 | 498 | -0 | 0 | -0 | -678 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.17 | 0.01 | 0.07 | 0.00 | 0.00 | 21.6 |
| 1J | 256 | -0 | 729 | -0 | 0 | -0 | -856 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.22 | 0.02 | 0.10 | 0.00 | 0.00 | 21.6 |
| 2 | 256 | -0 | 632 | -0 | 0 | -0 | -782 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.19 | 0.02 | 0.09 | 0.00 | 0.00 | 21.6 |
| 7 | 256 | -0 | 619 | -0 | 0 | -0 | -782 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.19 | 0.02 | 0.09 | 0.00 | 0.00 | 21.6 |
| 8 | 256 | -0 | 628 | -0 | 0 | -0 | -783 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.19 | 0.02 | 0.09 | 0.00 | 0.00 | 21.6 |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | |
| 1A | 292 | -0 | 1232 | -0 | 0 | -0 | -781 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.20 | 0.03 | 0.17 | 0.00 | 0.00 | 21.6 |
| 1B | 292 | -0 | 1732 | -0 | 0 | -0 | -861 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.22 | 0.05 | 0.24 | 0.00 | 0.00 | 21.6 |
| 1I | 292 | -0 | 1356 | -0 | 0 | -0 | -681 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.17 | 0.04 | 0.19 | 0.00 | 0.00 | 21.6 |
| 1J | 292 | -0 | 1608 | -0 | 0 | -0 | -856 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.22 | 0.05 | 0.22 | 0.00 | 0.00 | 21.6 |
| 2 | 292 | -0 | 1501 | -0 | 0 | -0 | -815 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.19 | 0.04 | 0.21 | 0.00 | 0.00 | 21.6 |
| 7 | 292 | -0 | 1478 | -0 | 0 | -0 | -817 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.19 | 0.04 | 0.20 | 0.00 | 0.00 | 21.6 |
| 8 | 292 | -0 | 1505 | -0 | 0 | -0 | -820 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.20 | 0.04 | 0.21 | 0.00 | 0.00 | 21.6 |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | |
| 1A | 328 | -0 | 1232 | -0 | 0 | 0 | 729 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.18 | 0.03 | 0.17 | 0.00 | 0.00 | 21.6 |
| 1B | 328 | -0 | 1732 | -0 | 0 | 0 | -544 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.14 | 0.05 | 0.24 | 0.00 | 0.00 | 21.6 |
| 1I | 328 | -0 | 1356 | -0 | 0 | 0 | 610 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.15 | 0.04 | 0.19 | 0.00 | 0.00 | 21.6 |
| 1J | 328 | -0 | 1608 | -0 | 0 | 0 | 364 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.09 | 0.05 | 0.22 | 0.00 | 0.00 | 21.6 |
| 2 | 328 | -0 | 1501 | -0 | 0 | 0 | 512 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.12 | 0.04 | 0.21 | 0.00 | 0.00 | 21.6 |
| 7 | 328 | -0 | 1478 | -0 | 0 | 0 | 489 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.12 | 0.04 | 0.20 | 0.00 | 0.00 | 21.6 |
| 8 | 328 | -0 | 1505 | -0 | 0 | 0 | 510 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.12 | 0.04 | 0.21 | 0.00 | 0.00 | 21.6 |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | |
| 1A | 365 | -0 | 1232 | -0 | 0 | 0 | 747 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.19 | 0.03 | 0.17 | 0.00 | 0.00 | 21.6 |
| 1B | 365 | -0 | 1732 | -0 | 0 | 0 | 220 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.06 | 0.05 | 0.24 | 0.00 | 0.00 | 21.6 |
| 1I | 365 | -0 | 1356 | -0 | 0 | 0 | 610 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.15 | 0.04 | 0.19 | 0.00 | 0.00 | 21.6 |
| 1J | 365 | -0 | 1608 | -0 | 0 | 0 | 363 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.09 | 0.05 | 0.22 | 0.00 | 0.00 | 21.6 |
| 2 | 365 | -0 | 1501 | -0 | 0 | 0 | 512 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.12 | 0.04 | 0.21 | 0.00 | 0.00 | 21.6 |
| 7 | 365 | -0 | 1478 | -0 | 0 | 0 | 489 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.12 | 0.04 | 0.20 | 0.00 | 0.00 | 21.6 |
| 8 | 365 | -0 | 1505 | -0 | 0 | 0 | 510 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.12 | 0.04 | 0.21 | 0.00 | 0.00 | 21.6 |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

Nome travata: **CORDOLI DI FONDAZIONE09_IP1** Descrizione: **CORDOLI DI FONDAZIONE 2-7-10-15-20-2...**
**ASTA NUM. 33** NI 34 NF 41 SEZ. Rp B= 60.0 H= 30.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 0 | -0 | -1781 | 0 | 0 | 0 | 1338 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.34 | 0.05 | 0.25 | 0.00 | 0.00 | 21.6 |
| 1B | 0 | -0 | -1621 | 0 | 0 | 0 | 231 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.06 | 0.05 | 0.22 | 0.00 | 0.00 | 21.6 |
| 1I | 0 | -0 | -1909 | 0 | 0 | 0 | 1081 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.27 | 0.05 | 0.26 | 0.00 | 0.00 | 21.6 |
| 1J | 0 | -0 | -1493 | 0 | 0 | 0 | 487 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.12 | 0.04 | 0.21 | 0.00 | 0.00 | 21.6 |
| 2 | 0 | -0 | -1666 | 0 | 0 | 0 | 695 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.05 | 0.23 | 0.00 | 0.00 | 21.6 |
| 7 | 0 | -0 | -1675 | 0 | 0 | 0 | 769 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.18 | 0.05 | 0.23 | 0.00 | 0.00 | 21.6 |
| 8 | 0 | -0 | -1691 | 0 | 0 | 0 | 711 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.05 | 0.23 | 0.00 | 0.00 | 21.6 |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | |
| 1A | 36 | -0 | -1781 | 0 | 0 | 0 | 1338 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.34 | 0.05 | 0.25 | 0.00 | 0.00 | 21.6 |
| 1B | 36 | -0 | -1621 | 0 | 0 | 0 | -612 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.15 | 0.05 | 0.22 | 0.00 | 0.00 | 21.6 |
| 1I | 36 | -0 | -1909 | 0 | 0 | 0 | 1081 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.27 | 0.05 | 0.26 | 0.00 | 0.00 | 21.6 |
| 1J | 36 | -0 | -1493 | 0 | 0 | 0 | 489 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.12 | 0.04 | 0.21 | 0.00 | 0.00 | 21.6 |
| 2 | 36 | -0 | -1666 | 0 | 0 | 0 | 695 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.05 | 0.23 | 0.00 | 0.00 | 21.6 |
| 7 | 36 | -0 | -1675 | 0 | 0 | 0 | 769 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.18 | 0.05 | 0.23 | 0.00 | 0.00 | 21.6 |
| 8 | 36 | -0 | -1691 | 0 | 0 | 0 | 711 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.05 | 0.23 | 0.00 | 0.00 | 21.6 |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | |
| 1A | 73 | -0 | -1781 | 0 | 0 | 0 | 862 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.22 | 0.05 | 0.25 | 0.00 | 0.00 | 21.6 |
| 1B | 73 | -0 | -1621 | 0 | 0 | 0 | -1217 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.31 | 0.05 | 0.22 | 0.00 | 0.00 | 21.6 |
| 1I | 73 | -0 | -1909 | 0 | 0 | 0 | 613 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.15 | 0.05 | 0.26 | 0.00 | 0.00 | 21.6 |
| 1J | 73 | -0 | -1493 | 0 | 0 | 0 | -890 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.22 | 0.04 | 0.21 | 0.00 | 0.00 | 21.6 |
| 2 | 73 | -0 | -1666 | 0 | 0 | -0 | -777 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.19 | 0.05 | 0.23 | 0.00 | 0.00 | 21.6 |
| 7 | 73 | -0 | -1675 | 0 | 0 | -0 | -711 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.17 | 0.05 | 0.23 | 0.00 | 0.00 | 21.6 |
| 8 | 73 | -0 | -1691 | 0 | 0 | -0 | -783 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.19 | 0.05 | 0.23 | 0.00 | 0.00 | 21.6 |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | |
| 1A | 110 | -0 | -1088 | 0 | 0 | -0 | -384 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.10 | 0.03 | 0.15 | 0.00 | 0.00 | 21.6 |
| 1B | 110 | -0 | -681 | 0 | 0 | -0 | -1202 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.30 | 0.02 | 0.09 | 0.00 | 0.00 | 21.6 |
| 1I | 110 | -0 | -1070 | 0 | 0 | -0 | -607 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.15 | 0.03 | 0.15 | 0.00 | 0.00 | 21.6 |
| 1J | 110 | -0 | -699 | 0 | 0 | -0 | -979 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.25 | 0.02 | 0.10 | 0.00 | 0.00 | 21.6 |
| 2 | 110 | -0 | -835 | 0 | 0 | -0 | -829 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.20 | 0.02 | 0.12 | 0.00 | 0.00 | 21.6 |
| 7 | 110 | -0 | -861 | 0 | 0 | -0 | -778 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.19 | 0.02 | 0.12 | 0.00 | 0.00 | 21.6 |
| 8 | 110 | -0 | -859 | 0 | 0 | -0 | -844 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.20 | 0.02 | 0.12 | 0.00 | 0.00 | 21.6 |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | |
| 1A | 146 | -0 | -1088 | 0 | 0 | -0 | -758 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.19 | 0.03 | 0.15 | 0.00 | 0.00 | 21.6 |
| 1B | 146 | -0 | -681 | 0 | 0 | -0 | -1267 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.32 | 0.02 | 0.09 | 0.00 | 0.00 | 21.6 |
| 1I | 146 | -0 | -1070 | 0 | 0 | -0 | -716 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.18 | 0.03 | 0.15 | 0.00 | 0.00 | 21.6 |
| 1J | 146 | -0 | -699 | 0 | 0 | -0 | -1147 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.29 | 0.02 | 0.10 | 0.00 | 0.00 | 21.6 |
| 2 | 146 | -0 | -835 | 0 | 0 | -0 | -906 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.22 | 0.02 | 0.12 | 0.00 | 0.00 | 21.6 |
| 7 | 146 | -0 | -861 | 0 | 0 | -0 | -896 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.21 | 0.02 | 0.12 | 0.00 | 0.00 | 21.6 |
| 8 | 146 | -0 | -859 | 0 | 0 | -0 | -941 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.22 | 0.02 | 0.12 | 0.00 | 0.00 | 21.6 |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | |
| 1A | 182 | -0 | -549 | 0 | 0 | -0 | -775 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.20 | 0.02 | 0.08 | 0.00 | 0.00 | 21.6 |
| 1B | 182 | -0 | 319 | 0 | 0 | -0 | -1267 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.32 | 0.01 | 0.04 | 0.00 | 0.00 | 21.6 |
| 1I | 182 | -0 | -340 | 0 | 0 | -0 | -716 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.18 | 0.01 | 0.05 | 0.00 | 0.00 | 21.6 |
| 1J | 182 | -0 | 110 | 0 | 0 | -0 | -1147 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.29 | 0.00 | 0.02 | 0.00 | 0.00 | 21.6 |
| 2 | 182 | -0 | -35 | 0 | 0 | -0 | -904 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.22 | 0.00 | 0.00 | 0.00 | 0.00 | 21.6 |
| 7 | 182 | -0 | -90 | 0 | 0 | -0 | -891 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.21 | 0.00 | 0.01 | 0.00 | 0.00 | 21.6 |
| 8 | 182 | -0 | -60 | 0 | 0 | -0 | -937 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.22 | 0.00 | 0.01 | 0.00 | 0.00 | 21.6 |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | |
| 1A | 219 | -0 | -549 | 0 | 0 | -0 | -955 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.24 | 0.02 | 0.08 | 0.00 | 0.00 | 21.6 |
| 1B | 219 | -0 | 1525 | 0 | 0 | -0 | -1267 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.32 | 0.04 | 0.21 | 0.00 | 0.00 | 21.6 |
| 1I | 219 | -0 | 360 | -0 | 0 | -0 | -716 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.18 | 0.01 | 0.05 | 0.00 | 0.00 | 21.6 |
| 1J | 219 | -0 | 1056 | -0 | 0 | -0 | -1147 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.29 | 0.03 | 0.15 | 0.00 | 0.00 | 21.6 |
| 2 | 219 | -0 | 840 | -0 | 0 | -0 | -906 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.22 | 0.02 | 0.12 | 0.00 | 0.00 | 21.6 |
| 7 | 219 | -0 | 736 | -0 | 0 | -0 | -896 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.21 | 0.02 | 0.10 | 0.00 | 0.00 | 21.6 |
| 8 | 219 | -0 | 811 | -0 | 0 | -0 | -941 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.22 | 0.02 | 0.11 | 0.00 | 0.00 | 21.6 |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | |
| 1A | 256 | -0 | -109 | 0 | 0 | -0 | -914 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.23 | 0.00 | 0.02 | 0.00 | 0.00 | 21.6 |
| 1B | 256 | -0 | 1525 | 0 | 0 | -0 | -928 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.23 | 0.04 | 0.21 | 0.00 | 0.00 | 21.6 |
| 1I | 256 | -0 | 360 | -0 | 0 | -0 | -481 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.12 | 0.01 | 0.05 | 0.00 | 0.00 | 21.6 |
| 1J | 256 | -0 | 1056 | -0 | 0 | -0 | -1147 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.29 | 0.03 | 0.15 | 0.00 | 0.00 | 21.6 |
| 2 | 256 | -0 | 840 | -0 | 0 | -0 | -855 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.20 | 0.02 | 0.12 | 0.00 | 0.00 | 21.6 |
| 7 | 256 | -0 | 736 | -0 | 0 | -0 | -851 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.20 | 0.02 | 0.10 | 0.00 | 0.00 | 21.6 |
| 8 | 256 | -0 | 811 | -0 | 0 | -0 | -891 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.21 | 0.02 | 0.11 | 0.00 | 0.00 | 21.6 |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | |
| 1A | 292 | -0 | 327 | -0 | 0 | 0 | -974 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.25 | 0.01 | 0.05 | 0.00 | 0.00 | 21.6 |
| 1B | 292 | -0 | 3061 | -0 | 0 | 0 | -1267 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.32 | 0.09 | 0.42 | 0.00 | 0.00 | 21.6 |
| 1I | 292 | -0 | 1117 | -0 | 0 | 0 | -367 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.09 | 0.03 | 0.15 | 0.00 | 0.00 | 21.6 |
| 1J | 292 | -0 | 2271 | -0 | 0 | 0 | -1147 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.29 | 0.06 | 0.31 | 0.00 | 0.00 | 21.6 |
| 2 | 292 | -0 | 1896 | -0 | 0 | -0 | -869 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.21 | 0.05 | 0.26 | 0.00 | 0.00 | 21.6 |
| 7 | 292 | -0 | 1723 | -0 | 0 | -0 | -882 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.21 | 0.05 | 0.24 | 0.00 | 0.00 | 21.6 |
| 8 | 292 | -0 | 1867 | -0 | 0 | -0 | -916 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.22 | 0.05 | 0.26 | 0.00 | 0.00 | 21.6 |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | |
| 1A | 328 | -0 | 327 | -0 | 0 | 0 | 1350 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.34 | 0.01 | 0.05 | 0.00 | 0.00 | 21.6 |
| 1B | 328 | -0 | 3061 | -0 | 0 | 0 | -1267 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.32 | 0.09 | 0.42 | 0.00 | 0.00 | 21.6 |
| 1I | 328 | -0 | 1117 | -0 | 0 | 0 | 1102 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.28 | 0.03 | 0.15 | 0.00 | 0.00 | 21.6 |
| 1J | 328 | -0 | 2271 | -0 | 0 | 0 | -1045 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.26 | 0.06 | 0.31 | 0.00 | 0.00 | 21.6 |
| 2 | 328 | -0 | 1896 | -0 | 0 | 0 | 807 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.19 | 0.05 | 0.26 | 0.00 | 0.00 | 21.6 |
| 7 | 328 | -0 | 1723 | -0 | 0 | 0 | 641 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.15 | 0.05 | 0.24 | 0.00 | 0.00 | 21.6 |
| 8 | 328 | -0 | 1867 | -0 | 0 | 0 | 734 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.18 | 0.05 | 0.26 | 0.00 | 0.00 | 21.6 |
| apost= -- | | aant= -- | | ainf= -- | | asup= -- | | (e arm. base= 4 X 2.01) staffe= 2 d 8 / 21.6 | | | | | | | | | | |
| 1A | 365 | -0 | 327 | -0 | 0 | 0 | 2062 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.52 | 0.01 | 0.05 | 0.00 | 0.00 | 21.6 |
| 1B | 365 | -0 | 3061 | -0 | 0 | 0 | -1267 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.32 | 0.09 | 0.42 | 0.00 | 0.00 | 21.6 |
| 1I | 365 | -0 | 1117 | -0 | 0 | 0 | 1286 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.32 | 0.03 | 0.15 | 0.00 | 0.00 | 21.6 |
| 1J | 365 | -0 | 2271 | -0 | 0 | 0 | -854 | 4.02 | 4.02 | 4.02 | 4.02 | 0.23 | 0.22 | 0.06 | 0.31 | 0.00 | 0.00 | 21.6 |
| 2 | 365 | -0 | 1896 | -0 | 0 | 0 | 807 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.19 | 0.05 | 0.26 | 0.00 | 0.00 | 21.6 |
| 7 | 365 | -0 | 1723 | -0 | 0 | 0 | 641 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.15 | 0.05 | 0.24 | 0.00 | 0.00 | 21.6 |
| 8 | 365 | -0 | 1867 | -0 | 0 | 0 | 734 | 4.02 | 4.02 | 4.02 | 4.02 | 0.10 | 0.18 | 0.05 | 0.26 | 0.00 | 0.00 | 21.6 |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01) staffe= 2 d  8 / 21.6

Nome travata: **CORDOLI DI FONDAZIONE10_IP1**  Descrizione: **CORDOLI DI FONDAZIONE 5-8-13-18-23-2...**
**ASTA NUM. 34**  NI 2  NF 97  SEZ.  Rp  B= 60.0  H= 60.0  (trave di fondazione)

armatura base = 4 X 2.01  per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 0 | -0 | -6047 | 0 | 0 | 0 | 2874 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.08 | 0.50 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | 2481 | 0 | 0 | 0 | -2812 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.03 | 0.20 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | -3572 | 0 | 0 | 0 | 2008 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.05 | 0.29 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | 6 | 0 | 0 | 0 | -1890 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | -1102 | 0 | 0 | -0 | -1309 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | -1686 | 0 | 0 | -0 | -1342 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | -1199 | 0 | 0 | -0 | -959 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.02 | 0.10 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 36 | -0 | -6047 | 0 | 0 | 0 | 2874 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.08 | 0.50 | 0.00 | 0.00 | -- |
| 1B | 36 | -0 | 2481 | 0 | 0 | 0 | -3174 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.03 | 0.20 | 0.00 | 0.00 | -- |
| 1I | 36 | -0 | -3572 | 0 | 0 | 0 | 2008 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.05 | 0.29 | 0.00 | 0.00 | -- |
| 1J | 36 | -0 | 6 | 0 | 0 | 0 | -2147 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 2 | 36 | -0 | -1102 | 0 | 0 | -0 | -1711 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 7 | 36 | -0 | -1686 | 0 | 0 | -0 | -1958 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 8 | 36 | -0 | -1199 | 0 | 0 | -0 | -1397 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.02 | 0.10 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 73 | -0 | -6047 | 0 | 0 | -0 | -1947 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.08 | 0.50 | 0.00 | 0.00 | -- |
| 1B | 73 | -0 | 2481 | 0 | 0 | -0 | -3537 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.03 | 0.20 | 0.00 | 0.00 | -- |
| 1I | 73 | -0 | -3572 | 0 | 0 | 0 | 2192 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.05 | 0.29 | 0.00 | 0.00 | -- |
| 1J | 73 | -0 | 114 | 0 | 0 | 0 | -2470 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.15 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 2 | 73 | -0 | -1102 | 0 | 0 | -0 | -1967 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 7 | 73 | -0 | -1686 | 0 | 0 | -0 | -2445 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.14 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 8 | 73 | -0 | -1199 | 0 | 0 | -0 | -1772 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.02 | 0.10 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 110 | -0 | -3735 | 0 | 0 | 0 | 2557 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.15 | 0.05 | 0.31 | 0.00 | 0.00 | -- |
| 1B | 110 | -0 | 1637 | 0 | 0 | 0 | -4278 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.25 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 1I | 110 | -0 | -2212 | 0 | 0 | -0 | -292 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 1J | 110 | -0 | 114 | 0 | 0 | -0 | -3092 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.18 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 2 | 110 | -0 | -590 | 0 | 0 | -0 | -1967 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 7 | 110 | -0 | -948 | 0 | 0 | -0 | -2445 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.14 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 8 | 110 | -0 | -691 | 0 | 0 | -0 | -1760 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.01 | 0.06 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 146 | -0 | -3735 | 0 | 0 | 0 | 3073 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.18 | 0.05 | 0.31 | 0.00 | 0.00 | -- |
| 1B | 146 | -0 | 1637 | 0 | 0 | 0 | -5560 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.33 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 1I | 146 | -0 | -2212 | 0 | 0 | -0 | -292 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 1J | 146 | -0 | 234 | 0 | 0 | -0 | -3791 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 2 | 146 | -0 | -590 | 0 | 0 | -0 | -1967 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 7 | 146 | -0 | -948 | 0 | 0 | -0 | -2445 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.14 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 8 | 146 | -0 | -691 | 0 | 0 | -0 | -1772 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.01 | 0.06 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 182 | -0 | -1914 | 0 | 0 | 0 | 2230 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.03 | 0.16 | 0.00 | 0.00 | -- |
| 1B | 182 | -0 | 1000 | 0 | 0 | 0 | -5809 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.34 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1I | 182 | -0 | -1148 | 0 | 0 | -0 | -292 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.02 | 0.09 | 0.00 | 0.00 | -- |
| 1J | 182 | -0 | 234 | 0 | 0 | -0 | -4074 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.24 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 2 | 182 | -0 | -177 | 0 | 0 | -0 | -1967 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 7 | 182 | -0 | -358 | 0 | 0 | -0 | -2445 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.14 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 182 | -0 | -276 | 0 | 0 | -0 | -1772 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 219 | -0 | -1914 | 0 | 0 | 0 | 1803 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.03 | 0.16 | 0.00 | 0.00 | -- |
| 1B | 219 | -0 | 1000 | 0 | 0 | 0 | -6124 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.36 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1I | 219 | -0 | -1148 | 0 | 0 | -0 | -292 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.02 | 0.09 | 0.00 | 0.00 | -- |
| 1J | 219 | -0 | 397 | 0 | 0 | -0 | -4208 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.25 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 2 | 219 | -0 | -177 | 0 | 0 | -0 | -1967 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 7 | 219 | -0 | -358 | 0 | 0 | -0 | -2445 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.14 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 219 | -0 | -276 | 0 | 0 | -0 | -1772 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 256 | -0 | -523 | 0 | 0 | 0 | 1803 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1B | 256 | -0 | 571 | 0 | 0 | 0 | -6124 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.36 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 1I | 256 | -0 | -349 | 0 | 0 | -0 | -292 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 1J | 256 | -0 | 397 | 0 | 0 | -0 | -4208 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.25 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 2 | 256 | -0 | 164 | -0 | 0 | -0 | -1967 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 7 | 256 | -0 | 118 | -0 | 0 | -0 | -2445 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.14 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 8 | 256 | -0 | 70 | -0 | 0 | -0 | -1772 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.00 | 0.01 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 292 | -0 | -523 | 0 | 0 | 0 | 1803 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1B | 292 | -0 | 688 | 0 | 0 | 0 | -6124 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.36 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1I | 292 | -0 | -349 | 0 | 0 | -0 | -292 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 1J | 292 | -0 | 743 | 0 | 0 | -0 | -4208 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.25 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 2 | 292 | -0 | 467 | -0 | 0 | -0 | -1967 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 292 | -0 | 521 | -0 | 0 | -0 | -2445 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.14 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 8 | 292 | -0 | 376 | -0 | 0 | -0 | -1772 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.01 | 0.03 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 328 | -0 | 173 | -0 | 0 | 0 | 1803 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1B | 328 | -0 | 688 | -0 | 0 | 0 | -6124 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.36 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1I | 328 | -0 | 118 | -0 | 0 | -0 | -292 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1J | 328 | -0 | 743 | -0 | 0 | -0 | -4208 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.25 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 2 | 328 | -0 | 467 | -0 | 0 | -0 | -1967 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 328 | -0 | 521 | -0 | 0 | -0 | -2445 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.14 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 8 | 328 | -0 | 376 | -0 | 0 | -0 | -1772 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.01 | 0.03 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 365 | -0 | 173 | -0 | 0 | 0 | 1803 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1B | 365 | -0 | 688 | -0 | 0 | 0 | -6080 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.36 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1I | 365 | -0 | 118 | -0 | 0 | -0 | -244 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1J | 365 | -0 | 743 | -0 | 0 | -0 | -4143 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.24 | 0.01 | 0.06 | 0.00 | 0.00 | -- |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 365 | -0 | 467 | -0 | 0 | -0 | -1806 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 365 | -0 | 521 | -0 | 0 | -0 | -2313 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.13 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 8 | 365 | -0 | 376 | -0 | 0 | -0 | -1687 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.01 | 0.03 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE10_IP1** Descrizione: **CORDOLI DI FONDAZIONE 5-8-13-18-23-2...**
**ASTA NUM. 35** NI 97 NF 6 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | | kg | | | kg*m | | | | cmq | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 0 | -0 | -236 | 0 | 0 | 0 | 849 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | 193 | 0 | 0 | 0 | -4279 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.25 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | -534 | 0 | 0 | 0 | 245 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | 490 | 0 | 0 | 0 | -3675 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | 42 | -0 | 0 | -0 | -1519 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | 28 | -0 | 0 | -0 | -1831 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | -9 | 0 | 0 | -0 | -1410 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.00 | 0.00 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 36 | -0 | -236 | 0 | 0 | 0 | 849 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1B | 36 | -0 | 193 | 0 | 0 | 0 | -4279 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.25 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 36 | -0 | -534 | 0 | 0 | 0 | 245 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.01 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1J | 36 | -0 | 490 | 0 | 0 | 0 | -3675 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 36 | -0 | 42 | -0 | 0 | -0 | -1519 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 7 | 36 | -0 | 28 | -0 | 0 | -0 | -1831 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 8 | 36 | -0 | -9 | 0 | 0 | -0 | -1410 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.00 | 0.00 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 73 | -0 | -236 | 0 | 0 | 0 | 849 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1B | 73 | -0 | 837 | 0 | 0 | 0 | -4279 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.25 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1I | 73 | -0 | -534 | 0 | 0 | -0 | -314 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1J | 73 | -0 | 1036 | 0 | 0 | -0 | -3675 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 2 | 73 | -0 | 351 | -0 | 0 | -0 | -1519 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.09 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 7 | 73 | -0 | 390 | -0 | 0 | -0 | -1831 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 73 | -0 | 297 | -0 | 0 | -0 | -1410 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 110 | -0 | -163 | 0 | 0 | 0 | 849 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1B | 110 | -0 | 837 | 0 | 0 | 0 | -4279 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.25 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1I | 110 | -0 | -362 | 0 | 0 | -0 | -314 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 1J | 110 | -0 | 1036 | 0 | 0 | -0 | -3673 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 2 | 110 | -0 | 351 | -0 | 0 | -0 | -1519 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.09 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 7 | 110 | -0 | 390 | -0 | 0 | -0 | -1831 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 110 | -0 | 297 | -0 | 0 | -0 | -1410 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 146 | -0 | -163 | 0 | 0 | 0 | 832 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1B | 146 | -0 | 1457 | 0 | 0 | 0 | -4279 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.25 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 1I | 146 | -0 | -362 | 0 | 0 | -0 | -314 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 1J | 146 | -0 | 1633 | 0 | 0 | -0 | -3675 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 2 | 146 | -0 | 699 | -0 | 0 | -0 | -1519 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.09 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 7 | 146 | -0 | 777 | -0 | 0 | -0 | -1831 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 8 | 146 | -0 | 636 | -0 | 0 | -0 | -1410 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.01 | 0.05 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 182 | -0 | -29 | 0 | 0 | 0 | 814 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 1B | 182 | -0 | 1457 | 0 | 0 | 0 | -4180 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.25 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 1I | 182 | -0 | -205 | 0 | 0 | -0 | -314 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1J | 182 | -0 | 1633 | 0 | 0 | -0 | -3267 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 2 | 182 | -0 | 699 | -0 | 0 | -0 | -1426 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 7 | 182 | -0 | 777 | -0 | 0 | -0 | -1740 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 8 | 182 | -0 | 636 | -0 | 0 | -0 | -1370 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.01 | 0.05 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 219 | -0 | 184 | -0 | 0 | 0 | 983 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1B | 219 | -0 | 2082 | -0 | 0 | 0 | -4128 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.24 | 0.03 | 0.17 | 0.00 | 0.00 | -- |
| 1I | 219 | -0 | -205 | 0 | 0 | -0 | -278 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1J | 219 | -0 | 2310 | 0 | 0 | -0 | -3264 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 2 | 219 | -0 | 1106 | -0 | 0 | -0 | -1432 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 7 | 219 | -0 | 1212 | -0 | 0 | -0 | -1735 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 8 | 219 | -0 | 1028 | -0 | 0 | -0 | -1389 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.01 | 0.08 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 256 | -0 | 185 | -0 | 0 | 0 | 1293 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.08 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1B | 256 | -0 | 2082 | -0 | 0 | 0 | -3611 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.03 | 0.17 | 0.00 | 0.00 | -- |
| 1I | 256 | -0 | -44 | 0 | 0 | 0 | 522 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 1J | 256 | -0 | 2311 | 0 | 0 | 0 | -3077 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.18 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 2 | 256 | -0 | 1106 | -0 | 0 | -0 | -1028 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 7 | 256 | -0 | 1212 | -0 | 0 | -0 | -1293 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 8 | 256 | -0 | 1028 | -0 | 0 | -0 | -1013 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.01 | 0.08 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 292 | -0 | 475 | -0 | 0 | 0 | 1790 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1B | 292 | -0 | 2749 | -0 | 0 | 0 | -3522 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.04 | 0.23 | 0.00 | 0.00 | -- |
| 1I | 292 | -0 | 131 | -0 | 0 | 0 | 1218 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1J | 292 | -0 | 3093 | -0 | 0 | 0 | -3391 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.20 | 0.04 | 0.26 | 0.00 | 0.00 | -- |
| 2 | 292 | -0 | 1585 | -0 | 0 | 0 | 1005 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 7 | 292 | -0 | 1711 | -0 | 0 | -0 | -1170 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 8 | 292 | -0 | 1485 | -0 | 0 | 0 | 883 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.02 | 0.12 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 328 | -0 | 475 | -0 | 0 | 0 | 2278 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1B | 328 | -0 | 2749 | -0 | 0 | 0 | -2862 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.04 | 0.23 | 0.00 | 0.00 | -- |
| 1I | 328 | -0 | 131 | -0 | 0 | 0 | 2177 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1J | 328 | -0 | 3093 | -0 | 0 | 0 | -3174 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.04 | 0.26 | 0.00 | 0.00 | -- |
| 2 | 328 | -0 | 1585 | -0 | 0 | 0 | 1005 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 7 | 328 | -0 | 1711 | -0 | 0 | 0 | 920 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 8 | 328 | -0 | 1485 | -0 | 0 | 0 | 883 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.02 | 0.12 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 365 | -0 | 475 | -0 | 0 | 0 | 2278 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.01 | 0.04 | 0.00 | 0.00 | -- |



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| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1B | 365 | -0 | 2749 | -0 | 0 | 0 | -2445 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.14 | 0.04 | 0.23 | 0.00 | 0.00 | -- |
| 1I | 365 | -0 | 131 | -0 | 0 | 0 | 2781 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.16 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1J | 365 | -0 | 3093 | -0 | 0 | 0 | -3198 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.19 | 0.04 | 0.26 | 0.00 | 0.00 | -- |
| 2 | 365 | -0 | 1585 | -0 | 0 | 0 | 1005 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.06 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 7 | 365 | -0 | 1711 | -0 | 0 | 0 | 920 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.05 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 8 | 365 | -0 | 1485 | -0 | 0 | 0 | 883 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.05 | 0.02 | 0.12 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE10_IP1** Descrizione: **CORDOLI DI FONDAZIONE 5-8-13-18-23-2...**
**ASTA NUM. 36** NI 6 NF 53 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | | kg | | | kg*m | | | | cmq | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 0 | -0 | -2166 | 0 | 0 | 0 | 1945 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.11 | 0.03 | 0.18 | 0.00 | 0.00 | -- | |
| 1B | 0 | -0 | -166 | 0 | 0 | 0 | 421 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.02 | 0.00 | 0.01 | 0.00 | 0.00 | -- | |
| 1I | 0 | -0 | -3553 | 0 | 0 | 0 | 1831 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.11 | 0.05 | 0.29 | 0.00 | 0.00 | -- | |
| 1J | 0 | -0 | 1221 | 0 | 0 | 0 | 536 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.03 | 0.02 | 0.10 | 0.00 | 0.00 | -- | |
| 2 | 0 | -0 | -955 | 0 | 0 | 0 | 1277 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.07 | 0.01 | 0.08 | 0.00 | 0.00 | -- | |
| 7 | 0 | -0 | -983 | 0 | 0 | 0 | 1239 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.07 | 0.01 | 0.08 | 0.00 | 0.00 | -- | |
| 8 | 0 | -0 | -1137 | 0 | 0 | 0 | 1221 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.07 | 0.02 | 0.09 | 0.00 | 0.00 | -- | |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 20 | -0 | -2166 | 0 | 0 | 0 | 1945 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.11 | 0.03 | 0.18 | 0.00 | 0.00 | -- | |
| 1B | 20 | -0 | -166 | 0 | 0 | 0 | 288 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.02 | 0.00 | 0.01 | 0.00 | 0.00 | -- | |
| 1I | 20 | -0 | -3553 | 0 | 0 | 0 | 4495 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.26 | 0.05 | 0.29 | 0.00 | 0.00 | -- | |
| 1J | 20 | -0 | 1221 | 0 | 0 | 0 | 536 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.03 | 0.02 | 0.10 | 0.00 | 0.00 | -- | |
| 2 | 20 | -0 | -955 | 0 | 0 | 0 | 1277 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.07 | 0.01 | 0.08 | 0.00 | 0.00 | -- | |
| 7 | 20 | -0 | -983 | 0 | 0 | 0 | 1239 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.07 | 0.01 | 0.08 | 0.00 | 0.00 | -- | |
| 8 | 20 | -0 | -1137 | 0 | 0 | 0 | 1221 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.07 | 0.02 | 0.09 | 0.00 | 0.00 | -- | |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 41 | -0 | -2166 | 0 | 0 | 0 | 2120 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.12 | 0.03 | 0.18 | 0.00 | 0.00 | -- | |
| 1B | 41 | -0 | 252 | 0 | 0 | 0 | -394 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.02 | 0.00 | 0.02 | 0.00 | 0.00 | -- | |
| 1I | 41 | -0 | -3553 | 0 | 0 | 0 | 4707 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.28 | 0.05 | 0.29 | 0.00 | 0.00 | -- | |
| 1J | 41 | -0 | 1740 | 0 | 0 | 0 | -1784 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.11 | 0.02 | 0.14 | 0.00 | 0.00 | -- | |
| 2 | 41 | -0 | -955 | 0 | 0 | 0 | 1420 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.08 | 0.01 | 0.08 | 0.00 | 0.00 | -- | |
| 7 | 41 | -0 | -983 | 0 | 0 | 0 | 1387 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.08 | 0.01 | 0.08 | 0.00 | 0.00 | -- | |
| 8 | 41 | -0 | -1137 | 0 | 0 | 0 | 1392 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.08 | 0.02 | 0.09 | 0.00 | 0.00 | -- | |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 62 | -0 | -1951 | 0 | 0 | 0 | 2120 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.12 | 0.03 | 0.16 | 0.00 | 0.00 | -- | |
| 1B | 62 | -0 | 252 | 0 | 0 | 0 | -764 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.04 | 0.00 | 0.02 | 0.00 | 0.00 | -- | |
| 1I | 62 | -0 | -3438 | 0 | 0 | 0 | 4969 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.29 | 0.05 | 0.28 | 0.00 | 0.00 | -- | |
| 1J | 62 | -0 | 1740 | 0 | 0 | 0 | -2467 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.15 | 0.02 | 0.14 | 0.00 | 0.00 | -- | |
| 2 | 62 | -0 | -631 | 0 | 0 | 0 | 1304 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.07 | 0.01 | 0.05 | 0.00 | 0.00 | -- | |
| 7 | 62 | -0 | -651 | 0 | 0 | 0 | 1268 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.07 | 0.01 | 0.05 | 0.00 | 0.00 | -- | |
| 8 | 62 | -0 | -829 | 0 | 0 | 0 | 1287 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.07 | 0.01 | 0.07 | 0.00 | 0.00 | -- | |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 82 | -0 | -1951 | 0 | 0 | 0 | 2120 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.12 | 0.03 | 0.16 | 0.00 | 0.00 | -- | |
| 1B | 82 | -0 | 678 | 0 | 0 | 0 | -1407 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.08 | 0.01 | 0.06 | 0.00 | 0.00 | -- | |
| 1I | 82 | -0 | -3438 | 0 | 0 | 0 | 5304 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.31 | 0.05 | 0.28 | 0.00 | 0.00 | -- | |
| 1J | 82 | -0 | 2276 | 0 | 0 | 0 | -3494 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.21 | 0.03 | 0.19 | 0.00 | 0.00 | -- | |
| 2 | 82 | -0 | -631 | 0 | 0 | 0 | 1175 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.07 | 0.01 | 0.05 | 0.00 | 0.00 | -- | |
| 7 | 82 | -0 | -651 | 0 | 0 | 0 | 1134 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.06 | 0.01 | 0.05 | 0.00 | 0.00 | -- | |
| 8 | 82 | -0 | -829 | 0 | 0 | 0 | 1117 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.06 | 0.01 | 0.07 | 0.00 | 0.00 | -- | |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 102 | -0 | -1721 | 0 | 0 | 0 | 3245 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.19 | 0.02 | 0.14 | 0.00 | 0.00 | -- | |
| 1B | 102 | -0 | 678 | 0 | 0 | 0 | -1726 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.10 | 0.01 | 0.06 | 0.00 | 0.00 | -- | |
| 1I | 102 | -0 | -3318 | 0 | 0 | 0 | 5674 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.33 | 0.04 | 0.27 | 0.00 | 0.00 | -- | |
| 1J | 102 | -0 | 2275 | 0 | 0 | 0 | -4156 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.24 | 0.03 | 0.19 | 0.00 | 0.00 | -- | |
| 2 | 102 | -0 | -293 | 0 | 0 | 0 | 898 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.05 | 0.00 | 0.02 | 0.00 | 0.00 | -- | |
| 7 | 102 | -0 | -306 | 0 | 0 | 0 | 850 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.05 | 0.00 | 0.03 | 0.00 | 0.00 | -- | |
| 8 | 102 | -0 | -508 | 0 | 0 | 0 | 807 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.05 | 0.01 | 0.04 | 0.00 | 0.00 | -- | |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 123 | -0 | -1721 | 0 | 0 | 0 | 3206 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.19 | 0.02 | 0.14 | 0.00 | 0.00 | -- | |
| 1B | 123 | -0 | 1111 | 0 | 0 | 0 | -2324 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.14 | 0.01 | 0.09 | 0.00 | 0.00 | -- | |
| 1I | 123 | -0 | -3318 | 0 | 0 | 0 | 6122 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.36 | 0.04 | 0.27 | 0.00 | 0.00 | -- | |
| 1J | 123 | -0 | 2823 | 0 | 0 | 0 | -5169 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.30 | 0.04 | 0.23 | 0.00 | 0.00 | -- | |
| 2 | 123 | -0 | -293 | 0 | 0 | 0 | 838 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.05 | 0.00 | 0.02 | 0.00 | 0.00 | -- | |
| 7 | 123 | -0 | -306 | 0 | 0 | 0 | 783 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.04 | 0.00 | 0.03 | 0.00 | 0.00 | -- | |
| 8 | 123 | -0 | -508 | 0 | 0 | 0 | 703 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.04 | 0.01 | 0.04 | 0.00 | 0.00 | -- | |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 144 | -0 | -1477 | 0 | 0 | 0 | 3206 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.19 | 0.02 | 0.12 | 0.00 | 0.00 | -- | |
| 1B | 144 | -0 | 1111 | 0 | 0 | 0 | -2594 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.15 | 0.01 | 0.09 | 0.00 | 0.00 | -- | |
| 1I | 144 | -0 | -3189 | 0 | 0 | 0 | 6495 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.38 | 0.04 | 0.26 | 0.00 | 0.00 | -- | |
| 1J | 144 | -0 | 2823 | 0 | 0 | 0 | -5813 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.34 | 0.04 | 0.23 | 0.00 | 0.00 | -- | |
| 2 | 144 | -0 | 57 | -0 | 0 | 0 | 699 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | -- | |
| 7 | 144 | -0 | 50 | -0 | 0 | 0 | 634 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | -- | |
| 8 | 144 | -0 | -177 | 0 | 0 | 0 | 372 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.02 | 0.00 | 0.01 | 0.00 | 0.00 | -- | |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 164 | -0 | -1477 | 0 | 0 | 0 | 3145 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.19 | 0.02 | 0.12 | 0.00 | 0.00 | -- | |
| 1B | 164 | -0 | 1547 | 0 | 0 | 0 | -2609 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.15 | 0.02 | 0.13 | 0.00 | 0.00 | -- | |
| 1I | 164 | -0 | -3189 | 0 | 0 | 0 | 6375 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.38 | 0.04 | 0.26 | 0.00 | 0.00 | -- | |
| 1J | 164 | -0 | 3372 | 0 | 0 | 0 | -5898 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.35 | 0.05 | 0.28 | 0.00 | 0.00 | -- | |
| 2 | 164 | -0 | 416 | -0 | 0 | 0 | 782 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.04 | 0.01 | 0.03 | 0.00 | 0.00 | -- | |
| 7 | 164 | -0 | 416 | -0 | 0 | 0 | 720 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.04 | 0.01 | 0.03 | 0.00 | 0.00 | -- | |
| 8 | 164 | -0 | -177 | 0 | 0 | 0 | 348 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.02 | 0.00 | 0.01 | 0.00 | 0.00 | -- | |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 184 | -0 | -1218 | 0 | 0 | 0 | 3145 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.19 | 0.02 | 0.10 | 0.00 | 0.00 | -- | |
| 1B | 184 | -0 | 1547 | 0 | 0 | 0 | -2609 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.15 | 0.02 | 0.13 | 0.00 | 0.00 | -- | |
| 1I | 184 | -0 | -3043 | 0 | 0 | 0 | 6375 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.38 | 0.04 | 0.25 | 0.00 | 0.00 | -- | |
| 1J | 184 | -0 | 3372 | 0 | 0 | 0 | -5898 | 4.02 | 4.02 | 8.04 | 8.04 0.22 | 0.35 | 0.05 | 0.28 | 0.00 | 0.00 | -- | |
| 2 | 184 | -0 | 416 | -0 | 0 | 0 | 782 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.04 | 0.01 | 0.03 | 0.00 | 0.00 | -- | |
| 7 | 184 | -0 | 416 | -0 | 0 | 0 | 720 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.04 | 0.01 | 0.03 | 0.00 | 0.00 | -- | |
| 8 | 184 | -0 | 165 | -0 | 0 | 0 | 348 | 4.02 | 4.02 | 8.04 | 8.04 0.06 | 0.02 | 0.00 | 0.01 | 0.00 | 0.00 | -- | |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 205 | -0 | -1218 | 0 | 0 | 0 | 3145 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.19 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 1B | 205 | -0 | 1547 | 0 | 0 | 0 | -2609 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.15 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1I | 205 | -0 | -3043 | 0 | 0 | 0 | 6375 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.38 | 0.04 | 0.25 | 0.00 | 0.00 | -- |
| 1J | 205 | -0 | 3372 | 0 | 0 | 0 | -5898 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.35 | 0.05 | 0.28 | 0.00 | 0.00 | -- |
| 2 | 205 | -0 | 416 | -0 | 0 | 0 | 782 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 7 | 205 | -0 | 416 | -0 | 0 | 0 | 720 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 205 | -0 | 165 | -0 | 0 | 0 | 348 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.01 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE10_IP1**  Descrizione: **CORDOLI DI FONDAZIONE 5-8-13-18-23-2...**
**ASTA NUM. 37**  NI 53  NF 7  SEZ.  Rp  B= 60.0  H= 60.0  (trave di fondazione)

armatura base = 4 X 2.01  per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | cmq | | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 0 | -0 | -1981 | 0 | 0 | 0 | 2916 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.03 | 0.16 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | 1429 | 0 | 0 | 0 | -2372 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | -3982 | 0 | 0 | 0 | 5864 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.35 | 0.05 | 0.33 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | 3430 | 0 | 0 | 0 | -5320 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.31 | 0.05 | 0.28 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | -547 | 0 | 0 | 0 | 726 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | -562 | 0 | 0 | 0 | 663 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | -262 | 0 | 0 | 0 | 334 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 30 | -0 | -1981 | 0 | 0 | 0 | 2916 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.03 | 0.16 | 0.00 | 0.00 | -- |
| 1B | 30 | -0 | 1429 | 0 | 0 | 0 | -2372 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.02 | 0.12 | 0.00 | 0.00 | -- |
| 1I | 30 | -0 | -3982 | 0 | 0 | 0 | 5864 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.35 | 0.05 | 0.33 | 0.00 | 0.00 | -- |
| 1J | 30 | -0 | 3430 | 0 | 0 | 0 | -5320 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.31 | 0.05 | 0.28 | 0.00 | 0.00 | -- |
| 2 | 30 | -0 | -547 | 0 | 0 | 0 | 726 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 7 | 30 | -0 | -562 | 0 | 0 | 0 | 663 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 8 | 30 | -0 | -262 | 0 | 0 | 0 | 334 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 61 | -0 | -1981 | 0 | 0 | 0 | 3002 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.18 | 0.03 | 0.16 | 0.00 | 0.00 | -- |
| 1B | 61 | -0 | 1900 | 0 | 0 | 0 | -2372 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.03 | 0.16 | 0.00 | 0.00 | -- |
| 1I | 61 | -0 | -3982 | 0 | 0 | 0 | 6015 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.35 | 0.05 | 0.33 | 0.00 | 0.00 | -- |
| 1J | 61 | -0 | 3788 | 0 | 0 | 0 | -5320 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.31 | 0.05 | 0.31 | 0.00 | 0.00 | -- |
| 2 | 61 | -0 | -547 | 0 | 0 | 0 | 808 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 7 | 61 | -0 | -562 | 0 | 0 | 0 | 748 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 8 | 61 | -0 | 279 | -0 | 0 | 0 | 374 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 92 | -0 | -1356 | 0 | 0 | 0 | 2450 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1B | 92 | -0 | 1900 | 0 | 0 | 0 | -2343 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.03 | 0.16 | 0.00 | 0.00 | -- |
| 1I | 92 | -0 | -3244 | 0 | 0 | 0 | 4737 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.28 | 0.04 | 0.27 | 0.00 | 0.00 | -- |
| 1J | 92 | -0 | 3788 | 0 | 0 | 0 | -4629 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.27 | 0.05 | 0.31 | 0.00 | 0.00 | -- |
| 2 | 92 | -0 | 10 | -0 | 0 | 0 | 483 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 7 | 92 | -0 | 3 | -0 | 0 | 0 | 408 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 8 | 92 | -0 | 279 | -0 | 0 | 0 | 374 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.02 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 122 | -0 | -1356 | 0 | 0 | 0 | 2107 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.02 | 0.11 | 0.00 | 0.00 | -- |
| 1B | 122 | -0 | 2435 | 0 | 0 | 0 | -2177 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.03 | 0.20 | 0.00 | 0.00 | -- |
| 1I | 122 | -0 | -3244 | 0 | 0 | 0 | 3768 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.04 | 0.27 | 0.00 | 0.00 | -- |
| 1J | 122 | -0 | 4268 | 0 | 0 | 0 | -3803 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.06 | 0.35 | 0.00 | 0.00 | -- |
| 2 | 122 | -0 | 573 | -0 | 0 | 0 | 808 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 7 | 122 | -0 | 574 | -0 | 0 | 0 | 748 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 8 | 122 | -0 | 835 | -0 | 0 | 0 | 919 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.07 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 152 | -0 | -764 | 0 | 0 | 0 | 1035 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1B | 152 | -0 | 2435 | 0 | 0 | 0 | 2147 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.03 | 0.20 | 0.00 | 0.00 | -- |
| 1I | 152 | -0 | -2597 | 0 | 0 | 0 | 2401 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.03 | 0.21 | 0.00 | 0.00 | -- |
| 1J | 152 | -0 | 4268 | 0 | 0 | 0 | 3133 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.18 | 0.06 | 0.35 | 0.00 | 0.00 | -- |
| 2 | 152 | -0 | 573 | -0 | 0 | 0 | 808 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.05 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 7 | 152 | -0 | 574 | -0 | 0 | 0 | 748 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.04 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 8 | 152 | -0 | 835 | -0 | 0 | 0 | 1174 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.01 | 0.07 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 183 | -0 | -764 | 0 | 0 | 0 | 2276 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1B | 183 | -0 | 3031 | 0 | 0 | 0 | 3730 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.04 | 0.25 | 0.00 | 0.00 | -- |
| 1I | 183 | -0 | -2597 | 0 | 0 | 0 | 3524 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.03 | 0.21 | 0.00 | 0.00 | -- |
| 1J | 183 | -0 | 4882 | 0 | 0 | 0 | 4988 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.29 | 0.07 | 0.40 | 0.00 | 0.00 | -- |
| 2 | 183 | -0 | 1139 | -0 | 0 | 0 | 1560 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.09 | 0.02 | 0.09 | 0.00 | 0.00 | -- |
| 7 | 183 | -0 | 1149 | -0 | 0 | 0 | 1494 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.02 | 0.09 | 0.00 | 0.00 | -- |
| 8 | 183 | -0 | 1403 | -0 | 0 | 0 | 1793 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.02 | 0.12 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 214 | -0 | -206 | 0 | 0 | 0 | 2841 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1B | 214 | -0 | 3031 | 0 | 0 | 0 | -2150 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.13 | 0.04 | 0.25 | 0.00 | 0.00 | -- |
| 1I | 214 | -0 | -2056 | 0 | 0 | 0 | 4662 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.27 | 0.03 | 0.17 | 0.00 | 0.00 | -- |
| 1J | 214 | -0 | 4881 | 0 | 0 | 0 | -3971 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.23 | 0.07 | 0.40 | 0.00 | 0.00 | -- |
| 2 | 214 | -0 | 1139 | -0 | 0 | 0 | 1907 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.02 | 0.09 | 0.00 | 0.00 | -- |
| 7 | 214 | -0 | 1149 | -0 | 0 | 0 | 1844 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.02 | 0.09 | 0.00 | 0.00 | -- |
| 8 | 214 | -0 | 1403 | -0 | 0 | 0 | 2221 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.13 | 0.02 | 0.12 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 244 | -0 | 318 | -0 | 0 | 0 | 3836 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.23 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 1B | 244 | -0 | 3672 | -0 | 0 | 0 | -2372 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.05 | 0.30 | 0.00 | 0.00 | -- |
| 1I | 244 | -0 | -2056 | 0 | 0 | 0 | 6147 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.36 | 0.03 | 0.17 | 0.00 | 0.00 | -- |
| 1J | 244 | -0 | 5607 | 0 | 0 | 0 | -5060 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.30 | 0.07 | 0.46 | 0.00 | 0.00 | -- |
| 2 | 244 | -0 | 1699 | -0 | 0 | 0 | 2305 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.13 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 7 | 244 | -0 | 1719 | -0 | 0 | 0 | 2248 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.13 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 8 | 244 | -0 | 1975 | -0 | 0 | 0 | 2657 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.15 | 0.03 | 0.16 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 274 | -0 | 318 | -0 | 0 | 0 | 4955 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.29 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 1B | 274 | -0 | 3671 | -0 | 0 | 0 | -2372 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.05 | 0.30 | 0.00 | 0.00 | -- |
| 1I | 274 | -0 | -1617 | 0 | 0 | 0 | 7575 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.45 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1J | 274 | -0 | 5606 | 0 | 0 | 0 | -5320 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.31 | 0.07 | 0.46 | 0.00 | 0.00 | -- |
| 2 | 274 | -0 | 1699 | -0 | 0 | 0 | 2305 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.13 | 0.02 | 0.14 | 0.00 | 0.00 | -- |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 274 | -0 | 1719 | -0 | 0 | 0 | 2248 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.13 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 8 | 274 | -0 | 1975 | -0 | 0 | 0 | 2657 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.15 | 0.03 | 0.16 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 305 | -0 | 318 | -0 | 0 | 0 | 5520 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.33 | 0.00 | 0.03 | 0.00 | 0.00 | -- |
| 1B | 305 | -0 | 3671 | -0 | 0 | 0 | -2372 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.05 | 0.30 | 0.00 | 0.00 | -- |
| 1I | 305 | -0 | -1617 | 0 | 0 | 0 | 7840 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.46 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1J | 305 | -0 | 5606 | 0 | 0 | 0 | -5320 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.31 | 0.07 | 0.46 | 0.00 | 0.00 | -- |
| 2 | 305 | -0 | 1699 | -0 | 0 | 0 | 2305 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.13 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 7 | 305 | -0 | 1719 | -0 | 0 | 0 | 2248 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.13 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 8 | 305 | -0 | 1975 | -0 | 0 | 0 | 2657 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.15 | 0.03 | 0.16 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE10_IP1** Descrizione: **CORDOLI DI FONDAZIONE 5-8-13-18-23-2...**
**ASTA NUM. 38** NI 7 NF 40 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 0 | -0 | -4013 | 0 | 0 | 0 | 5763 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.34 | 0.05 | 0.33 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | -915 | 0 | 0 | 0 | -546 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.03 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | -5100 | 0 | 0 | 0 | 8501 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.50 | 0.07 | 0.42 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | 172 | 0 | 0 | 0 | -3341 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.20 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | -2147 | 0 | 0 | 0 | 2098 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | -2265 | 0 | 0 | 0 | 2000 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | -2346 | 0 | 0 | 0 | 2527 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.14 | 0.03 | 0.19 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 36 | -0 | -4013 | 0 | 0 | 0 | 5763 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.34 | 0.05 | 0.33 | 0.00 | 0.00 | -- |
| 1B | 36 | -0 | -915 | 0 | 0 | 0 | -1886 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.11 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1I | 36 | -0 | -5100 | 0 | 0 | 0 | 8501 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.50 | 0.07 | 0.42 | 0.00 | 0.00 | -- |
| 1J | 36 | -0 | 172 | 0 | 0 | 0 | -3522 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 2 | 36 | -0 | -2147 | 0 | 0 | 0 | 2098 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 7 | 36 | -0 | -2265 | 0 | 0 | 0 | 2000 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 8 | 36 | -0 | -2346 | 0 | 0 | 0 | 2527 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.14 | 0.03 | 0.19 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 73 | -0 | -4013 | 0 | 0 | 0 | 6144 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.36 | 0.05 | 0.33 | 0.00 | 0.00 | -- |
| 1B | 73 | -0 | -915 | 0 | 0 | 0 | -2639 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.16 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1I | 73 | -0 | -5100 | 0 | 0 | 0 | 8756 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.52 | 0.07 | 0.42 | 0.00 | 0.00 | -- |
| 1J | 73 | -0 | 450 | 0 | 0 | 0 | -3627 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 73 | -0 | -2147 | 0 | 0 | 0 | 2230 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.13 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 7 | 73 | -0 | -2265 | 0 | 0 | 0 | 2139 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.03 | 0.19 | 0.00 | 0.00 | -- |
| 8 | 73 | -0 | -2346 | 0 | 0 | 0 | 2671 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.15 | 0.03 | 0.19 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 110 | -0 | -3192 | 0 | 0 | 0 | 5321 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.31 | 0.04 | 0.26 | 0.00 | 0.00 | -- |
| 1B | 110 | -0 | -482 | 0 | 0 | 0 | -2923 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1I | 110 | -0 | -4123 | 0 | 0 | 0 | 6760 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.40 | 0.06 | 0.34 | 0.00 | 0.00 | -- |
| 1J | 110 | -0 | 450 | 0 | 0 | 0 | -3627 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 110 | -0 | -1567 | 0 | 0 | 0 | 1286 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 7 | 110 | -0 | -1666 | 0 | 0 | 0 | 1147 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.06 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 8 | 110 | -0 | -1738 | 0 | 0 | 0 | 1647 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.09 | 0.02 | 0.14 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 146 | -0 | -3192 | 0 | 0 | 0 | 4542 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.27 | 0.04 | 0.26 | 0.00 | 0.00 | -- |
| 1B | 146 | -0 | -482 | 0 | 0 | 0 | -3484 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1I | 146 | -0 | -4123 | 0 | 0 | 0 | 5390 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.32 | 0.06 | 0.34 | 0.00 | 0.00 | -- |
| 1J | 146 | -0 | 640 | 0 | 0 | 0 | -3627 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 2 | 146 | -0 | -1567 | 0 | 0 | -0 | -1295 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 7 | 146 | -0 | -1666 | 0 | 0 | -0 | -1597 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.09 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 8 | 146 | -0 | -1738 | 0 | 0 | -0 | -1216 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.14 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 182 | -0 | -2400 | 0 | 0 | 0 | 3469 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.20 | 0.03 | 0.20 | 0.00 | 0.00 | -- |
| 1B | 182 | -0 | -166 | 0 | 0 | 0 | -3652 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1I | 182 | -0 | -3206 | 0 | 0 | 0 | 3748 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.04 | 0.26 | 0.00 | 0.00 | -- |
| 1J | 182 | -0 | 640 | 0 | 0 | 0 | -3627 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 2 | 182 | -0 | -1065 | 0 | 0 | -0 | -1362 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 7 | 182 | -0 | -1138 | 0 | 0 | -0 | -1674 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.09 | 0.02 | 0.09 | 0.00 | 0.00 | -- |
| 8 | 182 | -0 | -1209 | 0 | 0 | -0 | -1318 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.07 | 0.02 | 0.10 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 219 | -0 | -2400 | 0 | 0 | 0 | 2904 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.17 | 0.03 | 0.20 | 0.00 | 0.00 | -- |
| 1B | 219 | -0 | -165 | 0 | 0 | 0 | -4024 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.24 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1I | 219 | -0 | -3206 | 0 | 0 | 0 | 2694 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.16 | 0.04 | 0.26 | 0.00 | 0.00 | -- |
| 1J | 219 | -0 | 778 | 0 | 0 | 0 | -3627 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 2 | 219 | -0 | -1065 | 0 | 0 | -0 | -1730 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.01 | 0.09 | 0.00 | 0.00 | -- |
| 7 | 219 | -0 | -1138 | 0 | 0 | -0 | -2036 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.02 | 0.09 | 0.00 | 0.00 | -- |
| 8 | 219 | -0 | -1209 | 0 | 0 | -0 | -1760 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.02 | 0.10 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 256 | -0 | -1625 | 0 | 0 | 0 | 2011 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.12 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1B | 256 | -0 | 33 | 0 | 0 | 0 | -4123 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.24 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 1I | 256 | -0 | -2370 | 0 | 0 | -0 | -839 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.03 | 0.20 | 0.00 | 0.00 | -- |
| 1J | 256 | -0 | 778 | 0 | 0 | -0 | -3531 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 2 | 256 | -0 | -638 | 0 | 0 | -0 | -1709 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 7 | 256 | -0 | -674 | 0 | 0 | -0 | -2036 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 8 | 256 | -0 | -760 | 0 | 0 | -0 | -1749 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.01 | 0.06 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 292 | -0 | -1625 | 0 | 0 | 0 | 1615 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.10 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1B | 292 | -0 | 198 | 0 | 0 | 0 | -4413 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.26 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 292 | -0 | -2370 | 0 | 0 | -0 | -839 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.03 | 0.20 | 0.00 | 0.00 | -- |
| 1J | 292 | -0 | 914 | 0 | 0 | -0 | -3461 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.20 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 2 | 292 | -0 | -638 | 0 | 0 | -0 | -1730 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 7 | 292 | -0 | -674 | 0 | 0 | -0 | -2036 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 8 | 292 | -0 | -760 | 0 | 0 | -0 | -1811 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.01 | 0.06 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 328 | -0 | -912 | 0 | 0 | 0 | 1039 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.06 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1B | 328 | -0 | 198 | 0 | 0 | 0 | -4555 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.27 | 0.00 | 0.02 | 0.00 | 0.00 | -- |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1I | 328 | -0 | -1629 | 0 | 0 | -0 | -839 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1J | 328 | -0 | 914 | 0 | 0 | -0 | -3627 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 2 | 328 | -0 | -269 | 0 | 0 | -0 | -1730 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 7 | 328 | -0 | -254 | 0 | 0 | -0 | -2036 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 8 | 328 | -0 | -373 | 0 | 0 | -0 | -1811 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.00 | 0.03 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 365 | -0 | -912 | 0 | 0 | 0 | 335 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.02 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1B | 365 | -0 | 198 | 0 | 0 | 0 | -4571 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.27 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 365 | -0 | -1629 | 0 | 0 | -0 | -839 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.02 | 0.13 | 0.00 | 0.00 | -- |
| 1J | 365 | -0 | 914 | 0 | 0 | -0 | -3627 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 2 | 365 | -0 | -269 | 0 | 0 | -0 | -1730 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 7 | 365 | -0 | -254 | 0 | 0 | -0 | -2036 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 8 | 365 | -0 | -373 | 0 | 0 | -0 | -1811 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.00 | 0.03 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

Nome travata: **CORDOLI DI FONDAZIONE10_IP1**  Descrizione: **CORDOLI DI FONDAZIONE 5-8-13-18-23-2...**
**ASTA NUM. 39**  NI 40  NF 47  SEZ.  Rp  B= 60.0  H= 60.0  (trave di fondazione)

armatura base = 4 X 2.01  per le armature aggiuntive consultare il tabulato

| NC | x | Fx | Fy | Fz | Mx | My | Mz | APOST | AANT | AINF | ASUP | x/d | Indice | resistenza | aswta | aswto | PASSO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cmq | | | | | | Fx,M | Bielle | V,Mx | cmq/m | cm |
| 1A | 0 | -0 | -996 | 0 | 0 | 0 | 1559 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1B | 0 | -0 | -195 | 0 | 0 | 0 | -6040 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.36 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 0 | -0 | -1236 | 0 | 0 | -0 | -876 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 1J | 0 | -0 | 44 | 0 | 0 | -0 | -3771 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.22 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 2 | 0 | -0 | -463 | 0 | 0 | -0 | -1986 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 0 | -0 | -518 | 0 | 0 | -0 | -2488 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.14 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 8 | 0 | -0 | -540 | 0 | 0 | -0 | -2058 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.04 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 36 | -0 | -996 | 0 | 0 | 0 | 1559 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1B | 36 | -0 | -195 | 0 | 0 | 0 | -6325 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.37 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1I | 36 | -0 | -1236 | 0 | 0 | -0 | -876 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 1J | 36 | -0 | 44 | 0 | 0 | -0 | -4075 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.24 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| 2 | 36 | -0 | -463 | 0 | 0 | -0 | -2123 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 36 | -0 | -518 | 0 | 0 | -0 | -2599 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.15 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 8 | 36 | -0 | -540 | 0 | 0 | -0 | -2252 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.13 | 0.01 | 0.04 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 73 | -0 | -996 | 0 | 0 | 0 | 1559 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 1B | 73 | -0 | 481 | 0 | 0 | 0 | -6485 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.38 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1I | 73 | -0 | -1236 | 0 | 0 | -0 | -876 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 1J | 73 | -0 | 434 | 0 | 0 | -0 | -4584 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.27 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 73 | -0 | -463 | 0 | 0 | -0 | -2123 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 7 | 73 | -0 | -518 | 0 | 0 | -0 | -2599 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.15 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 8 | 73 | -0 | -540 | 0 | 0 | -0 | -2252 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.13 | 0.01 | 0.04 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 110 | -0 | -796 | 0 | 0 | 0 | 1559 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.01 | 0.07 | 0.00 | 0.00 | -- |
| 1B | 110 | -0 | 481 | 0 | 0 | 0 | -6485 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.38 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1I | 110 | -0 | -749 | 0 | 0 | -0 | -876 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1J | 110 | -0 | 434 | 0 | 0 | -0 | -4584 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.27 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 2 | 110 | -0 | -132 | 0 | 0 | -0 | -2123 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 7 | 110 | -0 | -88 | 0 | 0 | -0 | -2599 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.15 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 8 | 110 | -0 | -201 | 0 | 0 | -0 | -2252 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.13 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 146 | -0 | -1175 | 0 | 0 | 0 | 1559 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 1B | 146 | -0 | 1856 | 0 | 0 | 0 | -6485 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.38 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 1I | 146 | -0 | -749 | 0 | 0 | -0 | -876 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.01 | 0.06 | 0.00 | 0.00 | -- |
| 1J | 146 | -0 | 1156 | 0 | 0 | -0 | -4584 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.27 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 2 | 146 | -0 | 226 | -0 | 0 | -0 | -2123 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 7 | 146 | -0 | 404 | -0 | 0 | -0 | -2599 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.15 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 146 | -0 | -201 | 0 | 0 | -0 | -2252 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.13 | 0.00 | 0.02 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 182 | -0 | -1175 | 0 | 0 | 0 | 1235 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 1B | 182 | -0 | 1856 | 0 | 0 | 0 | -6485 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.38 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 1I | 182 | -0 | -476 | 0 | 0 | -0 | -876 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1J | 182 | -0 | 1156 | 0 | 0 | -0 | -4584 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.27 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 2 | 182 | -0 | 226 | -0 | 0 | -0 | -2123 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 7 | 182 | -0 | 404 | -0 | 0 | -0 | -2599 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.15 | 0.01 | 0.03 | 0.00 | 0.00 | -- |
| 8 | 182 | -0 | 162 | -0 | 0 | -0 | -2252 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.13 | 0.00 | 0.01 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 219 | -0 | -1783 | 0 | 0 | 0 | 1263 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.07 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 1B | 219 | -0 | 3666 | 0 | 0 | 0 | -6485 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.38 | 0.05 | 0.30 | 0.00 | 0.00 | -- |
| 1I | 219 | -0 | -476 | 0 | 0 | -0 | -876 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.01 | 0.04 | 0.00 | 0.00 | -- |
| 1J | 219 | -0 | 2165 | 0 | 0 | -0 | -4584 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.27 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 2 | 219 | -0 | 646 | -0 | 0 | -0 | -2123 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 7 | 219 | -0 | 1000 | -0 | 0 | -0 | -2599 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.15 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 8 | 219 | -0 | 586 | -0 | 0 | -0 | -2252 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.13 | 0.01 | 0.05 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 256 | -0 | -1783 | 0 | 0 | -0 | -1563 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.02 | 0.15 | 0.00 | 0.00 | -- |
| 1B | 256 | -0 | 3666 | 0 | 0 | -0 | -6204 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.37 | 0.05 | 0.30 | 0.00 | 0.00 | -- |
| 1I | 256 | -0 | -282 | 0 | 0 | -0 | -816 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.05 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1J | 256 | -0 | 2165 | 0 | 0 | -0 | -4584 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.27 | 0.03 | 0.18 | 0.00 | 0.00 | -- |
| 2 | 256 | -0 | 646 | -0 | 0 | -0 | -2123 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.01 | 0.05 | 0.00 | 0.00 | -- |
| 7 | 256 | -0 | 1000 | -0 | 0 | -0 | -2580 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.15 | 0.01 | 0.08 | 0.00 | 0.00 | -- |
| 8 | 256 | -0 | 586 | -0 | 0 | -0 | -2252 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.13 | 0.01 | 0.05 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 292 | -0 | -2617 | 0 | 0 | -0 | -2636 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.16 | 0.03 | 0.22 | 0.00 | 0.00 | -- |
| 1B | 292 | -0 | 5987 | 0 | 0 | -0 | -6467 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.38 | 0.08 | 0.49 | 0.00 | 0.00 | -- |
| 1I | 292 | -0 | -282 | 0 | 0 | -0 | -677 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.00 | 0.02 | 0.00 | 0.00 | -- |
| 1J | 292 | -0 | 3501 | 0 | 0 | -0 | -4584 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.27 | 0.05 | 0.29 | 0.00 | 0.00 | -- |
| 2 | 292 | -0 | 1159 | -0 | 0 | -0 | -2123 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 7 | 292 | -0 | 1738 | -0 | 0 | -0 | -2599 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.15 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 8 | 292 | -0 | 1105 | -0 | 0 | -0 | -2252 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.13 | 0.01 | 0.09 | 0.00 | 0.00 | -- |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d  8 / 33.0



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| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 328 | -0 | -2617 | 0 | 0 | -0 | -3580 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.03 | 0.22 | 0.00 | 0.00 | -- |
| 1B | 328 | -0 | 5987 | 0 | 0 | -0 | -3926 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.23 | 0.08 | 0.49 | 0.00 | 0.00 | -- |
| 1I | 328 | -0 | -131 | 0 | 0 | 0 | 621 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.04 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1J | 328 | -0 | 3501 | 0 | 0 | 0 | -4584 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.27 | 0.05 | 0.29 | 0.00 | 0.00 | -- |
| 2 | 328 | -0 | 1159 | -0 | 0 | -0 | -1806 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.10 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 7 | 328 | -0 | 1738 | -0 | 0 | -0 | -2053 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.12 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 8 | 328 | -0 | 1105 | -0 | 0 | -0 | -2011 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.11 | 0.01 | 0.09 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 365 | -0 | -2617 | 0 | 0 | -0 | -3580 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.21 | 0.03 | 0.22 | 0.00 | 0.00 | -- |
| 1B | 365 | -0 | 5987 | 0 | 0 | -0 | 2455 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.14 | 0.08 | 0.49 | 0.00 | 0.00 | -- |
| 1I | 365 | -0 | -131 | 0 | 0 | 0 | 1570 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.09 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| 1J | 365 | -0 | 3501 | 0 | 0 | 0 | -4584 | 4.02 | 4.02 | 8.04 | 8.04 | 0.22 | 0.27 | 0.05 | 0.29 | 0.00 | 0.00 | -- |
| 2 | 365 | -0 | 1159 | -0 | 0 | -0 | -1383 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.02 | 0.10 | 0.00 | 0.00 | -- |
| 7 | 365 | -0 | 1738 | -0 | 0 | -0 | -1419 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.08 | 0.02 | 0.14 | 0.00 | 0.00 | -- |
| 8 | 365 | -0 | 1105 | -0 | 0 | -0 | -1608 | 4.02 | 4.02 | 8.04 | 8.04 | 0.06 | 0.09 | 0.01 | 0.09 | 0.00 | 0.00 | -- |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) staffe= 2 d 8 / 33.0

**TRAVI DI FONDAZIONE ALLO SLD**

Elemento: **TRAVE DI FONDAZIONE** Gruppo: **1** Tabella: **Tabella fondazioni**
Descrizione: **CORDOLI DI FONDAZIONE**
Spunt. I **30.0** cm Spunt. J **30.0** cm
Rck: **300.00** kg/cm$^2$ fyk: **4580.0** kg/cm$^2$ Condizioni ambientali: **Ordinaria**
Copriferro: **3.0** cm
Diametro staffe: **8** mm Numero braccia: **2**

Nome travata: **CORDOLI DI FONDAZIONE01_IP1** Descrizione: **CORDOLI DI FONDAZIONE 1-2-3-4-5**
**ASTA NUM. 1** NI 1 NF 18 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cm$^2$ | | | | | kg/cm$^2$ | mm |
| 3 | 0 | -0 | -455 | 0 | 0 | 0 | -364 | 4.02 | 4.02 | 8.04 | 8.04 | -0.79 | 6.7 | 0.00 |
| 4 | 0 | -0 | -421 | 0 | 0 | 0 | -337 | 4.02 | 4.02 | 8.04 | 8.04 | -0.73 | 6.2 | 0.00 |
| 5 | 0 | -0 | -412 | 0 | 0 | 0 | -330 | 4.02 | 4.02 | 8.04 | 8.04 | -0.72 | 6.1 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 18 | -0 | -455 | 0 | 0 | 0 | -443 | 4.02 | 4.02 | 8.04 | 8.04 | -0.96 | 8.2 | 0.00 |
| 4 | 18 | -0 | -421 | 0 | 0 | 0 | -410 | 4.02 | 4.02 | 8.04 | 8.04 | -0.89 | 7.6 | 0.00 |
| 5 | 18 | -0 | -412 | 0 | 0 | 0 | -402 | 4.02 | 4.02 | 8.04 | 8.04 | -0.87 | 7.4 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 35 | -0 | -455 | 0 | 0 | 0 | -523 | 4.02 | 4.02 | 8.04 | 8.04 | -1.14 | 9.7 | 0.00 |
| 4 | 35 | -0 | -421 | 0 | 0 | 0 | -484 | 4.02 | 4.02 | 8.04 | 8.04 | -1.05 | 9.0 | 0.00 |
| 5 | 35 | -0 | -412 | 0 | 0 | 0 | -474 | 4.02 | 4.02 | 8.04 | 8.04 | -1.03 | 8.8 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 52 | -0 | -356 | 0 | 0 | 0 | -585 | 4.02 | 4.02 | 8.04 | 8.04 | -1.27 | 10.8 | 0.00 |
| 4 | 52 | -0 | -356 | 0 | 0 | 0 | -546 | 4.02 | 4.02 | 8.04 | 8.04 | -1.19 | 10.1 | 0.00 |
| 5 | 52 | -0 | -357 | 0 | 0 | 0 | -537 | 4.02 | 4.02 | 8.04 | 8.04 | -1.17 | 9.9 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 70 | -0 | -356 | 0 | 0 | 0 | -648 | 4.02 | 4.02 | 8.04 | 8.04 | -1.41 | 12.0 | 0.00 |
| 4 | 70 | -0 | -356 | 0 | 0 | 0 | -609 | 4.02 | 4.02 | 8.04 | 8.04 | -1.32 | 11.3 | 0.00 |
| 5 | 70 | -0 | -357 | 0 | 0 | 0 | -599 | 4.02 | 4.02 | 8.04 | 8.04 | -1.30 | 11.1 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 88 | -0 | -247 | 0 | 0 | 0 | -691 | 4.02 | 4.02 | 8.04 | 8.04 | -1.50 | 12.8 | 0.00 |
| 4 | 88 | -0 | -287 | 0 | 0 | 0 | -659 | 4.02 | 4.02 | 8.04 | 8.04 | -1.43 | 12.2 | 0.00 |
| 5 | 88 | -0 | -297 | 0 | 0 | 0 | -651 | 4.02 | 4.02 | 8.04 | 8.04 | -1.42 | 12.1 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 105 | -0 | -247 | 0 | 0 | 0 | -734 | 4.02 | 4.02 | 8.04 | 8.04 | -1.60 | 13.6 | 0.00 |
| 4 | 105 | -0 | -287 | 0 | 0 | 0 | -709 | 4.02 | 4.02 | 8.04 | 8.04 | -1.54 | 13.1 | 0.00 |
| 5 | 105 | -0 | -297 | 0 | 0 | 0 | -703 | 4.02 | 4.02 | 8.04 | 8.04 | -1.53 | 13.0 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 122 | -0 | -128 | 0 | 0 | 0 | -756 | 4.02 | 4.02 | 8.04 | 8.04 | -1.65 | 14.0 | 0.00 |
| 4 | 122 | -0 | -211 | 0 | 0 | 0 | -746 | 4.02 | 4.02 | 8.04 | 8.04 | -1.62 | 13.8 | 0.00 |
| 5 | 122 | -0 | -231 | 0 | 0 | 0 | -743 | 4.02 | 4.02 | 8.04 | 8.04 | -1.62 | 13.8 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 140 | -0 | -128 | 0 | 0 | 0 | -779 | 4.02 | 4.02 | 8.04 | 8.04 | -1.69 | 14.4 | 0.00 |
| 4 | 140 | -0 | -211 | 0 | 0 | 0 | -783 | 4.02 | 4.02 | 8.04 | 8.04 | -1.70 | 14.5 | 0.00 |
| 5 | 140 | -0 | -231 | 0 | 0 | 0 | -784 | 4.02 | 4.02 | 8.04 | 8.04 | -1.71 | 14.5 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 158 | -0 | 3 | 0 | 0 | 0 | -778 | 4.02 | 4.02 | 8.04 | 8.04 | -1.69 | 14.4 | 0.00 |
| 4 | 158 | -0 | -127 | 0 | 0 | 0 | -805 | 4.02 | 4.02 | 8.04 | 8.04 | -1.75 | 14.9 | 0.00 |
| 5 | 158 | -0 | -159 | 0 | 0 | 0 | -812 | 4.02 | 4.02 | 8.04 | 8.04 | -1.77 | 15.0 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 175 | -0 | 3 | 0 | 0 | 0 | -778 | 4.02 | 4.02 | 8.04 | 8.04 | -1.69 | 14.4 | 0.00 |
| 4 | 175 | -0 | -127 | 0 | 0 | 0 | -827 | 4.02 | 4.02 | 8.04 | 8.04 | -1.80 | 15.3 | 0.00 |
| 5 | 175 | -0 | -159 | 0 | 0 | 0 | -839 | 4.02 | 4.02 | 8.04 | 8.04 | -1.83 | 15.5 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE01_IP1** Descrizione: **CORDOLI DI FONDAZIONE 1-2-3-4-5**
**ASTA NUM. 2** NI 18 NF 94 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato



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| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cm² | | | | | kg/cm² | mm |
| 3 | 0 | -0 | 980 | 0 | 0 | 0 | -925 | 4.02 | 4.02 | 8.04 | 8.04 | -2.01 | 17.1 | 0.00 |
| 4 | 0 | -0 | 859 | 0 | 0 | 0 | -945 | 4.02 | 4.02 | 8.04 | 8.04 | -2.06 | 17.5 | 0.00 |
| 5 | 0 | -0 | 828 | 0 | 0 | 0 | -950 | 4.02 | 4.02 | 8.04 | 8.04 | -2.07 | 17.6 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 18 | -0 | 980 | 0 | 0 | 0 | -749 | 4.02 | 4.02 | 8.04 | 8.04 | -1.63 | 13.9 | 0.00 |
| 4 | 18 | -0 | 859 | 0 | 0 | 0 | -790 | 4.02 | 4.02 | 8.04 | 8.04 | -1.72 | 14.6 | 0.00 |
| 5 | 18 | -0 | 828 | 0 | 0 | 0 | -801 | 4.02 | 4.02 | 8.04 | 8.04 | -1.74 | 14.8 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 36 | -0 | 1144 | 0 | 0 | 0 | -572 | 4.02 | 4.02 | 8.04 | 8.04 | -1.25 | 10.6 | 0.00 |
| 4 | 36 | -0 | 966 | 0 | 0 | 0 | -636 | 4.02 | 4.02 | 8.04 | 8.04 | -1.38 | 11.8 | 0.00 |
| 5 | 36 | -0 | 921 | 0 | 0 | 0 | -652 | 4.02 | 4.02 | 8.04 | 8.04 | -1.42 | 12.1 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 54 | -0 | 1144 | 0 | 0 | 0 | -366 | 4.02 | 4.02 | 8.04 | 8.04 | -0.80 | 6.8 | 0.00 |
| 4 | 54 | -0 | 966 | 0 | 0 | 0 | -462 | 4.02 | 4.02 | 8.04 | 8.04 | -1.01 | 8.6 | 0.00 |
| 5 | 54 | -0 | 921 | 0 | 0 | 0 | -486 | 4.02 | 4.02 | 8.04 | 8.04 | -1.06 | 9.0 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 72 | -0 | 1324 | 0 | 0 | 0 | -161 | 4.02 | 4.02 | 8.04 | 8.04 | -0.35 | 3.0 | 0.00 |
| 4 | 72 | -0 | 1086 | 0 | 0 | 0 | -288 | 4.02 | 4.02 | 8.04 | 8.04 | -0.63 | 5.3 | 0.00 |
| 5 | 72 | -0 | 1026 | 0 | 0 | 0 | -320 | 4.02 | 4.02 | 8.04 | 8.04 | -0.70 | 5.9 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 90 | -0 | 1324 | 0 | 0 | 0 | 78 | 4.02 | 4.02 | 8.04 | 8.04 | -0.17 | 1.4 | 0.00 |
| 4 | 90 | -0 | 1086 | 0 | 0 | 0 | -93 | 4.02 | 4.02 | 8.04 | 8.04 | -0.20 | 1.7 | 0.00 |
| 5 | 90 | -0 | 1026 | 0 | 0 | 0 | -135 | 4.02 | 4.02 | 8.04 | 8.04 | -0.29 | 2.5 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 108 | -0 | 1522 | 0 | 0 | 0 | 316 | 4.02 | 4.02 | 8.04 | 8.04 | -0.69 | 5.9 | 0.00 |
| 4 | 108 | -0 | 1219 | 0 | 0 | 0 | 103 | 4.02 | 4.02 | 8.04 | 8.04 | -0.22 | 1.9 | 0.00 |
| 5 | 108 | -0 | 1144 | 0 | 0 | 0 | 49 | 4.02 | 4.02 | 8.04 | 8.04 | -0.11 | 0.9 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 126 | -0 | 1522 | 0 | 0 | 0 | 590 | 4.02 | 4.02 | 8.04 | 8.04 | -1.28 | 10.9 | 0.00 |
| 4 | 126 | -0 | 1219 | 0 | 0 | 0 | 322 | 4.02 | 4.02 | 8.04 | 8.04 | -0.70 | 6.0 | 0.00 |
| 5 | 126 | -0 | 1144 | 0 | 0 | 0 | 255 | 4.02 | 4.02 | 8.04 | 8.04 | -0.56 | 4.7 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 144 | -0 | 1737 | 0 | 0 | 0 | 864 | 4.02 | 4.02 | 8.04 | 8.04 | -1.88 | 16.0 | 0.00 |
| 4 | 144 | -0 | 1366 | 0 | 0 | 0 | 542 | 4.02 | 4.02 | 8.04 | 8.04 | -1.18 | 10.0 | 0.00 |
| 5 | 144 | -0 | 1274 | 0 | 0 | 0 | 461 | 4.02 | 4.02 | 8.04 | 8.04 | -1.00 | 8.5 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 162 | -0 | 1737 | 0 | 0 | 0 | 1177 | 4.02 | 4.02 | 8.04 | 8.04 | -2.56 | 21.8 | 0.00 |
| 4 | 162 | -0 | 1366 | 0 | 0 | 0 | 788 | 4.02 | 4.02 | 8.04 | 8.04 | -1.71 | 14.6 | 0.00 |
| 5 | 162 | -0 | 1274 | 0 | 0 | 0 | 691 | 4.02 | 4.02 | 8.04 | 8.04 | -1.50 | 12.8 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 180 | -0 | 1737 | 0 | 0 | 0 | 1228 | 4.02 | 4.02 | 8.04 | 8.04 | -2.67 | 22.7 | 0.00 |
| 4 | 180 | -0 | 1366 | 0 | 0 | 0 | 829 | 4.02 | 4.02 | 8.04 | 8.04 | -1.80 | 15.3 | 0.00 |
| 5 | 180 | -0 | 1274 | 0 | 0 | 0 | 729 | 4.02 | 4.02 | 8.04 | 8.04 | -1.59 | 13.5 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |

Nome travata: **CORDOLI DI FONDAZIONE01_IP1** Descrizione: **CORDOLI DI FONDAZIONE 1-2-3-4-5**
**ASTA NUM. 3** NI 94 NF 20 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cm² | | | | | kg/cm² | mm |
| 3 | 0 | -0 | -443 | 0 | 0 | 0 | 1391 | 4.02 | 4.02 | 8.04 | 8.04 | -3.03 | 25.7 | 0.00 |
| 4 | 0 | -0 | -285 | 0 | 0 | 0 | 968 | 4.02 | 4.02 | 8.04 | 8.04 | -2.11 | 17.9 | 0.00 |
| 5 | 0 | -0 | -245 | 0 | 0 | 0 | 862 | 4.02 | 4.02 | 8.04 | 8.04 | -1.88 | 16.0 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 20 | -0 | -443 | 0 | 0 | 0 | 1370 | 4.02 | 4.02 | 8.04 | 8.04 | -2.98 | 25.4 | 0.00 |
| 4 | 20 | -0 | -285 | 0 | 0 | 0 | 955 | 4.02 | 4.02 | 8.04 | 8.04 | -2.08 | 17.7 | 0.00 |
| 5 | 20 | -0 | -245 | 0 | 0 | 0 | 851 | 4.02 | 4.02 | 8.04 | 8.04 | -1.85 | 15.8 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 39 | -0 | -443 | 0 | 0 | 0 | 1283 | 4.02 | 4.02 | 8.04 | 8.04 | -2.79 | 23.8 | 0.00 |
| 4 | 39 | -0 | -285 | 0 | 0 | 0 | 899 | 4.02 | 4.02 | 8.04 | 8.04 | -1.96 | 16.6 | 0.00 |
| 5 | 39 | -0 | -245 | 0 | 0 | 0 | 802 | 4.02 | 4.02 | 8.04 | 8.04 | -1.75 | 14.9 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 59 | -0 | -178 | 0 | 0 | 0 | 1248 | 4.02 | 4.02 | 8.04 | 8.04 | -2.71 | 23.1 | 0.00 |
| 4 | 59 | -0 | -99 | 0 | 0 | 0 | 879 | 4.02 | 4.02 | 8.04 | 8.04 | -1.91 | 16.3 | 0.00 |
| 5 | 59 | -0 | -79 | 0 | 0 | 0 | 787 | 4.02 | 4.02 | 8.04 | 8.04 | -1.71 | 14.6 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 79 | -0 | -178 | 0 | 0 | 0 | 1213 | 4.02 | 4.02 | 8.04 | 8.04 | -2.64 | 22.5 | 0.00 |
| 4 | 79 | -0 | -99 | 0 | 0 | 0 | 860 | 4.02 | 4.02 | 8.04 | 8.04 | -1.87 | 15.9 | 0.00 |
| 5 | 79 | -0 | 96 | 0 | 0 | 0 | 771 | 4.02 | 4.02 | 8.04 | 8.04 | -1.68 | 14.3 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 98 | -0 | 98 | 0 | 0 | 0 | 1231 | 4.02 | 4.02 | 10.05 | 8.04 | -2.66 | 22.5 | 0.00 |
| 4 | 98 | -0 | 97 | 0 | 0 | 0 | 879 | 4.02 | 4.02 | 10.05 | 8.04 | -1.90 | 16.0 | 0.00 |
| 5 | 98 | -0 | 96 | 0 | 0 | 0 | 790 | 4.02 | 4.02 | 10.05 | 8.04 | -1.71 | 14.4 | 0.00 |
| apost= -- | | aant= -- | | ainf= 6.03 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |



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| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 118 | -0 | 381 | 0 | 0 | 0 | 1251 | 4.02 | 4.02 | 10.05 | 10.05 | -2.67 | 22.7 | 0.00 |
| 4 | 118 | -0 | 300 | 0 | 0 | 0 | 898 | 4.02 | 4.02 | 10.05 | 10.05 | -1.92 | 16.3 | 0.00 |
| 5 | 118 | -0 | 279 | 0 | 0 | 0 | 809 | 4.02 | 4.02 | 10.05 | 10.05 | -1.73 | 14.7 | 0.00 |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 138 | -0 | 381 | 0 | 0 | 0 | 1326 | 4.02 | 4.02 | 10.05 | 10.05 | -2.83 | 24.1 | 0.00 |
| 4 | 138 | -0 | 300 | 0 | 0 | 0 | 957 | 4.02 | 4.02 | 10.05 | 10.05 | -2.04 | 17.4 | 0.00 |
| 5 | 138 | -0 | 279 | 0 | 0 | 0 | 864 | 4.02 | 4.02 | 10.05 | 10.05 | -1.85 | 15.7 | 0.00 |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 158 | -0 | 669 | 0 | 0 | 0 | 1401 | 4.02 | 4.02 | 10.05 | 10.05 | -2.99 | 25.4 | 0.00 |
| 4 | 158 | -0 | 507 | 0 | 0 | 0 | 1016 | 4.02 | 4.02 | 10.05 | 10.05 | -2.17 | 18.5 | 0.00 |
| 5 | 158 | -0 | 467 | 0 | 0 | 0 | 919 | 4.02 | 4.02 | 10.05 | 10.05 | -1.96 | 16.7 | 0.00 |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 177 | -0 | 669 | 0 | 0 | 0 | 1533 | 4.02 | 4.02 | 10.05 | 10.05 | -3.27 | 27.8 | 0.00 |
| 4 | 177 | -0 | 507 | 0 | 0 | 0 | 1116 | 4.02 | 4.02 | 10.05 | 10.05 | -2.38 | 20.3 | 0.00 |
| 5 | 177 | -0 | 467 | 0 | 0 | 0 | 1011 | 4.02 | 4.02 | 10.05 | 10.05 | -2.16 | 18.4 | 0.00 |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 197 | -0 | 669 | 0 | 0 | 0 | 1564 | 4.02 | 4.02 | 10.05 | 10.05 | -3.34 | 28.4 | 0.00 |
| 4 | 197 | -0 | 507 | 0 | 0 | 0 | 1140 | 4.02 | 4.02 | 10.05 | 10.05 | -2.43 | 20.7 | 0.00 |
| 5 | 197 | -0 | 467 | 0 | 0 | 0 | 1033 | 4.02 | 4.02 | 10.05 | 10.05 | -2.21 | 18.8 | 0.00 |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE01_IP1** Descrizione: **CORDOLI DI FONDAZIONE 1-2-3-4-5**
**ASTA NUM. 4** NI 20 NF 2 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | | kg | | | kg*m | | | | cm² | | | kg/cm² | mm |
| 3 | 0 | -0 | -1574 | 0 | 0 | 0 | 1419 | 4.02 | 4.02 | 10.05 | 10.05 | -3.03 | 25.8 | 0.00 |
| 4 | 0 | -0 | -1185 | 0 | 0 | 0 | 1031 | 4.02 | 4.02 | 10.05 | 10.05 | -2.20 | 18.7 | 0.00 |
| 5 | 0 | -0 | -1088 | 0 | 0 | 0 | 934 | 4.02 | 4.02 | 10.05 | 10.05 | -1.99 | 17.0 | 0.00 |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 22 | -0 | -1574 | 0 | 0 | 0 | 1317 | 4.02 | 4.02 | 10.05 | 10.05 | -2.81 | 23.9 | 0.00 |
| 4 | 22 | -0 | -1185 | 0 | 0 | 0 | 954 | 4.02 | 4.02 | 10.05 | 10.05 | -2.04 | 17.3 | 0.00 |
| 5 | 22 | -0 | -1088 | 0 | 0 | 0 | 863 | 4.02 | 4.02 | 10.05 | 10.05 | -1.84 | 15.7 | 0.00 |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 43 | -0 | -1574 | 0 | 0 | 0 | 978 | 4.02 | 4.02 | 10.05 | 10.05 | -2.09 | 17.8 | 0.00 |
| 4 | 43 | -0 | -1185 | 0 | 0 | 0 | 699 | 4.02 | 4.02 | 10.05 | 10.05 | -1.49 | 12.7 | 0.00 |
| 5 | 43 | -0 | -1088 | 0 | 0 | 0 | 629 | 4.02 | 4.02 | 10.05 | 10.05 | -1.34 | 11.4 | 0.00 |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 64 | -0 | -1264 | 0 | 0 | 0 | 707 | 4.02 | 4.02 | 10.05 | 10.05 | -1.51 | 12.8 | 0.00 |
| 4 | 64 | -0 | -957 | 0 | 0 | 0 | 493 | 4.02 | 4.02 | 10.05 | 10.05 | -1.05 | 9.0 | 0.00 |
| 5 | 64 | -0 | -880 | 0 | 0 | 0 | 440 | 4.02 | 4.02 | 10.05 | 10.05 | -0.94 | 8.0 | 0.00 |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 86 | -0 | -1264 | 0 | 0 | 0 | 435 | 4.02 | 4.02 | 8.04 | 10.05 | -0.94 | 8.0 | 0.00 |
| 4 | 86 | -0 | -957 | 0 | 0 | 0 | 288 | 4.02 | 4.02 | 8.04 | 10.05 | -0.62 | 5.3 | 0.00 |
| 5 | 86 | -0 | -880 | 0 | 0 | 0 | 251 | 4.02 | 4.02 | 8.04 | 10.05 | -0.54 | 4.6 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 6.03 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 108 | -0 | -961 | 0 | 0 | 0 | 228 | 4.02 | 4.02 | 8.04 | 8.04 | -0.50 | 4.2 | 0.00 |
| 4 | 108 | -0 | -732 | 0 | 0 | 0 | 130 | 4.02 | 4.02 | 8.04 | 8.04 | -0.28 | 2.4 | 0.00 |
| 5 | 108 | -0 | -674 | 0 | 0 | 0 | 106 | 4.02 | 4.02 | 8.04 | 8.04 | -0.23 | 2.0 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 129 | -0 | -961 | 0 | 0 | 0 | 22 | 4.02 | 4.02 | 8.04 | 8.04 | -0.05 | 0.4 | 0.00 |
| 4 | 129 | -0 | -732 | 0 | 0 | 0 | -27 | 4.02 | 4.02 | 8.04 | 8.04 | -0.06 | 0.5 | 0.00 |
| 5 | 129 | -0 | -674 | 0 | 0 | 0 | -39 | 4.02 | 4.02 | 8.04 | 8.04 | -0.09 | 0.7 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 150 | -0 | -668 | 0 | 0 | 0 | -122 | 4.02 | 4.02 | 8.04 | 8.04 | -0.26 | 2.3 | 0.00 |
| 4 | 150 | -0 | -512 | 0 | 0 | 0 | -137 | 4.02 | 4.02 | 8.04 | 8.04 | -0.30 | 2.5 | 0.00 |
| 5 | 150 | -0 | -472 | 0 | 0 | 0 | -141 | 4.02 | 4.02 | 8.04 | 8.04 | -0.31 | 2.6 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 172 | -0 | -668 | 0 | 0 | 0 | -265 | 4.02 | 4.02 | 8.04 | 8.04 | -0.58 | 4.9 | 0.00 |
| 4 | 172 | -0 | -512 | 0 | 0 | 0 | -247 | 4.02 | 4.02 | 8.04 | 8.04 | -0.54 | 4.6 | 0.00 |
| 5 | 172 | -0 | -472 | 0 | 0 | 0 | -242 | 4.02 | 4.02 | 8.04 | 8.04 | -0.53 | 4.5 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 194 | -0 | -384 | 0 | 0 | 0 | -348 | 4.02 | 4.02 | 8.04 | 8.04 | -0.76 | 6.4 | 0.00 |
| 4 | 194 | -0 | -295 | 0 | 0 | 0 | -310 | 4.02 | 4.02 | 8.04 | 8.04 | -0.68 | 5.7 | 0.00 |
| 5 | 194 | -0 | -273 | 0 | 0 | 0 | -301 | 4.02 | 4.02 | 8.04 | 8.04 | -0.65 | 5.6 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 215 | -0 | -384 | 0 | 0 | 0 | -430 | 4.02 | 4.02 | 8.04 | 8.04 | -0.94 | 8.0 | 0.00 |
| 4 | 215 | -0 | -295 | 0 | 0 | 0 | -374 | 4.02 | 4.02 | 8.04 | 8.04 | -0.81 | 6.9 | 0.00 |
| 5 | 215 | -0 | -273 | 0 | 0 | 0 | -360 | 4.02 | 4.02 | 8.04 | 8.04 | -0.78 | 6.7 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE02_IP1** Descrizione: **CORDOLI DI FONDAZIONE 6-7-8**
**ASTA NUM. 5** NI 95 NF 96 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | | kg | | | kg*m | | | | cm² | | | kg/cm² | mm |



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| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 0 | -0 | -1159 | -0 | 0 | -0 | 714 | 4.02 | 4.02 | 8.04 | 8.04 | -1.55 | 13.2 | 0.00 |
| 4 | 0 | -0 | -1149 | -0 | 0 | -0 | 525 | 4.02 | 4.02 | 8.04 | 8.04 | -1.14 | 9.7 | 0.00 |
| 5 | 0 | -0 | -1147 | -0 | 0 | -0 | 478 | 4.02 | 4.02 | 8.04 | 8.04 | -1.04 | 8.9 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 18 | -0 | -1159 | -0 | 0 | -0 | 685 | 4.02 | 4.02 | 8.04 | 8.04 | -1.49 | 12.7 | 0.00 |
| 4 | 18 | -0 | -1149 | -0 | 0 | -0 | 497 | 4.02 | 4.02 | 8.04 | 8.04 | -1.08 | 9.2 | 0.00 |
| 5 | 18 | -0 | -1147 | -0 | 0 | -0 | 449 | 4.02 | 4.02 | 8.04 | 8.04 | -0.98 | 8.3 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 35 | -0 | -1159 | -0 | 0 | -0 | 482 | 4.02 | 4.02 | 8.04 | 8.04 | -1.05 | 8.9 | 0.00 |
| 4 | 35 | -0 | -1149 | -0 | 0 | -0 | 296 | 4.02 | 4.02 | 8.04 | 8.04 | -0.64 | 5.5 | 0.00 |
| 5 | 35 | -0 | -1147 | -0 | 0 | -0 | 249 | 4.02 | 4.02 | 8.04 | 8.04 | -0.54 | 4.6 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 52 | -0 | -998 | -0 | 0 | -0 | 308 | 4.02 | 4.02 | 8.04 | 8.04 | -0.67 | 5.7 | 0.00 |
| 4 | 52 | -0 | -1016 | -0 | 0 | -0 | 118 | 4.02 | 4.02 | 8.04 | 8.04 | -0.26 | 2.2 | 0.00 |
| 5 | 52 | -0 | -1020 | -0 | 0 | -0 | 70 | 4.02 | 4.02 | 8.04 | 8.04 | -0.15 | 1.3 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 70 | -0 | -998 | -0 | 0 | -0 | 133 | 4.02 | 4.02 | 8.04 | 8.04 | -0.29 | 2.5 | 0.00 |
| 4 | 70 | -0 | -1016 | -0 | 0 | 0 | -60 | 4.02 | 4.02 | 8.04 | 8.04 | -0.13 | 1.1 | 0.00 |
| 5 | 70 | -0 | -1020 | -0 | 0 | 0 | -108 | 4.02 | 4.02 | 8.04 | 8.04 | -0.24 | 2.0 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 88 | -0 | -839 | -0 | 0 | 0 | -14 | 4.02 | 4.02 | 8.04 | 8.04 | -0.03 | 0.3 | 0.00 |
| 4 | 88 | -0 | -887 | -0 | 0 | 0 | -215 | 4.02 | 4.02 | 8.04 | 8.04 | -0.47 | 4.0 | 0.00 |
| 5 | 88 | -0 | -899 | -0 | 0 | 0 | -266 | 4.02 | 4.02 | 8.04 | 8.04 | -0.58 | 4.9 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 105 | -0 | -839 | -0 | 0 | 0 | -161 | 4.02 | 4.02 | 8.04 | 8.04 | -0.35 | 3.0 | 0.00 |
| 4 | 105 | -0 | -887 | -0 | 0 | 0 | -370 | 4.02 | 4.02 | 8.04 | 8.04 | -0.81 | 6.9 | 0.00 |
| 5 | 105 | -0 | -899 | -0 | 0 | 0 | -423 | 4.02 | 4.02 | 8.04 | 8.04 | -0.92 | 7.8 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 122 | -0 | -684 | -0 | 0 | 0 | -281 | 4.02 | 4.02 | 8.04 | 8.04 | -0.61 | 5.2 | 0.00 |
| 4 | 122 | -0 | -764 | -0 | 0 | 0 | -504 | 4.02 | 4.02 | 8.04 | 8.04 | -1.10 | 9.3 | 0.00 |
| 5 | 122 | -0 | -784 | -0 | 0 | 0 | -560 | 4.02 | 4.02 | 8.04 | 8.04 | -1.22 | 10.4 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 140 | -0 | -684 | -0 | 0 | 0 | -400 | 4.02 | 4.02 | 8.04 | 8.04 | -0.87 | 7.4 | 0.00 |
| 4 | 140 | -0 | -764 | -0 | 0 | 0 | -638 | 4.02 | 4.02 | 8.04 | 8.04 | -1.39 | 11.8 | 0.00 |
| 5 | 140 | -0 | -784 | -0 | 0 | 0 | -697 | 4.02 | 4.02 | 8.04 | 8.04 | -1.52 | 12.9 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 158 | -0 | -530 | -0 | 0 | 0 | -493 | 4.02 | 4.02 | 8.04 | 8.04 | -1.07 | 9.1 | 0.00 |
| 4 | 158 | -0 | -645 | -0 | 0 | 0 | -751 | 4.02 | 4.02 | 8.04 | 8.04 | -1.63 | 13.9 | 0.00 |
| 5 | 158 | -0 | -674 | -0 | 0 | 0 | -815 | 4.02 | 4.02 | 8.04 | 8.04 | -1.77 | 15.1 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 175 | -0 | -530 | -0 | 0 | 0 | -586 | 4.02 | 4.02 | 8.04 | 8.04 | -1.27 | 10.8 | 0.00 |
| 4 | 175 | -0 | -645 | -0 | 0 | 0 | -864 | 4.02 | 4.02 | 8.04 | 8.04 | -1.88 | 16.0 | 0.00 |
| 5 | 175 | -0 | -674 | -0 | 0 | 0 | -933 | 4.02 | 4.02 | 8.04 | 8.04 | -2.03 | 17.3 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE02_IP1** Descrizione: **CORDOLI DI FONDAZIONE 6-7-8**
**ASTA NUM. 6** NI 96 NF 97 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cm² | | | | | kg/cm² | mm |
| 3 | 0 | -0 | -329 | -0 | 0 | 0 | -257 | 4.02 | 4.02 | 8.04 | 8.04 | -0.56 | 4.8 | 0.00 |
| 4 | 0 | -0 | -118 | -0 | 0 | 0 | -613 | 4.02 | 4.02 | 8.04 | 8.04 | -1.33 | 11.3 | 0.00 |
| 5 | 0 | -0 | -65 | -0 | 0 | 0 | -702 | 4.02 | 4.02 | 8.04 | 8.04 | -1.53 | 13.0 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 59 | -0 | -329 | -0 | 0 | 0 | -452 | 4.02 | 4.02 | 8.04 | 8.04 | -0.98 | 8.4 | 0.00 |
| 4 | 59 | -0 | -118 | -0 | 0 | 0 | -682 | 4.02 | 4.02 | 8.04 | 8.04 | -1.48 | 12.6 | 0.00 |
| 5 | 59 | -0 | -65 | -0 | 0 | 0 | -740 | 4.02 | 4.02 | 8.04 | 8.04 | -1.61 | 13.7 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 118 | -0 | -329 | -0 | 0 | 0 | -647 | 4.02 | 4.02 | 8.04 | 8.04 | -1.41 | 12.0 | 0.00 |
| 4 | 118 | -0 | -118 | -0 | 0 | 0 | -752 | 4.02 | 4.02 | 8.04 | 8.04 | -1.64 | 13.9 | 0.00 |
| 5 | 118 | -0 | -65 | -0 | 0 | 0 | -779 | 4.02 | 4.02 | 8.04 | 8.04 | -1.69 | 14.4 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 178 | -0 | -78 | -0 | 0 | 0 | -693 | 4.02 | 4.02 | 8.04 | 8.04 | -1.51 | 12.8 | 0.00 |
| 4 | 178 | -0 | 27 | 0 | 0 | 0 | -736 | 4.02 | 4.02 | 8.04 | 8.04 | -1.60 | 13.6 | 0.00 |
| 5 | 178 | -0 | 53 | 0 | 0 | 0 | -747 | 4.02 | 4.02 | 8.04 | 8.04 | -1.63 | 13.8 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 237 | -0 | 209 | 0 | 0 | 0 | -739 | 4.02 | 4.02 | 8.04 | 8.04 | -1.61 | 13.7 | 0.00 |
| 4 | 237 | -0 | 210 | 0 | 0 | 0 | -721 | 4.02 | 4.02 | 8.04 | 8.04 | -1.57 | 13.3 | 0.00 |
| 5 | 237 | -0 | 210 | 0 | 0 | 0 | -716 | 4.02 | 4.02 | 8.04 | 8.04 | -1.56 | 13.3 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 296 | -0 | 209 | 0 | 0 | 0 | -615 | 4.02 | 4.02 | 8.04 | 8.04 | -1.34 | 11.4 | 0.00 |
| 4 | 296 | -0 | 210 | 0 | 0 | 0 | -597 | 4.02 | 4.02 | 8.04 | 8.04 | -1.30 | 11.0 | 0.00 |
| 5 | 296 | -0 | 210 | 0 | 0 | 0 | -592 | 4.02 | 4.02 | 8.04 | 8.04 | -1.29 | 11.0 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 355 | -0 | 573 | 0 | 0 | 0 | -492 | 4.02 | 4.02 | 8.04 | 8.04 | -1.07 | 9.1 | 0.00 |
| 4 | 355 | -0 | 471 | 0 | 0 | 0 | -473 | 4.02 | 4.02 | 8.04 | 8.04 | -1.03 | 8.8 | 0.00 |
| 5 | 355 | -0 | 446 | 0 | 0 | 0 | -468 | 4.02 | 4.02 | 8.04 | 8.04 | -1.02 | 8.7 | 0.00 |



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apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 414 | -0 | 573 | 0 | 0 | 0 | -152 | 4.02 | 4.02 | 8.04 | 8.04 | -0.33 | 2.8 | 0.00 |
| 4 | 414 | -0 | 471 | 0 | 0 | 0 | -194 | 4.02 | 4.02 | 8.04 | 8.04 | -0.42 | 3.6 | 0.00 |
| 5 | 414 | -0 | 446 | 0 | 0 | 0 | -204 | 4.02 | 4.02 | 8.04 | 8.04 | -0.44 | 3.8 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 474 | -0 | 1039 | 0 | 0 | -0 | 187 | 4.02 | 4.02 | 8.04 | 8.04 | -0.41 | 3.5 | 0.00 |
| 4 | 474 | -0 | 837 | 0 | 0 | -0 | 85 | 4.02 | 4.02 | 8.04 | 8.04 | -0.19 | 1.6 | 0.00 |
| 5 | 474 | -0 | 786 | 0 | 0 | -0 | 59 | 4.02 | 4.02 | 8.04 | 8.04 | -0.13 | 1.1 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 533 | -0 | 1039 | 0 | 0 | -0 | 802 | 4.02 | 4.02 | 8.04 | 8.04 | -1.75 | 14.9 | 0.00 |
| 4 | 533 | -0 | 837 | 0 | 0 | -0 | 580 | 4.02 | 4.02 | 8.04 | 8.04 | -1.26 | 10.7 | 0.00 |
| 5 | 533 | -0 | 786 | 0 | 0 | -0 | 525 | 4.02 | 4.02 | 8.04 | 8.04 | -1.14 | 9.7 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 592 | -0 | 1039 | 0 | 0 | -0 | 1262 | 4.02 | 4.02 | 8.04 | 8.04 | -2.75 | 23.4 | 0.00 |
| 4 | 592 | -0 | 837 | 0 | 0 | -0 | 950 | 4.02 | 4.02 | 8.04 | 8.04 | -2.07 | 17.6 | 0.00 |
| 5 | 592 | -0 | 786 | 0 | 0 | -0 | 872 | 4.02 | 4.02 | 8.04 | 8.04 | -1.90 | 16.1 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE03_IP1**  Descrizione: **CORDOLI DI FONDAZIONE 9-10-11-12-13**
**ASTA NUM. 7**  NI 5  NF 29  SEZ.  Rp  B= 60.0  H= 60.0  (trave di fondazione)

armatura base = 4 X 2.01  per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cm² | | | | | kg/cm² | mm |
| 3 | 0 | -0 | -901 | -0 | 0 | 0 | -760 | 4.02 | 4.02 | 8.04 | 8.04 | -1.65 | 14.1 | 0.00 |
| 4 | 0 | -0 | -930 | -0 | 0 | 0 | -558 | 4.02 | 4.02 | 8.04 | 8.04 | -1.22 | 10.3 | 0.00 |
| 5 | 0 | -0 | -937 | -0 | 0 | 0 | -508 | 4.02 | 4.02 | 8.04 | 8.04 | -1.11 | 9.4 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 18 | -0 | -901 | -0 | 0 | 0 | -918 | 4.02 | 4.02 | 8.04 | 8.04 | -2.00 | 17.0 | 0.00 |
| 4 | 18 | -0 | -930 | -0 | 0 | 0 | -721 | 4.02 | 4.02 | 8.04 | 8.04 | -1.57 | 13.4 | 0.00 |
| 5 | 18 | -0 | -937 | -0 | 0 | 0 | -672 | 4.02 | 4.02 | 8.04 | 8.04 | -1.46 | 12.4 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 35 | -0 | -901 | -0 | 0 | 0 | -1076 | 4.02 | 4.02 | 8.04 | 8.04 | -2.34 | 19.9 | 0.00 |
| 4 | 35 | -0 | -930 | -0 | 0 | 0 | -884 | 4.02 | 4.02 | 8.04 | 8.04 | -1.92 | 16.4 | 0.00 |
| 5 | 35 | -0 | -937 | -0 | 0 | 0 | -836 | 4.02 | 4.02 | 8.04 | 8.04 | -1.82 | 15.5 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 52 | -0 | -719 | -0 | 0 | 0 | -1202 | 4.02 | 4.02 | 8.04 | 8.04 | -2.61 | 22.3 | 0.00 |
| 4 | 52 | -0 | -783 | -0 | 0 | 0 | -1021 | 4.02 | 4.02 | 8.04 | 8.04 | -2.22 | 18.9 | 0.00 |
| 5 | 52 | -0 | -799 | -0 | 0 | 0 | -976 | 4.02 | 4.02 | 8.04 | 8.04 | -2.12 | 18.1 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 70 | -0 | -719 | -0 | 0 | 0 | -1328 | 4.02 | 4.02 | 8.04 | 8.04 | -2.89 | 24.6 | 0.00 |
| 4 | 70 | -0 | -783 | -0 | 0 | 0 | -1158 | 4.02 | 4.02 | 8.04 | 8.04 | -2.52 | 21.4 | 0.00 |
| 5 | 70 | -0 | -799 | -0 | 0 | 0 | -1116 | 4.02 | 4.02 | 8.04 | 8.04 | -2.43 | 20.7 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 88 | -0 | -522 | -0 | 0 | 0 | -1419 | 4.02 | 4.02 | 8.04 | 8.04 | -3.09 | 26.3 | 0.00 |
| 4 | 88 | -0 | -629 | -0 | 0 | 0 | -1268 | 4.02 | 4.02 | 8.04 | 8.04 | -2.76 | 23.5 | 0.00 |
| 5 | 88 | -0 | -656 | -0 | 0 | 0 | -1231 | 4.02 | 4.02 | 8.04 | 8.04 | -2.68 | 22.8 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 105 | -0 | -522 | -0 | 0 | 0 | -1510 | 4.02 | 4.02 | 8.04 | 8.04 | -3.29 | 28.0 | 0.00 |
| 4 | 105 | -0 | -629 | -0 | 0 | 0 | -1378 | 4.02 | 4.02 | 8.04 | 8.04 | -3.00 | 25.5 | 0.00 |
| 5 | 105 | -0 | -656 | -0 | 0 | 0 | -1345 | 4.02 | 4.02 | 8.04 | 8.04 | -2.93 | 24.9 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 122 | -0 | -306 | -0 | 0 | 0 | -1564 | 4.02 | 4.02 | 8.04 | 8.04 | -3.40 | 29.0 | 0.00 |
| 4 | 122 | -0 | -465 | -0 | 0 | 0 | -1459 | 4.02 | 4.02 | 8.04 | 8.04 | -3.18 | 27.0 | 0.00 |
| 5 | 122 | -0 | -505 | -0 | 0 | 0 | -1433 | 4.02 | 4.02 | 8.04 | 8.04 | -3.12 | 26.5 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 140 | -0 | -306 | -0 | 0 | 0 | -1617 | 4.02 | 4.02 | 8.04 | 8.04 | -3.52 | 29.9 | 0.00 |
| 4 | 140 | -0 | -465 | -0 | 0 | 0 | -1541 | 4.02 | 4.02 | 8.04 | 8.04 | -3.35 | 28.5 | 0.00 |
| 5 | 140 | -0 | -505 | -0 | 0 | 0 | -1522 | 4.02 | 4.02 | 8.04 | 8.04 | -3.31 | 28.2 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 158 | -0 | -71 | -0 | 0 | 0 | -1629 | 4.02 | 4.02 | 8.04 | 8.04 | -3.55 | 30.2 | 0.00 |
| 4 | 158 | -0 | -290 | -0 | 0 | 0 | -1592 | 4.02 | 4.02 | 8.04 | 8.04 | -3.46 | 29.5 | 0.00 |
| 5 | 158 | -0 | -345 | -0 | 0 | 0 | -1582 | 4.02 | 4.02 | 8.04 | 8.04 | -3.44 | 29.3 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 175 | -0 | -71 | -0 | 0 | 0 | -1642 | 4.02 | 4.02 | 8.04 | 8.04 | -3.57 | 30.4 | 0.00 |
| 4 | 175 | -0 | -290 | -0 | 0 | 0 | -1643 | 4.02 | 4.02 | 8.04 | 8.04 | -3.57 | 30.4 | 0.00 |
| 5 | 175 | -0 | -345 | -0 | 0 | 0 | -1643 | 4.02 | 4.02 | 8.04 | 8.04 | -3.57 | 30.4 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE03_IP1**  Descrizione: **CORDOLI DI FONDAZIONE 9-10-11-12-13**
**ASTA NUM. 8**  NI 29  NF 56  SEZ.  Rp  B= 60.0  H= 60.0  (trave di fondazione)

armatura base = 4 X 2.01  per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cm² | | | | | kg/cm² | mm |
| 3 | 0 | -0 | 2206 | 0 | 0 | 0 | -2098 | 4.02 | 4.02 | 8.04 | 8.04 | -4.56 | 38.8 | 0.00 |
| 4 | 0 | -0 | 1735 | 0 | 0 | 0 | -2008 | 4.02 | 4.02 | 8.04 | 8.04 | -4.37 | 37.2 | 0.00 |
| 5 | 0 | -0 | 1617 | 0 | 0 | 0 | -1986 | 4.02 | 4.02 | 8.04 | 8.04 | -4.32 | 36.8 | 0.00 |



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apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 18 | -0 | 2206 | 0 | 0 | 0 | -1701 | 4.02 | 4.02 | 8.04 | 8.04 | -3.70 | 31.5 | 0.00 |
| 4 | 18 | -0 | 1735 | 0 | 0 | 0 | -1696 | 4.02 | 4.02 | 8.04 | 8.04 | -3.69 | 31.4 | 0.00 |
| 5 | 18 | -0 | 1617 | 0 | 0 | 0 | -1695 | 4.02 | 4.02 | 8.04 | 8.04 | -3.69 | 31.4 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 36 | -0 | 2502 | 0 | 0 | 0 | -1304 | 4.02 | 4.02 | 8.04 | 8.04 | -2.84 | 24.1 | 0.00 |
| 4 | 36 | -0 | 1949 | 0 | 0 | 0 | -1384 | 4.02 | 4.02 | 8.04 | 8.04 | -3.01 | 25.6 | 0.00 |
| 5 | 36 | -0 | 1811 | 0 | 0 | 0 | -1404 | 4.02 | 4.02 | 8.04 | 8.04 | -3.05 | 26.0 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 54 | -0 | 2502 | 0 | 0 | 0 | -854 | 4.02 | 4.02 | 8.04 | 8.04 | -1.86 | 15.8 | 0.00 |
| 4 | 54 | -0 | 1949 | 0 | 0 | 0 | -1033 | 4.02 | 4.02 | 8.04 | 8.04 | -2.25 | 19.1 | 0.00 |
| 5 | 54 | -0 | 1811 | 0 | 0 | 0 | -1078 | 4.02 | 4.02 | 8.04 | 8.04 | -2.35 | 20.0 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 72 | -0 | 2829 | 0 | 0 | 0 | -403 | 4.02 | 4.02 | 8.04 | 8.04 | -0.88 | 7.5 | 0.00 |
| 4 | 72 | -0 | 2186 | 0 | 0 | 0 | -682 | 4.02 | 4.02 | 8.04 | 8.04 | -1.48 | 12.6 | 0.00 |
| 5 | 72 | -0 | 2026 | 0 | 0 | 0 | -752 | 4.02 | 4.02 | 8.04 | 8.04 | -1.64 | 13.9 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 90 | -0 | 2829 | 0 | 0 | -0 | 106 | 4.02 | 4.02 | 8.04 | 8.04 | -0.23 | 2.0 | 0.00 |
| 4 | 90 | -0 | 2186 | 0 | 0 | 0 | -289 | 4.02 | 4.02 | 8.04 | 8.04 | -0.63 | 5.3 | 0.00 |
| 5 | 90 | -0 | 2026 | 0 | 0 | 0 | -387 | 4.02 | 4.02 | 8.04 | 8.04 | -0.84 | 7.2 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 108 | -0 | 3189 | 0 | 0 | -0 | 615 | 4.02 | 4.02 | 8.04 | 8.04 | -1.34 | 11.4 | 0.00 |
| 4 | 108 | -0 | 2447 | 0 | 0 | -0 | 105 | 4.02 | 4.02 | 8.04 | 8.04 | -0.23 | 1.9 | 0.00 |
| 5 | 108 | -0 | 2261 | 0 | 0 | 0 | -22 | 4.02 | 4.02 | 8.04 | 8.04 | -0.05 | 0.4 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 126 | -0 | 3189 | 0 | 0 | -0 | 1189 | 4.02 | 4.02 | 8.04 | 8.04 | -2.59 | 22.0 | 0.00 |
| 4 | 126 | -0 | 2447 | 0 | 0 | -0 | 545 | 4.02 | 4.02 | 8.04 | 8.04 | -1.19 | 10.1 | 0.00 |
| 5 | 126 | -0 | 2261 | 0 | 0 | -0 | 385 | 4.02 | 4.02 | 8.04 | 8.04 | -0.84 | 7.1 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 144 | -0 | 3580 | 0 | 0 | -0 | 1763 | 4.02 | 4.02 | 8.04 | 8.04 | -3.84 | 32.6 | 0.00 |
| 4 | 144 | -0 | 2731 | 0 | 0 | -0 | 986 | 4.02 | 4.02 | 8.04 | 8.04 | -2.15 | 18.3 | 0.00 |
| 5 | 144 | -0 | 2518 | 0 | 0 | -0 | 792 | 4.02 | 4.02 | 8.04 | 8.04 | -1.72 | 14.7 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 162 | -0 | 3580 | 0 | 0 | -0 | 2407 | 4.02 | 4.02 | 8.04 | 8.04 | -5.24 | 44.6 | 0.00 |
| 4 | 162 | -0 | 2731 | 0 | 0 | -0 | 1477 | 4.02 | 4.02 | 8.04 | 8.04 | -3.21 | 27.4 | 0.00 |
| 5 | 162 | -0 | 2518 | 0 | 0 | -0 | 1245 | 4.02 | 4.02 | 8.04 | 8.04 | -2.71 | 23.0 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 180 | -0 | 3580 | 0 | 0 | -0 | 2515 | 4.02 | 4.02 | 8.04 | 8.04 | -5.47 | 46.6 | 0.00 |
| 4 | 180 | -0 | 2731 | 0 | 0 | -0 | 1559 | 4.02 | 4.02 | 8.04 | 8.04 | -3.39 | 28.9 | 0.00 |
| 5 | 180 | -0 | 2518 | 0 | 0 | -0 | 1320 | 4.02 | 4.02 | 8.04 | 8.04 | -2.87 | 24.4 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE03_IP1**  Descrizione: **CORDOLI DI FONDAZIONE 9-10-11-12-13**
**ASTA NUM. 9**  NI 56  NF 36  SEZ.  Rp  B= 60.0  H= 60.0  (trave di fondazione)

armatura base = 4 X 2.01  per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cm² | | | | | kg/cm² | mm |
| 3 | 0 | -0 | -642 | -0 | 0 | -0 | 2924 | 4.02 | 4.02 | 8.04 | 8.04 | -6.36 | 54.1 | 0.00 |
| 4 | 0 | -0 | -411 | -0 | 0 | -0 | 1883 | 4.02 | 4.02 | 8.04 | 8.04 | -4.10 | 34.9 | 0.00 |
| 5 | 0 | -0 | -353 | -0 | 0 | -0 | 1624 | 4.02 | 4.02 | 8.04 | 8.04 | -3.53 | 30.1 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 20 | -0 | -642 | -0 | 0 | -0 | 2894 | 4.02 | 4.02 | 8.04 | 8.04 | -6.30 | 53.6 | 0.00 |
| 4 | 20 | -0 | -411 | -0 | 0 | -0 | 1864 | 4.02 | 4.02 | 8.04 | 8.04 | -4.06 | 34.5 | 0.00 |
| 5 | 20 | -0 | -353 | -0 | 0 | -0 | 1607 | 4.02 | 4.02 | 8.04 | 8.04 | -3.50 | 29.8 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 39 | -0 | -642 | -0 | 0 | -0 | 2767 | 4.02 | 4.02 | 8.04 | 8.04 | -6.02 | 51.2 | 0.00 |
| 4 | 39 | -0 | -411 | -0 | 0 | -0 | 1783 | 4.02 | 4.02 | 8.04 | 8.04 | -3.88 | 33.0 | 0.00 |
| 5 | 39 | -0 | -353 | -0 | 0 | -0 | 1538 | 4.02 | 4.02 | 8.04 | 8.04 | -3.35 | 28.5 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 59 | -0 | -158 | -0 | 0 | -0 | 2736 | 4.02 | 4.02 | 8.04 | 8.04 | -5.95 | 50.7 | 0.00 |
| 4 | 59 | -0 | -56 | -0 | 0 | -0 | 1772 | 4.02 | 4.02 | 8.04 | 8.04 | -3.86 | 32.8 | 0.00 |
| 5 | 59 | -0 | -31 | -0 | 0 | -0 | 1531 | 4.02 | 4.02 | 8.04 | 8.04 | -3.33 | 28.3 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 79 | -0 | 344 | 0 | 0 | -0 | 2705 | 4.02 | 4.02 | 8.04 | 8.04 | -5.89 | 50.1 | 0.00 |
| 4 | 79 | -0 | 314 | 0 | 0 | -0 | 1761 | 4.02 | 4.02 | 8.04 | 8.04 | -3.83 | 32.6 | 0.00 |
| 5 | 79 | -0 | 306 | 0 | 0 | -0 | 1525 | 4.02 | 4.02 | 8.04 | 8.04 | -3.32 | 28.2 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 98 | -0 | 344 | 0 | 0 | -0 | 2773 | 4.02 | 4.02 | 8.04 | 8.04 | -6.03 | 51.3 | 0.00 |
| 4 | 98 | -0 | 314 | 0 | 0 | -0 | 1823 | 4.02 | 4.02 | 8.04 | 8.04 | -3.97 | 33.8 | 0.00 |
| 5 | 98 | -0 | 306 | 0 | 0 | -0 | 1585 | 4.02 | 4.02 | 8.04 | 8.04 | -3.45 | 29.4 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 118 | -0 | 857 | 0 | 0 | -0 | 2840 | 4.02 | 4.02 | 8.04 | 8.04 | -6.18 | 52.6 | 0.00 |
| 4 | 118 | -0 | 695 | 0 | 0 | -0 | 1885 | 4.02 | 4.02 | 8.04 | 8.04 | -4.10 | 34.9 | 0.00 |
| 5 | 118 | -0 | 655 | 0 | 0 | -0 | 1646 | 4.02 | 4.02 | 8.04 | 8.04 | -3.58 | 30.5 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 138 | -0 | 857 | 0 | 0 | -0 | 3009 | 4.02 | 4.02 | 8.04 | 8.04 | -6.55 | 55.7 | 0.00 |
| 4 | 138 | -0 | 695 | 0 | 0 | -0 | 2022 | 4.02 | 4.02 | 8.04 | 8.04 | -4.40 | 37.4 | 0.00 |
| 5 | 138 | -0 | 655 | 0 | 0 | -0 | 1775 | 4.02 | 4.02 | 8.04 | 8.04 | -3.86 | 32.9 | 0.00 |



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apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 158 | -0 | 1375 | 0 | 0 | -0 | 3178 | 4.02 | 4.02 | 8.04 | 8.04 | -6.91 | 58.8 | 0.00 |
| 4 | 158 | -0 | 1084 | 0 | 0 | -0 | 2159 | 4.02 | 4.02 | 8.04 | 8.04 | -4.70 | 40.0 | 0.00 |
| 5 | 158 | -0 | 1011 | 0 | 0 | -0 | 1904 | 4.02 | 4.02 | 8.04 | 8.04 | -4.14 | 35.3 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 177 | -0 | 1375 | 0 | 0 | -0 | 3449 | 4.02 | 4.02 | 8.04 | 8.04 | -7.50 | 63.9 | 0.00 |
| 4 | 177 | -0 | 1084 | 0 | 0 | -0 | 2373 | 4.02 | 4.02 | 8.04 | 8.04 | -5.16 | 43.9 | 0.00 |
| 5 | 177 | -0 | 1011 | 0 | 0 | -0 | 2103 | 4.02 | 4.02 | 8.04 | 8.04 | -4.58 | 38.9 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 197 | -0 | 1375 | 0 | 0 | -0 | 3514 | 4.02 | 4.02 | 8.04 | 8.04 | -7.64 | 65.1 | 0.00 |
| 4 | 197 | -0 | 1084 | 0 | 0 | -0 | 2423 | 4.02 | 4.02 | 8.04 | 8.04 | -5.27 | 44.9 | 0.00 |
| 5 | 197 | -0 | 1011 | 0 | 0 | -0 | 2150 | 4.02 | 4.02 | 8.04 | 8.04 | -4.68 | 39.8 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE03_IP1**  Descrizione: **CORDOLI DI FONDAZIONE 9-10-11-12-13**
**ASTA NUM. 10**  NI 36  NF 6  SEZ.  Rp  B= 60.0  H= 60.0  (trave di fondazione)

armatura base = 4 X 2.01  per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | $cm^2$ | | | | | $kg/cm^2$ | mm |
| 3 | 0 | -0 | -3143 | -0 | 0 | -0 | 3250 | 4.02 | 4.02 | 8.04 | 8.04 | -7.07 | 60.2 | 0.00 |
| 4 | 0 | -0 | -2253 | -0 | 0 | -0 | 2247 | 4.02 | 4.02 | 8.04 | 8.04 | -4.89 | 41.6 | 0.00 |
| 5 | 0 | -0 | -2031 | -0 | 0 | -0 | 1996 | 4.02 | 4.02 | 8.04 | 8.04 | -4.34 | 37.0 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 22 | -0 | -3143 | -0 | 0 | -0 | 3045 | 4.02 | 4.02 | 8.04 | 8.04 | -6.63 | 56.4 | 0.00 |
| 4 | 22 | -0 | -2253 | -0 | 0 | -0 | 2101 | 4.02 | 4.02 | 8.04 | 8.04 | -4.57 | 38.9 | 0.00 |
| 5 | 22 | -0 | -2031 | -0 | 0 | -0 | 1864 | 4.02 | 4.02 | 8.04 | 8.04 | -4.06 | 34.5 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 43 | -0 | -3143 | -0 | 0 | -0 | 2370 | 4.02 | 4.02 | 8.04 | 8.04 | -5.16 | 43.9 | 0.00 |
| 4 | 43 | -0 | -2253 | -0 | 0 | -0 | 1616 | 4.02 | 4.02 | 8.04 | 8.04 | -3.52 | 29.9 | 0.00 |
| 5 | 43 | -0 | -2031 | -0 | 0 | -0 | 1428 | 4.02 | 4.02 | 8.04 | 8.04 | -3.11 | 26.4 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 64 | -0 | -2600 | -0 | 0 | -0 | 1811 | 4.02 | 4.02 | 8.04 | 8.04 | -3.94 | 33.5 | 0.00 |
| 4 | 64 | -0 | -1836 | -0 | 0 | -0 | 1221 | 4.02 | 4.02 | 8.04 | 8.04 | -2.66 | 22.6 | 0.00 |
| 5 | 64 | -0 | -1645 | -0 | 0 | -0 | 1074 | 4.02 | 4.02 | 8.04 | 8.04 | -2.34 | 19.9 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 86 | -0 | -2600 | -0 | 0 | -0 | 1252 | 4.02 | 4.02 | 8.04 | 8.04 | -2.72 | 23.2 | 0.00 |
| 4 | 86 | -0 | -1836 | -0 | 0 | -0 | 827 | 4.02 | 4.02 | 8.04 | 8.04 | -1.80 | 15.3 | 0.00 |
| 5 | 86 | -0 | -1645 | -0 | 0 | -0 | 721 | 4.02 | 4.02 | 8.04 | 8.04 | -1.57 | 13.3 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 108 | -0 | -2083 | -0 | 0 | -0 | 804 | 4.02 | 4.02 | 8.04 | 8.04 | -1.75 | 14.9 | 0.00 |
| 4 | 108 | -0 | -1432 | -0 | 0 | -0 | 519 | 4.02 | 4.02 | 8.04 | 8.04 | -1.13 | 9.6 | 0.00 |
| 5 | 108 | -0 | -1269 | -0 | 0 | -0 | 447 | 4.02 | 4.02 | 8.04 | 8.04 | -0.97 | 8.3 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 129 | -0 | -2083 | -0 | 0 | -0 | 356 | 4.02 | 4.02 | 8.04 | 8.04 | -0.78 | 6.6 | 0.00 |
| 4 | 129 | -0 | -1432 | -0 | 0 | -0 | 211 | 4.02 | 4.02 | 8.04 | 8.04 | -0.46 | 3.9 | 0.00 |
| 5 | 129 | -0 | -1269 | -0 | 0 | -0 | 175 | 4.02 | 4.02 | 8.04 | 8.04 | -0.38 | 3.2 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 150 | -0 | -1595 | -0 | 0 | -0 | 13 | 4.02 | 4.02 | 8.04 | 8.04 | -0.03 | 0.2 | 0.00 |
| 4 | 150 | -0 | -1044 | -0 | 0 | 0 | -14 | 4.02 | 4.02 | 8.04 | 8.04 | -0.03 | 0.3 | 0.00 |
| 5 | 150 | -0 | -906 | -0 | 0 | 0 | -20 | 4.02 | 4.02 | 8.04 | 8.04 | -0.04 | 0.4 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 172 | -0 | -1595 | -0 | 0 | 0 | -330 | 4.02 | 4.02 | 8.04 | 8.04 | -0.72 | 6.1 | 0.00 |
| 4 | 172 | -0 | -1044 | -0 | 0 | 0 | -238 | 4.02 | 4.02 | 8.04 | 8.04 | -0.52 | 4.4 | 0.00 |
| 5 | 172 | -0 | -906 | -0 | 0 | 0 | -215 | 4.02 | 4.02 | 8.04 | 8.04 | -0.47 | 4.0 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 194 | -0 | -1138 | -0 | 0 | 0 | -575 | 4.02 | 4.02 | 8.04 | 8.04 | -1.25 | 10.6 | 0.00 |
| 4 | 194 | -0 | -672 | -0 | 0 | 0 | -382 | 4.02 | 4.02 | 8.04 | 8.04 | -0.83 | 7.1 | 0.00 |
| 5 | 194 | -0 | -555 | -0 | 0 | 0 | -334 | 4.02 | 4.02 | 8.04 | 8.04 | -0.73 | 6.2 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 215 | -0 | -1138 | -0 | 0 | 0 | -819 | 4.02 | 4.02 | 8.04 | 8.04 | -1.78 | 15.2 | 0.00 |
| 4 | 215 | -0 | -672 | -0 | 0 | 0 | -527 | 4.02 | 4.02 | 8.04 | 8.04 | -1.15 | 9.8 | 0.00 |
| 5 | 215 | -0 | -555 | -0 | 0 | 0 | -454 | 4.02 | 4.02 | 8.04 | 8.04 | -0.99 | 8.4 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE04_IP1**  Descrizione: **CORDOLI DI FONDAZIONE 14-15**
**ASTA NUM. 11**  NI 54  NF 86  SEZ.  Rp  B= 60.0  H= 60.0  (trave di fondazione)

armatura base = 4 X 2.01  per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | $cm^2$ | | | | | $kg/cm^2$ | mm |
| 3 | 0 | -0 | -967 | -0 | 0 | -0 | 447 | 4.02 | 4.02 | 8.04 | 8.04 | -0.97 | 8.3 | 0.00 |
| 4 | 0 | -0 | -860 | -0 | 0 | -0 | 441 | 4.02 | 4.02 | 8.04 | 8.04 | -0.96 | 8.2 | 0.00 |
| 5 | 0 | -0 | -833 | -0 | 0 | -0 | 439 | 4.02 | 4.02 | 8.04 | 8.04 | -0.96 | 8.1 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 18 | -0 | -967 | -0 | 0 | -0 | 422 | 4.02 | 4.02 | 8.04 | 8.04 | -0.92 | 7.8 | 0.00 |
| 4 | 18 | -0 | -860 | -0 | 0 | -0 | 419 | 4.02 | 4.02 | 8.04 | 8.04 | -0.91 | 7.8 | 0.00 |
| 5 | 18 | -0 | -833 | -0 | 0 | -0 | 419 | 4.02 | 4.02 | 8.04 | 8.04 | -0.91 | 7.8 | 0.00 |



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apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 35 | -0 | -967 | -0 | 0 | -0 | 253 | 4.02 | 4.02 | 8.04 | 8.04 | -0.55 | 4.7 | 0.00 |
| 4 | 35 | -0 | -860 | -0 | 0 | -0 | 269 | 4.02 | 4.02 | 8.04 | 8.04 | -0.59 | 5.0 | 0.00 |
| 5 | 35 | -0 | -833 | -0 | 0 | -0 | 273 | 4.02 | 4.02 | 8.04 | 8.04 | -0.59 | 5.1 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 52 | -0 | -775 | -0 | 0 | -0 | 118 | 4.02 | 4.02 | 8.04 | 8.04 | -0.26 | 2.2 | 0.00 |
| 4 | 52 | -0 | -702 | -0 | 0 | -0 | 146 | 4.02 | 4.02 | 8.04 | 8.04 | -0.32 | 2.7 | 0.00 |
| 5 | 52 | -0 | -684 | -0 | 0 | -0 | 153 | 4.02 | 4.02 | 8.04 | 8.04 | -0.33 | 2.8 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 70 | -0 | -775 | -0 | 0 | 0 | -18 | 4.02 | 4.02 | 8.04 | 8.04 | -0.04 | 0.3 | 0.00 |
| 4 | 70 | -0 | -702 | -0 | 0 | -0 | 23 | 4.02 | 4.02 | 8.04 | 8.04 | -0.05 | 0.4 | 0.00 |
| 5 | 70 | -0 | -684 | -0 | 0 | -0 | 33 | 4.02 | 4.02 | 8.04 | 8.04 | -0.07 | 0.6 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 88 | -0 | -574 | -0 | 0 | 0 | -118 | 4.02 | 4.02 | 8.04 | 8.04 | -0.26 | 2.2 | 0.00 |
| 4 | 88 | -0 | -544 | -0 | 0 | 0 | -72 | 4.02 | 4.02 | 8.04 | 8.04 | -0.16 | 1.3 | 0.00 |
| 5 | 88 | -0 | -536 | -0 | 0 | 0 | -60 | 4.02 | 4.02 | 8.04 | 8.04 | -0.13 | 1.1 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 105 | -0 | -574 | -0 | 0 | 0 | -219 | 4.02 | 4.02 | 8.04 | 8.04 | -0.48 | 4.0 | 0.00 |
| 4 | 105 | -0 | -544 | -0 | 0 | 0 | -167 | 4.02 | 4.02 | 8.04 | 8.04 | -0.36 | 3.1 | 0.00 |
| 5 | 105 | -0 | -536 | -0 | 0 | 0 | -154 | 4.02 | 4.02 | 8.04 | 8.04 | -0.34 | 2.9 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 122 | -0 | -363 | -0 | 0 | 0 | -282 | 4.02 | 4.02 | 8.04 | 8.04 | -0.61 | 5.2 | 0.00 |
| 4 | 122 | -0 | -383 | -0 | 0 | 0 | -234 | 4.02 | 4.02 | 8.04 | 8.04 | -0.51 | 4.3 | 0.00 |
| 5 | 122 | -0 | -388 | -0 | 0 | 0 | -222 | 4.02 | 4.02 | 8.04 | 8.04 | -0.48 | 4.1 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 140 | -0 | -363 | -0 | 0 | 0 | -346 | 4.02 | 4.02 | 8.04 | 8.04 | -0.75 | 6.4 | 0.00 |
| 4 | 140 | -0 | -383 | -0 | 0 | 0 | -301 | 4.02 | 4.02 | 8.04 | 8.04 | -0.66 | 5.6 | 0.00 |
| 5 | 140 | -0 | -388 | -0 | 0 | 0 | -290 | 4.02 | 4.02 | 8.04 | 8.04 | -0.63 | 5.4 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 158 | -0 | -143 | -0 | 0 | 0 | -371 | 4.02 | 4.02 | 8.04 | 8.04 | -0.81 | 6.9 | 0.00 |
| 4 | 158 | -0 | -221 | -0 | 0 | 0 | -340 | 4.02 | 4.02 | 8.04 | 8.04 | -0.74 | 6.3 | 0.00 |
| 5 | 158 | -0 | -240 | -0 | 0 | 0 | -332 | 4.02 | 4.02 | 8.04 | 8.04 | -0.72 | 6.1 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 175 | -0 | -143 | -0 | 0 | 0 | -396 | 4.02 | 4.02 | 8.04 | 8.04 | -0.86 | 7.3 | 0.00 |
| 4 | 175 | -0 | -221 | -0 | 0 | 0 | -379 | 4.02 | 4.02 | 8.04 | 8.04 | -0.82 | 7.0 | 0.00 |
| 5 | 175 | -0 | -240 | -0 | 0 | 0 | -374 | 4.02 | 4.02 | 8.04 | 8.04 | -0.81 | 6.9 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE05_IP1**  Descrizione: **CORDOLI DI FONDAZIONE 19-20-21-22-23**
**ASTA NUM. 12**  NI 8  NF 23  SEZ.  Rp  B= 60.0  H= 60.0  (trave di fondazione)

armatura base = 4 X 2.01  per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cm² | | | | | kg/cm² | mm |
| 3 | 0 | -0 | -354 | -0 | 0 | 0 | -1184 | 4.02 | 4.02 | 8.04 | 8.04 | -2.58 | 21.9 | 0.00 |
| 4 | 0 | -0 | -403 | -0 | 0 | 0 | -968 | 4.02 | 4.02 | 8.04 | 8.04 | -2.11 | 17.9 | 0.00 |
| 5 | 0 | -0 | -415 | -0 | 0 | 0 | -914 | 4.02 | 4.02 | 8.04 | 8.04 | -1.99 | 16.9 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 18 | -0 | -354 | -0 | 0 | 0 | -1246 | 4.02 | 4.02 | 8.04 | 8.04 | -2.71 | 23.1 | 0.00 |
| 4 | 18 | -0 | -403 | -0 | 0 | 0 | -1038 | 4.02 | 4.02 | 8.04 | 8.04 | -2.26 | 19.2 | 0.00 |
| 5 | 18 | -0 | -415 | -0 | 0 | 0 | -986 | 4.02 | 4.02 | 8.04 | 8.04 | -2.15 | 18.3 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 35 | -0 | -354 | -0 | 0 | 0 | -1308 | 4.02 | 4.02 | 8.04 | 8.04 | -2.85 | 24.2 | 0.00 |
| 4 | 35 | -0 | -403 | -0 | 0 | 0 | -1109 | 4.02 | 4.02 | 8.04 | 8.04 | -2.41 | 20.5 | 0.00 |
| 5 | 35 | -0 | -415 | -0 | 0 | 0 | -1059 | 4.02 | 4.02 | 8.04 | 8.04 | -2.30 | 19.6 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 52 | -0 | -298 | -0 | 0 | 0 | -1360 | 4.02 | 4.02 | 8.04 | 8.04 | -2.96 | 25.2 | 0.00 |
| 4 | 52 | -0 | -383 | -0 | 0 | 0 | -1176 | 4.02 | 4.02 | 8.04 | 8.04 | -2.56 | 21.8 | 0.00 |
| 5 | 52 | -0 | -404 | -0 | 0 | 0 | -1130 | 4.02 | 4.02 | 8.04 | 8.04 | -2.46 | 20.9 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 70 | -0 | -298 | -0 | 0 | 0 | -1412 | 4.02 | 4.02 | 8.04 | 8.04 | -3.07 | 26.2 | 0.00 |
| 4 | 70 | -0 | -383 | -0 | 0 | 0 | -1243 | 4.02 | 4.02 | 8.04 | 8.04 | -2.70 | 23.0 | 0.00 |
| 5 | 70 | -0 | -404 | -0 | 0 | 0 | -1200 | 4.02 | 4.02 | 8.04 | 8.04 | -2.61 | 22.2 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 88 | -0 | -221 | -0 | 0 | 0 | -1451 | 4.02 | 4.02 | 8.04 | 8.04 | -3.16 | 26.9 | 0.00 |
| 4 | 88 | -0 | -350 | -0 | 0 | 0 | -1304 | 4.02 | 4.02 | 8.04 | 8.04 | -2.84 | 24.2 | 0.00 |
| 5 | 88 | -0 | -382 | -0 | 0 | 0 | -1267 | 4.02 | 4.02 | 8.04 | 8.04 | -2.76 | 23.5 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 105 | -0 | -221 | -0 | 0 | 0 | -1490 | 4.02 | 4.02 | 8.04 | 8.04 | -3.24 | 27.6 | 0.00 |
| 4 | 105 | -0 | -350 | -0 | 0 | 0 | -1365 | 4.02 | 4.02 | 8.04 | 8.04 | -2.97 | 25.3 | 0.00 |
| 5 | 105 | -0 | -382 | -0 | 0 | 0 | -1334 | 4.02 | 4.02 | 8.04 | 8.04 | -2.90 | 24.7 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 122 | -0 | -119 | -0 | 0 | 0 | -1511 | 4.02 | 4.02 | 8.04 | 8.04 | -3.29 | 28.0 | 0.00 |
| 4 | 122 | -0 | -301 | -0 | 0 | 0 | -1418 | 4.02 | 4.02 | 8.04 | 8.04 | -3.08 | 26.3 | 0.00 |
| 5 | 122 | -0 | -346 | -0 | 0 | 0 | -1395 | 4.02 | 4.02 | 8.04 | 8.04 | -3.03 | 25.8 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 140 | -0 | -119 | -0 | 0 | 0 | -1532 | 4.02 | 4.02 | 8.04 | 8.04 | -3.33 | 28.4 | 0.00 |
| 4 | 140 | -0 | -301 | -0 | 0 | 0 | -1471 | 4.02 | 4.02 | 8.04 | 8.04 | -3.20 | 27.2 | 0.00 |



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| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 140 | -0 | -346 | -0 | 0 | 0 | -1455 | 4.02 | 4.02 | 8.04 | 8.04 | -3.17 | 26.9 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 158 | -0 | 10 | 0 | 0 | 0 | -1529 | 4.02 | 4.02 | 8.04 | 8.04 | -3.33 | 28.3 | 0.00 |
| 4 | 158 | -0 | -233 | -0 | 0 | 0 | -1512 | 4.02 | 4.02 | 8.04 | 8.04 | -3.29 | 28.0 | 0.00 |
| 5 | 158 | -0 | -294 | -0 | 0 | 0 | -1506 | 4.02 | 4.02 | 8.04 | 8.04 | -3.28 | 27.9 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 175 | -0 | 10 | 0 | 0 | 0 | -1528 | 4.02 | 4.02 | 8.04 | 8.04 | -3.32 | 28.3 | 0.00 |
| 4 | 175 | -0 | -233 | -0 | 0 | 0 | -1553 | 4.02 | 4.02 | 8.04 | 8.04 | -3.38 | 28.7 | 0.00 |
| 5 | 175 | -0 | -294 | -0 | 0 | 0 | -1558 | 4.02 | 4.02 | 8.04 | 8.04 | -3.39 | 28.8 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE05_IP1** Descrizione: **CORDOLI DI FONDAZIONE 19-20-21-22-23**
**ASTA NUM. 13** NI 23 NF 57 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | | kg | | | kg*m | | | | $cm^2$ | | | $kg/cm^2$ | mm |
| 3 | 0 | -0 | 2740 | 0 | 0 | 0 | -2037 | 4.02 | 4.02 | 8.04 | 8.04 | -4.43 | 37.7 | 0.00 |
| 4 | 0 | -0 | 2278 | 0 | 0 | 0 | -1973 | 4.02 | 4.02 | 8.04 | 8.04 | -4.29 | 36.5 | 0.00 |
| 5 | 0 | -0 | 2163 | 0 | 0 | 0 | -1957 | 4.02 | 4.02 | 8.04 | 8.04 | -4.26 | 36.2 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 18 | -0 | 2740 | 0 | 0 | 0 | -1544 | 4.02 | 4.02 | 8.04 | 8.04 | -3.36 | 28.6 | 0.00 |
| 4 | 18 | -0 | 2278 | 0 | 0 | 0 | -1563 | 4.02 | 4.02 | 8.04 | 8.04 | -3.40 | 28.9 | 0.00 |
| 5 | 18 | -0 | 2163 | 0 | 0 | 0 | -1568 | 4.02 | 4.02 | 8.04 | 8.04 | -3.41 | 29.0 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 36 | -0 | 2940 | 0 | 0 | 0 | -1051 | 4.02 | 4.02 | 8.04 | 8.04 | -2.29 | 19.5 | 0.00 |
| 4 | 36 | -0 | 2396 | 0 | 0 | 0 | -1153 | 4.02 | 4.02 | 8.04 | 8.04 | -2.51 | 21.4 | 0.00 |
| 5 | 36 | -0 | 2259 | 0 | 0 | 0 | -1179 | 4.02 | 4.02 | 8.04 | 8.04 | -2.57 | 21.8 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 54 | -0 | 2940 | 0 | 0 | 0 | -522 | 4.02 | 4.02 | 8.04 | 8.04 | -1.14 | 9.7 | 0.00 |
| 4 | 54 | -0 | 2396 | 0 | 0 | 0 | -722 | 4.02 | 4.02 | 8.04 | 8.04 | -1.57 | 13.4 | 0.00 |
| 5 | 54 | -0 | 2259 | 0 | 0 | 0 | -772 | 4.02 | 4.02 | 8.04 | 8.04 | -1.68 | 14.3 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 72 | -0 | 3178 | 0 | 0 | -0 | 8 | 4.02 | 4.02 | 8.04 | 8.04 | -0.02 | 0.1 | 0.00 |
| 4 | 72 | -0 | 2541 | 0 | 0 | 0 | -291 | 4.02 | 4.02 | 8.04 | 8.04 | -0.63 | 5.4 | 0.00 |
| 5 | 72 | -0 | 2382 | 0 | 0 | 0 | -366 | 4.02 | 4.02 | 8.04 | 8.04 | -0.80 | 6.8 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 90 | -0 | 3178 | 0 | 0 | -0 | 580 | 4.02 | 4.02 | 8.04 | 8.04 | -1.26 | 10.7 | 0.00 |
| 4 | 90 | -0 | 2541 | 0 | 0 | -0 | 167 | 4.02 | 4.02 | 8.04 | 8.04 | -0.36 | 3.1 | 0.00 |
| 5 | 90 | -0 | 2382 | 0 | 0 | -0 | 63 | 4.02 | 4.02 | 8.04 | 8.04 | -0.14 | 1.2 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 108 | -0 | 3454 | 0 | 0 | -0 | 1152 | 4.02 | 4.02 | 8.04 | 8.04 | -2.51 | 21.3 | 0.00 |
| 4 | 108 | -0 | 2716 | 0 | 0 | -0 | 624 | 4.02 | 4.02 | 8.04 | 8.04 | -1.36 | 11.6 | 0.00 |
| 5 | 108 | -0 | 2532 | 0 | 0 | -0 | 492 | 4.02 | 4.02 | 8.04 | 8.04 | -1.07 | 9.1 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 126 | -0 | 3454 | 0 | 0 | -0 | 1774 | 4.02 | 4.02 | 8.04 | 8.04 | -3.86 | 32.8 | 0.00 |
| 4 | 126 | -0 | 2716 | 0 | 0 | -0 | 1113 | 4.02 | 4.02 | 8.04 | 8.04 | -2.42 | 20.6 | 0.00 |
| 5 | 126 | -0 | 2532 | 0 | 0 | -0 | 948 | 4.02 | 4.02 | 8.04 | 8.04 | -2.06 | 17.6 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 144 | -0 | 3767 | 0 | 0 | -0 | 2395 | 4.02 | 4.02 | 8.04 | 8.04 | -5.21 | 44.4 | 0.00 |
| 4 | 144 | -0 | 2919 | 0 | 0 | -0 | 1602 | 4.02 | 4.02 | 8.04 | 8.04 | -3.49 | 29.7 | 0.00 |
| 5 | 144 | -0 | 2707 | 0 | 0 | -0 | 1404 | 4.02 | 4.02 | 8.04 | 8.04 | -3.05 | 26.0 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 162 | -0 | 3767 | 0 | 0 | -0 | 3073 | 4.02 | 4.02 | 8.04 | 8.04 | -6.69 | 56.9 | 0.00 |
| 4 | 162 | -0 | 2919 | 0 | 0 | -0 | 2127 | 4.02 | 4.02 | 8.04 | 8.04 | -4.63 | 39.4 | 0.00 |
| 5 | 162 | -0 | 2707 | 0 | 0 | -0 | 1891 | 4.02 | 4.02 | 8.04 | 8.04 | -4.11 | 35.0 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 180 | -0 | 3767 | 0 | 0 | -0 | 3186 | 4.02 | 4.02 | 8.04 | 8.04 | -6.93 | 59.0 | 0.00 |
| 4 | 180 | -0 | 2919 | 0 | 0 | -0 | 2215 | 4.02 | 4.02 | 8.04 | 8.04 | -4.82 | 41.0 | 0.00 |
| 5 | 180 | -0 | 2707 | 0 | 0 | -0 | 1972 | 4.02 | 4.02 | 8.04 | 8.04 | -4.29 | 36.5 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE05_IP1** Descrizione: **CORDOLI DI FONDAZIONE 19-20-21-22-23**
**ASTA NUM. 14** NI 57 NF 21 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | | kg | | | kg*m | | | | $cm^2$ | | | $kg/cm^2$ | mm |
| 3 | 0 | -0 | -529 | -0 | 0 | -0 | 3637 | 4.02 | 4.02 | 8.04 | 8.04 | -7.91 | 67.3 | 0.00 |
| 4 | 0 | -0 | -289 | -0 | 0 | -0 | 2584 | 4.02 | 4.02 | 8.04 | 8.04 | -5.62 | 47.8 | 0.00 |
| 5 | 0 | -0 | -229 | -0 | 0 | -0 | 2320 | 4.02 | 4.02 | 8.04 | 8.04 | -5.05 | 43.0 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 20 | -0 | -529 | -0 | 0 | -0 | 3612 | 4.02 | 4.02 | 8.04 | 8.04 | -7.86 | 66.9 | 0.00 |
| 4 | 20 | -0 | -289 | -0 | 0 | -0 | 2570 | 4.02 | 4.02 | 8.04 | 8.04 | -5.59 | 47.6 | 0.00 |
| 5 | 20 | -0 | -229 | -0 | 0 | -0 | 2309 | 4.02 | 4.02 | 8.04 | 8.04 | -5.02 | 42.8 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 39 | -0 | -529 | -0 | 0 | -0 | 3508 | 4.02 | 4.02 | 8.04 | 8.04 | -7.63 | 65.0 | 0.00 |
| 4 | 39 | -0 | -289 | -0 | 0 | -0 | 2513 | 4.02 | 4.02 | 8.04 | 8.04 | -5.47 | 46.5 | 0.00 |



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| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 39 | -0 | -229 | -0 | 0 | -0 | 2264 | 4.02 | 4.02 | 8.04 | 8.04 | -4.93 | 41.9 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 59 | -0 | -126 | -0 | 0 | -0 | 3483 | 4.02 | 4.02 | 8.04 | 8.04 | -7.58 | 64.5 | 0.00 |
| 4 | 59 | -0 | -18 | -0 | 0 | -0 | 2510 | 4.02 | 4.02 | 8.04 | 8.04 | -5.46 | 46.5 | 0.00 |
| 5 | 59 | -0 | 10 | 0 | 0 | -0 | 2266 | 4.02 | 4.02 | 8.04 | 8.04 | -4.93 | 42.0 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 79 | -0 | 296 | 0 | 0 | -0 | 3458 | 4.02 | 4.02 | 8.04 | 8.04 | -7.52 | 64.0 | 0.00 |
| 4 | 79 | -0 | 270 | 0 | 0 | -0 | 2506 | 4.02 | 4.02 | 8.04 | 8.04 | -5.45 | 46.4 | 0.00 |
| 5 | 79 | -0 | 264 | 0 | 0 | -0 | 2268 | 4.02 | 4.02 | 8.04 | 8.04 | -4.93 | 42.0 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 98 | -0 | 296 | 0 | 0 | -0 | 3516 | 4.02 | 4.02 | 8.04 | 8.04 | -7.65 | 65.1 | 0.00 |
| 4 | 98 | -0 | 270 | 0 | 0 | -0 | 2559 | 4.02 | 4.02 | 8.04 | 8.04 | -5.57 | 47.4 | 0.00 |
| 5 | 98 | -0 | 264 | 0 | 0 | -0 | 2320 | 4.02 | 4.02 | 8.04 | 8.04 | -5.05 | 43.0 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 118 | -0 | 727 | 0 | 0 | -0 | 3575 | 4.02 | 4.02 | 8.04 | 8.04 | -7.78 | 66.2 | 0.00 |
| 4 | 118 | -0 | 568 | 0 | 0 | -0 | 2612 | 4.02 | 4.02 | 8.04 | 8.04 | -5.68 | 48.4 | 0.00 |
| 5 | 118 | -0 | 528 | 0 | 0 | -0 | 2372 | 4.02 | 4.02 | 8.04 | 8.04 | -5.16 | 43.9 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 138 | -0 | 727 | 0 | 0 | -0 | 3718 | 4.02 | 4.02 | 8.04 | 8.04 | -8.09 | 68.8 | 0.00 |
| 4 | 138 | -0 | 568 | 0 | 0 | -0 | 2724 | 4.02 | 4.02 | 8.04 | 8.04 | -5.93 | 50.4 | 0.00 |
| 5 | 138 | -0 | 528 | 0 | 0 | -0 | 2476 | 4.02 | 4.02 | 8.04 | 8.04 | -5.39 | 45.8 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 158 | -0 | 1158 | 0 | 0 | -0 | 3861 | 4.02 | 4.02 | 8.04 | 8.04 | -8.40 | 71.5 | 0.00 |
| 4 | 158 | -0 | 869 | 0 | 0 | -0 | 2836 | 4.02 | 4.02 | 8.04 | 8.04 | -6.17 | 52.5 | 0.00 |
| 5 | 158 | -0 | 796 | 0 | 0 | -0 | 2580 | 4.02 | 4.02 | 8.04 | 8.04 | -5.61 | 47.8 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 177 | -0 | 1158 | 0 | 0 | -0 | 4089 | 4.02 | 4.02 | 8.04 | 8.04 | -8.90 | 75.7 | 0.00 |
| 4 | 177 | -0 | 869 | 0 | 0 | -0 | 3007 | 4.02 | 4.02 | 8.04 | 8.04 | -6.54 | 55.7 | 0.00 |
| 5 | 177 | -0 | 796 | 0 | 0 | -0 | 2737 | 4.02 | 4.02 | 8.04 | 8.04 | -5.95 | 50.7 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 197 | -0 | 1158 | 0 | 0 | -0 | 4144 | 4.02 | 4.02 | 8.04 | 8.04 | -9.02 | 76.7 | 0.00 |
| 4 | 197 | -0 | 869 | 0 | 0 | -0 | 3048 | 4.02 | 4.02 | 8.04 | 8.04 | -6.63 | 56.4 | 0.00 |
| 5 | 197 | -0 | 796 | 0 | 0 | -0 | 2774 | 4.02 | 4.02 | 8.04 | 8.04 | -6.03 | 51.4 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE05_IP1** Descrizione: **CORDOLI DI FONDAZIONE 19-20-21-22-23**
**ASTA NUM. 15** NI 21 NF 7 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cm² | | | | | kg/cm² | mm |
| 3 | 0 | -0 | -3456 | -0 | 0 | -0 | 3807 | 4.02 | 4.02 | 8.04 | 8.04 | -8.28 | 70.5 | 0.00 |
| 4 | 0 | -0 | -2557 | -0 | 0 | -0 | 2799 | 4.02 | 4.02 | 8.04 | 8.04 | -6.09 | 51.8 | 0.00 |
| 5 | 0 | -0 | -2332 | -0 | 0 | -0 | 2547 | 4.02 | 4.02 | 8.04 | 8.04 | -5.54 | 47.2 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 22 | -0 | -3456 | -0 | 0 | -0 | 3582 | 4.02 | 4.02 | 8.04 | 8.04 | -7.79 | 66.3 | 0.00 |
| 4 | 22 | -0 | -2557 | -0 | 0 | -0 | 2633 | 4.02 | 4.02 | 8.04 | 8.04 | -5.73 | 48.8 | 0.00 |
| 5 | 22 | -0 | -2332 | -0 | 0 | -0 | 2396 | 4.02 | 4.02 | 8.04 | 8.04 | -5.21 | 44.4 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 43 | -0 | -3456 | -0 | 0 | -0 | 2839 | 4.02 | 4.02 | 8.04 | 8.04 | -6.18 | 52.6 | 0.00 |
| 4 | 43 | -0 | -2557 | -0 | 0 | -0 | 2083 | 4.02 | 4.02 | 8.04 | 8.04 | -4.53 | 38.6 | 0.00 |
| 5 | 43 | -0 | -2332 | -0 | 0 | -0 | 1894 | 4.02 | 4.02 | 8.04 | 8.04 | -4.12 | 35.1 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 64 | -0 | -3021 | -0 | 0 | -0 | 2189 | 4.02 | 4.02 | 8.04 | 8.04 | -4.76 | 40.5 | 0.00 |
| 4 | 64 | -0 | -2249 | -0 | 0 | -0 | 1599 | 4.02 | 4.02 | 8.04 | 8.04 | -3.48 | 29.6 | 0.00 |
| 5 | 64 | -0 | -2056 | -0 | 0 | -0 | 1452 | 4.02 | 4.02 | 8.04 | 8.04 | -3.16 | 26.9 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 86 | -0 | -3021 | -0 | 0 | -0 | 1540 | 4.02 | 4.02 | 8.04 | 8.04 | -3.35 | 28.5 | 0.00 |
| 4 | 86 | -0 | -2249 | -0 | 0 | -0 | 1116 | 4.02 | 4.02 | 8.04 | 8.04 | -2.43 | 20.7 | 0.00 |
| 5 | 86 | -0 | -2056 | -0 | 0 | -0 | 1011 | 4.02 | 4.02 | 8.04 | 8.04 | -2.20 | 18.7 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 108 | -0 | -2620 | -0 | 0 | -0 | 977 | 4.02 | 4.02 | 8.04 | 8.04 | -2.13 | 18.1 | 0.00 |
| 4 | 108 | -0 | -1964 | -0 | 0 | -0 | 694 | 4.02 | 4.02 | 8.04 | 8.04 | -1.51 | 12.8 | 0.00 |
| 5 | 108 | -0 | -1799 | -0 | 0 | -0 | 624 | 4.02 | 4.02 | 8.04 | 8.04 | -1.36 | 11.6 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 129 | -0 | -2620 | -0 | 0 | -0 | 413 | 4.02 | 4.02 | 8.04 | 8.04 | -0.90 | 7.7 | 0.00 |
| 4 | 129 | -0 | -1964 | -0 | 0 | -0 | 272 | 4.02 | 4.02 | 8.04 | 8.04 | -0.59 | 5.0 | 0.00 |
| 5 | 129 | -0 | -1799 | -0 | 0 | -0 | 237 | 4.02 | 4.02 | 8.04 | 8.04 | -0.52 | 4.4 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 150 | -0 | -2261 | -0 | 0 | 0 | -73 | 4.02 | 4.02 | 8.04 | 8.04 | -0.16 | 1.3 | 0.00 |
| 4 | 150 | -0 | -1705 | -0 | 0 | 0 | -94 | 4.02 | 4.02 | 8.04 | 8.04 | -0.21 | 1.7 | 0.00 |
| 5 | 150 | -0 | -1566 | -0 | 0 | 0 | -100 | 4.02 | 4.02 | 8.04 | 8.04 | -0.22 | 1.8 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 172 | -0 | -2261 | -0 | 0 | 0 | -559 | 4.02 | 4.02 | 8.04 | 8.04 | -1.22 | 10.3 | 0.00 |
| 4 | 172 | -0 | -1705 | -0 | 0 | 0 | -461 | 4.02 | 4.02 | 8.04 | 8.04 | -1.00 | 8.5 | 0.00 |
| 5 | 172 | -0 | -1566 | -0 | 0 | 0 | -436 | 4.02 | 4.02 | 8.04 | 8.04 | -0.95 | 8.1 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 194 | -0 | -1942 | -0 | 0 | 0 | -976 | 4.02 | 4.02 | 8.04 | 8.04 | -2.12 | 18.1 | 0.00 |



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| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 194 | -0 | -1473 | -0 | 0 | 0 | -777 | 4.02 | 4.02 | 8.04 | 8.04 | -1.69 | 14.4 | 0.00 |
| 5 | 194 | -0 | -1356 | -0 | 0 | 0 | -728 | 4.02 | 4.02 | 8.04 | 8.04 | -1.58 | 13.5 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 215 | -0 | -1942 | -0 | 0 | 0 | -1394 | 4.02 | 4.02 | 8.04 | 8.04 | -3.03 | 25.8 | 0.00 |
| 4 | 215 | -0 | -1473 | -0 | 0 | 0 | -1094 | 4.02 | 4.02 | 8.04 | 8.04 | -2.38 | 20.3 | 0.00 |
| 5 | 215 | -0 | -1356 | -0 | 0 | 0 | -1019 | 4.02 | 4.02 | 8.04 | 8.04 | -2.22 | 18.9 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE06_IP1** Descrizione: **CORDOLI DI FONDAZIONE 24-25-26**
**ASTA NUM. 16** NI 39 NF 34 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | | | | | | | | | | | | -- | |
| | cm | | kg | | | kg*m | | | | $cm^2$ | | | $kg/cm^2$ | mm |
| 3 | 0 | -0 | -1295 | -0 | 0 | -0 | 877 | 4.02 | 4.02 | 8.04 | 8.04 | -1.91 | 16.2 | 0.00 |
| 4 | 0 | -0 | -1278 | -0 | 0 | -0 | 681 | 4.02 | 4.02 | 8.04 | 8.04 | -1.48 | 12.6 | 0.00 |
| 5 | 0 | -0 | -1273 | -0 | 0 | -0 | 632 | 4.02 | 4.02 | 8.04 | 8.04 | -1.37 | 11.7 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 18 | -0 | -1295 | -0 | 0 | -0 | 844 | 4.02 | 4.02 | 8.04 | 8.04 | -1.84 | 15.6 | 0.00 |
| 4 | 18 | -0 | -1278 | -0 | 0 | -0 | 649 | 4.02 | 4.02 | 8.04 | 8.04 | -1.41 | 12.0 | 0.00 |
| 5 | 18 | -0 | -1273 | -0 | 0 | -0 | 600 | 4.02 | 4.02 | 8.04 | 8.04 | -1.31 | 11.1 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 35 | -0 | -1295 | -0 | 0 | -0 | 618 | 4.02 | 4.02 | 8.04 | 8.04 | -1.34 | 11.4 | 0.00 |
| 4 | 35 | -0 | -1278 | -0 | 0 | -0 | 425 | 4.02 | 4.02 | 8.04 | 8.04 | -0.92 | 7.9 | 0.00 |
| 5 | 35 | -0 | -1273 | -0 | 0 | -0 | 377 | 4.02 | 4.02 | 8.04 | 8.04 | -0.82 | 7.0 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 52 | -0 | -1125 | -0 | 0 | -0 | 421 | 4.02 | 4.02 | 8.04 | 8.04 | -0.91 | 7.8 | 0.00 |
| 4 | 52 | -0 | -1136 | -0 | 0 | -0 | 226 | 4.02 | 4.02 | 8.04 | 8.04 | -0.49 | 4.2 | 0.00 |
| 5 | 52 | -0 | -1138 | -0 | 0 | -0 | 178 | 4.02 | 4.02 | 8.04 | 8.04 | -0.39 | 3.3 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 70 | -0 | -1125 | -0 | 0 | -0 | 224 | 4.02 | 4.02 | 8.04 | 8.04 | -0.49 | 4.1 | 0.00 |
| 4 | 70 | -0 | -1136 | -0 | 0 | -0 | 28 | 4.02 | 4.02 | 8.04 | 8.04 | -0.06 | 0.5 | 0.00 |
| 5 | 70 | -0 | -1138 | -0 | 0 | 0 | -21 | 4.02 | 4.02 | 8.04 | 8.04 | -0.05 | 0.4 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 88 | -0 | -958 | -0 | 0 | -0 | 56 | 4.02 | 4.02 | 8.04 | 8.04 | -0.12 | 1.0 | 0.00 |
| 4 | 88 | -0 | -998 | -0 | 0 | 0 | -147 | 4.02 | 4.02 | 8.04 | 8.04 | -0.32 | 2.7 | 0.00 |
| 5 | 88 | -0 | -1009 | -0 | 0 | 0 | -198 | 4.02 | 4.02 | 8.04 | 8.04 | -0.43 | 3.7 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 105 | -0 | -958 | -0 | 0 | 0 | -112 | 4.02 | 4.02 | 8.04 | 8.04 | -0.24 | 2.1 | 0.00 |
| 4 | 105 | -0 | -998 | -0 | 0 | 0 | -322 | 4.02 | 4.02 | 8.04 | 8.04 | -0.70 | 6.0 | 0.00 |
| 5 | 105 | -0 | -1009 | -0 | 0 | 0 | -375 | 4.02 | 4.02 | 8.04 | 8.04 | -0.81 | 6.9 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 122 | -0 | -793 | -0 | 0 | 0 | -251 | 4.02 | 4.02 | 8.04 | 8.04 | -0.55 | 4.6 | 0.00 |
| 4 | 122 | -0 | -866 | -0 | 0 | 0 | -473 | 4.02 | 4.02 | 8.04 | 8.04 | -1.03 | 8.8 | 0.00 |
| 5 | 122 | -0 | -884 | -0 | 0 | 0 | -529 | 4.02 | 4.02 | 8.04 | 8.04 | -1.15 | 9.8 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 140 | -0 | -793 | -0 | 0 | 0 | -389 | 4.02 | 4.02 | 8.04 | 8.04 | -0.85 | 7.2 | 0.00 |
| 4 | 140 | -0 | -866 | -0 | 0 | 0 | -625 | 4.02 | 4.02 | 8.04 | 8.04 | -1.36 | 11.6 | 0.00 |
| 5 | 140 | -0 | -884 | -0 | 0 | 0 | -684 | 4.02 | 4.02 | 8.04 | 8.04 | -1.49 | 12.7 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 158 | -0 | -630 | -0 | 0 | 0 | -500 | 4.02 | 4.02 | 8.04 | 8.04 | -1.09 | 9.2 | 0.00 |
| 4 | 158 | -0 | -738 | -0 | 0 | 0 | -754 | 4.02 | 4.02 | 8.04 | 8.04 | -1.64 | 14.0 | 0.00 |
| 5 | 158 | -0 | -765 | -0 | 0 | 0 | -818 | 4.02 | 4.02 | 8.04 | 8.04 | -1.78 | 15.1 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 175 | -0 | -630 | -0 | 0 | 0 | -610 | 4.02 | 4.02 | 8.04 | 8.04 | -1.33 | 11.3 | 0.00 |
| 4 | 175 | -0 | -738 | -0 | 0 | 0 | -883 | 4.02 | 4.02 | 8.04 | 8.04 | -1.92 | 16.4 | 0.00 |
| 5 | 175 | -0 | -765 | -0 | 0 | 0 | -952 | 4.02 | 4.02 | 8.04 | 8.04 | -2.07 | 17.6 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE06_IP1** Descrizione: **CORDOLI DI FONDAZIONE 24-25-26**
**ASTA NUM. 17** NI 34 NF 40 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | | | | | | | | | | | | -- | |
| | cm | | kg | | | kg*m | | | | $cm^2$ | | | $kg/cm^2$ | mm |
| 3 | 0 | -0 | -369 | -0 | 0 | 0 | -229 | 4.02 | 4.02 | 8.04 | 8.04 | -0.50 | 4.2 | 0.00 |
| 4 | 0 | -0 | -157 | -0 | 0 | 0 | -582 | 4.02 | 4.02 | 8.04 | 8.04 | -1.27 | 10.8 | 0.00 |
| 5 | 0 | -0 | -104 | -0 | 0 | 0 | -670 | 4.02 | 4.02 | 8.04 | 8.04 | -1.46 | 12.4 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 59 | -0 | -369 | -0 | 0 | 0 | -447 | 4.02 | 4.02 | 8.04 | 8.04 | -0.97 | 8.3 | 0.00 |
| 4 | 59 | -0 | -157 | -0 | 0 | 0 | -675 | 4.02 | 4.02 | 8.04 | 8.04 | -1.47 | 12.5 | 0.00 |
| 5 | 59 | -0 | -104 | -0 | 0 | 0 | -732 | 4.02 | 4.02 | 8.04 | 8.04 | -1.59 | 13.6 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 118 | -0 | -369 | -0 | 0 | 0 | -666 | 4.02 | 4.02 | 8.04 | 8.04 | -1.45 | 12.3 | 0.00 |
| 4 | 118 | -0 | -157 | -0 | 0 | 0 | -768 | 4.02 | 4.02 | 8.04 | 8.04 | -1.67 | 14.2 | 0.00 |
| 5 | 118 | -0 | -104 | -0 | 0 | 0 | -794 | 4.02 | 4.02 | 8.04 | 8.04 | -1.73 | 14.7 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 178 | -0 | -87 | -0 | 0 | 0 | -717 | 4.02 | 4.02 | 8.04 | 8.04 | -1.56 | 13.3 | 0.00 |



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| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 178 | -0 | 18 | 0 | 0 | 0 | -758 | 4.02 | 4.02 | 8.04 | 8.04 | -1.65 | 14.0 | 0.00 |
| 5 | 178 | -0 | 44 | 0 | 0 | 0 | -768 | 4.02 | 4.02 | 8.04 | 8.04 | -1.67 | 14.2 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 237 | -0 | 235 | 0 | 0 | 0 | -768 | 4.02 | 4.02 | 8.04 | 8.04 | -1.67 | 14.2 | 0.00 |
| 4 | 237 | -0 | 235 | 0 | 0 | 0 | -747 | 4.02 | 4.02 | 8.04 | 8.04 | -1.63 | 13.8 | 0.00 |
| 5 | 237 | -0 | 235 | 0 | 0 | 0 | -742 | 4.02 | 4.02 | 8.04 | 8.04 | -1.61 | 13.7 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 296 | -0 | 235 | 0 | 0 | 0 | -629 | 4.02 | 4.02 | 8.04 | 8.04 | -1.37 | 11.6 | 0.00 |
| 4 | 296 | -0 | 235 | 0 | 0 | 0 | -608 | 4.02 | 4.02 | 8.04 | 8.04 | -1.32 | 11.3 | 0.00 |
| 5 | 296 | -0 | 235 | 0 | 0 | 0 | -603 | 4.02 | 4.02 | 8.04 | 8.04 | -1.31 | 11.2 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 355 | -0 | 638 | 0 | 0 | 0 | -490 | 4.02 | 4.02 | 8.04 | 8.04 | -1.07 | 9.1 | 0.00 |
| 4 | 355 | -0 | 535 | 0 | 0 | 0 | -469 | 4.02 | 4.02 | 8.04 | 8.04 | -1.02 | 8.7 | 0.00 |
| 5 | 355 | -0 | 509 | 0 | 0 | 0 | -464 | 4.02 | 4.02 | 8.04 | 8.04 | -1.01 | 8.6 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 414 | -0 | 638 | 0 | 0 | 0 | -112 | 4.02 | 4.02 | 8.04 | 8.04 | -0.24 | 2.1 | 0.00 |
| 4 | 414 | -0 | 535 | 0 | 0 | 0 | -153 | 4.02 | 4.02 | 8.04 | 8.04 | -0.33 | 2.8 | 0.00 |
| 5 | 414 | -0 | 509 | 0 | 0 | 0 | -163 | 4.02 | 4.02 | 8.04 | 8.04 | -0.35 | 3.0 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 474 | -0 | 1149 | 0 | 0 | -0 | 266 | 4.02 | 4.02 | 8.04 | 8.04 | -0.58 | 4.9 | 0.00 |
| 4 | 474 | -0 | 943 | 0 | 0 | -0 | 164 | 4.02 | 4.02 | 8.04 | 8.04 | -0.36 | 3.0 | 0.00 |
| 5 | 474 | -0 | 891 | 0 | 0 | -0 | 138 | 4.02 | 4.02 | 8.04 | 8.04 | -0.30 | 2.6 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 533 | -0 | 1149 | 0 | 0 | -0 | 946 | 4.02 | 4.02 | 8.04 | 8.04 | -2.06 | 17.5 | 0.00 |
| 4 | 533 | -0 | 943 | 0 | 0 | -0 | 722 | 4.02 | 4.02 | 8.04 | 8.04 | -1.57 | 13.4 | 0.00 |
| 5 | 533 | -0 | 891 | 0 | 0 | -0 | 666 | 4.02 | 4.02 | 8.04 | 8.04 | -1.45 | 12.3 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 592 | -0 | 1149 | 0 | 0 | -0 | 1454 | 4.02 | 4.02 | 8.04 | 8.04 | -3.16 | 26.9 | 0.00 |
| 4 | 592 | -0 | 943 | 0 | 0 | -0 | 1139 | 4.02 | 4.02 | 8.04 | 8.04 | -2.48 | 21.1 | 0.00 |
| 5 | 592 | -0 | 891 | 0 | 0 | -0 | 1060 | 4.02 | 4.02 | 8.04 | 8.04 | -2.31 | 19.6 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE07_IP1** Descrizione: **CORDOLI DI FONDAZIONE 27-28-29-30-31**
**ASTA NUM. 18** NI 46 NF 41 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cm² | | | | | kg/cm² | mm |
| 3 | 0 | -0 | -446 | -0 | 0 | 0 | -348 | 4.02 | 4.02 | 8.04 | 8.04 | -0.76 | 6.5 | 0.00 |
| 4 | 0 | -0 | -411 | -0 | 0 | 0 | -322 | 4.02 | 4.02 | 8.04 | 8.04 | -0.70 | 6.0 | 0.00 |
| 5 | 0 | -0 | -402 | -0 | 0 | 0 | -316 | 4.02 | 4.02 | 8.04 | 8.04 | -0.69 | 5.8 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 18 | -0 | -446 | -0 | 0 | 0 | -427 | 4.02 | 4.02 | 8.04 | 8.04 | -0.93 | 7.9 | 0.00 |
| 4 | 18 | -0 | -411 | -0 | 0 | 0 | -394 | 4.02 | 4.02 | 8.04 | 8.04 | -0.86 | 7.3 | 0.00 |
| 5 | 18 | -0 | -402 | -0 | 0 | 0 | -386 | 4.02 | 4.02 | 8.04 | 8.04 | -0.84 | 7.1 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 35 | -0 | -446 | -0 | 0 | 0 | -505 | 4.02 | 4.02 | 8.04 | 8.04 | -1.10 | 9.3 | 0.00 |
| 4 | 35 | -0 | -411 | -0 | 0 | 0 | -466 | 4.02 | 4.02 | 8.04 | 8.04 | -1.01 | 8.6 | 0.00 |
| 5 | 35 | -0 | -402 | -0 | 0 | 0 | -456 | 4.02 | 4.02 | 8.04 | 8.04 | -0.99 | 8.4 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 52 | -0 | -352 | -0 | 0 | 0 | -566 | 4.02 | 4.02 | 8.04 | 8.04 | -1.23 | 10.5 | 0.00 |
| 4 | 52 | -0 | -351 | -0 | 0 | 0 | -527 | 4.02 | 4.02 | 8.04 | 8.04 | -1.15 | 9.8 | 0.00 |
| 5 | 52 | -0 | -351 | -0 | 0 | 0 | -518 | 4.02 | 4.02 | 8.04 | 8.04 | -1.13 | 9.6 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 70 | -0 | -352 | -0 | 0 | 0 | -628 | 4.02 | 4.02 | 8.04 | 8.04 | -1.37 | 11.6 | 0.00 |
| 4 | 70 | -0 | -351 | -0 | 0 | 0 | -589 | 4.02 | 4.02 | 8.04 | 8.04 | -1.28 | 10.9 | 0.00 |
| 5 | 70 | -0 | -351 | -0 | 0 | 0 | -579 | 4.02 | 4.02 | 8.04 | 8.04 | -1.26 | 10.7 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 88 | -0 | -248 | -0 | 0 | 0 | -671 | 4.02 | 4.02 | 8.04 | 8.04 | -1.46 | 12.4 | 0.00 |
| 4 | 88 | -0 | -285 | -0 | 0 | 0 | -639 | 4.02 | 4.02 | 8.04 | 8.04 | -1.39 | 11.8 | 0.00 |
| 5 | 88 | -0 | -295 | -0 | 0 | 0 | -630 | 4.02 | 4.02 | 8.04 | 8.04 | -1.37 | 11.7 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 105 | -0 | -248 | -0 | 0 | 0 | -714 | 4.02 | 4.02 | 8.04 | 8.04 | -1.55 | 13.2 | 0.00 |
| 4 | 105 | -0 | -285 | -0 | 0 | 0 | -689 | 4.02 | 4.02 | 8.04 | 8.04 | -1.50 | 12.7 | 0.00 |
| 5 | 105 | -0 | -295 | -0 | 0 | 0 | -682 | 4.02 | 4.02 | 8.04 | 8.04 | -1.48 | 12.6 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 122 | -0 | -133 | -0 | 0 | 0 | -738 | 4.02 | 4.02 | 8.04 | 8.04 | -1.60 | 13.7 | 0.00 |
| 4 | 122 | -0 | -213 | -0 | 0 | 0 | -726 | 4.02 | 4.02 | 8.04 | 8.04 | -1.58 | 13.4 | 0.00 |
| 5 | 122 | -0 | -233 | -0 | 0 | 0 | -723 | 4.02 | 4.02 | 8.04 | 8.04 | -1.57 | 13.4 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 140 | -0 | -133 | -0 | 0 | 0 | -761 | 4.02 | 4.02 | 8.04 | 8.04 | -1.66 | 14.1 | 0.00 |
| 4 | 140 | -0 | -213 | -0 | 0 | 0 | -763 | 4.02 | 4.02 | 8.04 | 8.04 | -1.66 | 14.1 | 0.00 |
| 5 | 140 | -0 | -233 | -0 | 0 | 0 | -764 | 4.02 | 4.02 | 8.04 | 8.04 | -1.66 | 14.1 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 158 | -0 | -5 | -0 | 0 | 0 | -762 | 4.02 | 4.02 | 8.04 | 8.04 | -1.66 | 14.1 | 0.00 |
| 4 | 158 | -0 | -132 | -0 | 0 | 0 | -786 | 4.02 | 4.02 | 8.04 | 8.04 | -1.71 | 14.6 | 0.00 |
| 5 | 158 | -0 | -163 | -0 | 0 | 0 | -792 | 4.02 | 4.02 | 8.04 | 8.04 | -1.72 | 14.7 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)



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| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 175 | -0 | -5 | -0 | 0 | 0 | -763 | 4.02 | 4.02 | 8.04 | 8.04 | -1.66 | 14.1 | 0.00 |
| 4 | 175 | -0 | -132 | -0 | 0 | 0 | -809 | 4.02 | 4.02 | 8.04 | 8.04 | -1.76 | 15.0 | 0.00 |
| 5 | 175 | -0 | -163 | -0 | 0 | 0 | -821 | 4.02 | 4.02 | 8.04 | 8.04 | -1.79 | 15.2 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE07_IP1** Descrizione: **CORDOLI DI FONDAZIONE 27-28-29-30-31**
**ASTA NUM. 19** NI 41 NF 82 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | | kg | | | kg*m | | | | $cm^2$ | | | $kg/cm^2$ | mm |
| 3 | 0 | -0 | 993 | 0 | 0 | 0 | -907 | 4.02 | 4.02 | 8.04 | 8.04 | -1.97 | 16.8 | 0.00 |
| 4 | 0 | -0 | 870 | 0 | 0 | 0 | -925 | 4.02 | 4.02 | 8.04 | 8.04 | -2.01 | 17.1 | 0.00 |
| 5 | 0 | -0 | 840 | 0 | 0 | 0 | -930 | 4.02 | 4.02 | 8.04 | 8.04 | -2.02 | 17.2 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 18 | -0 | 993 | 0 | 0 | 0 | -728 | 4.02 | 4.02 | 8.04 | 8.04 | -1.58 | 13.5 | 0.00 |
| 4 | 18 | -0 | 870 | 0 | 0 | 0 | -769 | 4.02 | 4.02 | 8.04 | 8.04 | -1.67 | 14.2 | 0.00 |
| 5 | 18 | -0 | 840 | 0 | 0 | 0 | -779 | 4.02 | 4.02 | 8.04 | 8.04 | -1.69 | 14.4 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 36 | -0 | 1155 | 0 | 0 | 0 | -550 | 4.02 | 4.02 | 8.04 | 8.04 | -1.20 | 10.2 | 0.00 |
| 4 | 36 | -0 | 975 | 0 | 0 | 0 | -612 | 4.02 | 4.02 | 8.04 | 8.04 | -1.33 | 11.3 | 0.00 |
| 5 | 36 | -0 | 931 | 0 | 0 | 0 | -628 | 4.02 | 4.02 | 8.04 | 8.04 | -1.37 | 11.6 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 54 | -0 | 1155 | 0 | 0 | 0 | -342 | 4.02 | 4.02 | 8.04 | 8.04 | -0.74 | 6.3 | 0.00 |
| 4 | 54 | -0 | 975 | 0 | 0 | 0 | -437 | 4.02 | 4.02 | 8.04 | 8.04 | -0.95 | 8.1 | 0.00 |
| 5 | 54 | -0 | 931 | 0 | 0 | 0 | -460 | 4.02 | 4.02 | 8.04 | 8.04 | -1.00 | 8.5 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 72 | -0 | 1333 | 0 | 0 | 0 | -134 | 4.02 | 4.02 | 8.04 | 8.04 | -0.29 | 2.5 | 0.00 |
| 4 | 72 | -0 | 1094 | 0 | 0 | 0 | -261 | 4.02 | 4.02 | 8.04 | 8.04 | -0.57 | 4.8 | 0.00 |
| 5 | 72 | -0 | 1034 | 0 | 0 | 0 | -293 | 4.02 | 4.02 | 8.04 | 8.04 | -0.64 | 5.4 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 90 | -0 | 1333 | 0 | 0 | -0 | 106 | 4.02 | 4.02 | 8.04 | 8.04 | -0.23 | 2.0 | 0.00 |
| 4 | 90 | -0 | 1094 | 0 | 0 | 0 | -64 | 4.02 | 4.02 | 8.04 | 8.04 | -0.14 | 1.2 | 0.00 |
| 5 | 90 | -0 | 1034 | 0 | 0 | 0 | -107 | 4.02 | 4.02 | 8.04 | 8.04 | -0.23 | 2.0 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 108 | -0 | 1529 | 0 | 0 | -0 | 346 | 4.02 | 4.02 | 8.04 | 8.04 | -0.75 | 6.4 | 0.00 |
| 4 | 108 | -0 | 1226 | 0 | 0 | -0 | 133 | 4.02 | 4.02 | 8.04 | 8.04 | -0.29 | 2.5 | 0.00 |
| 5 | 108 | -0 | 1150 | 0 | 0 | -0 | 80 | 4.02 | 4.02 | 8.04 | 8.04 | -0.17 | 1.5 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 126 | -0 | 1529 | 0 | 0 | -0 | 621 | 4.02 | 4.02 | 8.04 | 8.04 | -1.35 | 11.5 | 0.00 |
| 4 | 126 | -0 | 1226 | 0 | 0 | -0 | 354 | 4.02 | 4.02 | 8.04 | 8.04 | -0.77 | 6.5 | 0.00 |
| 5 | 126 | -0 | 1150 | 0 | 0 | -0 | 287 | 4.02 | 4.02 | 8.04 | 8.04 | -0.62 | 5.3 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 144 | -0 | 1742 | 0 | 0 | -0 | 896 | 4.02 | 4.02 | 8.04 | 8.04 | -1.95 | 16.6 | 0.00 |
| 4 | 144 | -0 | 1372 | 0 | 0 | -0 | 574 | 4.02 | 4.02 | 8.04 | 8.04 | -1.25 | 10.6 | 0.00 |
| 5 | 144 | -0 | 1280 | 0 | 0 | -0 | 494 | 4.02 | 4.02 | 8.04 | 8.04 | -1.07 | 9.1 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 162 | -0 | 1742 | 0 | 0 | -0 | 1210 | 4.02 | 4.02 | 8.04 | 8.04 | -2.63 | 22.4 | 0.00 |
| 4 | 162 | -0 | 1372 | 0 | 0 | -0 | 821 | 4.02 | 4.02 | 8.04 | 8.04 | -1.79 | 15.2 | 0.00 |
| 5 | 162 | -0 | 1280 | 0 | 0 | -0 | 724 | 4.02 | 4.02 | 8.04 | 8.04 | -1.58 | 13.4 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 180 | -0 | 1742 | 0 | 0 | -0 | 1262 | 4.02 | 4.02 | 8.04 | 8.04 | -2.75 | 23.4 | 0.00 |
| 4 | 180 | -0 | 1372 | 0 | 0 | -0 | 862 | 4.02 | 4.02 | 8.04 | 8.04 | -1.88 | 16.0 | 0.00 |
| 5 | 180 | -0 | 1280 | 0 | 0 | -0 | 762 | 4.02 | 4.02 | 8.04 | 8.04 | -1.66 | 14.1 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE07_IP1** Descrizione: **CORDOLI DI FONDAZIONE 27-28-29-30-31**
**ASTA NUM. 20** NI 82 NF 43 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | | kg | | | kg*m | | | | $cm^2$ | | | $kg/cm^2$ | mm |
| 3 | 0 | -0 | -456 | -0 | 0 | -0 | 1435 | 4.02 | 4.02 | 8.04 | 8.04 | -3.12 | 26.6 | 0.00 |
| 4 | 0 | -0 | -293 | -0 | 0 | -0 | 1009 | 4.02 | 4.02 | 8.04 | 8.04 | -2.20 | 18.7 | 0.00 |
| 5 | 0 | -0 | -252 | -0 | 0 | -0 | 903 | 4.02 | 4.02 | 8.04 | 8.04 | -1.96 | 16.7 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 20 | -0 | -456 | -0 | 0 | -0 | 1413 | 4.02 | 4.02 | 8.04 | 8.04 | -3.07 | 26.2 | 0.00 |
| 4 | 20 | -0 | -293 | -0 | 0 | -0 | 995 | 4.02 | 4.02 | 8.04 | 8.04 | -2.17 | 18.4 | 0.00 |
| 5 | 20 | -0 | -252 | -0 | 0 | -0 | 891 | 4.02 | 4.02 | 8.04 | 8.04 | -1.94 | 16.5 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 39 | -0 | -456 | -0 | 0 | -0 | 1323 | 4.02 | 4.02 | 8.04 | 8.04 | -2.88 | 24.5 | 0.00 |
| 4 | 39 | -0 | -293 | -0 | 0 | -0 | 938 | 4.02 | 4.02 | 8.04 | 8.04 | -2.04 | 17.4 | 0.00 |
| 5 | 39 | -0 | -252 | -0 | 0 | -0 | 841 | 4.02 | 4.02 | 8.04 | 8.04 | -1.83 | 15.6 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 59 | -0 | -192 | -0 | 0 | -0 | 1285 | 4.02 | 4.02 | 8.04 | 8.04 | -2.80 | 23.8 | 0.00 |
| 4 | 59 | -0 | -108 | -0 | 0 | -0 | 916 | 4.02 | 4.02 | 8.04 | 8.04 | -1.99 | 17.0 | 0.00 |
| 5 | 59 | -0 | -87 | -0 | 0 | -0 | 824 | 4.02 | 4.02 | 8.04 | 8.04 | -1.79 | 15.3 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)



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| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 79 | -0 | -192 | -0 | 0 | -0 | 1248 | 4.02 | 4.02 | 10.05 | 8.04 | -2.70 | 22.8 | 0.00 |
| 4 | 79 | -0 | -108 | -0 | 0 | -0 | 895 | 4.02 | 4.02 | 10.05 | 8.04 | -1.94 | 16.3 | 0.00 |
| 5 | 79 | -0 | 88 | 0 | 0 | -0 | 807 | 4.02 | 4.02 | 10.05 | 8.04 | -1.74 | 14.7 | 0.00 |

apost= -- aant= -- ainf= 6.03 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 98 | -0 | 83 | 0 | 0 | -0 | 1264 | 4.02 | 4.02 | 10.05 | 10.05 | -2.70 | 23.0 | 0.00 |
| 4 | 98 | -0 | 87 | 0 | 0 | -0 | 912 | 4.02 | 4.02 | 10.05 | 10.05 | -1.95 | 16.6 | 0.00 |
| 5 | 98 | -0 | 88 | 0 | 0 | -0 | 825 | 4.02 | 4.02 | 10.05 | 10.05 | -1.76 | 15.0 | 0.00 |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 118 | -0 | 366 | 0 | 0 | -0 | 1281 | 4.02 | 4.02 | 10.05 | 10.05 | -2.74 | 23.3 | 0.00 |
| 4 | 118 | -0 | 290 | 0 | 0 | -0 | 930 | 4.02 | 4.02 | 10.05 | 10.05 | -1.99 | 16.9 | 0.00 |
| 5 | 118 | -0 | 271 | 0 | 0 | -0 | 842 | 4.02 | 4.02 | 10.05 | 10.05 | -1.80 | 15.3 | 0.00 |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 138 | -0 | 366 | 0 | 0 | -0 | 1352 | 4.02 | 4.02 | 10.05 | 10.05 | -2.89 | 24.6 | 0.00 |
| 4 | 138 | -0 | 290 | 0 | 0 | -0 | 987 | 4.02 | 4.02 | 10.05 | 10.05 | -2.11 | 17.9 | 0.00 |
| 5 | 138 | -0 | 271 | 0 | 0 | -0 | 895 | 4.02 | 4.02 | 10.05 | 10.05 | -1.91 | 16.3 | 0.00 |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 158 | -0 | 653 | 0 | 0 | -0 | 1425 | 4.02 | 4.02 | 10.05 | 10.05 | -3.04 | 25.9 | 0.00 |
| 4 | 158 | -0 | 497 | 0 | 0 | -0 | 1044 | 4.02 | 4.02 | 10.05 | 10.05 | -2.23 | 19.0 | 0.00 |
| 5 | 158 | -0 | 458 | 0 | 0 | -0 | 949 | 4.02 | 4.02 | 10.05 | 10.05 | -2.03 | 17.2 | 0.00 |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 177 | -0 | 653 | 0 | 0 | -0 | 1554 | 4.02 | 4.02 | 10.05 | 10.05 | -3.32 | 28.2 | 0.00 |
| 4 | 177 | -0 | 497 | 0 | 0 | -0 | 1142 | 4.02 | 4.02 | 10.05 | 10.05 | -2.44 | 20.7 | 0.00 |
| 5 | 177 | -0 | 458 | 0 | 0 | -0 | 1039 | 4.02 | 4.02 | 10.05 | 10.05 | -2.22 | 18.9 | 0.00 |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 197 | -0 | 653 | 0 | 0 | -0 | 1584 | 4.02 | 4.02 | 10.05 | 10.05 | -3.38 | 28.8 | 0.00 |
| 4 | 197 | -0 | 497 | 0 | 0 | -0 | 1165 | 4.02 | 4.02 | 10.05 | 10.05 | -2.49 | 21.2 | 0.00 |
| 5 | 197 | -0 | 458 | 0 | 0 | -0 | 1060 | 4.02 | 4.02 | 10.05 | 10.05 | -2.26 | 19.3 | 0.00 |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE07_IP1** Descrizione: **CORDOLI DI FONDAZIONE 27-28-29-30-31**
**ASTA NUM. 21** NI 43 NF 47 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cm² | | | | | kg/cm² | mm |
| 3 | 0 | -0 | -1577 | -0 | 0 | -0 | 1440 | 4.02 | 4.02 | 10.05 | 10.05 | -3.08 | 26.2 | 0.00 |
| 4 | 0 | -0 | -1191 | -0 | 0 | -0 | 1057 | 4.02 | 4.02 | 10.05 | 10.05 | -2.26 | 19.2 | 0.00 |
| 5 | 0 | -0 | -1094 | -0 | 0 | -0 | 962 | 4.02 | 4.02 | 10.05 | 10.05 | -2.05 | 17.5 | 0.00 |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 22 | -0 | -1577 | -0 | 0 | -0 | 1338 | 4.02 | 4.02 | 10.05 | 10.05 | -2.86 | 24.3 | 0.00 |
| 4 | 22 | -0 | -1191 | -0 | 0 | -0 | 980 | 4.02 | 4.02 | 10.05 | 10.05 | -2.09 | 17.8 | 0.00 |
| 5 | 22 | -0 | -1094 | -0 | 0 | -0 | 891 | 4.02 | 4.02 | 10.05 | 10.05 | -1.90 | 16.2 | 0.00 |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 43 | -0 | -1577 | -0 | 0 | -0 | 999 | 4.02 | 4.02 | 10.05 | 10.05 | -2.13 | 18.1 | 0.00 |
| 4 | 43 | -0 | -1191 | -0 | 0 | -0 | 724 | 4.02 | 4.02 | 10.05 | 10.05 | -1.55 | 13.1 | 0.00 |
| 5 | 43 | -0 | -1094 | -0 | 0 | -0 | 656 | 4.02 | 4.02 | 10.05 | 10.05 | -1.40 | 11.9 | 0.00 |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 64 | -0 | -1268 | -0 | 0 | -0 | 726 | 4.02 | 4.02 | 10.05 | 10.05 | -1.55 | 13.2 | 0.00 |
| 4 | 64 | -0 | -963 | -0 | 0 | -0 | 517 | 4.02 | 4.02 | 10.05 | 10.05 | -1.10 | 9.4 | 0.00 |
| 5 | 64 | -0 | -887 | -0 | 0 | -0 | 464 | 4.02 | 4.02 | 10.05 | 10.05 | -0.99 | 8.4 | 0.00 |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 86 | -0 | -1268 | -0 | 0 | -0 | 454 | 4.02 | 4.02 | 10.05 | 10.05 | -0.97 | 8.2 | 0.00 |
| 4 | 86 | -0 | -963 | -0 | 0 | -0 | 310 | 4.02 | 4.02 | 10.05 | 10.05 | -0.66 | 5.6 | 0.00 |
| 5 | 86 | -0 | -887 | -0 | 0 | -0 | 274 | 4.02 | 4.02 | 10.05 | 10.05 | -0.58 | 5.0 | 0.00 |

apost= -- aant= -- ainf= 6.03 asup= 6.03 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 108 | -0 | -966 | -0 | 0 | -0 | 246 | 4.02 | 4.02 | 8.04 | 8.04 | -0.54 | 4.6 | 0.00 |
| 4 | 108 | -0 | -740 | -0 | 0 | -0 | 151 | 4.02 | 4.02 | 8.04 | 8.04 | -0.33 | 2.8 | 0.00 |
| 5 | 108 | -0 | -683 | -0 | 0 | -0 | 127 | 4.02 | 4.02 | 8.04 | 8.04 | -0.28 | 2.3 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 129 | -0 | -966 | -0 | 0 | -0 | 38 | 4.02 | 4.02 | 8.04 | 8.04 | -0.08 | 0.7 | 0.00 |
| 4 | 129 | -0 | -740 | -0 | 0 | 0 | -8 | 4.02 | 4.02 | 8.04 | 8.04 | -0.02 | 0.2 | 0.00 |
| 5 | 129 | -0 | -683 | -0 | 0 | 0 | -20 | 4.02 | 4.02 | 8.04 | 8.04 | -0.04 | 0.4 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 150 | -0 | -674 | -0 | 0 | 0 | -107 | 4.02 | 4.02 | 8.04 | 8.04 | -0.23 | 2.0 | 0.00 |
| 4 | 150 | -0 | -521 | -0 | 0 | 0 | -120 | 4.02 | 4.02 | 8.04 | 8.04 | -0.26 | 2.2 | 0.00 |
| 5 | 150 | -0 | -483 | -0 | 0 | 0 | -124 | 4.02 | 4.02 | 8.04 | 8.04 | -0.27 | 2.3 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 172 | -0 | -674 | -0 | 0 | 0 | -252 | 4.02 | 4.02 | 8.04 | 8.04 | -0.55 | 4.7 | 0.00 |
| 4 | 172 | -0 | -521 | -0 | 0 | 0 | -232 | 4.02 | 4.02 | 8.04 | 8.04 | -0.51 | 4.3 | 0.00 |
| 5 | 172 | -0 | -483 | -0 | 0 | 0 | -228 | 4.02 | 4.02 | 8.04 | 8.04 | -0.50 | 4.2 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 194 | -0 | -392 | -0 | 0 | 0 | -336 | 4.02 | 4.02 | 8.04 | 8.04 | -0.73 | 6.2 | 0.00 |
| 4 | 194 | -0 | -307 | -0 | 0 | 0 | -298 | 4.02 | 4.02 | 8.04 | 8.04 | -0.65 | 5.5 | 0.00 |
| 5 | 194 | -0 | -286 | -0 | 0 | 0 | -289 | 4.02 | 4.02 | 8.04 | 8.04 | -0.63 | 5.4 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 215 | -0 | -392 | -0 | 0 | 0 | -420 | 4.02 | 4.02 | 8.04 | 8.04 | -0.91 | 7.8 | 0.00 |
| 4 | 215 | -0 | -307 | -0 | 0 | 0 | -364 | 4.02 | 4.02 | 8.04 | 8.04 | -0.79 | 6.7 | 0.00 |
| 5 | 215 | -0 | -286 | -0 | 0 | 0 | -350 | 4.02 | 4.02 | 8.04 | 8.04 | -0.76 | 6.5 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)



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Nome travata: **CORDOLI DI FONDAZIONE08_IP1** Descrizione: **CORDOLI DI FONDAZIONE 1-6-9-14-19-24-27**
**ASTA NUM. 22** NI 1 NF 95 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cm² | | | | | kg/cm² | mm |
| 3 | 0 | -0 | -27 | 0 | 0 | 0 | -947 | 4.02 | 4.02 | 8.04 | 8.04 | -2.06 | 17.5 | 0.00 |
| 4 | 0 | -0 | 21 | 0 | 0 | 0 | -781 | 4.02 | 4.02 | 8.04 | 8.04 | -1.70 | 14.5 | 0.00 |
| 5 | 0 | -0 | 33 | 0 | 0 | 0 | -740 | 4.02 | 4.02 | 8.04 | 8.04 | -1.61 | 13.7 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 36 | -0 | -27 | 0 | 0 | 0 | -957 | 4.02 | 4.02 | 8.04 | 8.04 | -2.08 | 17.7 | 0.00 |
| 4 | 36 | -0 | 21 | 0 | 0 | 0 | -773 | 4.02 | 4.02 | 8.04 | 8.04 | -1.68 | 14.3 | 0.00 |
| 5 | 36 | -0 | 33 | 0 | 0 | 0 | -728 | 4.02 | 4.02 | 8.04 | 8.04 | -1.58 | 13.5 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 73 | -0 | 100 | 0 | 0 | 0 | -967 | 4.02 | 4.02 | 8.04 | 8.04 | -2.10 | 17.9 | 0.00 |
| 4 | 73 | -0 | 90 | 0 | 0 | 0 | -766 | 4.02 | 4.02 | 8.04 | 8.04 | -1.67 | 14.2 | 0.00 |
| 5 | 73 | -0 | 88 | 0 | 0 | 0 | -716 | 4.02 | 4.02 | 8.04 | 8.04 | -1.56 | 13.3 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 110 | -0 | 100 | 0 | 0 | 0 | -931 | 4.02 | 4.02 | 8.04 | 8.04 | -2.02 | 17.2 | 0.00 |
| 4 | 110 | -0 | 90 | 0 | 0 | 0 | -733 | 4.02 | 4.02 | 8.04 | 8.04 | -1.59 | 13.6 | 0.00 |
| 5 | 110 | -0 | 88 | 0 | 0 | 0 | -683 | 4.02 | 4.02 | 8.04 | 8.04 | -1.49 | 12.7 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 146 | -0 | 178 | 0 | 0 | 0 | -894 | 4.02 | 4.02 | 8.04 | 8.04 | -1.95 | 16.6 | 0.00 |
| 4 | 146 | -0 | 117 | 0 | 0 | 0 | -700 | 4.02 | 4.02 | 8.04 | 8.04 | -1.52 | 13.0 | 0.00 |
| 5 | 146 | -0 | 102 | 0 | 0 | 0 | -651 | 4.02 | 4.02 | 8.04 | 8.04 | -1.42 | 12.1 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 182 | -0 | 178 | 0 | 0 | 0 | -829 | 4.02 | 4.02 | 8.04 | 8.04 | -1.80 | 15.4 | 0.00 |
| 4 | 182 | -0 | 117 | 0 | 0 | 0 | -657 | 4.02 | 4.02 | 8.04 | 8.04 | -1.43 | 12.2 | 0.00 |
| 5 | 182 | -0 | 102 | 0 | 0 | 0 | -614 | 4.02 | 4.02 | 8.04 | 8.04 | -1.34 | 11.4 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 219 | -0 | 222 | 0 | 0 | 0 | -764 | 4.02 | 4.02 | 8.04 | 8.04 | -1.66 | 14.2 | 0.00 |
| 4 | 219 | -0 | 117 | 0 | 0 | 0 | -614 | 4.02 | 4.02 | 8.04 | 8.04 | -1.34 | 11.4 | 0.00 |
| 5 | 219 | -0 | 102 | 0 | 0 | 0 | -577 | 4.02 | 4.02 | 8.04 | 8.04 | -1.25 | 10.7 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 256 | -0 | 222 | 0 | 0 | 0 | -683 | 4.02 | 4.02 | 8.04 | 8.04 | -1.49 | 12.7 | 0.00 |
| 4 | 256 | -0 | 112 | 0 | 0 | 0 | -573 | 4.02 | 4.02 | 8.04 | 8.04 | -1.25 | 10.6 | 0.00 |
| 5 | 256 | -0 | 85 | 0 | 0 | 0 | -546 | 4.02 | 4.02 | 8.04 | 8.04 | -1.19 | 10.1 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 292 | -0 | 245 | 0 | 0 | 0 | -602 | 4.02 | 4.02 | 8.04 | 8.04 | -1.31 | 11.2 | 0.00 |
| 4 | 292 | -0 | 112 | 0 | 0 | 0 | -532 | 4.02 | 4.02 | 8.04 | 8.04 | -1.16 | 9.9 | 0.00 |
| 5 | 292 | -0 | 85 | 0 | 0 | 0 | -515 | 4.02 | 4.02 | 8.04 | 8.04 | -1.12 | 9.5 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 328 | -0 | 245 | 0 | 0 | 0 | -513 | 4.02 | 4.02 | 8.04 | 8.04 | -1.12 | 9.5 | 0.00 |
| 4 | 328 | -0 | 86 | 0 | 0 | 0 | -501 | 4.02 | 4.02 | 8.04 | 8.04 | -1.09 | 9.3 | 0.00 |
| 5 | 328 | -0 | 46 | 0 | 0 | 0 | -498 | 4.02 | 4.02 | 8.04 | 8.04 | -1.08 | 9.2 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 365 | -0 | 245 | 0 | 0 | 0 | -423 | 4.02 | 4.02 | 8.04 | 8.04 | -0.92 | 7.8 | 0.00 |
| 4 | 365 | -0 | 86 | 0 | 0 | 0 | -470 | 4.02 | 4.02 | 8.04 | 8.04 | -1.02 | 8.7 | 0.00 |
| 5 | 365 | -0 | 46 | 0 | 0 | 0 | -481 | 4.02 | 4.02 | 8.04 | 8.04 | -1.05 | 8.9 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |

Nome travata: **CORDOLI DI FONDAZIONE08_IP1** Descrizione: **CORDOLI DI FONDAZIONE 1-6-9-14-19-24-27**
**ASTA NUM. 23** NI 95 NF 5 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cm² | | | | | kg/cm² | mm |
| 3 | 0 | -0 | -9 | 0 | 0 | 0 | -266 | 4.02 | 4.02 | 8.04 | 8.04 | -0.58 | 4.9 | 0.00 |
| 4 | 0 | -0 | 108 | 0 | 0 | 0 | -351 | 4.02 | 4.02 | 8.04 | 8.04 | -0.76 | 6.5 | 0.00 |
| 5 | 0 | -0 | 137 | 0 | 0 | 0 | -372 | 4.02 | 4.02 | 8.04 | 8.04 | -0.81 | 6.9 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 36 | -0 | -9 | 0 | 0 | 0 | -269 | 4.02 | 4.02 | 8.04 | 8.04 | -0.59 | 5.0 | 0.00 |
| 4 | 36 | -0 | 108 | 0 | 0 | 0 | -311 | 4.02 | 4.02 | 8.04 | 8.04 | -0.68 | 5.8 | 0.00 |
| 5 | 36 | -0 | 137 | 0 | 0 | 0 | -322 | 4.02 | 4.02 | 8.04 | 8.04 | -0.70 | 6.0 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 73 | -0 | -9 | 0 | 0 | 0 | -273 | 4.02 | 4.02 | 8.04 | 8.04 | -0.59 | 5.1 | 0.00 |
| 4 | 73 | -0 | 108 | 0 | 0 | 0 | -272 | 4.02 | 4.02 | 8.04 | 8.04 | -0.59 | 5.0 | 0.00 |
| 5 | 73 | -0 | 137 | 0 | 0 | 0 | -272 | 4.02 | 4.02 | 8.04 | 8.04 | -0.59 | 5.0 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 110 | -0 | -5 | 0 | 0 | 0 | -274 | 4.02 | 4.02 | 8.04 | 8.04 | -0.60 | 5.1 | 0.00 |
| 4 | 110 | -0 | 62 | 0 | 0 | 0 | -250 | 4.02 | 4.02 | 8.04 | 8.04 | -0.54 | 4.6 | 0.00 |
| 5 | 110 | -0 | 78 | 0 | 0 | 0 | -243 | 4.02 | 4.02 | 8.04 | 8.04 | -0.53 | 4.5 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 146 | -0 | -5 | 0 | 0 | 0 | -276 | 4.02 | 4.02 | 8.04 | 8.04 | -0.60 | 5.1 | 0.00 |
| 4 | 146 | -0 | 62 | 0 | 0 | 0 | -227 | 4.02 | 4.02 | 8.04 | 8.04 | -0.49 | 4.2 | 0.00 |
| 5 | 146 | -0 | 78 | 0 | 0 | 0 | -215 | 4.02 | 4.02 | 8.04 | 8.04 | -0.47 | 4.0 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |



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| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 182 | -0 | -2 | 0 | 0 | 0 | -277 | 4.02 | 4.02 | 8.04 | 8.04 | -0.60 | 5.1 | 0.00 |
| 4 | 182 | -0 | 13 | 0 | 0 | 0 | -222 | 4.02 | 4.02 | 8.04 | 8.04 | -0.48 | 4.1 | 0.00 |
| 5 | 182 | -0 | 17 | 0 | 0 | 0 | -209 | 4.02 | 4.02 | 8.04 | 8.04 | -0.45 | 3.9 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 219 | -0 | 3 | 0 | 0 | 0 | -278 | 4.02 | 4.02 | 8.04 | 8.04 | -0.60 | 5.1 | 0.00 |
| 4 | 219 | -0 | -34 | 0 | 0 | 0 | -218 | 4.02 | 4.02 | 8.04 | 8.04 | -0.47 | 4.0 | 0.00 |
| 5 | 219 | -0 | -43 | 0 | 0 | 0 | -203 | 4.02 | 4.02 | 8.04 | 8.04 | -0.44 | 3.8 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 256 | -0 | 3 | 0 | 0 | 0 | -277 | 4.02 | 4.02 | 8.04 | 8.04 | -0.60 | 5.1 | 0.00 |
| 4 | 256 | -0 | -34 | 0 | 0 | 0 | -230 | 4.02 | 4.02 | 8.04 | 8.04 | -0.50 | 4.3 | 0.00 |
| 5 | 256 | -0 | -43 | 0 | 0 | 0 | -219 | 4.02 | 4.02 | 8.04 | 8.04 | -0.48 | 4.0 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 292 | -0 | 16 | 0 | 0 | 0 | -275 | 4.02 | 4.02 | 8.04 | 8.04 | -0.60 | 5.1 | 0.00 |
| 4 | 292 | -0 | -76 | 0 | 0 | 0 | -243 | 4.02 | 4.02 | 8.04 | 8.04 | -0.53 | 4.5 | 0.00 |
| 5 | 292 | -0 | -99 | 0 | 0 | 0 | -234 | 4.02 | 4.02 | 8.04 | 8.04 | -0.51 | 4.3 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 328 | -0 | 16 | 0 | 0 | 0 | -270 | 4.02 | 4.02 | 8.04 | 8.04 | -0.59 | 5.0 | 0.00 |
| 4 | 328 | -0 | -76 | 0 | 0 | 0 | -270 | 4.02 | 4.02 | 8.04 | 8.04 | -0.59 | 5.0 | 0.00 |
| 5 | 328 | -0 | -99 | 0 | 0 | 0 | -271 | 4.02 | 4.02 | 8.04 | 8.04 | -0.59 | 5.0 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 365 | -0 | 16 | 0 | 0 | 0 | -264 | 4.02 | 4.02 | 8.04 | 8.04 | -0.57 | 4.9 | 0.00 |
| 4 | 365 | -0 | -76 | 0 | 0 | 0 | -298 | 4.02 | 4.02 | 8.04 | 8.04 | -0.65 | 5.5 | 0.00 |
| 5 | 365 | -0 | -99 | 0 | 0 | 0 | -307 | 4.02 | 4.02 | 8.04 | 8.04 | -0.67 | 5.7 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE08_IP1**  Descrizione: **CORDOLI DI FONDAZIONE 1-6-9-14-19-24-27**
**ASTA NUM. 24**  NI 5  NF 54  SEZ.  Rp  B= 60.0  H= 60.0  (trave di fondazione)

armatura base = 4 X 2.01  per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cm² | | | | | kg/cm² | mm |
| 3 | 0 | -0 | -30 | 0 | 0 | 0 | 151 | 4.02 | 4.02 | 8.04 | 8.04 | -0.33 | 2.8 | 0.00 |
| 4 | 0 | -0 | 86 | 0 | 0 | 0 | 25 | 4.02 | 4.02 | 8.04 | 8.04 | -0.05 | 0.5 | 0.00 |
| 5 | 0 | -0 | 115 | 0 | 0 | 0 | -24 | 4.02 | 4.02 | 8.04 | 8.04 | -0.05 | 0.4 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 20 | -0 | -30 | 0 | 0 | 0 | 150 | 4.02 | 4.02 | 8.04 | 8.04 | -0.33 | 2.8 | 0.00 |
| 4 | 20 | -0 | 86 | 0 | 0 | 0 | 30 | 4.02 | 4.02 | 8.04 | 8.04 | -0.06 | 0.6 | 0.00 |
| 5 | 20 | -0 | 115 | 0 | 0 | 0 | -0 | 4.02 | 4.02 | 8.04 | 8.04 | -0.00 | 0.0 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 41 | -0 | -30 | 0 | 0 | 0 | 144 | 4.02 | 4.02 | 8.04 | 8.04 | -0.31 | 2.7 | 0.00 |
| 4 | 41 | -0 | 86 | 0 | 0 | 0 | 47 | 4.02 | 4.02 | 8.04 | 8.04 | -0.10 | 0.9 | 0.00 |
| 5 | 41 | -0 | 115 | 0 | 0 | 0 | 23 | 4.02 | 4.02 | 8.04 | 8.04 | -0.05 | 0.4 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 62 | -0 | -12 | 0 | 0 | 0 | 141 | 4.02 | 4.02 | 8.04 | 8.04 | -0.31 | 2.6 | 0.00 |
| 4 | 62 | -0 | 71 | 0 | 0 | 0 | 62 | 4.02 | 4.02 | 8.04 | 8.04 | -0.13 | 1.1 | 0.00 |
| 5 | 62 | -0 | 91 | 0 | 0 | 0 | 42 | 4.02 | 4.02 | 8.04 | 8.04 | -0.09 | 0.8 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 82 | -0 | -12 | 0 | 0 | 0 | 139 | 4.02 | 4.02 | 8.04 | 8.04 | -0.30 | 2.6 | 0.00 |
| 4 | 82 | -0 | 71 | 0 | 0 | 0 | 76 | 4.02 | 4.02 | 8.04 | 8.04 | -0.17 | 1.4 | 0.00 |
| 5 | 82 | -0 | 91 | 0 | 0 | 0 | 61 | 4.02 | 4.02 | 8.04 | 8.04 | -0.13 | 1.1 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 102 | -0 | 9 | 0 | 0 | 0 | 140 | 4.02 | 4.02 | 8.04 | 8.04 | -0.31 | 2.6 | 0.00 |
| 4 | 102 | -0 | 59 | 0 | 0 | 0 | 88 | 4.02 | 4.02 | 8.04 | 8.04 | -0.19 | 1.6 | 0.00 |
| 5 | 102 | -0 | 72 | 0 | 0 | 0 | 75 | 4.02 | 4.02 | 8.04 | 8.04 | -0.16 | 1.4 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 123 | -0 | 33 | 0 | 0 | 0 | 142 | 4.02 | 4.02 | 8.04 | 8.04 | -0.31 | 2.6 | 0.00 |
| 4 | 123 | -0 | 59 | 0 | 0 | 0 | 101 | 4.02 | 4.02 | 8.04 | 8.04 | -0.22 | 1.9 | 0.00 |
| 5 | 123 | -0 | 72 | 0 | 0 | 0 | 90 | 4.02 | 4.02 | 8.04 | 8.04 | -0.20 | 1.7 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 144 | -0 | 33 | 0 | 0 | 0 | 149 | 4.02 | 4.02 | 8.04 | 8.04 | -0.32 | 2.8 | 0.00 |
| 4 | 144 | -0 | 51 | 0 | 0 | 0 | 111 | 4.02 | 4.02 | 8.04 | 8.04 | -0.24 | 2.1 | 0.00 |
| 5 | 144 | -0 | 55 | 0 | 0 | 0 | 102 | 4.02 | 4.02 | 8.04 | 8.04 | -0.22 | 1.9 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 164 | -0 | 61 | 0 | 0 | 0 | 156 | 4.02 | 4.02 | 8.04 | 8.04 | -0.34 | 2.9 | 0.00 |
| 4 | 164 | -0 | 51 | 0 | 0 | 0 | 122 | 4.02 | 4.02 | 8.04 | 8.04 | -0.26 | 2.3 | 0.00 |
| 5 | 164 | -0 | 55 | 0 | 0 | 0 | 113 | 4.02 | 4.02 | 8.04 | 8.04 | -0.25 | 2.1 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 184 | -0 | 61 | 0 | 0 | 0 | 168 | 4.02 | 4.02 | 8.04 | 8.04 | -0.37 | 3.1 | 0.00 |
| 4 | 184 | -0 | 46 | 0 | 0 | 0 | 131 | 4.02 | 4.02 | 8.04 | 8.04 | -0.28 | 2.4 | 0.00 |
| 5 | 184 | -0 | 42 | 0 | 0 | 0 | 122 | 4.02 | 4.02 | 8.04 | 8.04 | -0.26 | 2.3 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 205 | -0 | 61 | 0 | 0 | 0 | 172 | 4.02 | 4.02 | 8.04 | 8.04 | -0.37 | 3.2 | 0.00 |
| 4 | 205 | -0 | 46 | 0 | 0 | 0 | 133 | 4.02 | 4.02 | 8.04 | 8.04 | -0.29 | 2.5 | 0.00 |
| 5 | 205 | -0 | 42 | 0 | 0 | 0 | 124 | 4.02 | 4.02 | 8.04 | 8.04 | -0.27 | 2.3 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE08_IP1**  Descrizione: **CORDOLI DI FONDAZIONE 1-6-9-14-19-24-27**
**ASTA NUM. 25**  NI 54  NF 8  SEZ.  Rp  B= 60.0  H= 60.0  (trave di fondazione)

armatura base = 4 X 2.01  per le armature aggiuntive consultare il tabulato



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| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cm² | | | | | kg/cm² | mm |
| 3 | 0 | -0 | 155 | 0 | 0 | 0 | -134 | 4.02 | 4.02 | 8.04 | 8.04 | -0.29 | 2.5 | 0.00 |
| 4 | 0 | -0 | 196 | 0 | 0 | 0 | -121 | 4.02 | 4.02 | 8.04 | 8.04 | -0.26 | 2.2 | 0.00 |
| 5 | 0 | -0 | 206 | 0 | 0 | 0 | -118 | 4.02 | 4.02 | 8.04 | 8.04 | -0.26 | 2.2 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 30 | -0 | 155 | 0 | 0 | 0 | -86 | 4.02 | 4.02 | 8.04 | 8.04 | -0.19 | 1.6 | 0.00 |
| 4 | 30 | -0 | 196 | 0 | 0 | 0 | -61 | 4.02 | 4.02 | 8.04 | 8.04 | -0.13 | 1.1 | 0.00 |
| 5 | 30 | -0 | 206 | 0 | 0 | 0 | -55 | 4.02 | 4.02 | 8.04 | 8.04 | -0.12 | 1.0 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 61 | -0 | 205 | 0 | 0 | 0 | -39 | 4.02 | 4.02 | 8.04 | 8.04 | -0.09 | 0.7 | 0.00 |
| 4 | 61 | -0 | 198 | 0 | 0 | 0 | -1 | 4.02 | 4.02 | 8.04 | 8.04 | -0.00 | 0.0 | 0.00 |
| 5 | 61 | -0 | 206 | 0 | 0 | 0 | 8 | 4.02 | 4.02 | 8.04 | 8.04 | -0.02 | 0.1 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 92 | -0 | 205 | 0 | 0 | 0 | 23 | 4.02 | 4.02 | 8.04 | 8.04 | -0.05 | 0.4 | 0.00 |
| 4 | 92 | -0 | 198 | 0 | 0 | 0 | 59 | 4.02 | 4.02 | 8.04 | 8.04 | -0.13 | 1.1 | 0.00 |
| 5 | 92 | -0 | 196 | 0 | 0 | 0 | 68 | 4.02 | 4.02 | 8.04 | 8.04 | -0.15 | 1.3 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 122 | -0 | 260 | 0 | 0 | 0 | 86 | 4.02 | 4.02 | 8.04 | 8.04 | -0.19 | 1.6 | 0.00 |
| 4 | 122 | -0 | 206 | 0 | 0 | 0 | 119 | 4.02 | 4.02 | 8.04 | 8.04 | -0.26 | 2.2 | 0.00 |
| 5 | 122 | -0 | 196 | 0 | 0 | 0 | 128 | 4.02 | 4.02 | 8.04 | 8.04 | -0.28 | 2.4 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 152 | -0 | 260 | 0 | 0 | 0 | 165 | 4.02 | 4.02 | 8.04 | 8.04 | -0.36 | 3.1 | 0.00 |
| 4 | 152 | -0 | 206 | 0 | 0 | 0 | 182 | 4.02 | 4.02 | 8.04 | 8.04 | -0.40 | 3.4 | 0.00 |
| 5 | 152 | -0 | 192 | 0 | 0 | 0 | 186 | 4.02 | 4.02 | 8.04 | 8.04 | -0.40 | 3.4 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 183 | -0 | 321 | 0 | 0 | 0 | 245 | 4.02 | 4.02 | 8.04 | 8.04 | -0.53 | 4.5 | 0.00 |
| 4 | 183 | -0 | 218 | 0 | 0 | 0 | 244 | 4.02 | 4.02 | 8.04 | 8.04 | -0.53 | 4.5 | 0.00 |
| 5 | 183 | -0 | 192 | 0 | 0 | 0 | 244 | 4.02 | 4.02 | 8.04 | 8.04 | -0.53 | 4.5 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 214 | -0 | 321 | 0 | 0 | 0 | 342 | 4.02 | 4.02 | 8.04 | 8.04 | -0.74 | 6.3 | 0.00 |
| 4 | 214 | -0 | 218 | 0 | 0 | 0 | 311 | 4.02 | 4.02 | 8.04 | 8.04 | -0.68 | 5.8 | 0.00 |
| 5 | 214 | -0 | 192 | 0 | 0 | 0 | 303 | 4.02 | 4.02 | 8.04 | 8.04 | -0.66 | 5.6 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 244 | -0 | 384 | 0 | 0 | 0 | 440 | 4.02 | 4.02 | 8.04 | 8.04 | -0.96 | 8.2 | 0.00 |
| 4 | 244 | -0 | 233 | 0 | 0 | 0 | 378 | 4.02 | 4.02 | 8.04 | 8.04 | -0.82 | 7.0 | 0.00 |
| 5 | 244 | -0 | 196 | 0 | 0 | 0 | 362 | 4.02 | 4.02 | 8.04 | 8.04 | -0.79 | 6.7 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 274 | -0 | 384 | 0 | 0 | 0 | 558 | 4.02 | 4.02 | 8.04 | 8.04 | -1.21 | 10.3 | 0.00 |
| 4 | 274 | -0 | 233 | 0 | 0 | 0 | 449 | 4.02 | 4.02 | 8.04 | 8.04 | -0.98 | 8.3 | 0.00 |
| 5 | 274 | -0 | 195 | 0 | 0 | 0 | 421 | 4.02 | 4.02 | 8.04 | 8.04 | -0.92 | 7.8 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 305 | -0 | 384 | 0 | 0 | 0 | 617 | 4.02 | 4.02 | 8.04 | 8.04 | -1.34 | 11.4 | 0.00 |
| 4 | 305 | -0 | 233 | 0 | 0 | 0 | 485 | 4.02 | 4.02 | 8.04 | 8.04 | -1.05 | 9.0 | 0.00 |
| 5 | 305 | -0 | 195 | 0 | 0 | 0 | 452 | 4.02 | 4.02 | 8.04 | 8.04 | -0.98 | 8.4 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |

Nome travata: **CORDOLI DI FONDAZIONE08_IP1** Descrizione: **CORDOLI DI FONDAZIONE 1-6-9-14-19-24-27**
**ASTA NUM. 26** NI 8 NF 39 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cm² | | | | | kg/cm² | mm |
| 3 | 0 | -0 | -319 | 0 | 0 | 0 | 344 | 4.02 | 4.02 | 8.04 | 8.04 | -0.75 | 6.4 | 0.00 |
| 4 | 0 | -0 | -215 | 0 | 0 | 0 | 290 | 4.02 | 4.02 | 8.04 | 8.04 | -0.63 | 5.4 | 0.00 |
| 5 | 0 | -0 | -189 | 0 | 0 | 0 | 277 | 4.02 | 4.02 | 8.04 | 8.04 | -0.60 | 5.1 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 36 | -0 | -319 | 0 | 0 | 0 | 275 | 4.02 | 4.02 | 8.04 | 8.04 | -0.60 | 5.1 | 0.00 |
| 4 | 36 | -0 | -215 | 0 | 0 | 0 | 244 | 4.02 | 4.02 | 8.04 | 8.04 | -0.53 | 4.5 | 0.00 |
| 5 | 36 | -0 | -189 | 0 | 0 | 0 | 236 | 4.02 | 4.02 | 8.04 | 8.04 | -0.51 | 4.4 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 73 | -0 | -319 | 0 | 0 | 0 | 159 | 4.02 | 4.02 | 8.04 | 8.04 | -0.35 | 2.9 | 0.00 |
| 4 | 73 | -0 | -215 | 0 | 0 | 0 | 166 | 4.02 | 4.02 | 8.04 | 8.04 | -0.36 | 3.1 | 0.00 |
| 5 | 73 | -0 | -193 | 0 | 0 | 0 | 168 | 4.02 | 4.02 | 8.04 | 8.04 | -0.36 | 3.1 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 110 | -0 | -254 | 0 | 0 | 0 | 66 | 4.02 | 4.02 | 8.04 | 8.04 | -0.14 | 1.2 | 0.00 |
| 4 | 110 | -0 | -206 | 0 | 0 | 0 | 91 | 4.02 | 4.02 | 8.04 | 8.04 | -0.20 | 1.7 | 0.00 |
| 5 | 110 | -0 | -193 | 0 | 0 | 0 | 97 | 4.02 | 4.02 | 8.04 | 8.04 | -0.21 | 1.8 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 146 | -0 | -254 | 0 | 0 | 0 | -27 | 4.02 | 4.02 | 8.04 | 8.04 | -0.06 | 0.5 | 0.00 |
| 4 | 146 | -0 | -207 | 0 | 0 | 0 | 16 | 4.02 | 4.02 | 8.04 | 8.04 | -0.03 | 0.3 | 0.00 |
| 5 | 146 | -0 | -208 | 0 | 0 | 0 | 26 | 4.02 | 4.02 | 8.04 | 8.04 | -0.06 | 0.5 | 0.00 |
| apost= -- | | aant= -- | | ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01) | | | | | | | | | | |
| 3 | 182 | -0 | -202 | 0 | 0 | 0 | -101 | 4.02 | 4.02 | 8.04 | 8.04 | -0.22 | 1.9 | 0.00 |
| 4 | 182 | -0 | -207 | 0 | 0 | 0 | -60 | 4.02 | 4.02 | 8.04 | 8.04 | -0.13 | 1.1 | 0.00 |
| 5 | 182 | -0 | -208 | 0 | 0 | 0 | -50 | 4.02 | 4.02 | 8.04 | 8.04 | -0.11 | 0.9 | 0.00 |



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apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 219 | -0 | -202 | 0 | 0 | 0 | -175 | 4.02 | 4.02 | 8.04 | 8.04 | -0.38 | 3.2 | 0.00 |
| 4 | 219 | -0 | -219 | 0 | 0 | 0 | -135 | 4.02 | 4.02 | 8.04 | 8.04 | -0.29 | 2.5 | 0.00 |
| 5 | 219 | -0 | -233 | 0 | 0 | 0 | -126 | 4.02 | 4.02 | 8.04 | 8.04 | -0.27 | 2.3 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 256 | -0 | -162 | 0 | 0 | 0 | -234 | 4.02 | 4.02 | 8.04 | 8.04 | -0.51 | 4.3 | 0.00 |
| 4 | 256 | -0 | -219 | 0 | 0 | 0 | -215 | 4.02 | 4.02 | 8.04 | 8.04 | -0.47 | 4.0 | 0.00 |
| 5 | 256 | -0 | -233 | 0 | 0 | 0 | -211 | 4.02 | 4.02 | 8.04 | 8.04 | -0.46 | 3.9 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 292 | -0 | -162 | 0 | 0 | 0 | -293 | 4.02 | 4.02 | 8.04 | 8.04 | -0.64 | 5.4 | 0.00 |
| 4 | 292 | -0 | -239 | 0 | 0 | 0 | -295 | 4.02 | 4.02 | 8.04 | 8.04 | -0.64 | 5.5 | 0.00 |
| 5 | 292 | -0 | -266 | 0 | 0 | 0 | -296 | 4.02 | 4.02 | 8.04 | 8.04 | -0.64 | 5.5 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 328 | -0 | -131 | 0 | 0 | 0 | -341 | 4.02 | 4.02 | 8.04 | 8.04 | -0.74 | 6.3 | 0.00 |
| 4 | 328 | -0 | -239 | 0 | 0 | 0 | -382 | 4.02 | 4.02 | 8.04 | 8.04 | -0.83 | 7.1 | 0.00 |
| 5 | 328 | -0 | -266 | 0 | 0 | 0 | -393 | 4.02 | 4.02 | 8.04 | 8.04 | -0.85 | 7.3 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 365 | -0 | -131 | 0 | 0 | 0 | -388 | 4.02 | 4.02 | 8.04 | 8.04 | -0.84 | 7.2 | 0.00 |
| 4 | 365 | -0 | -239 | 0 | 0 | 0 | -470 | 4.02 | 4.02 | 8.04 | 8.04 | -1.02 | 8.7 | 0.00 |
| 5 | 365 | -0 | -266 | 0 | 0 | 0 | -490 | 4.02 | 4.02 | 8.04 | 8.04 | -1.07 | 9.1 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE08_IP1**  Descrizione: **CORDOLI DI FONDAZIONE 1-6-9-14-19-24-27**
**ASTA NUM. 27**  NI 39  NF 46  SEZ.  Rp  B= 60.0  H= 60.0  (trave di fondazione)

armatura base = 4 X 2.01  per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cm² | | | | | kg/cm² | mm |
| 3 | 0 | -0 | -217 | 0 | 0 | 0 | -561 | 4.02 | 4.02 | 8.04 | 8.04 | -1.22 | 10.4 | 0.00 |
| 4 | 0 | -0 | -60 | 0 | 0 | 0 | -600 | 4.02 | 4.02 | 8.04 | 8.04 | -1.31 | 11.1 | 0.00 |
| 5 | 0 | -0 | -21 | 0 | 0 | 0 | -610 | 4.02 | 4.02 | 8.04 | 8.04 | -1.33 | 11.3 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 36 | -0 | -217 | 0 | 0 | 0 | -640 | 4.02 | 4.02 | 8.04 | 8.04 | -1.39 | 11.8 | 0.00 |
| 4 | 36 | -0 | -60 | 0 | 0 | 0 | -622 | 4.02 | 4.02 | 8.04 | 8.04 | -1.35 | 11.5 | 0.00 |
| 5 | 36 | -0 | -21 | 0 | 0 | 0 | -618 | 4.02 | 4.02 | 8.04 | 8.04 | -1.34 | 11.4 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 73 | -0 | -217 | 0 | 0 | 0 | -719 | 4.02 | 4.02 | 8.04 | 8.04 | -1.56 | 13.3 | 0.00 |
| 4 | 73 | -0 | -79 | 0 | 0 | 0 | -644 | 4.02 | 4.02 | 8.04 | 8.04 | -1.40 | 11.9 | 0.00 |
| 5 | 73 | -0 | -53 | 0 | 0 | 0 | -626 | 4.02 | 4.02 | 8.04 | 8.04 | -1.36 | 11.6 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 110 | -0 | -186 | 0 | 0 | 0 | -787 | 4.02 | 4.02 | 8.04 | 8.04 | -1.71 | 14.6 | 0.00 |
| 4 | 110 | -0 | -79 | 0 | 0 | 0 | -674 | 4.02 | 4.02 | 8.04 | 8.04 | -1.47 | 12.5 | 0.00 |
| 5 | 110 | -0 | -53 | 0 | 0 | 0 | -645 | 4.02 | 4.02 | 8.04 | 8.04 | -1.40 | 11.9 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 146 | -0 | -186 | 0 | 0 | 0 | -855 | 4.02 | 4.02 | 8.04 | 8.04 | -1.86 | 15.8 | 0.00 |
| 4 | 146 | -0 | -83 | 0 | 0 | 0 | -703 | 4.02 | 4.02 | 8.04 | 8.04 | -1.53 | 13.0 | 0.00 |
| 5 | 146 | -0 | -69 | 0 | 0 | 0 | -664 | 4.02 | 4.02 | 8.04 | 8.04 | -1.45 | 12.3 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 182 | -0 | -141 | 0 | 0 | 0 | -906 | 4.02 | 4.02 | 8.04 | 8.04 | -1.97 | 16.8 | 0.00 |
| 4 | 182 | -0 | -83 | 0 | 0 | 0 | -733 | 4.02 | 4.02 | 8.04 | 8.04 | -1.59 | 13.6 | 0.00 |
| 5 | 182 | -0 | -69 | 0 | 0 | 0 | -689 | 4.02 | 4.02 | 8.04 | 8.04 | -1.50 | 12.8 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 219 | -0 | -141 | 0 | 0 | 0 | -958 | 4.02 | 4.02 | 8.04 | 8.04 | -2.08 | 17.7 | 0.00 |
| 4 | 219 | -0 | -83 | 0 | 0 | 0 | -763 | 4.02 | 4.02 | 8.04 | 8.04 | -1.66 | 14.1 | 0.00 |
| 5 | 219 | -0 | -69 | 0 | 0 | 0 | -714 | 4.02 | 4.02 | 8.04 | 8.04 | -1.55 | 13.2 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 256 | -0 | -67 | 0 | 0 | 0 | -983 | 4.02 | 4.02 | 8.04 | 8.04 | -2.14 | 18.2 | 0.00 |
| 4 | 256 | -0 | -60 | 0 | 0 | 0 | -785 | 4.02 | 4.02 | 8.04 | 8.04 | -1.71 | 14.5 | 0.00 |
| 5 | 256 | -0 | -58 | 0 | 0 | 0 | -736 | 4.02 | 4.02 | 8.04 | 8.04 | -1.60 | 13.6 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 292 | -0 | -67 | 0 | 0 | 0 | -1007 | 4.02 | 4.02 | 8.04 | 8.04 | -2.19 | 18.6 | 0.00 |
| 4 | 292 | -0 | -60 | 0 | 0 | 0 | -807 | 4.02 | 4.02 | 8.04 | 8.04 | -1.76 | 14.9 | 0.00 |
| 5 | 292 | -0 | -58 | 0 | 0 | 0 | -757 | 4.02 | 4.02 | 8.04 | 8.04 | -1.65 | 14.0 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 328 | -0 | 51 | 0 | 0 | 0 | -989 | 4.02 | 4.02 | 8.04 | 8.04 | -2.15 | 18.3 | 0.00 |
| 4 | 328 | -0 | 2 | 0 | 0 | 0 | -806 | 4.02 | 4.02 | 8.04 | 8.04 | -1.75 | 14.9 | 0.00 |
| 5 | 328 | -0 | -10 | 0 | 0 | 0 | -761 | 4.02 | 4.02 | 8.04 | 8.04 | -1.65 | 14.1 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 365 | -0 | 51 | 0 | 0 | 0 | -970 | 4.02 | 4.02 | 8.04 | 8.04 | -2.11 | 18.0 | 0.00 |
| 4 | 365 | -0 | 2 | 0 | 0 | 0 | -805 | 4.02 | 4.02 | 8.04 | 8.04 | -1.75 | 14.9 | 0.00 |
| 5 | 365 | -0 | -10 | 0 | 0 | 0 | -764 | 4.02 | 4.02 | 8.04 | 8.04 | -1.66 | 14.1 | 0.00 |

apost= --  aant= --  ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE09_IP1**  Descrizione: **CORDOLI DI FONDAZIONE 2-7-10-15-20-2...**
**ASTA NUM. 28**  NI 18  NF 96  SEZ.  Rp  B= 60.0  H= 30.0  (trave di fondazione)

armatura base = 4 X 2.01  per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cm² | | | | | kg/cm² | mm |



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| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 0 | -0 | -1424 | 0 | 0 | 0 | 613 | 4.02 | 4.02 | 4.02 | 4.02 | -5.42 | 41.3 | 0.00 |
| 4 | 0 | -0 | -1280 | 0 | 0 | 0 | 574 | 4.02 | 4.02 | 4.02 | 4.02 | -5.08 | 38.7 | 0.00 |
| 5 | 0 | -0 | -1244 | 0 | 0 | 0 | 565 | 4.02 | 4.02 | 4.02 | 4.02 | -4.99 | 38.0 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 36 | -0 | -1424 | 0 | 0 | 0 | 307 | 4.02 | 4.02 | 4.02 | 4.02 | -2.71 | 20.7 | 0.00 |
| 4 | 36 | -0 | -1280 | 0 | 0 | 0 | 299 | 4.02 | 4.02 | 4.02 | 4.02 | -2.65 | 20.2 | 0.00 |
| 5 | 36 | -0 | -1244 | 0 | 0 | 0 | 297 | 4.02 | 4.02 | 4.02 | 4.02 | -2.63 | 20.0 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 73 | -0 | -1424 | 0 | 0 | -0 | -213 | 4.02 | 4.02 | 4.02 | 4.02 | -1.88 | 14.4 | 0.00 |
| 4 | 73 | -0 | -1280 | 0 | 0 | -0 | -168 | 4.02 | 4.02 | 4.02 | 4.02 | -1.49 | 11.3 | 0.00 |
| 5 | 73 | -0 | -1244 | 0 | 0 | -0 | -157 | 4.02 | 4.02 | 4.02 | 4.02 | -1.39 | 10.6 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 110 | -0 | -625 | 0 | 0 | -0 | -441 | 4.02 | 4.02 | 4.02 | 4.02 | -3.90 | 29.7 | 0.00 |
| 4 | 110 | -0 | -566 | 0 | 0 | -0 | -375 | 4.02 | 4.02 | 4.02 | 4.02 | -3.32 | 25.3 | 0.00 |
| 5 | 110 | -0 | -552 | 0 | 0 | -0 | -358 | 4.02 | 4.02 | 4.02 | 4.02 | -3.17 | 24.1 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 146 | -0 | -625 | 0 | 0 | -0 | -669 | 4.02 | 4.02 | 4.02 | 4.02 | -5.92 | 45.1 | 0.00 |
| 4 | 146 | -0 | -566 | 0 | 0 | -0 | -582 | 4.02 | 4.02 | 4.02 | 4.02 | -5.14 | 39.2 | 0.00 |
| 5 | 146 | -0 | -552 | 0 | 0 | -0 | -560 | 4.02 | 4.02 | 4.02 | 4.02 | -4.95 | 37.7 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 182 | -0 | 35 | -0 | 0 | -0 | -656 | 4.02 | 4.02 | 4.02 | 4.02 | -5.80 | 44.2 | 0.00 |
| 4 | 182 | -0 | 24 | -0 | 0 | -0 | -573 | 4.02 | 4.02 | 4.02 | 4.02 | -5.07 | 38.6 | 0.00 |
| 5 | 182 | -0 | 21 | -0 | 0 | -0 | -552 | 4.02 | 4.02 | 4.02 | 4.02 | -4.88 | 37.2 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 219 | -0 | 635 | -0 | 0 | -0 | -643 | 4.02 | 4.02 | 4.02 | 4.02 | -5.69 | 43.4 | 0.00 |
| 4 | 219 | -0 | 558 | -0 | 0 | -0 | -564 | 4.02 | 4.02 | 4.02 | 4.02 | -4.99 | 38.0 | 0.00 |
| 5 | 219 | -0 | 539 | -0 | 0 | -0 | -544 | 4.02 | 4.02 | 4.02 | 4.02 | -4.81 | 36.7 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 256 | -0 | 635 | -0 | 0 | -0 | -412 | 4.02 | 4.02 | 4.02 | 4.02 | -3.64 | 27.7 | 0.00 |
| 4 | 256 | -0 | 558 | -0 | 0 | -0 | -360 | 4.02 | 4.02 | 4.02 | 4.02 | -3.19 | 24.3 | 0.00 |
| 5 | 256 | -0 | 539 | -0 | 0 | -0 | -348 | 4.02 | 4.02 | 4.02 | 4.02 | -3.07 | 23.4 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 292 | -0 | 1249 | -0 | 0 | -0 | -180 | 4.02 | 4.02 | 4.02 | 4.02 | -1.59 | 12.1 | 0.00 |
| 4 | 292 | -0 | 1103 | -0 | 0 | -0 | -157 | 4.02 | 4.02 | 4.02 | 4.02 | -1.39 | 10.6 | 0.00 |
| 5 | 292 | -0 | 1067 | -0 | 0 | -0 | -151 | 4.02 | 4.02 | 4.02 | 4.02 | -1.33 | 10.2 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 328 | -0 | 1249 | -0 | 0 | 0 | 276 | 4.02 | 4.02 | 4.02 | 4.02 | -2.44 | 18.6 | 0.00 |
| 4 | 328 | -0 | 1103 | -0 | 0 | 0 | 246 | 4.02 | 4.02 | 4.02 | 4.02 | -2.17 | 16.6 | 0.00 |
| 5 | 328 | -0 | 1067 | -0 | 0 | 0 | 239 | 4.02 | 4.02 | 4.02 | 4.02 | -2.11 | 16.1 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 365 | -0 | 1249 | -0 | 0 | 0 | 544 | 4.02 | 4.02 | 4.02 | 4.02 | -4.81 | 36.7 | 0.00 |
| 4 | 365 | -0 | 1103 | -0 | 0 | 0 | 483 | 4.02 | 4.02 | 4.02 | 4.02 | -4.27 | 32.5 | 0.00 |
| 5 | 365 | -0 | 1067 | -0 | 0 | 0 | 468 | 4.02 | 4.02 | 4.02 | 4.02 | -4.14 | 31.5 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE09_IP1** Descrizione: **CORDOLI DI FONDAZIONE 2-7-10-15-20-2...**
**ASTA NUM. 29** NI 96 NF 29 SEZ. Rp B= 60.0 H= 30.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cm² | | | | | kg/cm² | mm |
| 3 | 0 | -0 | -1122 | 0 | 0 | 0 | 452 | 4.02 | 4.02 | 4.02 | 4.02 | -4.00 | 30.4 | 0.00 |
| 4 | 0 | -0 | -991 | 0 | 0 | 0 | 425 | 4.02 | 4.02 | 4.02 | 4.02 | -3.76 | 28.7 | 0.00 |
| 5 | 0 | -0 | -958 | 0 | 0 | 0 | 419 | 4.02 | 4.02 | 4.02 | 4.02 | -3.70 | 28.2 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 36 | -0 | -1122 | 0 | 0 | 0 | 211 | 4.02 | 4.02 | 4.02 | 4.02 | -1.86 | 14.2 | 0.00 |
| 4 | 36 | -0 | -991 | 0 | 0 | 0 | 212 | 4.02 | 4.02 | 4.02 | 4.02 | -1.88 | 14.3 | 0.00 |
| 5 | 36 | -0 | -958 | 0 | 0 | 0 | 213 | 4.02 | 4.02 | 4.02 | 4.02 | -1.88 | 14.3 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 73 | -0 | -1122 | 0 | 0 | -0 | -199 | 4.02 | 4.02 | 4.02 | 4.02 | -1.76 | 13.4 | 0.00 |
| 4 | 73 | -0 | -991 | 0 | 0 | -0 | -150 | 4.02 | 4.02 | 4.02 | 4.02 | -1.32 | 10.1 | 0.00 |
| 5 | 73 | -0 | -958 | 0 | 0 | -0 | -137 | 4.02 | 4.02 | 4.02 | 4.02 | -1.21 | 9.2 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 110 | -0 | -504 | 0 | 0 | -0 | -383 | 4.02 | 4.02 | 4.02 | 4.02 | -3.38 | 25.8 | 0.00 |
| 4 | 110 | -0 | -451 | 0 | 0 | -0 | -314 | 4.02 | 4.02 | 4.02 | 4.02 | -2.78 | 21.2 | 0.00 |
| 5 | 110 | -0 | -438 | 0 | 0 | -0 | -297 | 4.02 | 4.02 | 4.02 | 4.02 | -2.63 | 20.0 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 146 | -0 | -504 | 0 | 0 | -0 | -567 | 4.02 | 4.02 | 4.02 | 4.02 | -5.01 | 38.2 | 0.00 |
| 4 | 146 | -0 | -451 | 0 | 0 | -0 | -479 | 4.02 | 4.02 | 4.02 | 4.02 | -4.23 | 32.3 | 0.00 |
| 5 | 146 | -0 | -438 | 0 | 0 | -0 | -457 | 4.02 | 4.02 | 4.02 | 4.02 | -4.04 | 30.8 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 182 | -0 | 103 | -0 | 0 | -0 | -529 | 4.02 | 4.02 | 4.02 | 4.02 | -4.68 | 35.6 | 0.00 |
| 4 | 182 | -0 | 72 | -0 | 0 | -0 | -452 | 4.02 | 4.02 | 4.02 | 4.02 | -4.00 | 30.5 | 0.00 |
| 5 | 182 | -0 | 65 | -0 | 0 | -0 | -433 | 4.02 | 4.02 | 4.02 | 4.02 | -3.83 | 29.2 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 219 | -0 | 767 | -0 | 0 | -0 | -491 | 4.02 | 4.02 | 4.02 | 4.02 | -4.34 | 33.1 | 0.00 |
| 4 | 219 | -0 | 635 | -0 | 0 | -0 | -426 | 4.02 | 4.02 | 4.02 | 4.02 | -3.77 | 28.7 | 0.00 |
| 5 | 219 | -0 | 602 | -0 | 0 | -0 | -410 | 4.02 | 4.02 | 4.02 | 4.02 | -3.62 | 27.6 | 0.00 |



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apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 256 | -0 | 767 | -0 | 0 | -0 | -211 | 4.02 | 4.02 | 4.02 | 4.02 | -1.87 | 14.2 | 0.00 |
| 4 | 256 | -0 | 635 | -0 | 0 | -0 | -194 | 4.02 | 4.02 | 4.02 | 4.02 | -1.72 | 13.1 | 0.00 |
| 5 | 256 | -0 | 602 | -0 | 0 | -0 | -190 | 4.02 | 4.02 | 4.02 | 4.02 | -1.68 | 12.8 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 292 | -0 | 1543 | -0 | 0 | 0 | 69 | 4.02 | 4.02 | 4.02 | 4.02 | -0.61 | 4.6 | 0.00 |
| 4 | 292 | -0 | 1284 | -0 | 0 | 0 | 37 | 4.02 | 4.02 | 4.02 | 4.02 | -0.33 | 2.5 | 0.00 |
| 5 | 292 | -0 | 1220 | -0 | 0 | 0 | 30 | 4.02 | 4.02 | 4.02 | 4.02 | -0.26 | 2.0 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 328 | -0 | 1543 | -0 | 0 | 0 | 632 | 4.02 | 4.02 | 4.02 | 4.02 | -5.59 | 42.6 | 0.00 |
| 4 | 328 | -0 | 1284 | -0 | 0 | 0 | 506 | 4.02 | 4.02 | 4.02 | 4.02 | -4.48 | 34.1 | 0.00 |
| 5 | 328 | -0 | 1220 | -0 | 0 | 0 | 475 | 4.02 | 4.02 | 4.02 | 4.02 | -4.20 | 32.0 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 365 | -0 | 1543 | -0 | 0 | 0 | 964 | 4.02 | 4.02 | 4.02 | 4.02 | -8.52 | 64.9 | 0.00 |
| 4 | 365 | -0 | 1284 | -0 | 0 | 0 | 782 | 4.02 | 4.02 | 4.02 | 4.02 | -6.92 | 52.7 | 0.00 |
| 5 | 365 | -0 | 1220 | -0 | 0 | 0 | 737 | 4.02 | 4.02 | 4.02 | 4.02 | -6.52 | 49.7 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE09_IP1**  Descrizione: **CORDOLI DI FONDAZIONE 2-7-10-15-20-2...**
**ASTA NUM. 30**  NI 29  NF 86  SEZ.  Rp  B= 60.0  H= 30.0  (trave di fondazione)

armatura base = 4 X 2.01  per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cm² | | | | | kg/cm² | mm |
| 3 | 0 | -0 | -1485 | 0 | 0 | 0 | 828 | 4.02 | 4.02 | 4.02 | 4.02 | -7.32 | 55.8 | 0.00 |
| 4 | 0 | -0 | -1245 | 0 | 0 | 0 | 687 | 4.02 | 4.02 | 4.02 | 4.02 | -6.07 | 46.3 | 0.00 |
| 5 | 0 | -0 | -1185 | 0 | 0 | 0 | 651 | 4.02 | 4.02 | 4.02 | 4.02 | -5.76 | 43.9 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 20 | -0 | -1485 | 0 | 0 | 0 | 747 | 4.02 | 4.02 | 4.02 | 4.02 | -6.60 | 50.3 | 0.00 |
| 4 | 20 | -0 | -1245 | 0 | 0 | 0 | 618 | 4.02 | 4.02 | 4.02 | 4.02 | -5.47 | 41.7 | 0.00 |
| 5 | 20 | -0 | -1185 | 0 | 0 | 0 | 586 | 4.02 | 4.02 | 4.02 | 4.02 | -5.18 | 39.5 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 41 | -0 | -1485 | 0 | 0 | 0 | 442 | 4.02 | 4.02 | 4.02 | 4.02 | -3.91 | 29.8 | 0.00 |
| 4 | 41 | -0 | -1245 | 0 | 0 | 0 | 363 | 4.02 | 4.02 | 4.02 | 4.02 | -3.21 | 24.5 | 0.00 |
| 5 | 41 | -0 | -1185 | 0 | 0 | 0 | 343 | 4.02 | 4.02 | 4.02 | 4.02 | -3.04 | 23.1 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 62 | -0 | -998 | 0 | 0 | 0 | 238 | 4.02 | 4.02 | 4.02 | 4.02 | -2.10 | 16.0 | 0.00 |
| 4 | 62 | -0 | -839 | 0 | 0 | 0 | 191 | 4.02 | 4.02 | 4.02 | 4.02 | -1.69 | 12.9 | 0.00 |
| 5 | 62 | -0 | -799 | 0 | 0 | 0 | 179 | 4.02 | 4.02 | 4.02 | 4.02 | -1.59 | 12.1 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 82 | -0 | -998 | 0 | 0 | 0 | 33 | 4.02 | 4.02 | 4.02 | 4.02 | -0.29 | 2.2 | 0.00 |
| 4 | 82 | -0 | -839 | 0 | 0 | 0 | 19 | 4.02 | 4.02 | 4.02 | 4.02 | -0.17 | 1.3 | 0.00 |
| 5 | 82 | -0 | -799 | 0 | 0 | 0 | 16 | 4.02 | 4.02 | 4.02 | 4.02 | -0.14 | 1.0 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 102 | -0 | -521 | 0 | 0 | -0 | -74 | 4.02 | 4.02 | 4.02 | 4.02 | -0.65 | 5.0 | 0.00 |
| 4 | 102 | -0 | -443 | 0 | 0 | -0 | -72 | 4.02 | 4.02 | 4.02 | 4.02 | -0.63 | 4.8 | 0.00 |
| 5 | 102 | -0 | -423 | 0 | 0 | -0 | -71 | 4.02 | 4.02 | 4.02 | 4.02 | -0.63 | 4.8 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 123 | -0 | -521 | 0 | 0 | -0 | -181 | 4.02 | 4.02 | 4.02 | 4.02 | -1.60 | 12.2 | 0.00 |
| 4 | 123 | -0 | -443 | 0 | 0 | -0 | -162 | 4.02 | 4.02 | 4.02 | 4.02 | -1.44 | 10.9 | 0.00 |
| 5 | 123 | -0 | -423 | 0 | 0 | -0 | -158 | 4.02 | 4.02 | 4.02 | 4.02 | -1.40 | 10.6 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 144 | -0 | -56 | 0 | 0 | -0 | -192 | 4.02 | 4.02 | 4.02 | 4.02 | -1.70 | 12.9 | 0.00 |
| 4 | 144 | -0 | -56 | 0 | 0 | -0 | -174 | 4.02 | 4.02 | 4.02 | 4.02 | -1.54 | 11.7 | 0.00 |
| 5 | 144 | -0 | -57 | 0 | 0 | -0 | -169 | 4.02 | 4.02 | 4.02 | 4.02 | -1.50 | 11.4 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 164 | -0 | 402 | -0 | 0 | -0 | -204 | 4.02 | 4.02 | 4.02 | 4.02 | -1.80 | 13.7 | 0.00 |
| 4 | 164 | -0 | 324 | -0 | 0 | -0 | -186 | 4.02 | 4.02 | 4.02 | 4.02 | -1.64 | 12.5 | 0.00 |
| 5 | 164 | -0 | 304 | -0 | 0 | -0 | -181 | 4.02 | 4.02 | 4.02 | 4.02 | -1.60 | 12.2 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 184 | -0 | 402 | -0 | 0 | -0 | -121 | 4.02 | 4.02 | 4.02 | 4.02 | -1.07 | 8.2 | 0.00 |
| 4 | 184 | -0 | 324 | -0 | 0 | -0 | -119 | 4.02 | 4.02 | 4.02 | 4.02 | -1.05 | 8.0 | 0.00 |
| 5 | 184 | -0 | 304 | -0 | 0 | -0 | -119 | 4.02 | 4.02 | 4.02 | 4.02 | -1.05 | 8.0 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 205 | -0 | 402 | -0 | 0 | -0 | -39 | 4.02 | 4.02 | 4.02 | 4.02 | -0.34 | 2.6 | 0.00 |
| 4 | 205 | -0 | 324 | -0 | 0 | -0 | -53 | 4.02 | 4.02 | 4.02 | 4.02 | -0.47 | 3.6 | 0.00 |
| 5 | 205 | -0 | 304 | -0 | 0 | -0 | -56 | 4.02 | 4.02 | 4.02 | 4.02 | -0.50 | 3.8 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE09_IP1**  Descrizione: **CORDOLI DI FONDAZIONE 2-7-10-15-20-2...**
**ASTA NUM. 31**  NI 86  NF 23  SEZ.  Rp  B= 60.0  H= 30.0  (trave di fondazione)

armatura base = 4 X 2.01  per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cm² | | | | | kg/cm² | mm |
| 3 | 0 | -0 | -962 | 0 | 0 | 0 | 99 | 4.02 | 4.02 | 4.02 | 4.02 | -0.87 | 6.6 | 0.00 |
| 4 | 0 | -0 | -792 | 0 | 0 | 0 | 63 | 4.02 | 4.02 | 4.02 | 4.02 | -0.55 | 4.2 | 0.00 |
| 5 | 0 | -0 | -749 | 0 | 0 | 0 | 54 | 4.02 | 4.02 | 4.02 | 4.02 | -0.47 | 3.6 | 0.00 |



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apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 30 | -0 | -962 | 0 | 0 | -0 | -50 | 4.02 | 4.02 | 4.02 | 4.02 | -0.45 | 3.4 | 0.00 |
| 4 | 30 | -0 | -792 | 0 | 0 | -0 | -60 | 4.02 | 4.02 | 4.02 | 4.02 | -0.53 | 4.0 | 0.00 |
| 5 | 30 | -0 | -749 | 0 | 0 | -0 | -63 | 4.02 | 4.02 | 4.02 | 4.02 | -0.55 | 4.2 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 61 | -0 | -962 | 0 | 0 | -0 | -344 | 4.02 | 4.02 | 4.02 | 4.02 | -3.04 | 23.2 | 0.00 |
| 4 | 61 | -0 | -792 | 0 | 0 | -0 | -302 | 4.02 | 4.02 | 4.02 | 4.02 | -2.67 | 20.3 | 0.00 |
| 5 | 61 | -0 | -749 | 0 | 0 | -0 | -291 | 4.02 | 4.02 | 4.02 | 4.02 | -2.57 | 19.6 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 92 | -0 | -296 | 0 | 0 | -0 | -434 | 4.02 | 4.02 | 4.02 | 4.02 | -3.84 | 29.3 | 0.00 |
| 4 | 92 | -0 | -236 | 0 | 0 | -0 | -374 | 4.02 | 4.02 | 4.02 | 4.02 | -3.30 | 25.2 | 0.00 |
| 5 | 92 | -0 | -222 | 0 | 0 | -0 | -359 | 4.02 | 4.02 | 4.02 | 4.02 | -3.17 | 24.2 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 122 | -0 | 382 | -0 | 0 | -0 | -524 | 4.02 | 4.02 | 4.02 | 4.02 | -4.64 | 35.3 | 0.00 |
| 4 | 122 | -0 | 332 | -0 | 0 | -0 | -446 | 4.02 | 4.02 | 4.02 | 4.02 | -3.94 | 30.0 | 0.00 |
| 5 | 122 | -0 | 320 | -0 | 0 | -0 | -426 | 4.02 | 4.02 | 4.02 | 4.02 | -3.77 | 28.7 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 152 | -0 | 382 | -0 | 0 | -0 | -408 | 4.02 | 4.02 | 4.02 | 4.02 | -3.61 | 27.5 | 0.00 |
| 4 | 152 | -0 | 332 | -0 | 0 | -0 | -344 | 4.02 | 4.02 | 4.02 | 4.02 | -3.05 | 23.2 | 0.00 |
| 5 | 152 | -0 | 320 | -0 | 0 | -0 | -328 | 4.02 | 4.02 | 4.02 | 4.02 | -2.91 | 22.1 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 183 | -0 | 1108 | -0 | 0 | -0 | -292 | 4.02 | 4.02 | 4.02 | 4.02 | -2.58 | 19.6 | 0.00 |
| 4 | 183 | -0 | 945 | -0 | 0 | -0 | -243 | 4.02 | 4.02 | 4.02 | 4.02 | -2.15 | 16.4 | 0.00 |
| 5 | 183 | -0 | 905 | -0 | 0 | -0 | -231 | 4.02 | 4.02 | 4.02 | 4.02 | -2.04 | 15.6 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 214 | -0 | 1108 | -0 | 0 | 0 | 46 | 4.02 | 4.02 | 4.02 | 4.02 | -0.41 | 3.1 | 0.00 |
| 4 | 214 | -0 | 945 | -0 | 0 | 0 | 45 | 4.02 | 4.02 | 4.02 | 4.02 | -0.40 | 3.1 | 0.00 |
| 5 | 214 | -0 | 905 | -0 | 0 | 0 | 45 | 4.02 | 4.02 | 4.02 | 4.02 | -0.40 | 3.0 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 244 | -0 | 1901 | -0 | 0 | 0 | 384 | 4.02 | 4.02 | 4.02 | 4.02 | -3.40 | 25.9 | 0.00 |
| 4 | 244 | -0 | 1618 | -0 | 0 | 0 | 334 | 4.02 | 4.02 | 4.02 | 4.02 | -2.95 | 22.5 | 0.00 |
| 5 | 244 | -0 | 1547 | -0 | 0 | 0 | 321 | 4.02 | 4.02 | 4.02 | 4.02 | -2.84 | 21.6 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 274 | -0 | 1901 | -0 | 0 | 0 | 964 | 4.02 | 4.02 | 4.02 | 4.02 | -8.53 | 65.0 | 0.00 |
| 4 | 274 | -0 | 1618 | -0 | 0 | 0 | 827 | 4.02 | 4.02 | 4.02 | 4.02 | -7.31 | 55.7 | 0.00 |
| 5 | 274 | -0 | 1547 | -0 | 0 | 0 | 793 | 4.02 | 4.02 | 4.02 | 4.02 | -7.01 | 53.4 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 305 | -0 | 1901 | -0 | 0 | 0 | 1259 | 4.02 | 4.02 | 4.02 | 4.02 | -11.13 | 84.8 | 0.00 |
| 4 | 305 | -0 | 1618 | -0 | 0 | 0 | 1077 | 4.02 | 4.02 | 4.02 | 4.02 | -9.53 | 72.6 | 0.00 |
| 5 | 305 | -0 | 1547 | -0 | 0 | 0 | 1032 | 4.02 | 4.02 | 4.02 | 4.02 | -9.13 | 69.5 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE09_IP1**  Descrizione: **CORDOLI DI FONDAZIONE 2-7-10-15-20-2...**
**ASTA NUM. 32**  NI 23  NF 34  SEZ.  Rp  B= 60.0  H= 30.0  (trave di fondazione)

armatura base = 4 X 2.01  per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cm² | | | | | kg/cm² | mm |
| 3 | 0 | -0 | -1832 | 0 | 0 | 0 | 1275 | 4.02 | 4.02 | 4.02 | 4.02 | -11.28 | 85.9 | 0.00 |
| 4 | 0 | -0 | -1561 | 0 | 0 | 0 | 1077 | 4.02 | 4.02 | 4.02 | 4.02 | -9.52 | 72.6 | 0.00 |
| 5 | 0 | -0 | -1494 | 0 | 0 | 0 | 1027 | 4.02 | 4.02 | 4.02 | 4.02 | -9.08 | 69.2 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 36 | -0 | -1832 | 0 | 0 | 0 | 881 | 4.02 | 4.02 | 4.02 | 4.02 | -7.79 | 59.4 | 0.00 |
| 4 | 36 | -0 | -1561 | 0 | 0 | 0 | 741 | 4.02 | 4.02 | 4.02 | 4.02 | -6.55 | 49.9 | 0.00 |
| 5 | 36 | -0 | -1494 | 0 | 0 | 0 | 706 | 4.02 | 4.02 | 4.02 | 4.02 | -6.24 | 47.5 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 73 | -0 | -1832 | 0 | 0 | 0 | 213 | 4.02 | 4.02 | 4.02 | 4.02 | -1.88 | 14.3 | 0.00 |
| 4 | 73 | -0 | -1561 | 0 | 0 | 0 | 171 | 4.02 | 4.02 | 4.02 | 4.02 | -1.52 | 11.5 | 0.00 |
| 5 | 73 | -0 | -1494 | 0 | 0 | 0 | 160 | 4.02 | 4.02 | 4.02 | 4.02 | -1.42 | 10.8 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 110 | -0 | -943 | 0 | 0 | -0 | -131 | 4.02 | 4.02 | 4.02 | 4.02 | -1.16 | 8.9 | 0.00 |
| 4 | 110 | -0 | -801 | 0 | 0 | -0 | -122 | 4.02 | 4.02 | 4.02 | 4.02 | -1.08 | 8.2 | 0.00 |
| 5 | 110 | -0 | -766 | 0 | 0 | -0 | -119 | 4.02 | 4.02 | 4.02 | 4.02 | -1.05 | 8.0 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 146 | -0 | -943 | 0 | 0 | -0 | -475 | 4.02 | 4.02 | 4.02 | 4.02 | -4.20 | 32.0 | 0.00 |
| 4 | 146 | -0 | -801 | 0 | 0 | -0 | -414 | 4.02 | 4.02 | 4.02 | 4.02 | -3.66 | 27.9 | 0.00 |
| 5 | 146 | -0 | -766 | 0 | 0 | -0 | -399 | 4.02 | 4.02 | 4.02 | 4.02 | -3.53 | 26.9 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 182 | -0 | -190 | 0 | 0 | -0 | -545 | 4.02 | 4.02 | 4.02 | 4.02 | -4.82 | 36.7 | 0.00 |
| 4 | 182 | -0 | -154 | 0 | 0 | -0 | -470 | 4.02 | 4.02 | 4.02 | 4.02 | -4.16 | 31.7 | 0.00 |
| 5 | 182 | -0 | -144 | 0 | 0 | -0 | -451 | 4.02 | 4.02 | 4.02 | 4.02 | -3.99 | 30.4 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 219 | -0 | 477 | -0 | 0 | -0 | -614 | 4.02 | 4.02 | 4.02 | 4.02 | -5.43 | 41.4 | 0.00 |
| 4 | 219 | -0 | 427 | -0 | 0 | -0 | -526 | 4.02 | 4.02 | 4.02 | 4.02 | -4.65 | 35.5 | 0.00 |
| 5 | 219 | -0 | 415 | -0 | 0 | -0 | -504 | 4.02 | 4.02 | 4.02 | 4.02 | -4.46 | 34.0 | 0.00 |

apost= --  aant= --  ainf= --  asup= --  (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 256 | -0 | 477 | -0 | 0 | -0 | -440 | 4.02 | 4.02 | 4.02 | 4.02 | -3.89 | 29.7 | 0.00 |
| 4 | 256 | -0 | 427 | -0 | 0 | -0 | -370 | 4.02 | 4.02 | 4.02 | 4.02 | -3.27 | 24.9 | 0.00 |



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| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 256 | -0 | 415 | -0 | 0 | -0 | -353 | 4.02 | 4.02 | 4.02 | 4.02 | -3.12 | 23.8 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 292 | -0 | 1130 | -0 | 0 | -0 | -266 | 4.02 | 4.02 | 4.02 | 4.02 | -2.35 | 17.9 | 0.00 |
| 4 | 292 | -0 | 1003 | -0 | 0 | -0 | -214 | 4.02 | 4.02 | 4.02 | 4.02 | -1.89 | 14.4 | 0.00 |
| 5 | 292 | -0 | 971 | -0 | 0 | -0 | -201 | 4.02 | 4.02 | 4.02 | 4.02 | -1.78 | 13.6 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 328 | -0 | 1130 | -0 | 0 | 0 | 146 | 4.02 | 4.02 | 4.02 | 4.02 | -1.29 | 9.9 | 0.00 |
| 4 | 328 | -0 | 1003 | -0 | 0 | 0 | 152 | 4.02 | 4.02 | 4.02 | 4.02 | -1.34 | 10.2 | 0.00 |
| 5 | 328 | -0 | 971 | -0 | 0 | 0 | 153 | 4.02 | 4.02 | 4.02 | 4.02 | -1.35 | 10.3 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 365 | -0 | 1130 | -0 | 0 | 0 | 389 | 4.02 | 4.02 | 4.02 | 4.02 | -3.44 | 26.2 | 0.00 |
| 4 | 365 | -0 | 1003 | -0 | 0 | 0 | 367 | 4.02 | 4.02 | 4.02 | 4.02 | -3.25 | 24.7 | 0.00 |
| 5 | 365 | -0 | 971 | -0 | 0 | 0 | 362 | 4.02 | 4.02 | 4.02 | 4.02 | -3.20 | 24.4 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE09_IP1** Descrizione: **CORDOLI DI FONDAZIONE 2-7-10-15-20-2...**
**ASTA NUM. 33** NI 34 NF 41 SEZ. Rp B= 60.0 H= 30.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cm² | | | | | kg/cm² | mm |
| 3 | 0 | -0 | -1253 | 0 | 0 | 0 | 524 | 4.02 | 4.02 | 4.02 | 4.02 | -4.63 | 35.3 | 0.00 |
| 4 | 0 | -0 | -1109 | 0 | 0 | 0 | 465 | 4.02 | 4.02 | 4.02 | 4.02 | -4.11 | 31.3 | 0.00 |
| 5 | 0 | -0 | -1074 | 0 | 0 | 0 | 450 | 4.02 | 4.02 | 4.02 | 4.02 | -3.98 | 30.3 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 36 | -0 | -1253 | 0 | 0 | 0 | 254 | 4.02 | 4.02 | 4.02 | 4.02 | -2.25 | 17.1 | 0.00 |
| 4 | 36 | -0 | -1109 | 0 | 0 | 0 | 226 | 4.02 | 4.02 | 4.02 | 4.02 | -2.00 | 15.3 | 0.00 |
| 5 | 36 | -0 | -1074 | 0 | 0 | 0 | 219 | 4.02 | 4.02 | 4.02 | 4.02 | -1.94 | 14.8 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 73 | -0 | -1253 | 0 | 0 | -0 | -203 | 4.02 | 4.02 | 4.02 | 4.02 | -1.80 | 13.7 | 0.00 |
| 4 | 73 | -0 | -1109 | 0 | 0 | -0 | -179 | 4.02 | 4.02 | 4.02 | 4.02 | -1.58 | 12.0 | 0.00 |
| 5 | 73 | -0 | -1074 | 0 | 0 | -0 | -173 | 4.02 | 4.02 | 4.02 | 4.02 | -1.53 | 11.6 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 110 | -0 | -628 | 0 | 0 | -0 | -433 | 4.02 | 4.02 | 4.02 | 4.02 | -3.83 | 29.2 | 0.00 |
| 4 | 110 | -0 | -553 | 0 | 0 | -0 | -381 | 4.02 | 4.02 | 4.02 | 4.02 | -3.37 | 25.6 | 0.00 |
| 5 | 110 | -0 | -534 | 0 | 0 | -0 | -367 | 4.02 | 4.02 | 4.02 | 4.02 | -3.25 | 24.8 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 146 | -0 | -628 | 0 | 0 | -0 | -662 | 4.02 | 4.02 | 4.02 | 4.02 | -5.85 | 44.6 | 0.00 |
| 4 | 146 | -0 | -553 | 0 | 0 | -0 | -582 | 4.02 | 4.02 | 4.02 | 4.02 | -5.15 | 39.2 | 0.00 |
| 5 | 146 | -0 | -534 | 0 | 0 | -0 | -563 | 4.02 | 4.02 | 4.02 | 4.02 | -4.98 | 37.9 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 182 | -0 | -25 | 0 | 0 | -0 | -671 | 4.02 | 4.02 | 4.02 | 4.02 | -5.93 | 45.2 | 0.00 |
| 4 | 182 | -0 | -14 | 0 | 0 | -0 | -588 | 4.02 | 4.02 | 4.02 | 4.02 | -5.20 | 39.6 | 0.00 |
| 5 | 182 | -0 | -12 | 0 | 0 | -0 | -567 | 4.02 | 4.02 | 4.02 | 4.02 | -5.01 | 38.2 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 219 | -0 | 635 | -0 | 0 | -0 | -680 | 4.02 | 4.02 | 4.02 | 4.02 | -6.02 | 45.8 | 0.00 |
| 4 | 219 | -0 | 576 | -0 | 0 | -0 | -593 | 4.02 | 4.02 | 4.02 | 4.02 | -5.24 | 40.0 | 0.00 |
| 5 | 219 | -0 | 561 | -0 | 0 | -0 | -571 | 4.02 | 4.02 | 4.02 | 4.02 | -5.05 | 38.5 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 256 | -0 | 635 | -0 | 0 | -0 | -448 | 4.02 | 4.02 | 4.02 | 4.02 | -3.97 | 30.2 | 0.00 |
| 4 | 256 | -0 | 576 | -0 | 0 | -0 | -383 | 4.02 | 4.02 | 4.02 | 4.02 | -3.38 | 25.8 | 0.00 |
| 5 | 256 | -0 | 561 | -0 | 0 | -0 | -366 | 4.02 | 4.02 | 4.02 | 4.02 | -3.24 | 24.7 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 292 | -0 | 1431 | -0 | 0 | -0 | -217 | 4.02 | 4.02 | 4.02 | 4.02 | -1.92 | 14.6 | 0.00 |
| 4 | 292 | -0 | 1287 | -0 | 0 | -0 | -172 | 4.02 | 4.02 | 4.02 | 4.02 | -1.53 | 11.6 | 0.00 |
| 5 | 292 | -0 | 1251 | -0 | 0 | -0 | -161 | 4.02 | 4.02 | 4.02 | 4.02 | -1.43 | 10.9 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 328 | -0 | 1431 | -0 | 0 | 0 | 306 | 4.02 | 4.02 | 4.02 | 4.02 | -2.70 | 20.6 | 0.00 |
| 4 | 328 | -0 | 1287 | -0 | 0 | 0 | 297 | 4.02 | 4.02 | 4.02 | 4.02 | -2.63 | 20.0 | 0.00 |
| 5 | 328 | -0 | 1251 | -0 | 0 | 0 | 295 | 4.02 | 4.02 | 4.02 | 4.02 | -2.61 | 19.9 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 365 | -0 | 1431 | -0 | 0 | 0 | 613 | 4.02 | 4.02 | 4.02 | 4.02 | -5.42 | 41.3 | 0.00 |
| 4 | 365 | -0 | 1287 | -0 | 0 | 0 | 574 | 4.02 | 4.02 | 4.02 | 4.02 | -5.08 | 38.7 | 0.00 |
| 5 | 365 | -0 | 1251 | -0 | 0 | 0 | 564 | 4.02 | 4.02 | 4.02 | 4.02 | -4.99 | 38.0 | 0.00 |

apost= -- aant= -- ainf= -- asup= -- (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE10_IP1** Descrizione: **CORDOLI DI FONDAZIONE 5-8-13-18-23-2...**
**ASTA NUM. 34** NI 2 NF 97 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cm² | | | | | kg/cm² | mm |
| 3 | 0 | -0 | -811 | 0 | 0 | -0 | -444 | 4.02 | 4.02 | 8.04 | 8.04 | -0.97 | 8.2 | 0.00 |
| 4 | 0 | -0 | -620 | 0 | 0 | -0 | -345 | 4.02 | 4.02 | 8.04 | 8.04 | -0.75 | 6.4 | 0.00 |
| 5 | 0 | -0 | -572 | 0 | 0 | -0 | -320 | 4.02 | 4.02 | 8.04 | 8.04 | -0.70 | 5.9 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 36 | -0 | -811 | 0 | 0 | -0 | -740 | 4.02 | 4.02 | 8.04 | 8.04 | -1.61 | 13.7 | 0.00 |
| 4 | 36 | -0 | -620 | 0 | 0 | -0 | -571 | 4.02 | 4.02 | 8.04 | 8.04 | -1.24 | 10.6 | 0.00 |



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| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 36 | -0 | -572 | 0 | 0 | -0 | -529 | 4.02 | 4.02 | 8.04 | 8.04 | -1.15 | 9.8 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 73 | -0 | -811 | 0 | 0 | -0 | -1036 | 4.02 | 4.02 | 8.04 | 8.04 | -2.25 | 19.2 | 0.00 |
| 4 | 73 | -0 | -620 | 0 | 0 | -0 | -798 | 4.02 | 4.02 | 8.04 | 8.04 | -1.74 | 14.8 | 0.00 |
| 5 | 73 | -0 | -572 | 0 | 0 | -0 | -738 | 4.02 | 4.02 | 8.04 | 8.04 | -1.61 | 13.7 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 110 | -0 | -434 | 0 | 0 | -0 | -1194 | 4.02 | 4.02 | 8.04 | 8.04 | -2.60 | 22.1 | 0.00 |
| 4 | 110 | -0 | -334 | 0 | 0 | -0 | -920 | 4.02 | 4.02 | 8.04 | 8.04 | -2.00 | 17.0 | 0.00 |
| 5 | 110 | -0 | -308 | 0 | 0 | -0 | -851 | 4.02 | 4.02 | 8.04 | 8.04 | -1.85 | 15.8 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 146 | -0 | -434 | 0 | 0 | -0 | -1353 | 4.02 | 4.02 | 8.04 | 8.04 | -2.94 | 25.1 | 0.00 |
| 4 | 146 | -0 | -334 | 0 | 0 | -0 | -1041 | 4.02 | 4.02 | 8.04 | 8.04 | -2.27 | 19.3 | 0.00 |
| 5 | 146 | -0 | -308 | 0 | 0 | -0 | -963 | 4.02 | 4.02 | 8.04 | 8.04 | -2.10 | 17.8 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 182 | -0 | -132 | 0 | 0 | -0 | -1401 | 4.02 | 4.02 | 8.04 | 8.04 | -3.05 | 25.9 | 0.00 |
| 4 | 182 | -0 | -108 | 0 | 0 | -0 | -1080 | 4.02 | 4.02 | 8.04 | 8.04 | -2.35 | 20.0 | 0.00 |
| 5 | 182 | -0 | -102 | 0 | 0 | -0 | -1001 | 4.02 | 4.02 | 8.04 | 8.04 | -2.18 | 18.5 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 219 | -0 | -132 | 0 | 0 | -0 | -1450 | 4.02 | 4.02 | 8.04 | 8.04 | -3.15 | 26.8 | 0.00 |
| 4 | 219 | -0 | -108 | 0 | 0 | -0 | -1120 | 4.02 | 4.02 | 8.04 | 8.04 | -2.44 | 20.7 | 0.00 |
| 5 | 219 | -0 | -102 | 0 | 0 | -0 | -1038 | 4.02 | 4.02 | 8.04 | 8.04 | -2.26 | 19.2 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 256 | -0 | 118 | -0 | 0 | -0 | -1407 | 4.02 | 4.02 | 8.04 | 8.04 | -3.06 | 26.1 | 0.00 |
| 4 | 256 | -0 | 72 | -0 | 0 | -0 | -1094 | 4.02 | 4.02 | 8.04 | 8.04 | -2.38 | 20.2 | 0.00 |
| 5 | 256 | -0 | 61 | -0 | 0 | -0 | -1016 | 4.02 | 4.02 | 8.04 | 8.04 | -2.21 | 18.8 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 292 | -0 | 338 | -0 | 0 | -0 | -1364 | 4.02 | 4.02 | 8.04 | 8.04 | -2.97 | 25.3 | 0.00 |
| 4 | 292 | -0 | 226 | -0 | 0 | -0 | -1067 | 4.02 | 4.02 | 8.04 | 8.04 | -2.32 | 19.8 | 0.00 |
| 5 | 292 | -0 | 198 | -0 | 0 | -0 | -993 | 4.02 | 4.02 | 8.04 | 8.04 | -2.16 | 18.4 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 328 | -0 | 338 | -0 | 0 | -0 | -1241 | 4.02 | 4.02 | 8.04 | 8.04 | -2.70 | 23.0 | 0.00 |
| 4 | 328 | -0 | 226 | -0 | 0 | -0 | -984 | 4.02 | 4.02 | 8.04 | 8.04 | -2.14 | 18.2 | 0.00 |
| 5 | 328 | -0 | 198 | -0 | 0 | -0 | -921 | 4.02 | 4.02 | 8.04 | 8.04 | -2.00 | 17.1 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 365 | -0 | 338 | -0 | 0 | -0 | -1117 | 4.02 | 4.02 | 8.04 | 8.04 | -2.43 | 20.7 | 0.00 |
| 4 | 365 | -0 | 226 | -0 | 0 | -0 | -902 | 4.02 | 4.02 | 8.04 | 8.04 | -1.96 | 16.7 | 0.00 |
| 5 | 365 | -0 | 198 | -0 | 0 | -0 | -848 | 4.02 | 4.02 | 8.04 | 8.04 | -1.85 | 15.7 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE10_IP1** Descrizione: **CORDOLI DI FONDAZIONE 5-8-13-18-23-2...**
**ASTA NUM. 35** NI 97 NF 6 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cm² | | | | | kg/cm² | mm |
| 3 | 0 | -0 | 35 | -0 | 0 | -0 | -1126 | 4.02 | 4.02 | 8.04 | 8.04 | -2.45 | 20.9 | 0.00 |
| 4 | 0 | -0 | 48 | -0 | 0 | -0 | -903 | 4.02 | 4.02 | 8.04 | 8.04 | -1.97 | 16.7 | 0.00 |
| 5 | 0 | -0 | 51 | -0 | 0 | -0 | -848 | 4.02 | 4.02 | 8.04 | 8.04 | -1.84 | 15.7 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 36 | -0 | 35 | -0 | 0 | -0 | -1113 | 4.02 | 4.02 | 8.04 | 8.04 | -2.42 | 20.6 | 0.00 |
| 4 | 36 | -0 | 48 | -0 | 0 | -0 | -886 | 4.02 | 4.02 | 8.04 | 8.04 | -1.93 | 16.4 | 0.00 |
| 5 | 36 | -0 | 51 | -0 | 0 | -0 | -829 | 4.02 | 4.02 | 8.04 | 8.04 | -1.80 | 15.4 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 73 | -0 | 258 | -0 | 0 | -0 | -1101 | 4.02 | 4.02 | 8.04 | 8.04 | -2.40 | 20.4 | 0.00 |
| 4 | 73 | -0 | 198 | -0 | 0 | -0 | -868 | 4.02 | 4.02 | 8.04 | 8.04 | -1.89 | 16.1 | 0.00 |
| 5 | 73 | -0 | 183 | -0 | 0 | -0 | -810 | 4.02 | 4.02 | 8.04 | 8.04 | -1.76 | 15.0 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 110 | -0 | 258 | -0 | 0 | -0 | -1007 | 4.02 | 4.02 | 8.04 | 8.04 | -2.19 | 18.6 | 0.00 |
| 4 | 110 | -0 | 198 | -0 | 0 | -0 | -796 | 4.02 | 4.02 | 8.04 | 8.04 | -1.73 | 14.7 | 0.00 |
| 5 | 110 | -0 | 183 | -0 | 0 | -0 | -744 | 4.02 | 4.02 | 8.04 | 8.04 | -1.62 | 13.8 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 146 | -0 | 510 | -0 | 0 | -0 | -913 | 4.02 | 4.02 | 8.04 | 8.04 | -1.99 | 16.9 | 0.00 |
| 4 | 146 | -0 | 367 | -0 | 0 | -0 | -724 | 4.02 | 4.02 | 8.04 | 8.04 | -1.58 | 13.4 | 0.00 |
| 5 | 146 | -0 | 331 | -0 | 0 | -0 | -677 | 4.02 | 4.02 | 8.04 | 8.04 | -1.47 | 12.5 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 182 | -0 | 510 | -0 | 0 | -0 | -726 | 4.02 | 4.02 | 8.04 | 8.04 | -1.58 | 13.4 | 0.00 |
| 4 | 182 | -0 | 367 | -0 | 0 | -0 | -590 | 4.02 | 4.02 | 8.04 | 8.04 | -1.28 | 10.9 | 0.00 |
| 5 | 182 | -0 | 331 | -0 | 0 | -0 | -556 | 4.02 | 4.02 | 8.04 | 8.04 | -1.21 | 10.3 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 219 | -0 | 806 | -0 | 0 | -0 | -540 | 4.02 | 4.02 | 8.04 | 8.04 | -1.17 | 10.0 | 0.00 |
| 4 | 219 | -0 | 567 | -0 | 0 | -0 | -456 | 4.02 | 4.02 | 8.04 | 8.04 | -0.99 | 8.4 | 0.00 |
| 5 | 219 | -0 | 507 | -0 | 0 | -0 | -435 | 4.02 | 4.02 | 8.04 | 8.04 | -0.95 | 8.1 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 256 | -0 | 806 | -0 | 0 | -0 | -246 | 4.02 | 4.02 | 8.04 | 8.04 | -0.53 | 4.6 | 0.00 |
| 4 | 256 | -0 | 567 | -0 | 0 | -0 | -249 | 4.02 | 4.02 | 8.04 | 8.04 | -0.54 | 4.6 | 0.00 |
| 5 | 256 | -0 | 507 | -0 | 0 | -0 | -250 | 4.02 | 4.02 | 8.04 | 8.04 | -0.54 | 4.6 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 292 | -0 | 1153 | -0 | 0 | 0 | 48 | 4.02 | 4.02 | 8.04 | 8.04 | -0.10 | 0.9 | 0.00 |



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| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 292 | -0 | 805 | -0 | 0 | -0 | -43 | 4.02 | 4.02 | 8.04 | 8.04 | -0.09 | 0.8 | 0.00 |
| 5 | 292 | -0 | 718 | -0 | 0 | -0 | -65 | 4.02 | 4.02 | 8.04 | 8.04 | -0.14 | 1.2 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 328 | -0 | 1153 | -0 | 0 | 0 | 469 | 4.02 | 4.02 | 8.04 | 8.04 | -1.02 | 8.7 | 0.00 |
| 4 | 328 | -0 | 805 | -0 | 0 | 0 | 251 | 4.02 | 4.02 | 8.04 | 8.04 | -0.55 | 4.6 | 0.00 |
| 5 | 328 | -0 | 718 | -0 | 0 | 0 | 197 | 4.02 | 4.02 | 8.04 | 8.04 | -0.43 | 3.6 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 365 | -0 | 1153 | -0 | 0 | 0 | 717 | 4.02 | 4.02 | 8.04 | 8.04 | -1.56 | 13.3 | 0.00 |
| 4 | 365 | -0 | 805 | -0 | 0 | 0 | 424 | 4.02 | 4.02 | 8.04 | 8.04 | -0.92 | 7.9 | 0.00 |
| 5 | 365 | -0 | 718 | -0 | 0 | 0 | 351 | 4.02 | 4.02 | 8.04 | 8.04 | -0.76 | 6.5 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE10_IP1** Descrizione: **CORDOLI DI FONDAZIONE 5-8-13-18-23-2...**
**ASTA NUM. 36** NI 6 NF 53 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | | kg | | | kg*m | | | | $cm^2$ | | | $kg/cm^2$ | mm |
| 3 | 0 | -0 | -682 | 0 | 0 | 0 | 917 | 4.02 | 4.02 | 8.04 | 8.04 | -1.99 | 17.0 | 0.00 |
| 4 | 0 | -0 | -412 | 0 | 0 | 0 | 574 | 4.02 | 4.02 | 8.04 | 8.04 | -1.25 | 10.6 | 0.00 |
| 5 | 0 | -0 | -344 | 0 | 0 | 0 | 488 | 4.02 | 4.02 | 8.04 | 8.04 | -1.06 | 9.0 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 20 | -0 | -682 | 0 | 0 | 0 | 879 | 4.02 | 4.02 | 8.04 | 8.04 | -1.91 | 16.3 | 0.00 |
| 4 | 20 | -0 | -412 | 0 | 0 | 0 | 551 | 4.02 | 4.02 | 8.04 | 8.04 | -1.20 | 10.2 | 0.00 |
| 5 | 20 | -0 | -344 | 0 | 0 | 0 | 469 | 4.02 | 4.02 | 8.04 | 8.04 | -1.02 | 8.7 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 41 | -0 | -682 | 0 | 0 | 0 | 739 | 4.02 | 4.02 | 8.04 | 8.04 | -1.61 | 13.7 | 0.00 |
| 4 | 41 | -0 | -412 | 0 | 0 | 0 | 467 | 4.02 | 4.02 | 8.04 | 8.04 | -1.02 | 8.6 | 0.00 |
| 5 | 41 | -0 | -344 | 0 | 0 | 0 | 398 | 4.02 | 4.02 | 8.04 | 8.04 | -0.87 | 7.4 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 62 | -0 | -446 | 0 | 0 | 0 | 648 | 4.02 | 4.02 | 8.04 | 8.04 | -1.41 | 12.0 | 0.00 |
| 4 | 62 | -0 | -246 | 0 | 0 | 0 | 416 | 4.02 | 4.02 | 8.04 | 8.04 | -0.91 | 7.7 | 0.00 |
| 5 | 62 | -0 | -196 | 0 | 0 | 0 | 358 | 4.02 | 4.02 | 8.04 | 8.04 | -0.78 | 6.6 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 82 | -0 | -446 | 0 | 0 | 0 | 556 | 4.02 | 4.02 | 8.04 | 8.04 | -1.21 | 10.3 | 0.00 |
| 4 | 82 | -0 | -246 | 0 | 0 | 0 | 366 | 4.02 | 4.02 | 8.04 | 8.04 | -0.80 | 6.8 | 0.00 |
| 5 | 82 | -0 | -196 | 0 | 0 | 0 | 318 | 4.02 | 4.02 | 8.04 | 8.04 | -0.69 | 5.9 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 102 | -0 | -200 | 0 | 0 | 0 | 515 | 4.02 | 4.02 | 8.04 | 8.04 | -1.12 | 9.5 | 0.00 |
| 4 | 102 | -0 | -72 | 0 | 0 | 0 | 351 | 4.02 | 4.02 | 8.04 | 8.04 | -0.76 | 6.5 | 0.00 |
| 5 | 102 | -0 | -40 | 0 | 0 | 0 | 310 | 4.02 | 4.02 | 8.04 | 8.04 | -0.67 | 5.7 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 123 | -0 | -200 | 0 | 0 | 0 | 474 | 4.02 | 4.02 | 8.04 | 8.04 | -1.03 | 8.8 | 0.00 |
| 4 | 123 | -0 | 109 | -0 | 0 | 0 | 336 | 4.02 | 4.02 | 8.04 | 8.04 | -0.73 | 6.2 | 0.00 |
| 5 | 123 | -0 | 123 | -0 | 0 | 0 | 301 | 4.02 | 4.02 | 8.04 | 8.04 | -0.66 | 5.6 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 144 | -0 | 54 | -0 | 0 | 0 | 485 | 4.02 | 4.02 | 8.04 | 8.04 | -1.06 | 9.0 | 0.00 |
| 4 | 144 | -0 | 109 | -0 | 0 | 0 | 358 | 4.02 | 4.02 | 8.04 | 8.04 | -0.78 | 6.6 | 0.00 |
| 5 | 144 | -0 | 123 | -0 | 0 | 0 | 327 | 4.02 | 4.02 | 8.04 | 8.04 | -0.71 | 6.0 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 164 | -0 | 316 | -0 | 0 | 0 | 496 | 4.02 | 4.02 | 8.04 | 8.04 | -1.08 | 9.2 | 0.00 |
| 4 | 164 | -0 | 298 | -0 | 0 | 0 | 381 | 4.02 | 4.02 | 8.04 | 8.04 | -0.83 | 7.1 | 0.00 |
| 5 | 164 | -0 | 293 | -0 | 0 | 0 | 352 | 4.02 | 4.02 | 8.04 | 8.04 | -0.77 | 6.5 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 184 | -0 | 316 | -0 | 0 | 0 | 561 | 4.02 | 4.02 | 8.04 | 8.04 | -1.22 | 10.4 | 0.00 |
| 4 | 184 | -0 | 298 | -0 | 0 | 0 | 442 | 4.02 | 4.02 | 8.04 | 8.04 | -0.96 | 8.2 | 0.00 |
| 5 | 184 | -0 | 293 | -0 | 0 | 0 | 412 | 4.02 | 4.02 | 8.04 | 8.04 | -0.90 | 7.6 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 205 | -0 | 316 | -0 | 0 | 0 | 578 | 4.02 | 4.02 | 8.04 | 8.04 | -1.26 | 10.7 | 0.00 |
| 4 | 205 | -0 | 298 | -0 | 0 | 0 | 458 | 4.02 | 4.02 | 8.04 | 8.04 | -1.00 | 8.5 | 0.00 |
| 5 | 205 | -0 | 293 | -0 | 0 | 0 | 428 | 4.02 | 4.02 | 8.04 | 8.04 | -0.93 | 7.9 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE10_IP1** Descrizione: **CORDOLI DI FONDAZIONE 5-8-13-18-23-2...**
**ASTA NUM. 37** NI 53 NF 7 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | | kg | | | kg*m | | | | $cm^2$ | | | $kg/cm^2$ | mm |
| 3 | 0 | -0 | -398 | 0 | 0 | 0 | 539 | 4.02 | 4.02 | 8.04 | 8.04 | -1.17 | 10.0 | 0.00 |
| 4 | 0 | -0 | -278 | 0 | 0 | 0 | 439 | 4.02 | 4.02 | 8.04 | 8.04 | -0.95 | 8.1 | 0.00 |
| 5 | 0 | -0 | -249 | 0 | 0 | 0 | 413 | 4.02 | 4.02 | 8.04 | 8.04 | -0.90 | 7.7 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 30 | -0 | -398 | 0 | 0 | 0 | 477 | 4.02 | 4.02 | 8.04 | 8.04 | -1.04 | 8.8 | 0.00 |
| 4 | 30 | -0 | -278 | 0 | 0 | 0 | 395 | 4.02 | 4.02 | 8.04 | 8.04 | -0.86 | 7.3 | 0.00 |
| 5 | 30 | -0 | -249 | 0 | 0 | 0 | 375 | 4.02 | 4.02 | 8.04 | 8.04 | -0.82 | 6.9 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 61 | -0 | -398 | 0 | 0 | 0 | 356 | 4.02 | 4.02 | 8.04 | 8.04 | -0.77 | 6.6 | 0.00 |



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| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 61 | -0 | -278 | 0 | 0 | 0 | 310 | 4.02 | 4.02 | 8.04 | 8.04 | -0.68 | 5.7 | 0.00 |
| 5 | 61 | -0 | -249 | 0 | 0 | 0 | 299 | 4.02 | 4.02 | 8.04 | 8.04 | -0.65 | 5.5 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 92 | -0 | 9 | -0 | 0 | 0 | 359 | 4.02 | 4.02 | 8.04 | 8.04 | -0.78 | 6.6 | 0.00 |
| 4 | 92 | -0 | 19 | -0 | 0 | 0 | 316 | 4.02 | 4.02 | 8.04 | 8.04 | -0.69 | 5.9 | 0.00 |
| 5 | 92 | -0 | 21 | -0 | 0 | 0 | 305 | 4.02 | 4.02 | 8.04 | 8.04 | -0.66 | 5.7 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 122 | -0 | 422 | -0 | 0 | 0 | 362 | 4.02 | 4.02 | 8.04 | 8.04 | -0.79 | 6.7 | 0.00 |
| 4 | 122 | -0 | 321 | -0 | 0 | 0 | 322 | 4.02 | 4.02 | 8.04 | 8.04 | -0.70 | 6.0 | 0.00 |
| 5 | 122 | -0 | 296 | -0 | 0 | 0 | 312 | 4.02 | 4.02 | 8.04 | 8.04 | -0.68 | 5.8 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 152 | -0 | 422 | -0 | 0 | 0 | 490 | 4.02 | 4.02 | 8.04 | 8.04 | -1.07 | 9.1 | 0.00 |
| 4 | 152 | -0 | 321 | -0 | 0 | 0 | 420 | 4.02 | 4.02 | 8.04 | 8.04 | -0.91 | 7.8 | 0.00 |
| 5 | 152 | -0 | 296 | -0 | 0 | 0 | 402 | 4.02 | 4.02 | 8.04 | 8.04 | -0.87 | 7.4 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 183 | -0 | 836 | -0 | 0 | 0 | 619 | 4.02 | 4.02 | 8.04 | 8.04 | -1.35 | 11.5 | 0.00 |
| 4 | 183 | -0 | 626 | -0 | 0 | 0 | 518 | 4.02 | 4.02 | 8.04 | 8.04 | -1.13 | 9.6 | 0.00 |
| 5 | 183 | -0 | 574 | -0 | 0 | 0 | 492 | 4.02 | 4.02 | 8.04 | 8.04 | -1.07 | 9.1 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 214 | -0 | 836 | -0 | 0 | 0 | 874 | 4.02 | 4.02 | 8.04 | 8.04 | -1.90 | 16.2 | 0.00 |
| 4 | 214 | -0 | 626 | -0 | 0 | 0 | 709 | 4.02 | 4.02 | 8.04 | 8.04 | -1.54 | 13.1 | 0.00 |
| 5 | 214 | -0 | 574 | -0 | 0 | 0 | 668 | 4.02 | 4.02 | 8.04 | 8.04 | -1.45 | 12.4 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 244 | -0 | 1246 | -0 | 0 | 0 | 1128 | 4.02 | 4.02 | 8.04 | 8.04 | -2.46 | 20.9 | 0.00 |
| 4 | 244 | -0 | 930 | -0 | 0 | 0 | 900 | 4.02 | 4.02 | 8.04 | 8.04 | -1.96 | 16.7 | 0.00 |
| 5 | 244 | -0 | 850 | -0 | 0 | 0 | 843 | 4.02 | 4.02 | 8.04 | 8.04 | -1.83 | 15.6 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 274 | -0 | 1246 | -0 | 0 | 0 | 1508 | 4.02 | 4.02 | 8.04 | 8.04 | -3.28 | 27.9 | 0.00 |
| 4 | 274 | -0 | 930 | -0 | 0 | 0 | 1183 | 4.02 | 4.02 | 8.04 | 8.04 | -2.57 | 21.9 | 0.00 |
| 5 | 274 | -0 | 850 | -0 | 0 | 0 | 1102 | 4.02 | 4.02 | 8.04 | 8.04 | -2.40 | 20.4 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 305 | -0 | 1246 | -0 | 0 | 0 | 1701 | 4.02 | 4.02 | 8.04 | 8.04 | -3.70 | 31.5 | 0.00 |
| 4 | 305 | -0 | 930 | -0 | 0 | 0 | 1328 | 4.02 | 4.02 | 8.04 | 8.04 | -2.89 | 24.6 | 0.00 |
| 5 | 305 | -0 | 850 | -0 | 0 | 0 | 1234 | 4.02 | 4.02 | 8.04 | 8.04 | -2.68 | 22.9 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE10_IP1** Descrizione: **CORDOLI DI FONDAZIONE 5-8-13-18-23-2...**
**ASTA NUM. 38** NI 7 NF 40 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | cm² | | | | | kg/cm² | mm |
| 3 | 0 | -0 | -1581 | 0 | 0 | 0 | 1550 | 4.02 | 4.02 | 8.04 | 8.04 | -3.37 | 28.7 | 0.00 |
| 4 | 0 | -0 | -1214 | 0 | 0 | 0 | 1215 | 4.02 | 4.02 | 8.04 | 8.04 | -2.64 | 22.5 | 0.00 |
| 5 | 0 | -0 | -1122 | 0 | 0 | 0 | 1132 | 4.02 | 4.02 | 8.04 | 8.04 | -2.46 | 21.0 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 36 | -0 | -1581 | 0 | 0 | 0 | 1210 | 4.02 | 4.02 | 8.04 | 8.04 | -2.63 | 22.4 | 0.00 |
| 4 | 36 | -0 | -1214 | 0 | 0 | 0 | 954 | 4.02 | 4.02 | 8.04 | 8.04 | -2.08 | 17.7 | 0.00 |
| 5 | 36 | -0 | -1122 | 0 | 0 | 0 | 890 | 4.02 | 4.02 | 8.04 | 8.04 | -1.94 | 16.5 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 73 | -0 | -1581 | 0 | 0 | 0 | 633 | 4.02 | 4.02 | 8.04 | 8.04 | -1.38 | 11.7 | 0.00 |
| 4 | 73 | -0 | -1214 | 0 | 0 | 0 | 511 | 4.02 | 4.02 | 8.04 | 8.04 | -1.11 | 9.5 | 0.00 |
| 5 | 73 | -0 | -1122 | 0 | 0 | 0 | 481 | 4.02 | 4.02 | 8.04 | 8.04 | -1.05 | 8.9 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 110 | -0 | -1156 | 0 | 0 | 0 | 211 | 4.02 | 4.02 | 8.04 | 8.04 | -0.46 | 3.9 | 0.00 |
| 4 | 110 | -0 | -901 | 0 | 0 | 0 | 182 | 4.02 | 4.02 | 8.04 | 8.04 | -0.40 | 3.4 | 0.00 |
| 5 | 110 | -0 | -837 | 0 | 0 | 0 | 175 | 4.02 | 4.02 | 8.04 | 8.04 | -0.38 | 3.2 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 146 | -0 | -1156 | 0 | 0 | -0 | -211 | 4.02 | 4.02 | 8.04 | 8.04 | -0.46 | 3.9 | 0.00 |
| 4 | 146 | -0 | -901 | 0 | 0 | -0 | -146 | 4.02 | 4.02 | 8.04 | 8.04 | -0.32 | 2.7 | 0.00 |
| 5 | 146 | -0 | -837 | 0 | 0 | -0 | -130 | 4.02 | 4.02 | 8.04 | 8.04 | -0.28 | 2.4 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 182 | -0 | -789 | 0 | 0 | -0 | -499 | 4.02 | 4.02 | 8.04 | 8.04 | -1.09 | 9.2 | 0.00 |
| 4 | 182 | -0 | -632 | 0 | 0 | -0 | -377 | 4.02 | 4.02 | 8.04 | 8.04 | -0.82 | 7.0 | 0.00 |
| 5 | 182 | -0 | -592 | 0 | 0 | -0 | -347 | 4.02 | 4.02 | 8.04 | 8.04 | -0.75 | 6.4 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 219 | -0 | -789 | 0 | 0 | -0 | -787 | 4.02 | 4.02 | 8.04 | 8.04 | -1.71 | 14.6 | 0.00 |
| 4 | 219 | -0 | -632 | 0 | 0 | -0 | -608 | 4.02 | 4.02 | 8.04 | 8.04 | -1.32 | 11.3 | 0.00 |
| 5 | 219 | -0 | -592 | 0 | 0 | -0 | -563 | 4.02 | 4.02 | 8.04 | 8.04 | -1.22 | 10.4 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 256 | -0 | -477 | 0 | 0 | -0 | -961 | 4.02 | 4.02 | 8.04 | 8.04 | -2.09 | 17.8 | 0.00 |
| 4 | 256 | -0 | -406 | 0 | 0 | -0 | -756 | 4.02 | 4.02 | 8.04 | 8.04 | -1.64 | 14.0 | 0.00 |
| 5 | 256 | -0 | -388 | 0 | 0 | -0 | -704 | 4.02 | 4.02 | 8.04 | 8.04 | -1.53 | 13.0 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 292 | -0 | -477 | 0 | 0 | -0 | -1135 | 4.02 | 4.02 | 8.04 | 8.04 | -2.47 | 21.0 | 0.00 |
| 4 | 292 | -0 | -406 | 0 | 0 | -0 | -904 | 4.02 | 4.02 | 8.04 | 8.04 | -1.97 | 16.7 | 0.00 |
| 5 | 292 | -0 | -388 | 0 | 0 | -0 | -846 | 4.02 | 4.02 | 8.04 | 8.04 | -1.84 | 15.7 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)



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| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 328 | -0 | -208 | 0 | 0 | -0 | -1211 | 4.02 | 4.02 | 8.04 | 8.04 | -2.63 | 22.4 | 0.00 |
| 4 | 328 | -0 | -212 | 0 | 0 | -0 | -981 | 4.02 | 4.02 | 8.04 | 8.04 | -2.13 | 18.2 | 0.00 |
| 5 | 328 | -0 | -213 | 0 | 0 | -0 | -923 | 4.02 | 4.02 | 8.04 | 8.04 | -2.01 | 17.1 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 365 | -0 | -208 | 0 | 0 | -0 | -1287 | 4.02 | 4.02 | 8.04 | 8.04 | -2.80 | 23.8 | 0.00 |
| 4 | 365 | -0 | -212 | 0 | 0 | -0 | -1058 | 4.02 | 4.02 | 8.04 | 8.04 | -2.30 | 19.6 | 0.00 |
| 5 | 365 | -0 | -213 | 0 | 0 | -0 | -1001 | 4.02 | 4.02 | 8.04 | 8.04 | -2.18 | 18.5 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

Nome travata: **CORDOLI DI FONDAZIONE10_IP1** Descrizione: **CORDOLI DI FONDAZIONE 5-8-13-18-23-2...**
**ASTA NUM. 39** NI 40 NF 47 SEZ. Rp B= 60.0 H= 60.0 (trave di fondazione)

armatura base = 4 X 2.01 per le armature aggiuntive consultare il tabulato

| NC | x | [Fx] | [Fy] | [Fz] | [Mx] | [My] | Mz | [APOST] | [AANT] | AINF | ASUP | Sc | Sf | w |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | | | | | | | | | | | | -- | |
| | cm | | kg | | | kg*m | | | | $cm^2$ | | | $kg/cm^2$ | mm |
| 3 | 0 | -0 | -335 | 0 | 0 | -0 | -1256 | 4.02 | 4.02 | 8.04 | 8.04 | -2.73 | 23.3 | 0.00 |
| 4 | 0 | -0 | -225 | 0 | 0 | -0 | -1034 | 4.02 | 4.02 | 8.04 | 8.04 | -2.25 | 19.1 | 0.00 |
| 5 | 0 | -0 | -197 | 0 | 0 | -0 | -978 | 4.02 | 4.02 | 8.04 | 8.04 | -2.13 | 18.1 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 36 | -0 | -335 | 0 | 0 | -0 | -1378 | 4.02 | 4.02 | 8.04 | 8.04 | -3.00 | 25.5 | 0.00 |
| 4 | 36 | -0 | -225 | 0 | 0 | -0 | -1116 | 4.02 | 4.02 | 8.04 | 8.04 | -2.43 | 20.7 | 0.00 |
| 5 | 36 | -0 | -197 | 0 | 0 | -0 | -1050 | 4.02 | 4.02 | 8.04 | 8.04 | -2.28 | 19.4 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 73 | -0 | -335 | 0 | 0 | -0 | -1501 | 4.02 | 4.02 | 8.04 | 8.04 | -3.27 | 27.8 | 0.00 |
| 4 | 73 | -0 | -225 | 0 | 0 | -0 | -1198 | 4.02 | 4.02 | 8.04 | 8.04 | -2.61 | 22.2 | 0.00 |
| 5 | 73 | -0 | -197 | 0 | 0 | -0 | -1122 | 4.02 | 4.02 | 8.04 | 8.04 | -2.44 | 20.8 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 110 | -0 | -93 | 0 | 0 | -0 | -1535 | 4.02 | 4.02 | 8.04 | 8.04 | -3.34 | 28.4 | 0.00 |
| 4 | 110 | -0 | -50 | 0 | 0 | -0 | -1216 | 4.02 | 4.02 | 8.04 | 8.04 | -2.65 | 22.5 | 0.00 |
| 5 | 110 | -0 | -40 | 0 | 0 | -0 | -1137 | 4.02 | 4.02 | 8.04 | 8.04 | -2.47 | 21.0 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 146 | -0 | 169 | -0 | 0 | -0 | -1569 | 4.02 | 4.02 | 8.04 | 8.04 | -3.41 | 29.1 | 0.00 |
| 4 | 146 | -0 | 142 | -0 | 0 | -0 | -1235 | 4.02 | 4.02 | 8.04 | 8.04 | -2.69 | 22.9 | 0.00 |
| 5 | 146 | -0 | 135 | -0 | 0 | -0 | -1151 | 4.02 | 4.02 | 8.04 | 8.04 | -2.50 | 21.3 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 182 | -0 | 169 | -0 | 0 | -0 | -1507 | 4.02 | 4.02 | 8.04 | 8.04 | -3.28 | 27.9 | 0.00 |
| 4 | 182 | -0 | 142 | -0 | 0 | -0 | -1182 | 4.02 | 4.02 | 8.04 | 8.04 | -2.57 | 21.9 | 0.00 |
| 5 | 182 | -0 | 135 | -0 | 0 | -0 | -1102 | 4.02 | 4.02 | 8.04 | 8.04 | -2.40 | 20.4 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 219 | -0 | 477 | -0 | 0 | -0 | -1446 | 4.02 | 4.02 | 8.04 | 8.04 | -3.15 | 26.8 | 0.00 |
| 4 | 219 | -0 | 372 | -0 | 0 | -0 | -1131 | 4.02 | 4.02 | 8.04 | 8.04 | -2.46 | 20.9 | 0.00 |
| 5 | 219 | -0 | 346 | -0 | 0 | -0 | -1052 | 4.02 | 4.02 | 8.04 | 8.04 | -2.29 | 19.5 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 256 | -0 | 477 | -0 | 0 | -0 | -1272 | 4.02 | 4.02 | 8.04 | 8.04 | -2.77 | 23.6 | 0.00 |
| 4 | 256 | -0 | 372 | -0 | 0 | -0 | -995 | 4.02 | 4.02 | 8.04 | 8.04 | -2.17 | 18.4 | 0.00 |
| 5 | 256 | -0 | 346 | -0 | 0 | -0 | -926 | 4.02 | 4.02 | 8.04 | 8.04 | -2.01 | 17.1 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 292 | -0 | 854 | -0 | 0 | -0 | -1098 | 4.02 | 4.02 | 8.04 | 8.04 | -2.39 | 20.3 | 0.00 |
| 4 | 292 | -0 | 659 | -0 | 0 | -0 | -859 | 4.02 | 4.02 | 8.04 | 8.04 | -1.87 | 15.9 | 0.00 |
| 5 | 292 | -0 | 610 | -0 | 0 | -0 | -800 | 4.02 | 4.02 | 8.04 | 8.04 | -1.74 | 14.8 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 328 | -0 | 854 | -0 | 0 | -0 | -786 | 4.02 | 4.02 | 8.04 | 8.04 | -1.71 | 14.6 | 0.00 |
| 4 | 328 | -0 | 659 | -0 | 0 | -0 | -619 | 4.02 | 4.02 | 8.04 | 8.04 | -1.35 | 11.5 | 0.00 |
| 5 | 328 | -0 | 610 | -0 | 0 | -0 | -577 | 4.02 | 4.02 | 8.04 | 8.04 | -1.26 | 10.7 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 365 | -0 | 854 | -0 | 0 | -0 | -475 | 4.02 | 4.02 | 8.04 | 8.04 | -1.03 | 8.8 | 0.00 |
| 4 | 365 | -0 | 659 | -0 | 0 | -0 | -378 | 4.02 | 4.02 | 8.04 | 8.04 | -0.82 | 7.0 | 0.00 |
| 5 | 365 | -0 | 610 | -0 | 0 | -0 | -354 | 4.02 | 4.02 | 8.04 | 8.04 | -0.77 | 6.6 | 0.00 |

apost= -- aant= -- ainf= 4.02 asup= 4.02 (e arm. base= 4 X 2.01)



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

**VERIFICHE EC3 – ELEMENTI IN ACCIAIO**

**TRAVI DI COPERTURA IN ACCIAIO**

Elemento: **TRAVE** Metodo di verifica: **Eurocodice 3 - NTC 2018**
Gruppo: **2** Descrizione: **TRAVI DI COPERTURA**
Tabella: **Tabella travi** Struttura: **Nuova**
Tipo acciaio: **S 275** Beta piano 'yx': **1.000** Beta piano 'zx': **1.000**
Tipologia sismica: **Senza prescrizioni aggiuntive**
γM0: **1.050** γM1': **1.050** γM1'': **1.050** γM2: **1.250** γrv: **0.000** γM0 Pf: **1.000** γM1 Pf: **1.000**
Tipo collegamento: **saldato** Connessione su un solo lato Connessione sul lato corto (solo 'L')

**ASTA NUM. 1** NI 16 NF 17 Lungh. 175.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -1981 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1B | 0 | -1981 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1C | 0 | -1981 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1D | 0 | -1981 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1E | 0 | 613 | 21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1F | 0 | 613 | 21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1G | 0 | 613 | 21 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1H | 0 | 613 | 21 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1I | 0 | -1262 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1J | 0 | -1262 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1K | 0 | -1262 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1L | 0 | -1262 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1M | 0 | -106 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 0 | -106 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 0 | -106 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 0 | -106 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 0 | -59 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | -682 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 8 | 0 | -62 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 88 | -1981 | -0 | 0 | 0 | 0 | 9 | 1 | 0.00 | 0.03 | 0.00 | |
| 1B | 88 | -1981 | 0 | 0 | 0 | 0 | 9 | 1 | 0.00 | 0.03 | 0.00 | |
| 1C | 88 | -1981 | -0 | -0 | 0 | 0 | 9 | 1 | 0.00 | 0.03 | 0.00 | |
| 1D | 88 | -1981 | 0 | -0 | 0 | 0 | 9 | 1 | 0.00 | 0.03 | 0.00 | |
| 1E | 88 | 613 | -0 | 0 | 0 | 0 | 9 | 1 | 0.00 | 0.01 | 0.00 | |
| 1F | 88 | 613 | 0 | 0 | 0 | 0 | 9 | 1 | 0.00 | 0.01 | 0.00 | |
| 1G | 88 | 613 | -0 | -0 | 0 | 0 | 9 | 1 | 0.00 | 0.01 | 0.00 | |
| 1H | 88 | 613 | 0 | -0 | 0 | 0 | 9 | 1 | 0.00 | 0.01 | 0.00 | |
| 1I | 88 | -1262 | -0 | 0 | 0 | 0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 1J | 88 | -1262 | 0 | 0 | 0 | 0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 1K | 88 | -1262 | -0 | -0 | 0 | 0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 1L | 88 | -1262 | 0 | -0 | 0 | 0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 1M | 88 | -106 | -0 | 0 | 0 | 0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 88 | -106 | 0 | 0 | 0 | 0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 88 | -106 | -0 | -0 | 0 | 0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 88 | -106 | 0 | -0 | 0 | 0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 88 | -59 | 0 | -0 | 0 | 0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 88 | -682 | 0 | 0 | 0 | 0 | 9 | 1 | 0.00 | 0.01 | 0.00 | |
| 8 | 88 | -62 | 0 | -0 | 0 | 0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 175 | -1981 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1B | 175 | -1981 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1C | 175 | -1981 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1D | 175 | -1981 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1E | 175 | 613 | -21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1F | 175 | 613 | -21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1G | 175 | 613 | -21 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1H | 175 | 613 | -21 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1I | 175 | -1262 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1J | 175 | -1262 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1K | 175 | -1262 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1L | 175 | -1262 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1M | 175 | -106 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 175 | -106 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 175 | -106 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 175 | -106 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 175 | -59 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 175 | -682 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 8 | 175 | -62 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -1981 | 0 | 9 | 1 | 0.6034 | 1.1667 | 1.0073 | -- | -- | 0.05 | -- | 0.05 Snell. 'zx'= | 85 |
| 1B | -1981 | 0 | 9 | 1 | 0.6034 | 1.1667 | 1.0073 | -- | -- | 0.05 | -- | 0.05 Snell. 'zx'= | 85 |
| 1C | -1981 | 0 | 9 | 1 | 0.6034 | 1.1667 | 1.0073 | -- | -- | 0.05 | -- | 0.05 Snell. 'zx'= | 85 |
| 1D | -1981 | 0 | 9 | 1 | 0.6034 | 1.1667 | 1.0073 | -- | -- | 0.05 | -- | 0.05 Snell. 'zx'= | 85 |
| 1I | -1262 | 0 | 9 | 1 | 0.6034 | 1.1062 | 1.0047 | -- | -- | 0.03 | -- | 0.03 Snell. 'zx'= | 85 |
| 1J | -1262 | 0 | 9 | 1 | 0.6034 | 1.1062 | 1.0047 | -- | -- | 0.03 | -- | 0.03 Snell. 'zx'= | 85 |
| 1K | -1262 | 0 | 9 | 1 | 0.6034 | 1.1062 | 1.0047 | -- | -- | 0.03 | -- | 0.03 Snell. 'zx'= | 85 |
| 1L | -1262 | 0 | 9 | 1 | 0.6034 | 1.1062 | 1.0047 | -- | -- | 0.03 | -- | 0.03 Snell. 'zx'= | 85 |
| 1M | -106 | 0 | 9 | 1 | 0.6034 | 1.0089 | 1.0004 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 85 |
| 1N | -106 | 0 | 9 | 1 | 0.6034 | 1.0089 | 1.0004 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 85 |
| 1O | -106 | 0 | 9 | 1 | 0.6034 | 1.0089 | 1.0004 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 85 |
| 1P | -106 | 0 | 9 | 1 | 0.6034 | 1.0089 | 1.0004 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 85 |
| 2 | -59 | 0 | 9 | 1 | 0.6034 | 1.0050 | 1.0002 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 85 |
| 7 | -682 | 0 | 9 | 1 | 0.6034 | 1.0574 | 1.0025 | -- | -- | 0.02 | -- | 0.02 Snell. 'zx'= | 85 |
| 8 | -62 | 0 | 9 | 1 | 0.6034 | 1.0052 | 1.0002 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 85 |

**ASTA NUM. 2** NI 17 NF 70 Lungh. 180.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -3328 | -286 | 2 | 0 | 0 | 0 | 1 | 0.02 | 0.05 | 0.00 | |
| 1B | 0 | -3328 | 319 | 2 | 0 | 0 | -0 | 1 | 0.02 | 0.05 | 0.00 | |
| 1C | 0 | -3328 | -286 | 2 | 0 | 0 | 0 | 1 | 0.02 | 0.05 | 0.00 | |
| 1D | 0 | -3328 | 319 | 2 | 0 | 0 | -0 | 1 | 0.02 | 0.05 | 0.00 | |
| 1E | 0 | 3088 | -286 | 2 | 0 | 0 | 0 | -- | 0.02 | 0.05 | 0.00 | |
| 1F | 0 | 3088 | 319 | 2 | 0 | 0 | -0 | -- | 0.02 | 0.05 | 0.00 | |
| 1G | 0 | 3088 | -286 | 2 | 0 | 0 | 0 | -- | 0.02 | 0.05 | 0.00 | |
| 1H | 0 | 3088 | 319 | 2 | 0 | 0 | -0 | -- | 0.02 | 0.05 | 0.00 | |
| 1I | 0 | -1420 | -105 | 2 | 0 | 0 | 0 | 1 | 0.01 | 0.02 | 0.00 | |
| 1J | 0 | -1420 | 137 | 2 | 0 | 0 | -0 | 1 | 0.01 | 0.02 | 0.00 | |
| 1K | 0 | -1420 | -105 | 2 | 0 | 0 | 0 | 1 | 0.01 | 0.02 | 0.00 | |
| 1L | 0 | -1420 | 137 | 2 | 0 | 0 | -0 | 1 | 0.01 | 0.02 | 0.00 | |
| 1M | 0 | 1179 | -105 | 2 | 0 | 0 | 0 | -- | 0.01 | 0.02 | 0.00 | |
| 1N | 0 | 1179 | 137 | 2 | 0 | 0 | -0 | -- | 0.01 | 0.02 | 0.00 | |
| 1O | 0 | 1179 | -105 | 2 | 0 | 0 | 0 | -- | 0.01 | 0.02 | 0.00 | |
| 1P | 0 | 1179 | 137 | 2 | 0 | 0 | -0 | -- | 0.01 | 0.02 | 0.00 | |
| 2 | 0 | -233 | 50 | 2 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | -115 | 15 | 2 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | -238 | 50 | 2 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 90 | -3328 | -308 | 2 | 0 | -2 | -267 | 1 | 0.02 | 0.05 | 0.06 | |
| 1B | 90 | -3328 | 297 | 2 | 0 | -2 | 277 | 1 | 0.02 | 0.05 | 0.06 | |
| 1C | 90 | -3328 | -308 | 2 | 0 | -1 | -267 | 1 | 0.02 | 0.05 | 0.06 | |
| 1D | 90 | -3328 | 297 | 2 | 0 | -1 | 277 | 1 | 0.02 | 0.05 | 0.06 | |
| 1E | 90 | 3088 | -308 | 2 | 0 | -2 | -267 | 1 | 0.02 | 0.05 | 0.06 | |
| 1F | 90 | 3088 | 297 | 2 | 0 | -2 | 277 | 1 | 0.02 | 0.05 | 0.06 | |
| 1G | 90 | 3088 | -308 | 2 | 0 | -1 | -267 | 1 | 0.02 | 0.05 | 0.06 | |
| 1H | 90 | 3088 | 297 | 2 | 0 | -1 | 277 | 1 | 0.02 | 0.05 | 0.06 | |
| 1I | 90 | -1420 | -127 | 2 | 0 | -2 | -104 | 1 | 0.01 | 0.02 | 0.02 | |
| 1J | 90 | -1420 | 115 | 2 | 0 | -2 | 113 | 1 | 0.01 | 0.02 | 0.03 | |
| 1K | 90 | -1420 | -127 | 2 | 0 | -2 | -104 | 1 | 0.01 | 0.02 | 0.02 | |
| 1L | 90 | -1420 | 115 | 2 | 0 | -2 | 113 | 1 | 0.01 | 0.02 | 0.03 | |
| 1M | 90 | 1179 | -127 | 2 | 0 | -2 | -104 | 1 | 0.01 | 0.02 | 0.02 | |
| 1N | 90 | 1179 | 115 | 2 | 0 | -2 | 113 | 1 | 0.01 | 0.02 | 0.03 | |
| 1O | 90 | 1179 | -127 | 2 | 0 | -2 | -104 | 1 | 0.01 | 0.02 | 0.02 | |
| 1P | 90 | 1179 | 115 | 2 | 0 | -2 | 113 | 1 | 0.01 | 0.02 | 0.03 | |
| 2 | 90 | -233 | 28 | 2 | 0 | -2 | 35 | 1 | 0.00 | 0.00 | 0.01 | |
| 7 | 90 | -115 | -6 | 2 | 0 | -2 | 4 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 90 | -238 | 28 | 2 | 0 | -2 | 35 | 1 | 0.00 | 0.00 | 0.01 | |
| 1A | 180 | -3328 | -330 | 2 | 0 | -3 | -555 | 1 | 0.02 | 0.05 | 0.12 | |
| 1B | 180 | -3328 | 275 | 2 | 0 | -3 | 534 | 1 | 0.02 | 0.05 | 0.12 | |
| 1C | 180 | -3328 | -330 | 2 | 0 | -3 | -555 | 1 | 0.02 | 0.05 | 0.12 | |
| 1D | 180 | -3328 | 275 | 2 | 0 | -3 | 534 | 1 | 0.02 | 0.05 | 0.12 | |
| 1E | 180 | 3088 | -330 | 2 | 0 | -3 | -555 | 1 | 0.02 | 0.05 | 0.12 | |
| 1F | 180 | 3088 | 275 | 2 | 0 | -3 | 534 | 1 | 0.02 | 0.05 | 0.12 | |
| 1G | 180 | 3088 | -330 | 2 | 0 | -3 | -555 | 1 | 0.02 | 0.05 | 0.12 | |
| 1H | 180 | 3088 | 275 | 2 | 0 | -3 | 534 | 1 | 0.02 | 0.05 | 0.12 | |
| 1I | 180 | -1420 | -149 | 2 | 0 | -3 | -228 | 1 | 0.01 | 0.02 | 0.05 | |
| 1J | 180 | -1420 | 93 | 2 | 0 | -3 | 207 | 1 | 0.01 | 0.02 | 0.05 | |
| 1K | 180 | -1420 | -149 | 2 | 0 | -3 | -228 | 1 | 0.01 | 0.02 | 0.05 | |
| 1L | 180 | -1420 | 93 | 2 | 0 | -3 | 207 | 1 | 0.01 | 0.02 | 0.05 | |
| 1M | 180 | 1179 | -149 | 2 | 0 | -3 | -228 | 1 | 0.01 | 0.02 | 0.05 | |
| 1N | 180 | 1179 | 93 | 2 | 0 | -3 | 207 | 1 | 0.01 | 0.02 | 0.05 | |
| 1O | 180 | 1179 | -149 | 2 | 0 | -3 | -228 | 1 | 0.01 | 0.02 | 0.05 | |
| 1P | 180 | 1179 | 93 | 2 | 0 | -3 | 207 | 1 | 0.01 | 0.02 | 0.05 | |
| 2 | 180 | -233 | 6 | 2 | 0 | -3 | 50 | 1 | 0.00 | 0.00 | 0.01 | |
| 7 | 180 | -115 | -28 | 2 | 0 | -3 | -12 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 180 | -238 | 6 | 2 | 0 | -3 | 51 | 1 | 0.00 | 0.00 | 0.01 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -3328 | -3 | -555 | 1 | 0.5854 | 0.9872 | 0.9989 | -- | -- | 0.09 | -- | 0.22 Snell. 'zx'= | 88 |
| 1B | -3328 | -3 | 534 | 1 | 0.5854 | 0.9872 | 0.9989 | -- | -- | 0.09 | -- | 0.21 Snell. 'zx'= | 88 |
| 1C | -3328 | -3 | -555 | 1 | 0.5854 | 0.9872 | 0.9989 | -- | -- | 0.09 | -- | 0.22 Snell. 'zx'= | 88 |
| 1D | -3328 | -3 | 534 | 1 | 0.5854 | 0.9872 | 0.9989 | -- | -- | 0.09 | -- | 0.21 Snell. 'zx'= | 88 |
| 1I | -1420 | -3 | -228 | 1 | 0.5854 | 0.9945 | 0.9997 | -- | -- | 0.04 | -- | 0.09 Snell. 'zx'= | 88 |
| 1J | -1420 | -3 | 207 | 1 | 0.5854 | 0.9945 | 0.9997 | -- | -- | 0.04 | -- | 0.09 Snell. 'zx'= | 88 |
| 1K | -1420 | -3 | -228 | 1 | 0.5854 | 0.9945 | 0.9997 | -- | -- | 0.04 | -- | 0.09 Snell. 'zx'= | 88 |
| 1L | -1420 | -3 | 207 | 1 | 0.5854 | 0.9945 | 0.9997 | -- | -- | 0.04 | -- | 0.09 Snell. 'zx'= | 88 |
| 2 | -233 | -3 | 50 | 1 | 0.5854 | 0.9991 | 1.0001 | -- | -- | 0.01 | -- | 0.02 Snell. 'zx'= | 88 |
| 7 | -115 | -3 | -12 | 1 | 0.5854 | 0.9996 | 1.0003 | -- | -- | 0.00 | -- | 0.01 Snell. 'zx'= | 88 |
| 8 | -238 | -3 | 51 | 1 | 0.5854 | 0.9991 | 1.0001 | -- | -- | 0.01 | -- | 0.02 Snell. 'zx'= | 88 |

**ASTA NUM. 3** NI 70 NF 19 Lungh. 197.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -2288 | -188 | 0 | 0 | 0 | 418 | 1 | 0.01 | 0.04 | 0.09 | |
| 1B | 0 | -2288 | 211 | 0 | 0 | 0 | -369 | 1 | 0.01 | 0.04 | 0.08 | |
| 1C | 0 | -2288 | -188 | 0 | 0 | 0 | 418 | 1 | 0.01 | 0.04 | 0.09 | |
| 1D | 0 | -2288 | 211 | 0 | 0 | 0 | -369 | 1 | 0.01 | 0.04 | 0.08 | |
| 1E | 0 | 2139 | -188 | 0 | 0 | 0 | 418 | 1 | 0.01 | 0.03 | 0.09 | |
| 1F | 0 | 2139 | 211 | 0 | 0 | 0 | -369 | 1 | 0.01 | 0.03 | 0.08 | |
| 1G | 0 | 2139 | -188 | 0 | 0 | 0 | 418 | 1 | 0.01 | 0.03 | 0.09 | |
| 1H | 0 | 2139 | 211 | 0 | 0 | 0 | -369 | 1 | 0.01 | 0.03 | 0.08 | |
| 1I | 0 | -947 | -67 | 0 | 0 | 0 | 179 | 1 | 0.00 | 0.01 | 0.04 | |
| 1J | 0 | -947 | 90 | 0 | 0 | 0 | -130 | 1 | 0.01 | 0.01 | 0.03 | |
| 1K | 0 | -947 | -67 | 0 | 0 | 0 | 179 | 1 | 0.00 | 0.01 | 0.04 | |
| 1L | 0 | -947 | 90 | 0 | 0 | 0 | -130 | 1 | 0.01 | 0.01 | 0.03 | |
| 1M | 0 | 798 | -67 | 0 | 0 | 0 | 179 | 1 | 0.00 | 0.01 | 0.04 | |
| 1N | 0 | 798 | 90 | 0 | 0 | 0 | -130 | 1 | 0.01 | 0.01 | 0.03 | |
| 1O | 0 | 798 | -67 | 0 | 0 | 0 | 179 | 1 | 0.00 | 0.01 | 0.04 | |
| 1P | 0 | 798 | 90 | 0 | 0 | 0 | -130 | 1 | 0.01 | 0.01 | 0.03 | |
| 2 | 0 | 139 | 34 | 0 | 0 | 0 | -20 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | -75 | 12 | 0 | 0 | 0 | 24 | 1 | 0.00 | 0.00 | 0.01 | |
| 8 | 0 | 140 | 34 | 0 | 0 | 0 | -20 | 1 | 0.00 | 0.00 | 0.00 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 98 | -2288 | -212 | 0 | 0 | 0 | 221 | 1 | 0.01 | 0.04 | 0.05 |
| 1B | 98 | -2288 | 187 | 0 | 0 | 0 | -173 | 1 | 0.01 | 0.04 | 0.04 |
| 1C | 98 | -2288 | -212 | 0 | 0 | 0 | 221 | 1 | 0.01 | 0.04 | 0.05 |
| 1D | 98 | -2288 | 187 | 0 | 0 | 0 | -173 | 1 | 0.01 | 0.04 | 0.04 |
| 1E | 98 | 2139 | -212 | 0 | 0 | 0 | 221 | 1 | 0.01 | 0.03 | 0.05 |
| 1F | 98 | 2139 | 187 | 0 | 0 | 0 | -173 | 1 | 0.01 | 0.03 | 0.04 |
| 1G | 98 | 2139 | -212 | 0 | 0 | 0 | 221 | 1 | 0.01 | 0.03 | 0.05 |
| 1H | 98 | 2139 | 187 | 0 | 0 | 0 | -173 | 1 | 0.01 | 0.03 | 0.04 |
| 1I | 98 | -947 | -91 | 0 | 0 | 0 | 101 | 1 | 0.01 | 0.01 | 0.02 |
| 1J | 98 | -947 | 66 | 0 | 0 | 0 | -53 | 1 | 0.00 | 0.01 | 0.01 |
| 1K | 98 | -947 | -91 | 0 | 0 | 0 | 101 | 1 | 0.01 | 0.01 | 0.02 |
| 1L | 98 | -947 | 66 | 0 | 0 | 0 | -53 | 1 | 0.00 | 0.01 | 0.01 |
| 1M | 98 | 798 | -91 | 0 | 0 | 0 | 101 | 1 | 0.01 | 0.01 | 0.02 |
| 1N | 98 | 798 | 66 | 0 | 0 | 0 | -53 | 1 | 0.00 | 0.01 | 0.01 |
| 1O | 98 | 798 | -91 | 0 | 0 | 0 | 101 | 1 | 0.01 | 0.01 | 0.02 |
| 1P | 98 | 798 | 66 | 0 | 0 | 0 | -53 | 1 | 0.00 | 0.01 | 0.01 |
| 2 | 98 | 139 | 10 | 0 | 0 | 0 | 2 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 98 | -75 | -12 | 0 | 0 | 0 | 24 | 1 | 0.00 | 0.00 | 0.01 |
| 8 | 98 | 140 | 10 | 0 | 0 | 0 | 2 | 1 | 0.00 | 0.00 | 0.00 |
| 1A | 197 | -2288 | -236 | 0 | 0 | 0 | 0 | 1 | 0.01 | 0.04 | 0.00 |
| 1B | 197 | -2288 | 163 | 0 | 0 | 0 | 0 | 1 | 0.01 | 0.04 | 0.00 |
| 1C | 197 | -2288 | -236 | 0 | 0 | 0 | 0 | 1 | 0.01 | 0.04 | 0.00 |
| 1D | 197 | -2288 | 163 | 0 | 0 | 0 | 0 | 1 | 0.01 | 0.04 | 0.00 |
| 1E | 197 | 2139 | -236 | 0 | 0 | 0 | 0 | -- | 0.01 | 0.03 | 0.00 |
| 1F | 197 | 2139 | 163 | 0 | 0 | 0 | 0 | -- | 0.01 | 0.03 | 0.00 |
| 1G | 197 | 2139 | -236 | 0 | 0 | 0 | 0 | -- | 0.01 | 0.03 | 0.00 |
| 1H | 197 | 2139 | 163 | 0 | 0 | 0 | 0 | -- | 0.01 | 0.03 | 0.00 |
| 1I | 197 | -947 | -115 | 0 | 0 | 0 | 0 | 1 | 0.01 | 0.01 | 0.00 |
| 1J | 197 | -947 | 42 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1K | 197 | -947 | -115 | 0 | 0 | 0 | 0 | 1 | 0.01 | 0.01 | 0.00 |
| 1L | 197 | -947 | 42 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1M | 197 | 798 | -115 | 0 | 0 | 0 | 0 | -- | 0.01 | 0.01 | 0.00 |
| 1N | 197 | 798 | 42 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 |
| 1O | 197 | 798 | -115 | 0 | 0 | 0 | 0 | -- | 0.01 | 0.01 | 0.00 |
| 1P | 197 | 798 | 42 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 |
| 2 | 197 | 139 | -14 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 7 | 197 | -75 | -36 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 8 | 197 | 140 | -14 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -2288 | 0 | 418 | 1 | 0.5266 | 0.9927 | 0.9997 | -- | -- | 0.07 | -- | 0.16 | Snell. 'zx'= 96 |
| 1B | -2288 | 0 | -369 | 1 | 0.5266 | 0.9927 | 0.9998 | -- | -- | 0.07 | -- | 0.15 | Snell. 'zx'= 96 |
| 1C | -2288 | 0 | 418 | 1 | 0.5266 | 0.9927 | 0.9997 | -- | -- | 0.07 | -- | 0.16 | Snell. 'zx'= 96 |
| 1D | -2288 | 0 | -369 | 1 | 0.5266 | 0.9927 | 0.9998 | -- | -- | 0.07 | -- | 0.15 | Snell. 'zx'= 96 |
| 1I | -947 | 0 | 179 | 1 | 0.5266 | 0.9970 | 1.0001 | -- | -- | 0.03 | -- | 0.07 | Snell. 'zx'= 96 |
| 1J | -947 | 0 | -130 | 1 | 0.5266 | 0.9970 | 1.0002 | -- | -- | 0.03 | -- | 0.06 | Snell. 'zx'= 96 |
| 1K | -947 | 0 | 179 | 1 | 0.5266 | 0.9970 | 1.0001 | -- | -- | 0.03 | -- | 0.07 | Snell. 'zx'= 96 |
| 1L | -947 | 0 | -130 | 1 | 0.5266 | 0.9970 | 1.0002 | -- | -- | 0.03 | -- | 0.06 | Snell. 'zx'= 96 |
| 7 | -75 | 0 | 24 | 1 | 0.5266 | 0.9998 | 1.0002 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |

**ASTA NUM. 4** NI 19 NF 15 Lungh. 215.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -447 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1B | 0 | -447 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1C | 0 | -447 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1D | 0 | -447 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1E | 0 | 1031 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 | |
| 1F | 0 | 1031 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 | |
| 1G | 0 | 1031 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 | |
| 1H | 0 | 1031 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 | |
| 1I | 0 | -48 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | -48 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 0 | -48 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 0 | -48 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 0 | 632 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1N | 0 | 632 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1O | 0 | 632 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1P | 0 | 632 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 2 | 0 | 31 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | 292 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | 30 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1A | 108 | -447 | -0 | 0 | 0 | 0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1B | 108 | -447 | 0 | 0 | 0 | 0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1C | 108 | -447 | -0 | -0 | 0 | 0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1D | 108 | -447 | 0 | -0 | 0 | 0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1E | 108 | 1031 | -0 | 0 | 0 | 0 | 14 | 1 | 0.00 | 0.02 | 0.00 | |
| 1F | 108 | 1031 | 0 | 0 | 0 | 0 | 14 | 1 | 0.00 | 0.02 | 0.00 | |
| 1G | 108 | 1031 | -0 | -0 | 0 | 0 | 14 | 1 | 0.00 | 0.02 | 0.00 | |
| 1H | 108 | 1031 | 0 | -0 | 0 | 0 | 14 | 1 | 0.00 | 0.02 | 0.00 | |
| 1I | 108 | -48 | -0 | 0 | 0 | 0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 108 | -48 | 0 | 0 | 0 | 0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 108 | -48 | -0 | -0 | 0 | 0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 108 | -48 | 0 | -0 | 0 | 0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 108 | 632 | -0 | 0 | 0 | 0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1N | 108 | 632 | 0 | 0 | 0 | 0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1O | 108 | 632 | -0 | -0 | 0 | 0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1P | 108 | 632 | 0 | -0 | 0 | 0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 2 | 108 | 31 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 108 | 292 | 0 | -0 | 0 | 0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 108 | 30 | 0 | -0 | 0 | 0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 215 | -447 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1B | 215 | -447 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1C | 215 | -447 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1D | 215 | -447 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1E | 215 | 1031 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 | |
| 1F | 215 | 1031 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 | |
| 1G | 215 | 1031 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 | |
| 1H | 215 | 1031 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 | |



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| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1I | 215 | -48 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1J | 215 | -48 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1K | 215 | -48 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1L | 215 | -48 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1M | 215 | 632 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 |
| 1N | 215 | 632 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 |
| 1O | 215 | 632 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 |
| 1P | 215 | 632 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 |
| 2 | 215 | 31 | -26 | -0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 7 | 215 | 292 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 8 | 215 | 30 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -447 | 0 | 14 | 1 | 0.4693 | 1.0612 | 1.0023 | -- | -- | 0.01 | -- | 0.02 | Snell. 'zx'= 105 |
| 1B | -447 | 0 | 14 | 1 | 0.4693 | 1.0612 | 1.0023 | -- | -- | 0.01 | -- | 0.02 | Snell. 'zx'= 105 |
| 1C | -447 | 0 | 14 | 1 | 0.4693 | 1.0612 | 1.0023 | -- | -- | 0.01 | -- | 0.02 | Snell. 'zx'= 105 |
| 1D | -447 | 0 | 14 | 1 | 0.4693 | 1.0612 | 1.0023 | -- | -- | 0.01 | -- | 0.02 | Snell. 'zx'= 105 |
| 1I | -48 | 0 | 14 | 1 | 0.4693 | 1.0066 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 1J | -48 | 0 | 14 | 1 | 0.4693 | 1.0066 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 1K | -48 | 0 | 14 | 1 | 0.4693 | 1.0066 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 1L | -48 | 0 | 14 | 1 | 0.4693 | 1.0066 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |

**ASTA NUM. 5** NI 13 NF 27 Lungh. 175.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -38 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | -38 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | -38 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | -38 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | 7 | 21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 0 | 7 | 21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 0 | 7 | 21 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 0 | 7 | 21 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 0 | -29 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | -29 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 0 | -29 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 0 | -29 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 0 | -1 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 0 | -1 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 0 | -1 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 0 | -1 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 0 | -1 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | -15 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | -1 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 88 | -38 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 88 | -38 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 88 | -38 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 88 | -38 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 88 | 7 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 88 | 7 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 88 | 7 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 88 | 7 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 88 | -29 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 88 | -29 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 88 | -29 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 88 | -29 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 88 | -1 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 88 | -1 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 88 | -1 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 88 | -1 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 88 | -1 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 88 | -15 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 88 | -1 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 175 | -38 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 175 | -38 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 175 | -38 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 175 | -38 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 175 | 7 | -21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 175 | 7 | -21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 175 | 7 | -21 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 175 | 7 | -21 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 175 | -29 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 175 | -29 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 175 | -29 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 175 | -29 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 175 | -1 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 175 | -1 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 175 | -1 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 175 | -1 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 175 | -1 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 175 | -15 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 175 | -1 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -38 | -0 | 9 | 1 | 0.6034 | 1.0008 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1B | -38 | -0 | 9 | 1 | 0.6034 | 1.0008 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1C | -38 | -0 | 9 | 1 | 0.6034 | 1.0008 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1D | -38 | -0 | 9 | 1 | 0.6034 | 1.0008 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1I | -29 | -0 | 9 | 1 | 0.6034 | 1.0006 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1J | -29 | -0 | 9 | 1 | 0.6034 | 1.0006 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1K | -29 | -0 | 9 | 1 | 0.6034 | 1.0006 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1L | -29 | -0 | 9 | 1 | 0.6034 | 1.0006 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |



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| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1M | -1 | -0 | 9 | 1 | 0.6034 | 1.0000 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1N | -1 | -0 | 9 | 1 | 0.6034 | 1.0000 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1O | -1 | -0 | 9 | 1 | 0.6034 | 1.0000 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1P | -1 | -0 | 9 | 1 | 0.6034 | 1.0000 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 2 | -1 | -0 | 9 | 1 | 0.6034 | 1.0000 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 7 | -15 | -0 | 9 | 1 | 0.6034 | 1.0003 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 8 | -1 | -0 | 9 | 1 | 0.6034 | 1.0000 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |

**ASTA NUM. 6** NI 27 NF 52 Lungh. 180.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -201 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | -201 | 22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | -201 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | -201 | 22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | 185 | 22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 0 | 185 | 22 | 0 | 0 | 0 | -0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 0 | 185 | 22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 0 | 185 | 22 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 0 | -119 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | -119 | 22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 0 | -119 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 0 | -119 | 22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 0 | 103 | 22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 0 | 103 | 22 | 0 | 0 | 0 | -0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 0 | 103 | 22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 0 | 103 | 22 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 0 | -3 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | -8 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | -3 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 90 | -201 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 90 | -201 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 90 | -201 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 90 | -201 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 90 | 185 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 90 | 185 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 90 | 185 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 90 | 185 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 90 | -119 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 90 | -119 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 90 | -119 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 90 | -119 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 90 | 103 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 90 | 103 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 90 | 103 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 90 | 103 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 90 | -3 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 90 | -8 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 90 | -3 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 180 | -201 | -22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 180 | -201 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 180 | -201 | -22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 180 | -201 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 180 | 185 | -22 | 0 | 0 | 0 | -0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 180 | 185 | -22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 180 | 185 | -22 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 180 | 185 | -22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 180 | -119 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 180 | -119 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 180 | -119 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 180 | -119 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 180 | 103 | -22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 180 | 103 | -22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 180 | 103 | -22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 180 | 103 | -22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 180 | -3 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 180 | -8 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 180 | -3 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -201 | -0 | 10 | 1 | 0.5854 | 1.0044 | 1.0008 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1B | -201 | -0 | 10 | 1 | 0.5854 | 1.0044 | 1.0008 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1C | -201 | -0 | 10 | 1 | 0.5854 | 1.0044 | 1.0008 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1D | -201 | -0 | 10 | 1 | 0.5854 | 1.0044 | 1.0008 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1I | -119 | -0 | 10 | 1 | 0.5854 | 1.0026 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 88 |
| 1J | -119 | -0 | 10 | 1 | 0.5854 | 1.0026 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 88 |
| 1K | -119 | -0 | 10 | 1 | 0.5854 | 1.0026 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 88 |
| 1L | -119 | -0 | 10 | 1 | 0.5854 | 1.0026 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 88 |
| 2 | -3 | -0 | 10 | 1 | 0.5854 | 1.0001 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 88 |
| 7 | -8 | -0 | 10 | 1 | 0.5854 | 1.0002 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 88 |
| 8 | -3 | -0 | 10 | 1 | 0.5854 | 1.0001 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 88 |

**ASTA NUM. 7** NI 52 NF 26 Lungh. 197.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -155 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | -155 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | -155 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | -155 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | 153 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 0 | 153 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 0 | 153 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1H | 0 | 153 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1I | 0 | -101 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1J | 0 | -101 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1K | 0 | -101 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1L | 0 | -101 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1M | 0 | 99 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1N | 0 | 99 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1O | 0 | 99 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1P | 0 | 99 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 2 | 0 | 1 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 7 | 0 | -1 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 8 | 0 | 1 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1A | 98 | -155 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1B | 98 | -155 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1C | 98 | -155 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1D | 98 | -155 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1E | 98 | 153 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1F | 98 | 153 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1G | 98 | 153 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1H | 98 | 153 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1I | 98 | -101 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1J | 98 | -101 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1K | 98 | -101 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1L | 98 | -101 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1M | 98 | 99 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1N | 98 | 99 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1O | 98 | 99 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1P | 98 | 99 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 2 | 98 | 1 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 98 | -1 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 8 | 98 | 1 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1A | 197 | -155 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1B | 197 | -155 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1C | 197 | -155 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1D | 197 | -155 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1E | 197 | 153 | -24 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1F | 197 | 153 | -24 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1G | 197 | 153 | -24 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1H | 197 | 153 | -24 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1I | 197 | -101 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1J | 197 | -101 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1K | 197 | -101 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1L | 197 | -101 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1M | 197 | 99 | -24 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1N | 197 | 99 | -24 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1O | 197 | 99 | -24 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1P | 197 | 99 | -24 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 2 | 197 | 1 | -24 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 7 | 197 | -1 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 8 | 197 | 1 | -24 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -155 | -0 | 12 | 1 | 0.5266 | 1.0044 | 1.0007 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1B | -155 | -0 | 12 | 1 | 0.5266 | 1.0044 | 1.0007 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1C | -155 | -0 | 12 | 1 | 0.5266 | 1.0044 | 1.0007 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1D | -155 | -0 | 12 | 1 | 0.5266 | 1.0044 | 1.0007 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1I | -101 | -0 | 12 | 1 | 0.5266 | 1.0029 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1J | -101 | -0 | 12 | 1 | 0.5266 | 1.0029 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1K | -101 | -0 | 12 | 1 | 0.5266 | 1.0029 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1L | -101 | -0 | 12 | 1 | 0.5266 | 1.0029 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 7 | -1 | -0 | 12 | 1 | 0.5266 | 1.0000 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |

**ASTA NUM. 8** NI 26 NF 14 Lungh. 215.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -81 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | -81 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | -81 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | -81 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | 88 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 0 | 88 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 0 | 88 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 0 | 88 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 0 | -47 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | -47 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 0 | -47 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 0 | -47 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 0 | 55 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 0 | 55 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 0 | 55 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 0 | 55 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 0 | 1 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | 4 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | 1 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1A | 108 | -81 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 108 | -81 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 108 | -81 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 108 | -81 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 108 | 88 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 108 | 88 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 108 | 88 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 108 | 88 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 108 | -47 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 108 | -47 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 108 | -47 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 108 | -47 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 108 | 55 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 108 | 55 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 108 | 55 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1P | 108 | 55 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 2 | 108 | 1 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 108 | 4 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 8 | 108 | 1 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1A | 215 | -81 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1B | 215 | -81 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1C | 215 | -81 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1D | 215 | -81 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1E | 215 | 88 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1F | 215 | 88 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1G | 215 | 88 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1H | 215 | 88 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1I | 215 | -47 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1J | 215 | -47 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1K | 215 | -47 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1L | 215 | -47 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1M | 215 | 55 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1N | 215 | 55 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1O | 215 | 55 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1P | 215 | 55 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 2 | 215 | 1 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 7 | 215 | 4 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 8 | 215 | 1 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -81 | -0 | 14 | 1 | 0.4693 | 1.0029 | 1.0004 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 105 |
| 1B | -81 | -0 | 14 | 1 | 0.4693 | 1.0029 | 1.0004 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 105 |
| 1C | -81 | -0 | 14 | 1 | 0.4693 | 1.0029 | 1.0004 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 105 |
| 1D | -81 | -0 | 14 | 1 | 0.4693 | 1.0029 | 1.0004 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 105 |
| 1I | -47 | -0 | 14 | 1 | 0.4693 | 1.0017 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 1J | -47 | -0 | 14 | 1 | 0.4693 | 1.0017 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 1K | -47 | -0 | 14 | 1 | 0.4693 | 1.0017 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 1L | -47 | -0 | 14 | 1 | 0.4693 | 1.0017 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |

**ASTA NUM. 9** NI 83 NF 62 Lungh. 175.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -2392 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.04 | 0.00 | |
| 1B | 0 | -2392 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.04 | 0.00 | |
| 1C | 0 | -2392 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.04 | 0.00 | |
| 1D | 0 | -2392 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.04 | 0.00 | |
| 1E | 0 | -4 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 0 | -4 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 0 | -4 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 0 | -4 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 0 | -1854 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1J | 0 | -1854 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1K | 0 | -1854 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1L | 0 | -1854 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1M | 0 | -542 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1N | 0 | -542 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1O | 0 | -542 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1P | 0 | -542 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 2 | 0 | 1 | 21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | -1197 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 8 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1A | 88 | -2392 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.04 | 0.00 | |
| 1B | 88 | -2392 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.04 | 0.00 | |
| 1C | 88 | -2392 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.04 | 0.00 | |
| 1D | 88 | -2392 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.04 | 0.00 | |
| 1E | 88 | -4 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 88 | -4 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 88 | -4 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 88 | -4 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 88 | -1854 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.03 | 0.00 | |
| 1J | 88 | -1854 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.03 | 0.00 | |
| 1K | 88 | -1854 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.03 | 0.00 | |
| 1L | 88 | -1854 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.03 | 0.00 | |
| 1M | 88 | -542 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 | |
| 1N | 88 | -542 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 | |
| 1O | 88 | -542 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 | |
| 1P | 88 | -542 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 | |
| 2 | 88 | 1 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 88 | -1197 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 8 | 88 | 0 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 175 | -2392 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.04 | 0.00 | |
| 1B | 175 | -2392 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.04 | 0.00 | |
| 1C | 175 | -2392 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.04 | 0.00 | |
| 1D | 175 | -2392 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.04 | 0.00 | |
| 1E | 175 | -4 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 175 | -4 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 175 | -4 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 175 | -4 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 175 | -1854 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1J | 175 | -1854 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1K | 175 | -1854 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1L | 175 | -1854 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1M | 175 | -542 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1N | 175 | -542 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1O | 175 | -542 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1P | 175 | -542 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 2 | 175 | 1 | -21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 7 | 175 | -1197 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 8 | 175 | 0 | -21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -2392 | -0 | 9 | 1 | 0.6034 | 1.0490 | 1.0089 | -- | -- | 0.06 | -- | 0.06 | Snell. 'zx'= 85 |
| 1B | -2392 | -0 | 9 | 1 | 0.6034 | 1.0490 | 1.0089 | -- | -- | 0.06 | -- | 0.06 | Snell. 'zx'= 85 |
| 1C | -2392 | -0 | 9 | 1 | 0.6034 | 1.0490 | 1.0089 | -- | -- | 0.06 | -- | 0.06 | Snell. 'zx'= 85 |
| 1D | -2392 | -0 | 9 | 1 | 0.6034 | 1.0490 | 1.0089 | -- | -- | 0.06 | -- | 0.06 | Snell. 'zx'= 85 |
| 1E | -4 | -0 | 9 | 1 | 0.6034 | 1.0001 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1F | -4 | -0 | 9 | 1 | 0.6034 | 1.0001 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1G | -4 | -0 | 9 | 1 | 0.6034 | 1.0001 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1H | -4 | -0 | 9 | 1 | 0.6034 | 1.0001 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1I | -1854 | -0 | 9 | 1 | 0.6034 | 1.0379 | 1.0069 | -- | -- | 0.05 | -- | 0.05 | Snell. 'zx'= 85 |
| 1J | -1854 | -0 | 9 | 1 | 0.6034 | 1.0379 | 1.0069 | -- | -- | 0.05 | -- | 0.05 | Snell. 'zx'= 85 |
| 1K | -1854 | -0 | 9 | 1 | 0.6034 | 1.0379 | 1.0069 | -- | -- | 0.05 | -- | 0.05 | Snell. 'zx'= 85 |
| 1L | -1854 | -0 | 9 | 1 | 0.6034 | 1.0379 | 1.0069 | -- | -- | 0.05 | -- | 0.05 | Snell. 'zx'= 85 |
| 1M | -542 | -0 | 9 | 1 | 0.6034 | 1.0111 | 1.0020 | -- | -- | 0.01 | -- | 0.02 | Snell. 'zx'= 85 |
| 1N | -542 | -0 | 9 | 1 | 0.6034 | 1.0111 | 1.0020 | -- | -- | 0.01 | -- | 0.02 | Snell. 'zx'= 85 |
| 1O | -542 | -0 | 9 | 1 | 0.6034 | 1.0111 | 1.0020 | -- | -- | 0.01 | -- | 0.02 | Snell. 'zx'= 85 |
| 1P | -542 | -0 | 9 | 1 | 0.6034 | 1.0111 | 1.0020 | -- | -- | 0.01 | -- | 0.02 | Snell. 'zx'= 85 |
| 7 | -1197 | -0 | 9 | 1 | 0.6034 | 1.0245 | 1.0044 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 85 |

**ASTA NUM. 10** NI 62 NF 50 Lungh. 180.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -2134 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1B | 0 | -2134 | 22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1C | 0 | -2134 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1D | 0 | -2134 | 22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1E | 0 | 2379 | 22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.04 | 0.00 | |
| 1F | 0 | 2379 | 22 | 0 | 0 | 0 | -0 | -- | 0.00 | 0.04 | 0.00 | |
| 1G | 0 | 2379 | 22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.04 | 0.00 | |
| 1H | 0 | 2379 | 22 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.04 | 0.00 | |
| 1I | 0 | -1111 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1J | 0 | -1111 | 22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1K | 0 | -1111 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1L | 0 | -1111 | 22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1M | 0 | 1356 | 22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 | |
| 1N | 0 | 1356 | 22 | 0 | 0 | 0 | -0 | -- | 0.00 | 0.02 | 0.00 | |
| 1O | 0 | 1356 | 22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 | |
| 1P | 0 | 1356 | 22 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.02 | 0.00 | |
| 2 | 0 | 9 | 22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | 123 | 22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | 9 | 22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1A | 90 | -2134 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.03 | 0.00 | |
| 1B | 90 | -2134 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.03 | 0.00 | |
| 1C | 90 | -2134 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.03 | 0.00 | |
| 1D | 90 | -2134 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.03 | 0.00 | |
| 1E | 90 | 2379 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.04 | 0.00 | |
| 1F | 90 | 2379 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.04 | 0.00 | |
| 1G | 90 | 2379 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.04 | 0.00 | |
| 1H | 90 | 2379 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.04 | 0.00 | |
| 1I | 90 | -1111 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.02 | 0.00 | |
| 1J | 90 | -1111 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.02 | 0.00 | |
| 1K | 90 | -1111 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.02 | 0.00 | |
| 1L | 90 | -1111 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.02 | 0.00 | |
| 1M | 90 | 1356 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.02 | 0.00 | |
| 1N | 90 | 1356 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.02 | 0.00 | |
| 1O | 90 | 1356 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.02 | 0.00 | |
| 1P | 90 | 1356 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.02 | 0.00 | |
| 2 | 90 | 9 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 90 | 123 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 90 | 9 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 180 | -2134 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1B | 180 | -2134 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1C | 180 | -2134 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1D | 180 | -2134 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1E | 180 | 2379 | -22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.04 | 0.00 | |
| 1F | 180 | 2379 | -22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.04 | 0.00 | |
| 1G | 180 | 2379 | -22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.04 | 0.00 | |
| 1H | 180 | 2379 | -22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.04 | 0.00 | |
| 1I | 180 | -1111 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1J | 180 | -1111 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1K | 180 | -1111 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1L | 180 | -1111 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1M | 180 | 1356 | -22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 | |
| 1N | 180 | 1356 | -22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 | |
| 1O | 180 | 1356 | -22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 | |
| 1P | 180 | 1356 | -22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 | |
| 2 | 180 | 9 | -22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 7 | 180 | 123 | -22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 8 | 180 | 9 | -22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -2134 | -0 | 10 | 1 | 0.5854 | 1.0472 | 1.0083 | -- | -- | 0.06 | -- | 0.06 | Snell. 'zx'= 88 |
| 1B | -2134 | -0 | 10 | 1 | 0.5854 | 1.0472 | 1.0083 | -- | -- | 0.06 | -- | 0.06 | Snell. 'zx'= 88 |
| 1C | -2134 | -0 | 10 | 1 | 0.5854 | 1.0472 | 1.0083 | -- | -- | 0.06 | -- | 0.06 | Snell. 'zx'= 88 |
| 1D | -2134 | -0 | 10 | 1 | 0.5854 | 1.0472 | 1.0083 | -- | -- | 0.06 | -- | 0.06 | Snell. 'zx'= 88 |
| 1I | -1111 | -0 | 10 | 1 | 0.5854 | 1.0246 | 1.0043 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 88 |
| 1J | -1111 | -0 | 10 | 1 | 0.5854 | 1.0246 | 1.0043 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 88 |
| 1K | -1111 | -0 | 10 | 1 | 0.5854 | 1.0246 | 1.0043 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 88 |
| 1L | -1111 | -0 | 10 | 1 | 0.5854 | 1.0246 | 1.0043 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 88 |

**ASTA NUM. 11** NI 50 NF 61 Lungh. 197.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -54 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | -54 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | -54 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | -54 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | 331 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1F | 0 | 331 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1G | 0 | 331 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1H | 0 | 331 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1I | 0 | 44 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | 44 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1K | 0 | 44 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1L | 0 | 44 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1M | 0 | 233 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 0 | 233 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 0 | 233 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 0 | 233 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 0 | 10 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | 139 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | 10 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1A | 98 | -54 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 98 | -54 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 98 | -54 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 98 | -54 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 98 | 331 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.01 | 0.00 | |
| 1F | 98 | 331 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.01 | 0.00 | |
| 1G | 98 | 331 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.01 | 0.00 | |
| 1H | 98 | 331 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.01 | 0.00 | |
| 1I | 98 | 44 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 98 | 44 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 98 | 44 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 98 | 44 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 98 | 233 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 98 | 233 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 98 | 233 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 98 | 233 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 98 | 10 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 98 | 139 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 98 | 10 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 197 | -54 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 197 | -54 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 197 | -54 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 197 | -54 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 197 | 331 | -24 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1F | 197 | 331 | -24 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1G | 197 | 331 | -24 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1H | 197 | 331 | -24 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1I | 197 | 44 | -24 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1J | 197 | 44 | -24 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1K | 197 | 44 | -24 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1L | 197 | 44 | -24 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1M | 197 | 233 | -24 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 197 | 233 | -24 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 197 | 233 | -24 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 197 | 233 | -24 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 197 | 10 | -24 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 7 | 197 | 139 | -24 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 8 | 197 | 10 | -24 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -54 | -0 | 12 | 1 | 0.5266 | 1.0015 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 1B | -54 | -0 | 12 | 1 | 0.5266 | 1.0015 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 1C | -54 | -0 | 12 | 1 | 0.5266 | 1.0015 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 1D | -54 | -0 | 12 | 1 | 0.5266 | 1.0015 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |

**ASTA NUM. 12** NI 61 NF 77 Lungh. 215.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -1790 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1B | 0 | -1790 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1C | 0 | -1790 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1D | 0 | -1790 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1E | 0 | 2117 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.03 | 0.00 | |
| 1F | 0 | 2117 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.03 | 0.00 | |
| 1G | 0 | 2117 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.03 | 0.00 | |
| 1H | 0 | 2117 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.03 | 0.00 | |
| 1I | 0 | -927 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1J | 0 | -927 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1K | 0 | -927 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1L | 0 | -927 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1M | 0 | 1254 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 | |
| 1N | 0 | 1254 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 | |
| 1O | 0 | 1254 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 | |
| 1P | 0 | 1254 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 | |
| 2 | 0 | 12 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | 164 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | 11 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1A | 108 | -1790 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.03 | 0.00 | |
| 1B | 108 | -1790 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.03 | 0.00 | |
| 1C | 108 | -1790 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.03 | 0.00 | |
| 1D | 108 | -1790 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.03 | 0.00 | |
| 1E | 108 | 2117 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.03 | 0.00 | |
| 1F | 108 | 2117 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.03 | 0.00 | |
| 1G | 108 | 2117 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.03 | 0.00 | |
| 1H | 108 | 2117 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.03 | 0.00 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1I | 108 | -927 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 |
| 1J | 108 | -927 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 |
| 1K | 108 | -927 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 |
| 1L | 108 | -927 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 |
| 1M | 108 | 1254 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.02 | 0.00 |
| 1N | 108 | 1254 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.02 | 0.00 |
| 1O | 108 | 1254 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.02 | 0.00 |
| 1P | 108 | 1254 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.02 | 0.00 |
| 2 | 108 | 12 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 108 | 164 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 8 | 108 | 11 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1A | 215 | -1790 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 |
| 1B | 215 | -1790 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 |
| 1C | 215 | -1790 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 |
| 1D | 215 | -1790 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 |
| 1E | 215 | 2117 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.03 | 0.00 |
| 1F | 215 | 2117 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.03 | 0.00 |
| 1G | 215 | 2117 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.03 | 0.00 |
| 1H | 215 | 2117 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.03 | 0.00 |
| 1I | 215 | -927 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1J | 215 | -927 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1K | 215 | -927 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1L | 215 | -927 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1M | 215 | 1254 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 |
| 1N | 215 | 1254 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 |
| 1O | 215 | 1254 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 |
| 1P | 215 | 1254 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 |
| 2 | 215 | 12 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 7 | 215 | 164 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 8 | 215 | 11 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | ---------- | | | | | | | | | | | |
| | kg | kg*m | | | | | | | | | | | |
| 1A | -1790 | -0 | 14 | 1 | 0.4693 | 1.0651 | 1.0092 | -- | -- | 0.06 | -- | 0.06 | Snell. 'zx'= 105 |
| 1B | -1790 | -0 | 14 | 1 | 0.4693 | 1.0651 | 1.0092 | -- | -- | 0.06 | -- | 0.06 | Snell. 'zx'= 105 |
| 1C | -1790 | -0 | 14 | 1 | 0.4693 | 1.0651 | 1.0092 | -- | -- | 0.06 | -- | 0.06 | Snell. 'zx'= 105 |
| 1D | -1790 | -0 | 14 | 1 | 0.4693 | 1.0651 | 1.0092 | -- | -- | 0.06 | -- | 0.06 | Snell. 'zx'= 105 |
| 1I | -927 | -0 | 14 | 1 | 0.4693 | 1.0337 | 1.0047 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 105 |
| 1J | -927 | -0 | 14 | 1 | 0.4693 | 1.0337 | 1.0047 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 105 |
| 1K | -927 | -0 | 14 | 1 | 0.4693 | 1.0337 | 1.0047 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 105 |
| 1L | -927 | -0 | 14 | 1 | 0.4693 | 1.0337 | 1.0047 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 105 |

**ASTA NUM. 13** NI 84 NF 60 Lungh. 175.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | ---------- | | | ---------- | | ------ | ---------- | | | | |
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -25 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | -25 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | -25 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | -25 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | -15 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 0 | -15 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 0 | -15 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 0 | -15 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 0 | -27 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | -27 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 0 | -27 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 0 | -27 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 0 | -12 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 0 | -12 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 0 | -12 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 0 | -12 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 0 | -1 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | -20 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | -1 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 88 | -25 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 88 | -25 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 88 | -25 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 88 | -25 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 88 | -15 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 88 | -15 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 88 | -15 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 88 | -15 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 88 | -27 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 88 | -27 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 88 | -27 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 88 | -27 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 88 | -12 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 88 | -12 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 88 | -12 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 88 | -12 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 88 | -1 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 88 | -20 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 88 | -1 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 175 | -25 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 175 | -25 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 175 | -25 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 175 | -25 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 175 | -15 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 175 | -15 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 175 | -15 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 175 | -15 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 175 | -27 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 175 | -27 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 175 | -27 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 175 | -27 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 175 | -12 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 175 | -12 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 175 | -12 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 175 | -12 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 175 | -1 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 175 | -20 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 8 | 175 | -1 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -25 | -0 | 9 | 1 | 0.6034 | 1.0005 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1B | -25 | -0 | 9 | 1 | 0.6034 | 1.0005 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1C | -25 | -0 | 9 | 1 | 0.6034 | 1.0005 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1D | -25 | -0 | 9 | 1 | 0.6034 | 1.0005 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1E | -15 | -0 | 9 | 1 | 0.6034 | 1.0003 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1F | -15 | -0 | 9 | 1 | 0.6034 | 1.0003 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1G | -15 | -0 | 9 | 1 | 0.6034 | 1.0003 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1H | -15 | -0 | 9 | 1 | 0.6034 | 1.0003 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1I | -27 | -0 | 9 | 1 | 0.6034 | 1.0005 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1J | -27 | -0 | 9 | 1 | 0.6034 | 1.0005 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1K | -27 | -0 | 9 | 1 | 0.6034 | 1.0005 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1L | -27 | -0 | 9 | 1 | 0.6034 | 1.0005 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1M | -12 | -0 | 9 | 1 | 0.6034 | 1.0003 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1N | -12 | -0 | 9 | 1 | 0.6034 | 1.0003 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1O | -12 | -0 | 9 | 1 | 0.6034 | 1.0003 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1P | -12 | -0 | 9 | 1 | 0.6034 | 1.0003 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 2 | -1 | -0 | 9 | 1 | 0.6034 | 1.0000 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 7 | -20 | -0 | 9 | 1 | 0.6034 | 1.0004 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 8 | -1 | -0 | 9 | 1 | 0.6034 | 1.0000 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |

**ASTA NUM. 14** NI 60 NF 63 Lungh. 180.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -156 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | -156 | 22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | -156 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | -156 | 22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | 125 | 22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 0 | 125 | 22 | 0 | 0 | 0 | -0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 0 | 125 | 22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 0 | 125 | 22 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 0 | -91 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | -91 | 22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 0 | -91 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 0 | -91 | 22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 0 | 60 | 22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 0 | 60 | 22 | 0 | 0 | 0 | -0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 0 | 60 | 22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 0 | 60 | 22 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 0 | -3 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | -16 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | -3 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 90 | -156 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 90 | -156 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 90 | -156 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 90 | -156 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 90 | 125 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 90 | 125 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 90 | 125 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 90 | 125 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 90 | -91 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 90 | -91 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 90 | -91 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 90 | -91 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 90 | 60 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 90 | 60 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 90 | 60 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 90 | 60 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 90 | -3 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 90 | -16 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 90 | -3 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 180 | -156 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 180 | -156 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 180 | -156 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 180 | -156 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 180 | 125 | -22 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 180 | 125 | -22 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 180 | 125 | -22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 180 | 125 | -22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 180 | -91 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 180 | -91 | -22 | 0 | 0 | -0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 180 | -91 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 180 | -91 | -22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 180 | 60 | -22 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 180 | 60 | -22 | 0 | 0 | -0 | -0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 180 | 60 | -22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 180 | 60 | -22 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 180 | -3 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 180 | -16 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 180 | -3 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -156 | -0 | 10 | 1 | 0.5854 | 1.0035 | 1.0006 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 88 |
| 1B | -156 | -0 | 10 | 1 | 0.5854 | 1.0035 | 1.0006 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 88 |
| 1C | -156 | -0 | 10 | 1 | 0.5854 | 1.0035 | 1.0006 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 88 |
| 1D | -156 | -0 | 10 | 1 | 0.5854 | 1.0035 | 1.0006 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 88 |
| 1I | -91 | -0 | 10 | 1 | 0.5854 | 1.0020 | 1.0004 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 88 |
| 1J | -91 | -0 | 10 | 1 | 0.5854 | 1.0020 | 1.0004 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 88 |



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| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1K | -91 | -0 | 10 | 1 | 0.5854 | 1.0020 | 1.0004 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 88 |
| 1L | -91 | -0 | 10 | 1 | 0.5854 | 1.0020 | 1.0004 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 88 |
| 2 | -3 | -0 | 10 | 1 | 0.5854 | 1.0001 | 1.0000 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 88 |
| 7 | -16 | -0 | 10 | 1 | 0.5854 | 1.0003 | 1.0001 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 88 |
| 8 | -3 | -0 | 10 | 1 | 0.5854 | 1.0001 | 1.0000 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 88 |

**ASTA NUM. 15** NI 63 NF 55 Lungh. 197.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -163 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | -163 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | -163 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | -163 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | 153 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 0 | 153 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 0 | 153 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 0 | 153 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 0 | -86 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | -86 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 0 | -86 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 0 | -86 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 0 | 75 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 0 | 75 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 0 | 75 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 0 | 75 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 0 | -4 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | -5 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | -4 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 98 | -163 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 98 | -163 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 98 | -163 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 98 | -163 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 98 | 153 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 98 | 153 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 98 | 153 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 98 | 153 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 98 | -86 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 98 | -86 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 98 | -86 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 98 | -86 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 98 | 75 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 98 | 75 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 98 | 75 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 98 | 75 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 98 | -4 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 98 | -5 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 98 | -4 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 197 | -163 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 197 | -163 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 197 | -163 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 197 | -163 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 197 | 153 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 197 | 153 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 197 | 153 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 197 | 153 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 197 | -86 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 197 | -86 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 197 | -86 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 197 | -86 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 197 | 75 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 197 | 75 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 197 | 75 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 197 | 75 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 197 | -4 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 197 | -5 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 197 | -4 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -163 | -0 | 12 | 1 | 0.5266 | 1.0046 | 1.0007 | -- | -- | 0.00 | -- | 0.01 Snell. 'zx'= | 96 |
| 1B | -163 | -0 | 12 | 1 | 0.5266 | 1.0046 | 1.0007 | -- | -- | 0.00 | -- | 0.01 Snell. 'zx'= | 96 |
| 1C | -163 | -0 | 12 | 1 | 0.5266 | 1.0046 | 1.0007 | -- | -- | 0.00 | -- | 0.01 Snell. 'zx'= | 96 |
| 1D | -163 | -0 | 12 | 1 | 0.5266 | 1.0046 | 1.0007 | -- | -- | 0.00 | -- | 0.01 Snell. 'zx'= | 96 |
| 1I | -86 | -0 | 12 | 1 | 0.5266 | 1.0024 | 1.0004 | -- | -- | 0.00 | -- | 0.01 Snell. 'zx'= | 96 |
| 1J | -86 | -0 | 12 | 1 | 0.5266 | 1.0024 | 1.0004 | -- | -- | 0.00 | -- | 0.01 Snell. 'zx'= | 96 |
| 1K | -86 | -0 | 12 | 1 | 0.5266 | 1.0024 | 1.0004 | -- | -- | 0.00 | -- | 0.01 Snell. 'zx'= | 96 |
| 1L | -86 | -0 | 12 | 1 | 0.5266 | 1.0024 | 1.0004 | -- | -- | 0.00 | -- | 0.01 Snell. 'zx'= | 96 |
| 2 | -4 | -0 | 12 | 1 | 0.5266 | 1.0001 | 1.0000 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 96 |
| 7 | -5 | -0 | 12 | 1 | 0.5266 | 1.0002 | 1.0000 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 96 |
| 8 | -4 | -0 | 12 | 1 | 0.5266 | 1.0001 | 1.0000 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 96 |

**ASTA NUM. 16** NI 55 NF 78 Lungh. 215.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -82 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | -82 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | -82 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | -82 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | 88 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 0 | 88 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 0 | 88 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 0 | 88 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 0 | -36 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1J | 0 | -36 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1K | 0 | -36 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1L | 0 | -36 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1M | 0 | 42 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1N | 0 | 42 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1O | 0 | 42 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1P | 0 | 42 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 2 | 0 | -2 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 0 | 3 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 8 | 0 | -2 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | | | |
| 1A | 108 | -82 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1B | 108 | -82 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1C | 108 | -82 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1D | 108 | -82 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1E | 108 | 88 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1F | 108 | 88 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1G | 108 | 88 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1H | 108 | 88 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1I | 108 | -36 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1J | 108 | -36 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1K | 108 | -36 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1L | 108 | -36 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1M | 108 | 42 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1N | 108 | 42 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1O | 108 | 42 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1P | 108 | 42 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 2 | 108 | -2 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 108 | 3 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 8 | 108 | -2 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | | | |
| 1A | 215 | -82 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1B | 215 | -82 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1C | 215 | -82 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1D | 215 | -82 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1E | 215 | 88 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1F | 215 | 88 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1G | 215 | 88 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1H | 215 | 88 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1I | 215 | -36 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1J | 215 | -36 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1K | 215 | -36 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1L | 215 | -36 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1M | 215 | 42 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1N | 215 | 42 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1O | 215 | 42 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1P | 215 | 42 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 2 | 215 | -2 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 215 | 3 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 8 | 215 | -2 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -82 | -0 | 14 | 1 | 0.4693 | 1.0030 | 1.0004 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 105 |
| 1B | -82 | -0 | 14 | 1 | 0.4693 | 1.0030 | 1.0004 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 105 |
| 1C | -82 | -0 | 14 | 1 | 0.4693 | 1.0030 | 1.0004 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 105 |
| 1D | -82 | -0 | 14 | 1 | 0.4693 | 1.0030 | 1.0004 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 105 |
| 1I | -36 | -0 | 14 | 1 | 0.4693 | 1.0013 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 1J | -36 | -0 | 14 | 1 | 0.4693 | 1.0013 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 1K | -36 | -0 | 14 | 1 | 0.4693 | 1.0013 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 1L | -36 | -0 | 14 | 1 | 0.4693 | 1.0013 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 2 | -2 | -0 | 14 | 1 | 0.4693 | 1.0001 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 8 | -2 | -0 | 14 | 1 | 0.4693 | 1.0001 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |

**ASTA NUM. 17** NI 12 NF 30 Lungh. 175.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -1318 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1B | 0 | -1318 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1C | 0 | -1318 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1D | 0 | -1318 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1E | 0 | -708 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1F | 0 | -708 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1G | 0 | -708 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1H | 0 | -708 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1I | 0 | -1155 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1J | 0 | -1155 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1K | 0 | -1155 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1L | 0 | -1155 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1M | 0 | -871 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1N | 0 | -871 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1O | 0 | -871 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1P | 0 | -871 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 2 | 0 | 22 | 21 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | -1011 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 8 | 0 | 20 | 21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| | | | | | | | | | | | | |
| 1A | 88 | -1318 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 1B | 88 | -1318 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 1C | 88 | -1318 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 1D | 88 | -1318 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 1E | 88 | -708 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 | |
| 1F | 88 | -708 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 | |
| 1G | 88 | -708 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 | |
| 1H | 88 | -708 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 | |
| 1I | 88 | -1155 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 1J | 88 | -1155 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 1K | 88 | -1155 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 1L | 88 | -1155 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 1M | 88 | -871 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 | |
| 1N | 88 | -871 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 | |
| 1O | 88 | -871 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 | |
| 1P | 88 | -871 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 88 | 22 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 88 | -1011 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 |
| 8 | 88 | 20 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 |
| 1A | 175 | -1318 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 1B | 175 | -1318 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 1C | 175 | -1318 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 1D | 175 | -1318 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 1E | 175 | -708 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1F | 175 | -708 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1G | 175 | -708 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1H | 175 | -708 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1I | 175 | -1155 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 1J | 175 | -1155 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 1K | 175 | -1155 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 1L | 175 | -1155 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 1M | 175 | -871 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1N | 175 | -871 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1O | 175 | -871 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1P | 175 | -871 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 2 | 175 | 22 | -21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 7 | 175 | -1011 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 8 | 175 | 20 | -21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -1318 | -0 | 9 | 1 | 0.6034 | 1.0270 | 1.0049 | -- | -- | 0.03 | -- | 0.04 | Snell. 'zx'= 85 |
| 1B | -1318 | -0 | 9 | 1 | 0.6034 | 1.0270 | 1.0049 | -- | -- | 0.03 | -- | 0.04 | Snell. 'zx'= 85 |
| 1C | -1318 | -0 | 9 | 1 | 0.6034 | 1.0270 | 1.0049 | -- | -- | 0.03 | -- | 0.04 | Snell. 'zx'= 85 |
| 1D | -1318 | -0 | 9 | 1 | 0.6034 | 1.0270 | 1.0049 | -- | -- | 0.03 | -- | 0.04 | Snell. 'zx'= 85 |
| 1E | -708 | -0 | 9 | 1 | 0.6034 | 1.0145 | 1.0026 | -- | -- | 0.02 | -- | 0.02 | Snell. 'zx'= 85 |
| 1F | -708 | -0 | 9 | 1 | 0.6034 | 1.0145 | 1.0026 | -- | -- | 0.02 | -- | 0.02 | Snell. 'zx'= 85 |
| 1G | -708 | -0 | 9 | 1 | 0.6034 | 1.0145 | 1.0026 | -- | -- | 0.02 | -- | 0.02 | Snell. 'zx'= 85 |
| 1H | -708 | -0 | 9 | 1 | 0.6034 | 1.0145 | 1.0026 | -- | -- | 0.02 | -- | 0.02 | Snell. 'zx'= 85 |
| 1I | -1155 | -0 | 9 | 1 | 0.6034 | 1.0236 | 1.0043 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 85 |
| 1J | -1155 | -0 | 9 | 1 | 0.6034 | 1.0236 | 1.0043 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 85 |
| 1K | -1155 | -0 | 9 | 1 | 0.6034 | 1.0236 | 1.0043 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 85 |
| 1L | -1155 | -0 | 9 | 1 | 0.6034 | 1.0236 | 1.0043 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 85 |
| 1M | -871 | -0 | 9 | 1 | 0.6034 | 1.0178 | 1.0032 | -- | -- | 0.02 | -- | 0.02 | Snell. 'zx'= 85 |
| 1N | -871 | -0 | 9 | 1 | 0.6034 | 1.0178 | 1.0032 | -- | -- | 0.02 | -- | 0.02 | Snell. 'zx'= 85 |
| 1O | -871 | -0 | 9 | 1 | 0.6034 | 1.0178 | 1.0032 | -- | -- | 0.02 | -- | 0.02 | Snell. 'zx'= 85 |
| 1P | -871 | -0 | 9 | 1 | 0.6034 | 1.0178 | 1.0032 | -- | -- | 0.02 | -- | 0.02 | Snell. 'zx'= 85 |
| 7 | -1011 | -0 | 9 | 1 | 0.6034 | 1.0207 | 1.0037 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 85 |

**ASTA NUM. 18** NI 30 NF 58 Lungh. 180.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -503 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1B | 0 | -503 | 22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1C | 0 | -503 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1D | 0 | -503 | 22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1E | 0 | -253 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 0 | -253 | 22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 0 | -253 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 0 | -253 | 22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 0 | -459 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1J | 0 | -459 | 22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1K | 0 | -459 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1L | 0 | -459 | 22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1M | 0 | -297 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 0 | -297 | 22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 0 | -297 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 0 | -297 | 22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 0 | -45 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | -375 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 8 | 0 | -48 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 90 | -503 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1B | 90 | -503 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1C | 90 | -503 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1D | 90 | -503 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1E | 90 | -253 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 90 | -253 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 90 | -253 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 90 | -253 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 90 | -459 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1J | 90 | -459 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1K | 90 | -459 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1L | 90 | -459 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1M | 90 | -297 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 90 | -297 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 90 | -297 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 90 | -297 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 90 | -45 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 90 | -375 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 8 | 90 | -48 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 180 | -503 | -22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1B | 180 | -503 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1C | 180 | -503 | -22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1D | 180 | -503 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1E | 180 | -253 | -22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 180 | -253 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 180 | -253 | -22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 180 | -253 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 180 | -459 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1J | 180 | -459 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1K | 180 | -459 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1L | 180 | -459 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1M | 180 | -297 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 180 | -297 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 180 | -297 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 180 | -297 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 180 | -45 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 180 | -375 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 8 | 180 | -48 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | ---------- | | | | | | | | | | | |
| | kg | kg*m | | | | | | | | | | | |
| 1A | -503 | -0 | 10 | 1 | 0.5854 | 1.0111 | 1.0020 | -- | -- | 0.01 | -- | 0.02 | Snell. 'zx'= 88 |
| 1B | -503 | -0 | 10 | 1 | 0.5854 | 1.0111 | 1.0020 | -- | -- | 0.01 | -- | 0.02 | Snell. 'zx'= 88 |
| 1C | -503 | -0 | 10 | 1 | 0.5854 | 1.0111 | 1.0020 | -- | -- | 0.01 | -- | 0.02 | Snell. 'zx'= 88 |
| 1D | -503 | -0 | 10 | 1 | 0.5854 | 1.0111 | 1.0020 | -- | -- | 0.01 | -- | 0.02 | Snell. 'zx'= 88 |
| 1E | -253 | -0 | 10 | 1 | 0.5854 | 1.0056 | 1.0010 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1F | -253 | -0 | 10 | 1 | 0.5854 | 1.0056 | 1.0010 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1G | -253 | -0 | 10 | 1 | 0.5854 | 1.0056 | 1.0010 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1H | -253 | -0 | 10 | 1 | 0.5854 | 1.0056 | 1.0010 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1I | -459 | -0 | 10 | 1 | 0.5854 | 1.0101 | 1.0018 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1J | -459 | -0 | 10 | 1 | 0.5854 | 1.0101 | 1.0018 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1K | -459 | -0 | 10 | 1 | 0.5854 | 1.0101 | 1.0018 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1L | -459 | -0 | 10 | 1 | 0.5854 | 1.0101 | 1.0018 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1M | -297 | -0 | 10 | 1 | 0.5854 | 1.0066 | 1.0012 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1N | -297 | -0 | 10 | 1 | 0.5854 | 1.0066 | 1.0012 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1O | -297 | -0 | 10 | 1 | 0.5854 | 1.0066 | 1.0012 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1P | -297 | -0 | 10 | 1 | 0.5854 | 1.0066 | 1.0012 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 2 | -45 | -0 | 10 | 1 | 0.5854 | 1.0010 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 88 |
| 7 | -375 | -0 | 10 | 1 | 0.5854 | 1.0083 | 1.0015 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 8 | -48 | -0 | 10 | 1 | 0.5854 | 1.0011 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 88 |

**ASTA NUM. 19** NI 58 NF 31 Lungh. 197.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | ---------- | | | ---------- | | ------ | ---------- | | | | |
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -112 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | -112 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | -112 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | -112 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | -84 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 0 | -84 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 0 | -84 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 0 | -84 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 0 | -139 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | -139 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 0 | -139 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 0 | -139 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 0 | -56 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 0 | -56 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 0 | -56 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 0 | -56 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 0 | -133 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | -95 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | -135 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 98 | -112 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 98 | -112 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 98 | -112 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 98 | -112 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 98 | -84 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 98 | -84 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 98 | -84 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 98 | -84 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 98 | -139 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 98 | -139 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 98 | -139 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 98 | -139 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 98 | -56 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 98 | -56 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 98 | -56 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 98 | -56 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 98 | -133 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 98 | -95 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 98 | -135 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 197 | -112 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 197 | -112 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 197 | -112 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 197 | -112 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 197 | -84 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 197 | -84 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 197 | -84 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 197 | -84 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 197 | -139 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 197 | -139 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 197 | -139 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 197 | -139 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 197 | -56 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 197 | -56 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 197 | -56 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 197 | -56 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 197 | -133 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 197 | -95 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 197 | -135 | -24 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | ---------- | | | | | | | | | | | |
| | kg | kg*m | | | | | | | | | | | |
| 1A | -112 | -0 | 12 | 1 | 0.5266 | 1.0032 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1B | -112 | -0 | 12 | 1 | 0.5266 | 1.0032 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1C | -112 | -0 | 12 | 1 | 0.5266 | 1.0032 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1D | -112 | -0 | 12 | 1 | 0.5266 | 1.0032 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1E | -84 | -0 | 12 | 1 | 0.5266 | 1.0024 | 1.0004 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |



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| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | -84 | -0 | 12 | 1 | 0.5266 | 1.0024 | 1.0004 | -- | -- | 0.00 | -- | 0.01 Snell. 'zx'= | 96 |
| 1G | -84 | -0 | 12 | 1 | 0.5266 | 1.0024 | 1.0004 | -- | -- | 0.00 | -- | 0.01 Snell. 'zx'= | 96 |
| 1H | -84 | -0 | 12 | 1 | 0.5266 | 1.0024 | 1.0004 | -- | -- | 0.00 | -- | 0.01 Snell. 'zx'= | 96 |
| 1I | -139 | -0 | 12 | 1 | 0.5266 | 1.0039 | 1.0006 | -- | -- | 0.00 | -- | 0.01 Snell. 'zx'= | 96 |
| 1J | -139 | -0 | 12 | 1 | 0.5266 | 1.0039 | 1.0006 | -- | -- | 0.00 | -- | 0.01 Snell. 'zx'= | 96 |
| 1K | -139 | -0 | 12 | 1 | 0.5266 | 1.0039 | 1.0006 | -- | -- | 0.00 | -- | 0.01 Snell. 'zx'= | 96 |
| 1L | -139 | -0 | 12 | 1 | 0.5266 | 1.0039 | 1.0006 | -- | -- | 0.00 | -- | 0.01 Snell. 'zx'= | 96 |
| 1M | -56 | -0 | 12 | 1 | 0.5266 | 1.0016 | 1.0003 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 96 |
| 1N | -56 | -0 | 12 | 1 | 0.5266 | 1.0016 | 1.0003 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 96 |
| 1O | -56 | -0 | 12 | 1 | 0.5266 | 1.0016 | 1.0003 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 96 |
| 1P | -56 | -0 | 12 | 1 | 0.5266 | 1.0016 | 1.0003 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 96 |
| 2 | -133 | -0 | 12 | 1 | 0.5266 | 1.0038 | 1.0006 | -- | -- | 0.00 | -- | 0.01 Snell. 'zx'= | 96 |
| 7 | -95 | -0 | 12 | 1 | 0.5266 | 1.0027 | 1.0004 | -- | -- | 0.00 | -- | 0.01 Snell. 'zx'= | 96 |
| 8 | -135 | -0 | 12 | 1 | 0.5266 | 1.0038 | 1.0006 | -- | -- | 0.00 | -- | 0.01 Snell. 'zx'= | 96 |

**ASTA NUM. 20** NI 31 NF 11 Lungh. 215.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | 139 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | 139 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | 139 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | 139 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | 595 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1F | 0 | 595 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1G | 0 | 595 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1H | 0 | 595 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1I | 0 | 262 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | 262 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1K | 0 | 262 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1L | 0 | 262 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1M | 0 | 471 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1N | 0 | 471 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1O | 0 | 471 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1P | 0 | 471 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 2 | 0 | -76 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | 367 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 8 | 0 | -76 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 108 | 139 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 108 | 139 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 108 | 139 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 108 | 139 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 108 | 595 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1F | 108 | 595 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1G | 108 | 595 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1H | 108 | 595 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1I | 108 | 262 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 108 | 262 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 108 | 262 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 108 | 262 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 108 | 471 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1N | 108 | 471 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1O | 108 | 471 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1P | 108 | 471 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 2 | 108 | -76 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 108 | 367 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 8 | 108 | -76 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 215 | 139 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1B | 215 | 139 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1C | 215 | 139 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1D | 215 | 139 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1E | 215 | 595 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1F | 215 | 595 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1G | 215 | 595 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1H | 215 | 595 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1I | 215 | 262 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1J | 215 | 262 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1K | 215 | 262 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1L | 215 | 262 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1M | 215 | 471 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1N | 215 | 471 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1O | 215 | 471 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1P | 215 | 471 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 2 | 215 | -76 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 215 | 367 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 8 | 215 | -76 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 2 | -76 | -0 | 14 | 1 | 0.4693 | 1.0028 | 1.0004 | -- | -- | 0.00 | -- | 0.01 Snell. 'zx'= | 105 |
| 8 | -76 | -0 | 14 | 1 | 0.4693 | 1.0028 | 1.0004 | -- | -- | 0.00 | -- | 0.01 Snell. 'zx'= | 105 |

**ASTA NUM. 21** NI 92 NF 87 Lungh. 175.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -1298 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1B | 0 | -1298 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1C | 0 | -1298 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1D | 0 | -1298 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1E | 0 | -406 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1F | 0 | -406 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1G | 0 | -406 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1H | 0 | -406 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1I | 0 | -991 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1J | 0 | -991 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 1K | 0 | -991 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 1L | 0 | -991 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 1M | 0 | -713 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1N | 0 | -713 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1O | 0 | -713 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1P | 0 | -713 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 2 | 0 | -19 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 0 | -852 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 8 | 0 | -19 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1A | 88 | -1298 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 |
| 1B | 88 | -1298 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 |
| 1C | 88 | -1298 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 |
| 1D | 88 | -1298 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 |
| 1E | 88 | -406 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 |
| 1F | 88 | -406 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 |
| 1G | 88 | -406 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 |
| 1H | 88 | -406 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 |
| 1I | 88 | -991 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 |
| 1J | 88 | -991 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 |
| 1K | 88 | -991 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 |
| 1L | 88 | -991 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 |
| 1M | 88 | -713 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 |
| 1N | 88 | -713 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 |
| 1O | 88 | -713 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 |
| 1P | 88 | -713 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 |
| 2 | 88 | -19 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 88 | -852 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 |
| 8 | 88 | -19 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 |
| 1A | 175 | -1298 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 1B | 175 | -1298 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 1C | 175 | -1298 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 1D | 175 | -1298 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 1E | 175 | -406 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1F | 175 | -406 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1G | 175 | -406 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1H | 175 | -406 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1I | 175 | -991 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 1J | 175 | -991 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 1K | 175 | -991 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 1L | 175 | -991 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 1M | 175 | -713 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1N | 175 | -713 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1O | 175 | -713 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1P | 175 | -713 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 2 | 175 | -19 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 175 | -852 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 8 | 175 | -19 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | ---------- | | | | | | | | | | | |
| | kg | kg*m | | | | | | | | | | | |
| 1A | -1298 | -0 | 9 | 1 | 0.6034 | 1.0266 | 1.0048 | -- | -- | 0.03 | -- | 0.04 | Snell. 'zx'= 85 |
| 1B | -1298 | -0 | 9 | 1 | 0.6034 | 1.0266 | 1.0048 | -- | -- | 0.03 | -- | 0.04 | Snell. 'zx'= 85 |
| 1C | -1298 | -0 | 9 | 1 | 0.6034 | 1.0266 | 1.0048 | -- | -- | 0.03 | -- | 0.04 | Snell. 'zx'= 85 |
| 1D | -1298 | -0 | 9 | 1 | 0.6034 | 1.0266 | 1.0048 | -- | -- | 0.03 | -- | 0.04 | Snell. 'zx'= 85 |
| 1E | -406 | -0 | 9 | 1 | 0.6034 | 1.0083 | 1.0015 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 85 |
| 1F | -406 | -0 | 9 | 1 | 0.6034 | 1.0083 | 1.0015 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 85 |
| 1G | -406 | -0 | 9 | 1 | 0.6034 | 1.0083 | 1.0015 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 85 |
| 1H | -406 | -0 | 9 | 1 | 0.6034 | 1.0083 | 1.0015 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 85 |
| 1I | -991 | -0 | 9 | 1 | 0.6034 | 1.0203 | 1.0037 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 85 |
| 1J | -991 | -0 | 9 | 1 | 0.6034 | 1.0203 | 1.0037 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 85 |
| 1K | -991 | -0 | 9 | 1 | 0.6034 | 1.0203 | 1.0037 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 85 |
| 1L | -991 | -0 | 9 | 1 | 0.6034 | 1.0203 | 1.0037 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 85 |
| 1M | -713 | -0 | 9 | 1 | 0.6034 | 1.0146 | 1.0026 | -- | -- | 0.02 | -- | 0.02 | Snell. 'zx'= 85 |
| 1N | -713 | -0 | 9 | 1 | 0.6034 | 1.0146 | 1.0026 | -- | -- | 0.02 | -- | 0.02 | Snell. 'zx'= 85 |
| 1O | -713 | -0 | 9 | 1 | 0.6034 | 1.0146 | 1.0026 | -- | -- | 0.02 | -- | 0.02 | Snell. 'zx'= 85 |
| 1P | -713 | -0 | 9 | 1 | 0.6034 | 1.0146 | 1.0026 | -- | -- | 0.02 | -- | 0.02 | Snell. 'zx'= 85 |
| 2 | -19 | -0 | 9 | 1 | 0.6034 | 1.0004 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 7 | -852 | -0 | 9 | 1 | 0.6034 | 1.0174 | 1.0032 | -- | -- | 0.02 | -- | 0.02 | Snell. 'zx'= 85 |
| 8 | -19 | -0 | 9 | 1 | 0.6034 | 1.0004 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |

**ASTA NUM. 22** NI 87 NF 88 Lungh. 180.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | ---------- | | | ---------- | | ------ | ---------- | | | | |
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -1041 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1B | 0 | -1041 | 22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1C | 0 | -1041 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1D | 0 | -1041 | 22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1E | 0 | 1082 | 22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 | |
| 1F | 0 | 1082 | 22 | 0 | 0 | 0 | -0 | -- | 0.00 | 0.02 | 0.00 | |
| 1G | 0 | 1082 | 22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 | |
| 1H | 0 | 1082 | 22 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.02 | 0.00 | |
| 1I | 0 | -326 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1J | 0 | -326 | 22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1K | 0 | -326 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1L | 0 | -326 | 22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1M | 0 | 367 | 22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1N | 0 | 367 | 22 | 0 | 0 | 0 | -0 | -- | 0.00 | 0.01 | 0.00 | |
| 1O | 0 | 367 | 22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1P | 0 | 367 | 22 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.01 | 0.00 | |
| 2 | 0 | -61 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | 22 | 22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | -63 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 90 | -1041 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.02 | 0.00 | |
| 1B | 90 | -1041 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.02 | 0.00 | |
| 1C | 90 | -1041 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.02 | 0.00 | |
| 1D | 90 | -1041 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.02 | 0.00 | |
| 1E | 90 | 1082 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.02 | 0.00 | |
| 1F | 90 | 1082 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.02 | 0.00 | |
| 1G | 90 | 1082 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.02 | 0.00 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1H | 90 | 1082 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.02 | 0.00 |
| 1I | 90 | -326 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 |
| 1J | 90 | -326 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 |
| 1K | 90 | -326 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 |
| 1L | 90 | -326 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 |
| 1M | 90 | 367 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 |
| 1N | 90 | 367 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 |
| 1O | 90 | 367 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 |
| 1P | 90 | 367 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 |
| 2 | 90 | -61 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 90 | 22 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 |
| 8 | 90 | -63 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 |
| 1A | 180 | -1041 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 1B | 180 | -1041 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 1C | 180 | -1041 | -22 | -0 | 0 | -0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 1D | 180 | -1041 | -22 | -0 | 0 | -0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 1E | 180 | 1082 | -22 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.02 | 0.00 |
| 1F | 180 | 1082 | -22 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.02 | 0.00 |
| 1G | 180 | 1082 | -22 | -0 | 0 | -0 | 0 | -- | 0.00 | 0.02 | 0.00 |
| 1H | 180 | 1082 | -22 | -0 | 0 | -0 | 0 | -- | 0.00 | 0.02 | 0.00 |
| 1I | 180 | -326 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1J | 180 | -326 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1K | 180 | -326 | -22 | -0 | 0 | -0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1L | 180 | -326 | -22 | -0 | 0 | -0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1M | 180 | 367 | -22 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.01 | 0.00 |
| 1N | 180 | 367 | -22 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.01 | 0.00 |
| 1O | 180 | 367 | -22 | -0 | 0 | -0 | 0 | -- | 0.00 | 0.01 | 0.00 |
| 1P | 180 | 367 | -22 | -0 | 0 | -0 | 0 | -- | 0.00 | 0.01 | 0.00 |
| 2 | 180 | -61 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 180 | 22 | -22 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 8 | 180 | -63 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -1041 | -0 | 10 | 1 | 0.5854 | 1.0230 | 1.0040 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 88 |
| 1B | -1041 | -0 | 10 | 1 | 0.5854 | 1.0230 | 1.0040 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 88 |
| 1C | -1041 | -0 | 10 | 1 | 0.5854 | 1.0230 | 1.0040 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 88 |
| 1D | -1041 | -0 | 10 | 1 | 0.5854 | 1.0230 | 1.0040 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 88 |
| 1I | -326 | -0 | 10 | 1 | 0.5854 | 1.0072 | 1.0013 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1J | -326 | -0 | 10 | 1 | 0.5854 | 1.0072 | 1.0013 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1K | -326 | -0 | 10 | 1 | 0.5854 | 1.0072 | 1.0013 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1L | -326 | -0 | 10 | 1 | 0.5854 | 1.0072 | 1.0013 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 2 | -61 | -0 | 10 | 1 | 0.5854 | 1.0014 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 88 |
| 8 | -63 | -0 | 10 | 1 | 0.5854 | 1.0014 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 88 |

**ASTA NUM. 23** NI 88 NF 90 Lungh. 197.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -108 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | -108 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | -108 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | -108 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | 151 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 0 | 151 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 0 | 151 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 0 | 151 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 0 | -40 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | -40 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 0 | -40 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 0 | -40 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 0 | 84 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 0 | 84 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 0 | 84 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 0 | 84 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 0 | -62 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | 24 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | -64 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 98 | -108 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 98 | -108 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 98 | -108 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 98 | -108 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 98 | 151 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 98 | 151 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 98 | 151 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 98 | 151 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 98 | -40 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 98 | -40 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 98 | -40 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 98 | -40 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 98 | 84 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 98 | 84 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 98 | 84 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 98 | 84 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 98 | -62 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 98 | 24 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 98 | -64 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 197 | -108 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 197 | -108 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 197 | -108 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 197 | -108 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 197 | 151 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 197 | 151 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 197 | 151 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 197 | 151 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 197 | -40 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 197 | -40 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 197 | -40 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 197 | -40 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 197 | 84 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 197 | 84 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1O | 197 | 84 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1P | 197 | 84 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 2 | 197 | -62 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 197 | 24 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 8 | 197 | -64 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | -- | -- | | | | | | | | | | |
| | kg | kg*m | | | | | | | | | | | |
| 1A | -108 | -0 | 12 | 1 | 0.5266 | 1.0031 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1B | -108 | -0 | 12 | 1 | 0.5266 | 1.0031 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1C | -108 | -0 | 12 | 1 | 0.5266 | 1.0031 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1D | -108 | -0 | 12 | 1 | 0.5266 | 1.0031 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1I | -40 | -0 | 12 | 1 | 0.5266 | 1.0011 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 1J | -40 | -0 | 12 | 1 | 0.5266 | 1.0011 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 1K | -40 | -0 | 12 | 1 | 0.5266 | 1.0011 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 1L | -40 | -0 | 12 | 1 | 0.5266 | 1.0011 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 2 | -62 | -0 | 12 | 1 | 0.5266 | 1.0018 | 1.0003 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 8 | -64 | -0 | 12 | 1 | 0.5266 | 1.0018 | 1.0003 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |

**ASTA NUM. 24** NI 90 NF 93 Lungh. 215.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -845 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1B | 0 | -845 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1C | 0 | -845 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1D | 0 | -845 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1E | 0 | 895 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1F | 0 | 895 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1G | 0 | 895 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1H | 0 | 895 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1I | 0 | -259 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | -259 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 0 | -259 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 0 | -259 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 0 | 308 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 0 | 308 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 0 | 308 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 0 | 308 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 0 | -64 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | 26 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | -66 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 108 | -845 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1B | 108 | -845 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1C | 108 | -845 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1D | 108 | -845 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1E | 108 | 895 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1F | 108 | 895 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1G | 108 | 895 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1H | 108 | 895 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1I | 108 | -259 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 108 | -259 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 108 | -259 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 108 | -259 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 108 | 308 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 108 | 308 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 108 | 308 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 108 | 308 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 108 | -64 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 108 | 26 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 108 | -66 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 215 | -845 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1B | 215 | -845 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1C | 215 | -845 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1D | 215 | -845 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1E | 215 | 895 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1F | 215 | 895 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1G | 215 | 895 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1H | 215 | 895 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1I | 215 | -259 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 215 | -259 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 215 | -259 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 215 | -259 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 215 | 308 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 215 | 308 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 215 | 308 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 215 | 308 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 215 | -64 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 215 | 26 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 8 | 215 | -66 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | -- | -- | | | | | | | | | | |
| | kg | kg*m | | | | | | | | | | | |
| 1A | -845 | -0 | 14 | 1 | 0.4693 | 1.0308 | 1.0043 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 105 |
| 1B | -845 | -0 | 14 | 1 | 0.4693 | 1.0308 | 1.0043 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 105 |
| 1C | -845 | -0 | 14 | 1 | 0.4693 | 1.0308 | 1.0043 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 105 |
| 1D | -845 | -0 | 14 | 1 | 0.4693 | 1.0308 | 1.0043 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 105 |
| 1I | -259 | -0 | 14 | 1 | 0.4693 | 1.0094 | 1.0013 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 105 |
| 1J | -259 | -0 | 14 | 1 | 0.4693 | 1.0094 | 1.0013 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 105 |
| 1K | -259 | -0 | 14 | 1 | 0.4693 | 1.0094 | 1.0013 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 105 |
| 1L | -259 | -0 | 14 | 1 | 0.4693 | 1.0094 | 1.0013 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 105 |
| 2 | -64 | -0 | 14 | 1 | 0.4693 | 1.0023 | 1.0003 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 105 |
| 8 | -66 | -0 | 14 | 1 | 0.4693 | 1.0024 | 1.0003 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 105 |

**ASTA NUM. 25** NI 81 NF 65 Lungh. 175.0 cm SEZ. 11 Ps IPE 180



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -246 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | -246 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | -246 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | -246 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | 193 | 21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 0 | 193 | 21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 0 | 193 | 21 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 0 | 193 | 21 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 0 | -100 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | -100 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 0 | -100 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 0 | -100 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 0 | 47 | 21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 0 | 47 | 21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 0 | 47 | 21 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 0 | 47 | 21 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 0 | -3 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | -27 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | -3 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 88 | -246 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 88 | -246 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 88 | -246 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 88 | -246 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 88 | 193 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 88 | 193 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 88 | 193 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 88 | 193 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 88 | -100 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 88 | -100 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 88 | -100 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 88 | -100 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 88 | 47 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 88 | 47 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 88 | 47 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 88 | 47 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 88 | -3 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 88 | -27 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 88 | -3 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 175 | -246 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 175 | -246 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 175 | -246 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 175 | -246 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 175 | 193 | -21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 175 | 193 | -21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 175 | 193 | -21 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 175 | 193 | -21 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 175 | -100 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 175 | -100 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 175 | -100 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 175 | -100 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 175 | 47 | -21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 175 | 47 | -21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 175 | 47 | -21 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 175 | 47 | -21 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 175 | -3 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 175 | -27 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 175 | -3 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -246 | -0 | 9 | 1 | 0.6034 | 1.0050 | 1.0009 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 85 |
| 1B | -246 | -0 | 9 | 1 | 0.6034 | 1.0050 | 1.0009 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 85 |
| 1C | -246 | -0 | 9 | 1 | 0.6034 | 1.0050 | 1.0009 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 85 |
| 1D | -246 | -0 | 9 | 1 | 0.6034 | 1.0050 | 1.0009 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 85 |
| 1I | -100 | -0 | 9 | 1 | 0.6034 | 1.0020 | 1.0004 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1J | -100 | -0 | 9 | 1 | 0.6034 | 1.0020 | 1.0004 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1K | -100 | -0 | 9 | 1 | 0.6034 | 1.0020 | 1.0004 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1L | -100 | -0 | 9 | 1 | 0.6034 | 1.0020 | 1.0004 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 2 | -3 | -0 | 9 | 1 | 0.6034 | 1.0001 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 7 | -27 | -0 | 9 | 1 | 0.6034 | 1.0005 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 8 | -3 | -0 | 9 | 1 | 0.6034 | 1.0001 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |

**ASTA NUM. 26** NI 65 NF 48 Lungh. 180.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -173 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | -173 | 22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | -173 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | -173 | 22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | 129 | 22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 0 | 129 | 22 | 0 | 0 | 0 | -0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 0 | 129 | 22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 0 | 129 | 22 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 0 | -72 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | -72 | 22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 0 | -72 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 0 | -72 | 22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 0 | 28 | 22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 0 | 28 | 22 | 0 | 0 | 0 | -0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 0 | 28 | 22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 0 | 28 | 22 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.00 | 0.00 | |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 0 | -6 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 0 | -22 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 8 | 0 | -6 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1A | 90 | -173 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 |
| 1B | 90 | -173 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 |
| 1C | 90 | -173 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 |
| 1D | 90 | -173 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 |
| 1E | 90 | 129 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 |
| 1F | 90 | 129 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 |
| 1G | 90 | 129 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 |
| 1H | 90 | 129 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 |
| 1I | 90 | -72 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 |
| 1J | 90 | -72 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 |
| 1K | 90 | -72 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 |
| 1L | 90 | -72 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 |
| 1M | 90 | 28 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 |
| 1N | 90 | 28 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 |
| 1O | 90 | 28 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 |
| 1P | 90 | 28 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 |
| 2 | 90 | -6 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 90 | -22 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 |
| 8 | 90 | -6 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 |
| 1A | 180 | -173 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1B | 180 | -173 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1C | 180 | -173 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1D | 180 | -173 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1E | 180 | 129 | -22 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1F | 180 | 129 | -22 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1G | 180 | 129 | -22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1H | 180 | 129 | -22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1I | 180 | -72 | -22 | 0 | 0 | -0 | -0 | 1 | 0.00 | 0.00 | 0.00 |
| 1J | 180 | -72 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1K | 180 | -72 | -22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 |
| 1L | 180 | -72 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1M | 180 | 28 | -22 | 0 | 0 | -0 | -0 | -- | 0.00 | 0.00 | 0.00 |
| 1N | 180 | 28 | -22 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1O | 180 | 28 | -22 | 0 | 0 | 0 | -0 | -- | 0.00 | 0.00 | 0.00 |
| 1P | 180 | 28 | -22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 2 | 180 | -6 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 180 | -22 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 8 | 180 | -6 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -173 | -0 | 10 | 1 | 0.5854 | 1.0038 | 1.0007 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 88 |
| 1B | -173 | -0 | 10 | 1 | 0.5854 | 1.0038 | 1.0007 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 88 |
| 1C | -173 | -0 | 10 | 1 | 0.5854 | 1.0038 | 1.0007 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 88 |
| 1D | -173 | -0 | 10 | 1 | 0.5854 | 1.0038 | 1.0007 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 88 |
| 1I | -72 | -0 | 10 | 1 | 0.5854 | 1.0016 | 1.0003 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 88 |
| 1J | -72 | -0 | 10 | 1 | 0.5854 | 1.0016 | 1.0003 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 88 |
| 1K | -72 | -0 | 10 | 1 | 0.5854 | 1.0016 | 1.0003 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 88 |
| 1L | -72 | -0 | 10 | 1 | 0.5854 | 1.0016 | 1.0003 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 88 |
| 2 | -6 | -0 | 10 | 1 | 0.5854 | 1.0001 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 88 |
| 7 | -22 | -0 | 10 | 1 | 0.5854 | 1.0005 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 88 |
| 8 | -6 | -0 | 10 | 1 | 0.5854 | 1.0001 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 88 |

**ASTA NUM. 27** NI 48 NF 66 Lungh. 197.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -42 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | -42 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | -42 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | -42 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | 17 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 0 | 17 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 0 | 17 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 0 | 17 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 0 | -22 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | -22 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 0 | -22 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 0 | -22 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 0 | -3 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 0 | -3 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 0 | -3 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 0 | -3 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 0 | -7 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | -12 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | -7 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 98 | -42 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 98 | -42 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 98 | -42 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 98 | -42 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 98 | 17 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 98 | 17 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 98 | 17 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 98 | 17 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 98 | -22 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 98 | -22 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 98 | -22 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 98 | -22 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 98 | -3 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 98 | -3 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 98 | -3 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 98 | -3 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 98 | -7 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 98 | -12 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 98 | -7 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 197 | -42 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 197 | -42 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1C | 197 | -42 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1D | 197 | -42 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1E | 197 | 17 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1F | 197 | 17 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1G | 197 | 17 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1H | 197 | 17 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1I | 197 | -22 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1J | 197 | -22 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1K | 197 | -22 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1L | 197 | -22 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1M | 197 | -3 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1N | 197 | -3 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1O | 197 | -3 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1P | 197 | -3 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 2 | 197 | -7 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 197 | -12 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 8 | 197 | -7 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -42 | -0 | 12 | 1 | 0.5266 | 1.0012 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 1B | -42 | -0 | 12 | 1 | 0.5266 | 1.0012 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 1C | -42 | -0 | 12 | 1 | 0.5266 | 1.0012 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 1D | -42 | -0 | 12 | 1 | 0.5266 | 1.0012 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 1I | -22 | -0 | 12 | 1 | 0.5266 | 1.0006 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 1J | -22 | -0 | 12 | 1 | 0.5266 | 1.0006 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 1K | -22 | -0 | 12 | 1 | 0.5266 | 1.0006 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 1L | -22 | -0 | 12 | 1 | 0.5266 | 1.0006 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 1M | -3 | -0 | 12 | 1 | 0.5266 | 1.0001 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 1N | -3 | -0 | 12 | 1 | 0.5266 | 1.0001 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 1O | -3 | -0 | 12 | 1 | 0.5266 | 1.0001 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 1P | -3 | -0 | 12 | 1 | 0.5266 | 1.0001 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 2 | -7 | -0 | 12 | 1 | 0.5266 | 1.0002 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 7 | -12 | -0 | 12 | 1 | 0.5266 | 1.0004 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 8 | -7 | -0 | 12 | 1 | 0.5266 | 1.0002 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |

**ASTA NUM. 28** NI 66 NF 75 Lungh. 215.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -152 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | -152 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | -152 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | -152 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | 147 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 0 | 147 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 0 | 147 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 0 | 147 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 0 | -53 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | -53 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 0 | -53 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 0 | -53 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 0 | 48 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 0 | 48 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 0 | 48 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 0 | 48 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 0 | -5 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | -3 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | -5 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 108 | -152 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 108 | -152 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 108 | -152 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 108 | -152 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 108 | 147 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 108 | 147 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 108 | 147 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 108 | 147 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 108 | -53 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 108 | -53 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 108 | -53 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 108 | -53 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 108 | 48 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 108 | 48 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 108 | 48 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 108 | 48 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 108 | -5 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 108 | -3 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 108 | -5 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 215 | -152 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 215 | -152 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 215 | -152 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 215 | -152 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 215 | 147 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 215 | 147 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 215 | 147 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 215 | 147 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 215 | -53 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 215 | -53 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 215 | -53 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 215 | -53 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 215 | 48 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 215 | 48 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 215 | 48 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 215 | 48 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 215 | -5 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 215 | -3 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 215 | -5 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -152 | -0 | 14 | 1 | 0.4693 | 1.0055 | 1.0008 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 105 |
| 1B | -152 | -0 | 14 | 1 | 0.4693 | 1.0055 | 1.0008 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 105 |
| 1C | -152 | -0 | 14 | 1 | 0.4693 | 1.0055 | 1.0008 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 105 |
| 1D | -152 | -0 | 14 | 1 | 0.4693 | 1.0055 | 1.0008 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 105 |
| 1I | -53 | -0 | 14 | 1 | 0.4693 | 1.0019 | 1.0003 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 1J | -53 | -0 | 14 | 1 | 0.4693 | 1.0019 | 1.0003 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 1K | -53 | -0 | 14 | 1 | 0.4693 | 1.0019 | 1.0003 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 1L | -53 | -0 | 14 | 1 | 0.4693 | 1.0019 | 1.0003 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 2 | -5 | -0 | 14 | 1 | 0.4693 | 1.0002 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 7 | -3 | -0 | 14 | 1 | 0.4693 | 1.0001 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 8 | -5 | -0 | 14 | 1 | 0.4693 | 1.0002 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |

**ASTA NUM. 29** NI 9 NF 24 Lungh. 175.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -1541 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1B | 0 | -1541 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1C | 0 | -1541 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1D | 0 | -1541 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1E | 0 | -957 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1F | 0 | -957 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1G | 0 | -957 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1H | 0 | -957 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1I | 0 | -1381 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1J | 0 | -1381 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1K | 0 | -1381 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1L | 0 | -1381 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1M | 0 | -1117 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1N | 0 | -1117 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1O | 0 | -1117 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1P | 0 | -1117 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 2 | 0 | 16 | 21 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | -1250 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 8 | 0 | 17 | 21 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1A | 88 | -1541 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 1B | 88 | -1541 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 1C | 88 | -1541 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 1D | 88 | -1541 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 1E | 88 | -957 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 1F | 88 | -957 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 1G | 88 | -957 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 1H | 88 | -957 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 1I | 88 | -1381 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 1J | 88 | -1381 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 1K | 88 | -1381 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 1L | 88 | -1381 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 1M | 88 | -1117 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 1N | 88 | -1117 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 1O | 88 | -1117 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 1P | 88 | -1117 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 2 | 88 | 16 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 88 | -1250 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 8 | 88 | 17 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 175 | -1541 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1B | 175 | -1541 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1C | 175 | -1541 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1D | 175 | -1541 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1E | 175 | -957 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1F | 175 | -957 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1G | 175 | -957 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1H | 175 | -957 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1I | 175 | -1381 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1J | 175 | -1381 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1K | 175 | -1381 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1L | 175 | -1381 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1M | 175 | -1117 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1N | 175 | -1117 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1O | 175 | -1117 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1P | 175 | -1117 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 2 | 175 | 16 | -21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 7 | 175 | -1250 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 8 | 175 | 17 | -21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -1541 | -0 | 9 | 1 | 0.6034 | 1.0315 | 1.0057 | -- | -- | 0.04 | -- | 0.04 | Snell. 'zx'= 85 |
| 1B | -1541 | -0 | 9 | 1 | 0.6034 | 1.0315 | 1.0057 | -- | -- | 0.04 | -- | 0.04 | Snell. 'zx'= 85 |
| 1C | -1541 | -0 | 9 | 1 | 0.6034 | 1.0315 | 1.0057 | -- | -- | 0.04 | -- | 0.04 | Snell. 'zx'= 85 |
| 1D | -1541 | -0 | 9 | 1 | 0.6034 | 1.0315 | 1.0057 | -- | -- | 0.04 | -- | 0.04 | Snell. 'zx'= 85 |
| 1E | -957 | -0 | 9 | 1 | 0.6034 | 1.0196 | 1.0035 | -- | -- | 0.02 | -- | 0.03 | Snell. 'zx'= 85 |
| 1F | -957 | -0 | 9 | 1 | 0.6034 | 1.0196 | 1.0035 | -- | -- | 0.02 | -- | 0.03 | Snell. 'zx'= 85 |
| 1G | -957 | -0 | 9 | 1 | 0.6034 | 1.0196 | 1.0035 | -- | -- | 0.02 | -- | 0.03 | Snell. 'zx'= 85 |
| 1H | -957 | -0 | 9 | 1 | 0.6034 | 1.0196 | 1.0035 | -- | -- | 0.02 | -- | 0.03 | Snell. 'zx'= 85 |
| 1I | -1381 | -0 | 9 | 1 | 0.6034 | 1.0283 | 1.0051 | -- | -- | 0.04 | -- | 0.04 | Snell. 'zx'= 85 |
| 1J | -1381 | -0 | 9 | 1 | 0.6034 | 1.0283 | 1.0051 | -- | -- | 0.04 | -- | 0.04 | Snell. 'zx'= 85 |
| 1K | -1381 | -0 | 9 | 1 | 0.6034 | 1.0283 | 1.0051 | -- | -- | 0.04 | -- | 0.04 | Snell. 'zx'= 85 |
| 1L | -1381 | -0 | 9 | 1 | 0.6034 | 1.0283 | 1.0051 | -- | -- | 0.04 | -- | 0.04 | Snell. 'zx'= 85 |
| 1M | -1117 | -0 | 9 | 1 | 0.6034 | 1.0229 | 1.0041 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 85 |
| 1N | -1117 | -0 | 9 | 1 | 0.6034 | 1.0229 | 1.0041 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 85 |
| 1O | -1117 | -0 | 9 | 1 | 0.6034 | 1.0229 | 1.0041 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 85 |
| 1P | -1117 | -0 | 9 | 1 | 0.6034 | 1.0229 | 1.0041 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 85 |
| 7 | -1250 | -0 | 9 | 1 | 0.6034 | 1.0256 | 1.0046 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 85 |

**ASTA NUM. 30** NI 24 NF 59 Lungh. 180.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -588 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1B | 0 | -588 | 22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1C | 0 | -588 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1D | 0 | -588 | 22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1E | 0 | -352 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1F | 0 | -352 | 22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1G | 0 | -352 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1H | 0 | -352 | 22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1I | 0 | -542 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1J | 0 | -542 | 22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1K | 0 | -542 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1L | 0 | -542 | 22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1M | 0 | -398 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1N | 0 | -398 | 22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1O | 0 | -398 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1P | 0 | -398 | 22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.01 | 0.00 | |
| 2 | 0 | -70 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | -473 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 8 | 0 | -67 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 90 | -588 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1B | 90 | -588 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1C | 90 | -588 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1D | 90 | -588 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1E | 90 | -352 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1F | 90 | -352 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1G | 90 | -352 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1H | 90 | -352 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1I | 90 | -542 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1J | 90 | -542 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1K | 90 | -542 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1L | 90 | -542 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1M | 90 | -398 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1N | 90 | -398 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1O | 90 | -398 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1P | 90 | -398 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 2 | 90 | -70 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 90 | -473 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 8 | 90 | -67 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 180 | -588 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1B | 180 | -588 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1C | 180 | -588 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1D | 180 | -588 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1E | 180 | -352 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1F | 180 | -352 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1G | 180 | -352 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1H | 180 | -352 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1I | 180 | -542 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1J | 180 | -542 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1K | 180 | -542 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1L | 180 | -542 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1M | 180 | -398 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1N | 180 | -398 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1O | 180 | -398 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1P | 180 | -398 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 2 | 180 | -70 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 180 | -473 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 8 | 180 | -67 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -588 | -0 | 10 | 1 | 0.5854 | 1.0130 | 1.0023 | -- | -- | 0.02 | -- | 0.02 | Snell. 'zx'= 88 |
| 1B | -588 | -0 | 10 | 1 | 0.5854 | 1.0130 | 1.0023 | -- | -- | 0.02 | -- | 0.02 | Snell. 'zx'= 88 |
| 1C | -588 | -0 | 10 | 1 | 0.5854 | 1.0130 | 1.0023 | -- | -- | 0.02 | -- | 0.02 | Snell. 'zx'= 88 |
| 1D | -588 | -0 | 10 | 1 | 0.5854 | 1.0130 | 1.0023 | -- | -- | 0.02 | -- | 0.02 | Snell. 'zx'= 88 |
| 1E | -352 | -0 | 10 | 1 | 0.5854 | 1.0078 | 1.0014 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1F | -352 | -0 | 10 | 1 | 0.5854 | 1.0078 | 1.0014 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1G | -352 | -0 | 10 | 1 | 0.5854 | 1.0078 | 1.0014 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1H | -352 | -0 | 10 | 1 | 0.5854 | 1.0078 | 1.0014 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1I | -542 | -0 | 10 | 1 | 0.5854 | 1.0120 | 1.0021 | -- | -- | 0.01 | -- | 0.02 | Snell. 'zx'= 88 |
| 1J | -542 | -0 | 10 | 1 | 0.5854 | 1.0120 | 1.0021 | -- | -- | 0.01 | -- | 0.02 | Snell. 'zx'= 88 |
| 1K | -542 | -0 | 10 | 1 | 0.5854 | 1.0120 | 1.0021 | -- | -- | 0.01 | -- | 0.02 | Snell. 'zx'= 88 |
| 1L | -542 | -0 | 10 | 1 | 0.5854 | 1.0120 | 1.0021 | -- | -- | 0.01 | -- | 0.02 | Snell. 'zx'= 88 |
| 1M | -398 | -0 | 10 | 1 | 0.5854 | 1.0088 | 1.0015 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1N | -398 | -0 | 10 | 1 | 0.5854 | 1.0088 | 1.0015 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1O | -398 | -0 | 10 | 1 | 0.5854 | 1.0088 | 1.0015 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1P | -398 | -0 | 10 | 1 | 0.5854 | 1.0088 | 1.0015 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 2 | -70 | -0 | 10 | 1 | 0.5854 | 1.0016 | 1.0003 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 88 |
| 7 | -473 | -0 | 10 | 1 | 0.5854 | 1.0105 | 1.0018 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 8 | -67 | -0 | 10 | 1 | 0.5854 | 1.0015 | 1.0003 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 88 |

**ASTA NUM. 31** NI 59 NF 22 Lungh. 197.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.

qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -131 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | -131 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | -131 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | -131 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | -104 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 0 | -104 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 0 | -104 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 0 | -104 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 0 | -155 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | -155 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1K | 0 | -155 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1L | 0 | -155 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1M | 0 | -80 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1N | 0 | -80 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1O | 0 | -80 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1P | 0 | -80 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 2 | 0 | -166 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 0 | -120 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 8 | 0 | -163 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1A | 98 | -131 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1B | 98 | -131 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1C | 98 | -131 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1D | 98 | -131 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1E | 98 | -104 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1F | 98 | -104 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1G | 98 | -104 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1H | 98 | -104 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1I | 98 | -155 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1J | 98 | -155 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1K | 98 | -155 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1L | 98 | -155 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1M | 98 | -80 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1N | 98 | -80 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1O | 98 | -80 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1P | 98 | -80 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 2 | 98 | -166 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 98 | -120 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 8 | 98 | -163 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 |
| 1A | 197 | -131 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1B | 197 | -131 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1C | 197 | -131 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1D | 197 | -131 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1E | 197 | -104 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1F | 197 | -104 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1G | 197 | -104 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1H | 197 | -104 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1I | 197 | -155 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1J | 197 | -155 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1K | 197 | -155 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1L | 197 | -155 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1M | 197 | -80 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1N | 197 | -80 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1O | 197 | -80 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1P | 197 | -80 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 2 | 197 | -166 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 197 | -120 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 8 | 197 | -163 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -131 | -0 | 12 | 1 | 0.5266 | 1.0037 | 1.0006 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1B | -131 | -0 | 12 | 1 | 0.5266 | 1.0037 | 1.0006 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1C | -131 | -0 | 12 | 1 | 0.5266 | 1.0037 | 1.0006 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1D | -131 | -0 | 12 | 1 | 0.5266 | 1.0037 | 1.0006 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1E | -104 | -0 | 12 | 1 | 0.5266 | 1.0030 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1F | -104 | -0 | 12 | 1 | 0.5266 | 1.0030 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1G | -104 | -0 | 12 | 1 | 0.5266 | 1.0030 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1H | -104 | -0 | 12 | 1 | 0.5266 | 1.0030 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1I | -155 | -0 | 12 | 1 | 0.5266 | 1.0044 | 1.0007 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1J | -155 | -0 | 12 | 1 | 0.5266 | 1.0044 | 1.0007 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1K | -155 | -0 | 12 | 1 | 0.5266 | 1.0044 | 1.0007 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1L | -155 | -0 | 12 | 1 | 0.5266 | 1.0044 | 1.0007 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1M | -80 | -0 | 12 | 1 | 0.5266 | 1.0023 | 1.0004 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1N | -80 | -0 | 12 | 1 | 0.5266 | 1.0023 | 1.0004 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1O | -80 | -0 | 12 | 1 | 0.5266 | 1.0023 | 1.0004 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1P | -80 | -0 | 12 | 1 | 0.5266 | 1.0023 | 1.0004 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 2 | -166 | -0 | 12 | 1 | 0.5266 | 1.0047 | 1.0007 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 7 | -120 | -0 | 12 | 1 | 0.5266 | 1.0034 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 8 | -163 | -0 | 12 | 1 | 0.5266 | 1.0046 | 1.0007 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |

**ASTA NUM. 32** NI 22 NF 10 Lungh. 215.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | 237 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | 237 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | 237 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | 237 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | 671 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1F | 0 | 671 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1G | 0 | 671 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1H | 0 | 671 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1I | 0 | 353 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1J | 0 | 353 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1K | 0 | 353 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1L | 0 | 353 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1M | 0 | 554 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1N | 0 | 554 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1O | 0 | 554 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1P | 0 | 554 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 2 | 0 | -90 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | 453 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 8 | 0 | -89 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 108 | 237 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 108 | 237 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 108 | 237 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 108 | 237 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 108 | 671 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1F | 108 | 671 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1G | 108 | 671 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1H | 108 | 671 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1I | 108 | 353 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 |
| 1J | 108 | 353 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 |
| 1K | 108 | 353 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 |
| 1L | 108 | 353 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 |
| 1M | 108 | 554 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 |
| 1N | 108 | 554 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 |
| 1O | 108 | 554 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 |
| 1P | 108 | 554 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 |
| 2 | 108 | -90 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 108 | 453 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 |
| 8 | 108 | -89 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1A | 215 | 237 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1B | 215 | 237 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1C | 215 | 237 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1D | 215 | 237 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1E | 215 | 671 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 |
| 1F | 215 | 671 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 |
| 1G | 215 | 671 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 |
| 1H | 215 | 671 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 |
| 1I | 215 | 353 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 |
| 1J | 215 | 353 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 |
| 1K | 215 | 353 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 |
| 1L | 215 | 353 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 |
| 1M | 215 | 554 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 |
| 1N | 215 | 554 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 |
| 1O | 215 | 554 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 |
| 1P | 215 | 554 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 |
| 2 | 215 | -90 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 215 | 453 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 |
| 8 | 215 | -89 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 2 | -90 | -0 | 14 | 1 | 0.4693 | 1.0033 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 105 |
| 8 | -89 | -0 | 14 | 1 | 0.4693 | 1.0032 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 105 |

**ASTA NUM. 33** NI 80 NF 73 Lungh. 175.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -27 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | -27 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | -27 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | -27 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | -17 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 0 | -17 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 0 | -17 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 0 | -17 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 0 | -29 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | -29 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 0 | -29 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 0 | -29 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 0 | -15 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 0 | -15 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 0 | -15 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 0 | -15 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 0 | -1 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | -22 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | -1 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 88 | -27 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 88 | -27 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 88 | -27 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 88 | -27 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 88 | -17 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 88 | -17 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 88 | -17 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 88 | -17 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 88 | -29 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 88 | -29 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 88 | -29 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 88 | -29 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 88 | -15 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 88 | -15 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 88 | -15 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 88 | -15 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 88 | -1 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 88 | -22 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 88 | -1 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 175 | -27 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 175 | -27 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 175 | -27 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 175 | -27 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 175 | -17 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 175 | -17 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 175 | -17 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 175 | -17 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 175 | -29 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 175 | -29 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 175 | -29 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 175 | -29 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 175 | -15 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 175 | -15 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 175 | -15 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 175 | -15 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 175 | -1 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 175 | -22 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 175 | -1 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | -- | -- | | | | | | | | | | |
| | kg | kg*m | | | | | | | | | | | |
| 1A | -27 | -0 | 9 | 1 | 0.6034 | 1.0005 | 1.0001 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 85 |
| 1B | -27 | -0 | 9 | 1 | 0.6034 | 1.0005 | 1.0001 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 85 |
| 1C | -27 | -0 | 9 | 1 | 0.6034 | 1.0005 | 1.0001 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 85 |
| 1D | -27 | -0 | 9 | 1 | 0.6034 | 1.0005 | 1.0001 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 85 |
| 1E | -17 | -0 | 9 | 1 | 0.6034 | 1.0004 | 1.0001 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 85 |
| 1F | -17 | -0 | 9 | 1 | 0.6034 | 1.0004 | 1.0001 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 85 |
| 1G | -17 | -0 | 9 | 1 | 0.6034 | 1.0004 | 1.0001 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 85 |
| 1H | -17 | -0 | 9 | 1 | 0.6034 | 1.0004 | 1.0001 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 85 |
| 1I | -29 | -0 | 9 | 1 | 0.6034 | 1.0006 | 1.0001 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 85 |
| 1J | -29 | -0 | 9 | 1 | 0.6034 | 1.0006 | 1.0001 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 85 |
| 1K | -29 | -0 | 9 | 1 | 0.6034 | 1.0006 | 1.0001 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 85 |
| 1L | -29 | -0 | 9 | 1 | 0.6034 | 1.0006 | 1.0001 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 85 |
| 1M | -15 | -0 | 9 | 1 | 0.6034 | 1.0003 | 1.0001 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 85 |
| 1N | -15 | -0 | 9 | 1 | 0.6034 | 1.0003 | 1.0001 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 85 |
| 1O | -15 | -0 | 9 | 1 | 0.6034 | 1.0003 | 1.0001 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 85 |
| 1P | -15 | -0 | 9 | 1 | 0.6034 | 1.0003 | 1.0001 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 85 |
| 2 | -1 | -0 | 9 | 1 | 0.6034 | 1.0000 | 1.0000 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 85 |
| 7 | -22 | -0 | 9 | 1 | 0.6034 | 1.0005 | 1.0001 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 85 |
| 8 | -1 | -0 | 9 | 1 | 0.6034 | 1.0000 | 1.0000 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 85 |

**ASTA NUM. 34** NI 73 NF 71 Lungh. 180.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | -- | -- | -- | -- | -- | -- | | -- | -- | -- | |
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -160 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | -160 | 22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | -160 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | -160 | 22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | 122 | 22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 0 | 122 | 22 | 0 | 0 | 0 | -0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 0 | 122 | 22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 0 | 122 | 22 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 0 | -94 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | -94 | 22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 0 | -94 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 0 | -94 | 22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 0 | 55 | 22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 0 | 55 | 22 | 0 | 0 | 0 | -0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 0 | 55 | 22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 0 | 55 | 22 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 0 | -4 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | -19 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | -4 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 90 | -160 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 90 | -160 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 90 | -160 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 90 | -160 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 90 | 122 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 90 | 122 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 90 | 122 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 90 | 122 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 90 | -94 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 90 | -94 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 90 | -94 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 90 | -94 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 90 | 55 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 90 | 55 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 90 | 55 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 90 | 55 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 90 | -4 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 90 | -19 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 90 | -4 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 180 | -160 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 180 | -160 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 180 | -160 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 180 | -160 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 180 | 122 | -22 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 180 | 122 | -22 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 180 | 122 | -22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 180 | 122 | -22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 180 | -94 | -22 | 0 | 0 | -0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 180 | -94 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 180 | -94 | -22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 180 | -94 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 180 | 55 | -22 | 0 | 0 | -0 | -0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 180 | 55 | -22 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 180 | 55 | -22 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 180 | 55 | -22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 180 | -4 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 180 | -19 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 180 | -4 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | -- | -- | | | | | | | | | | |
| | kg | kg*m | | | | | | | | | | | |
| 1A | -160 | -0 | 10 | 1 | 0.5854 | 1.0035 | 1.0006 | -- | -- | 0.00 | -- | 0.01 Snell. 'zx'= | 88 |
| 1B | -160 | -0 | 10 | 1 | 0.5854 | 1.0035 | 1.0006 | -- | -- | 0.00 | -- | 0.01 Snell. 'zx'= | 88 |
| 1C | -160 | -0 | 10 | 1 | 0.5854 | 1.0035 | 1.0006 | -- | -- | 0.00 | -- | 0.01 Snell. 'zx'= | 88 |
| 1D | -160 | -0 | 10 | 1 | 0.5854 | 1.0035 | 1.0006 | -- | -- | 0.00 | -- | 0.01 Snell. 'zx'= | 88 |
| 1I | -94 | -0 | 10 | 1 | 0.5854 | 1.0021 | 1.0004 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 88 |
| 1J | -94 | -0 | 10 | 1 | 0.5854 | 1.0021 | 1.0004 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 88 |
| 1K | -94 | -0 | 10 | 1 | 0.5854 | 1.0021 | 1.0004 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 88 |
| 1L | -94 | -0 | 10 | 1 | 0.5854 | 1.0021 | 1.0004 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 88 |
| 2 | -4 | -0 | 10 | 1 | 0.5854 | 1.0001 | 1.0000 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 88 |
| 7 | -19 | -0 | 10 | 1 | 0.5854 | 1.0004 | 1.0001 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 88 |
| 8 | -4 | -0 | 10 | 1 | 0.5854 | 1.0001 | 1.0000 | -- | -- | 0.00 | -- | 0.00 Snell. 'zx'= | 88 |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

**ASTA NUM. 35** NI 71 NF 72 Lungh. 197.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -166 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | -166 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | -166 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | -166 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | 151 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 0 | 151 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 0 | 151 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 0 | 151 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 0 | -87 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | -87 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 0 | -87 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 0 | -87 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 0 | 73 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 0 | 73 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 0 | 73 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 0 | 73 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 0 | -5 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | -7 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | -5 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 98 | -166 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 98 | -166 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 98 | -166 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 98 | -166 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 98 | 151 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 98 | 151 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 98 | 151 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 98 | 151 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 98 | -87 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 98 | -87 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 98 | -87 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 98 | -87 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 98 | 73 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 98 | 73 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 98 | 73 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 98 | 73 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 98 | -5 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 98 | -7 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 98 | -5 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 197 | -166 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 197 | -166 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 197 | -166 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 197 | -166 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 197 | 151 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 197 | 151 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 197 | 151 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 197 | 151 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 197 | -87 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 197 | -87 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 197 | -87 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 197 | -87 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 197 | 73 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 197 | 73 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 197 | 73 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 197 | 73 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 197 | -5 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 197 | -7 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 197 | -5 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -166 | -0 | 12 | 1 | 0.5266 | 1.0047 | 1.0007 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1B | -166 | -0 | 12 | 1 | 0.5266 | 1.0047 | 1.0007 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1C | -166 | -0 | 12 | 1 | 0.5266 | 1.0047 | 1.0007 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1D | -166 | -0 | 12 | 1 | 0.5266 | 1.0047 | 1.0007 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1I | -87 | -0 | 12 | 1 | 0.5266 | 1.0025 | 1.0004 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1J | -87 | -0 | 12 | 1 | 0.5266 | 1.0025 | 1.0004 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1K | -87 | -0 | 12 | 1 | 0.5266 | 1.0025 | 1.0004 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1L | -87 | -0 | 12 | 1 | 0.5266 | 1.0025 | 1.0004 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 2 | -5 | -0 | 12 | 1 | 0.5266 | 1.0001 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 7 | -7 | -0 | 12 | 1 | 0.5266 | 1.0002 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 8 | -5 | -0 | 12 | 1 | 0.5266 | 1.0001 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |

**ASTA NUM. 36** NI 72 NF 74 Lungh. 215.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -83 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | -83 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | -83 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | -83 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | 90 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 0 | 90 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 0 | 90 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 0 | 90 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 0 | -35 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | -35 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 0 | -35 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 0 | -35 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 0 | 42 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 0 | 42 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 0 | 42 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1P | 0 | 42 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 2 | 0 | -2 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 0 | 3 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 8 | 0 | -2 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1A | 108 | -83 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1B | 108 | -83 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1C | 108 | -83 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1D | 108 | -83 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1E | 108 | 90 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1F | 108 | 90 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1G | 108 | 90 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1H | 108 | 90 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1I | 108 | -35 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1J | 108 | -35 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1K | 108 | -35 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1L | 108 | -35 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1M | 108 | 42 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1N | 108 | 42 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1O | 108 | 42 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1P | 108 | 42 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 2 | 108 | -2 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 108 | 3 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 8 | 108 | -2 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 1A | 215 | -83 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1B | 215 | -83 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1C | 215 | -83 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1D | 215 | -83 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1E | 215 | 90 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1F | 215 | 90 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1G | 215 | 90 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1H | 215 | 90 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1I | 215 | -35 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1J | 215 | -35 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1K | 215 | -35 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1L | 215 | -35 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1M | 215 | 42 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1N | 215 | 42 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1O | 215 | 42 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1P | 215 | 42 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 2 | 215 | -2 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 215 | 3 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 8 | 215 | -2 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -83 | -0 | 14 | 1 | 0.4693 | 1.0030 | 1.0004 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 105 |
| 1B | -83 | -0 | 14 | 1 | 0.4693 | 1.0030 | 1.0004 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 105 |
| 1C | -83 | -0 | 14 | 1 | 0.4693 | 1.0030 | 1.0004 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 105 |
| 1D | -83 | -0 | 14 | 1 | 0.4693 | 1.0030 | 1.0004 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 105 |
| 1I | -35 | -0 | 14 | 1 | 0.4693 | 1.0013 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 1J | -35 | -0 | 14 | 1 | 0.4693 | 1.0013 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 1K | -35 | -0 | 14 | 1 | 0.4693 | 1.0013 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 1L | -35 | -0 | 14 | 1 | 0.4693 | 1.0013 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 2 | -2 | -0 | 14 | 1 | 0.4693 | 1.0001 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 8 | -2 | -0 | 14 | 1 | 0.4693 | 1.0001 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |

**ASTA NUM. 37** NI 38 NF 33 Lungh. 175.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -2384 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.04 | 0.00 | |
| 1B | 0 | -2384 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.04 | 0.00 | |
| 1C | 0 | -2384 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.04 | 0.00 | |
| 1D | 0 | -2384 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.04 | 0.00 | |
| 1E | 0 | -12 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 0 | -12 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 0 | -12 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 0 | -12 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 0 | -1843 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1J | 0 | -1843 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1K | 0 | -1843 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1L | 0 | -1843 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1M | 0 | -553 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1N | 0 | -553 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1O | 0 | -553 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1P | 0 | -553 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 2 | 0 | -0 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | -1200 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 8 | 0 | 1 | 21 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1A | 88 | -2384 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.04 | 0.00 | |
| 1B | 88 | -2384 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.04 | 0.00 | |
| 1C | 88 | -2384 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.04 | 0.00 | |
| 1D | 88 | -2384 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.04 | 0.00 | |
| 1E | 88 | -12 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 88 | -12 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 88 | -12 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 88 | -12 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 88 | -1843 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.03 | 0.00 | |
| 1J | 88 | -1843 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.03 | 0.00 | |
| 1K | 88 | -1843 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.03 | 0.00 | |
| 1L | 88 | -1843 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.03 | 0.00 | |
| 1M | 88 | -553 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 | |
| 1N | 88 | -553 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 | |
| 1O | 88 | -553 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 | |
| 1P | 88 | -553 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 | |
| 2 | 88 | -0 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 88 | -1200 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 | |
| 8 | 88 | 1 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 175 | -2384 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.04 | 0.00 | |
| 1B | 175 | -2384 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.04 | 0.00 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1C | 175 | -2384 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.04 | 0.00 |
| 1D | 175 | -2384 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.04 | 0.00 |
| 1E | 175 | -12 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1F | 175 | -12 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1G | 175 | -12 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1H | 175 | -12 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1I | 175 | -1843 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 |
| 1J | 175 | -1843 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 |
| 1K | 175 | -1843 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 |
| 1L | 175 | -1843 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 |
| 1M | 175 | -553 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1N | 175 | -553 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1O | 175 | -553 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1P | 175 | -553 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 2 | 175 | -0 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 175 | -1200 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 8 | 175 | 1 | -21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -2384 | -0 | 9 | 1 | 0.6034 | 1.0488 | 1.0088 | -- | -- | 0.06 | -- | 0.06 | Snell. 'zx'= 85 |
| 1B | -2384 | -0 | 9 | 1 | 0.6034 | 1.0488 | 1.0088 | -- | -- | 0.06 | -- | 0.06 | Snell. 'zx'= 85 |
| 1C | -2384 | -0 | 9 | 1 | 0.6034 | 1.0488 | 1.0088 | -- | -- | 0.06 | -- | 0.06 | Snell. 'zx'= 85 |
| 1D | -2384 | -0 | 9 | 1 | 0.6034 | 1.0488 | 1.0088 | -- | -- | 0.06 | -- | 0.06 | Snell. 'zx'= 85 |
| 1E | -12 | -0 | 9 | 1 | 0.6034 | 1.0002 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1F | -12 | -0 | 9 | 1 | 0.6034 | 1.0002 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1G | -12 | -0 | 9 | 1 | 0.6034 | 1.0002 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1H | -12 | -0 | 9 | 1 | 0.6034 | 1.0002 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1I | -1843 | -0 | 9 | 1 | 0.6034 | 1.0377 | 1.0068 | -- | -- | 0.05 | -- | 0.05 | Snell. 'zx'= 85 |
| 1J | -1843 | -0 | 9 | 1 | 0.6034 | 1.0377 | 1.0068 | -- | -- | 0.05 | -- | 0.05 | Snell. 'zx'= 85 |
| 1K | -1843 | -0 | 9 | 1 | 0.6034 | 1.0377 | 1.0068 | -- | -- | 0.05 | -- | 0.05 | Snell. 'zx'= 85 |
| 1L | -1843 | -0 | 9 | 1 | 0.6034 | 1.0377 | 1.0068 | -- | -- | 0.05 | -- | 0.05 | Snell. 'zx'= 85 |
| 1M | -553 | -0 | 9 | 1 | 0.6034 | 1.0113 | 1.0020 | -- | -- | 0.01 | -- | 0.02 | Snell. 'zx'= 85 |
| 1N | -553 | -0 | 9 | 1 | 0.6034 | 1.0113 | 1.0020 | -- | -- | 0.01 | -- | 0.02 | Snell. 'zx'= 85 |
| 1O | -553 | -0 | 9 | 1 | 0.6034 | 1.0113 | 1.0020 | -- | -- | 0.01 | -- | 0.02 | Snell. 'zx'= 85 |
| 1P | -553 | -0 | 9 | 1 | 0.6034 | 1.0113 | 1.0020 | -- | -- | 0.01 | -- | 0.02 | Snell. 'zx'= 85 |
| 2 | -0 | -0 | 9 | 1 | 0.6034 | 1.0000 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 7 | -1200 | -0 | 9 | 1 | 0.6034 | 1.0246 | 1.0044 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 85 |

**ASTA NUM. 38** NI 33 NF 68 Lungh. 180.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -2120 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1B | 0 | -2120 | 22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1C | 0 | -2120 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1D | 0 | -2120 | 22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1E | 0 | 2366 | 22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.04 | 0.00 | |
| 1F | 0 | 2366 | 22 | 0 | 0 | 0 | -0 | -- | 0.00 | 0.04 | 0.00 | |
| 1G | 0 | 2366 | 22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.04 | 0.00 | |
| 1H | 0 | 2366 | 22 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.04 | 0.00 | |
| 1I | 0 | -1092 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1J | 0 | -1092 | 22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1K | 0 | -1092 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1L | 0 | -1092 | 22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1M | 0 | 1338 | 22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 | |
| 1N | 0 | 1338 | 22 | 0 | 0 | 0 | -0 | -- | 0.00 | 0.02 | 0.00 | |
| 1O | 0 | 1338 | 22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 | |
| 1P | 0 | 1338 | 22 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.02 | 0.00 | |
| 2 | 0 | 10 | 22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | 121 | 22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | 12 | 22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1A | 90 | -2120 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.03 | 0.00 | |
| 1B | 90 | -2120 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.03 | 0.00 | |
| 1C | 90 | -2120 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.03 | 0.00 | |
| 1D | 90 | -2120 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.03 | 0.00 | |
| 1E | 90 | 2366 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.04 | 0.00 | |
| 1F | 90 | 2366 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.04 | 0.00 | |
| 1G | 90 | 2366 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.04 | 0.00 | |
| 1H | 90 | 2366 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.04 | 0.00 | |
| 1I | 90 | -1092 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.02 | 0.00 | |
| 1J | 90 | -1092 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.02 | 0.00 | |
| 1K | 90 | -1092 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.02 | 0.00 | |
| 1L | 90 | -1092 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.02 | 0.00 | |
| 1M | 90 | 1338 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.02 | 0.00 | |
| 1N | 90 | 1338 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.02 | 0.00 | |
| 1O | 90 | 1338 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.02 | 0.00 | |
| 1P | 90 | 1338 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.02 | 0.00 | |
| 2 | 90 | 10 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 90 | 121 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 90 | 12 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 180 | -2120 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1B | 180 | -2120 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1C | 180 | -2120 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1D | 180 | -2120 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1E | 180 | 2366 | -22 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.04 | 0.00 | |
| 1F | 180 | 2366 | -22 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.04 | 0.00 | |
| 1G | 180 | 2366 | -22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.04 | 0.00 | |
| 1H | 180 | 2366 | -22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.04 | 0.00 | |
| 1I | 180 | -1092 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1J | 180 | -1092 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1K | 180 | -1092 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1L | 180 | -1092 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1M | 180 | 1338 | -22 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.02 | 0.00 | |
| 1N | 180 | 1338 | -22 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.02 | 0.00 | |
| 1O | 180 | 1338 | -22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 | |
| 1P | 180 | 1338 | -22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 | |
| 2 | 180 | 10 | -22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 7 | 180 | 121 | -22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 8 | 180 | 12 | -22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |



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**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -2120 | -0 | 10 | 1 | 0.5854 | 1.0469 | 1.0082 | -- | -- | 0.06 | -- | 0.06 | Snell. 'zx'= 88 |
| 1B | -2120 | -0 | 10 | 1 | 0.5854 | 1.0469 | 1.0082 | -- | -- | 0.06 | -- | 0.06 | Snell. 'zx'= 88 |
| 1C | -2120 | -0 | 10 | 1 | 0.5854 | 1.0469 | 1.0082 | -- | -- | 0.06 | -- | 0.06 | Snell. 'zx'= 88 |
| 1D | -2120 | -0 | 10 | 1 | 0.5854 | 1.0469 | 1.0082 | -- | -- | 0.06 | -- | 0.06 | Snell. 'zx'= 88 |
| 1I | -1092 | -0 | 10 | 1 | 0.5854 | 1.0241 | 1.0042 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 88 |
| 1J | -1092 | -0 | 10 | 1 | 0.5854 | 1.0241 | 1.0042 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 88 |
| 1K | -1092 | -0 | 10 | 1 | 0.5854 | 1.0241 | 1.0042 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 88 |
| 1L | -1092 | -0 | 10 | 1 | 0.5854 | 1.0241 | 1.0042 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 88 |

**ASTA NUM. 39** NI 68 NF 35 Lungh. 197.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -59 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | -59 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | -59 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | -59 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | 336 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1F | 0 | 336 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1G | 0 | 336 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1H | 0 | 336 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1I | 0 | 40 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | 40 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1K | 0 | 40 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1L | 0 | 40 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1M | 0 | 237 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 0 | 237 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 0 | 237 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 0 | 237 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 0 | 8 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | 137 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | 10 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1A | 98 | -59 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 98 | -59 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 98 | -59 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 98 | -59 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 98 | 336 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.01 | 0.00 | |
| 1F | 98 | 336 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.01 | 0.00 | |
| 1G | 98 | 336 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.01 | 0.00 | |
| 1H | 98 | 336 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.01 | 0.00 | |
| 1I | 98 | 40 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 98 | 40 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 98 | 40 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 98 | 40 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 98 | 237 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 98 | 237 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 98 | 237 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 98 | 237 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 98 | 8 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 98 | 137 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 98 | 10 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 197 | -59 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 197 | -59 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 197 | -59 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 197 | -59 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 197 | 336 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1F | 197 | 336 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1G | 197 | 336 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1H | 197 | 336 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1I | 197 | 40 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1J | 197 | 40 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1K | 197 | 40 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1L | 197 | 40 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1M | 197 | 237 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 197 | 237 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 197 | 237 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 197 | 237 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 197 | 8 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 7 | 197 | 137 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 8 | 197 | 10 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -59 | -0 | 12 | 1 | 0.5266 | 1.0017 | 1.0003 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 1B | -59 | -0 | 12 | 1 | 0.5266 | 1.0017 | 1.0003 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 1C | -59 | -0 | 12 | 1 | 0.5266 | 1.0017 | 1.0003 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 1D | -59 | -0 | 12 | 1 | 0.5266 | 1.0017 | 1.0003 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |

**ASTA NUM. 40** NI 35 NF 37 Lungh. 215.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -1771 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1B | 0 | -1771 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1C | 0 | -1771 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1D | 0 | -1771 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 | |
| 1E | 0 | 2098 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.03 | 0.00 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | 0 | 2098 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.03 | 0.00 |
| 1G | 0 | 2098 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.03 | 0.00 |
| 1H | 0 | 2098 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.03 | 0.00 |
| 1I | 0 | -908 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1J | 0 | -908 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1K | 0 | -908 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1L | 0 | -908 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1M | 0 | 1235 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 |
| 1N | 0 | 1235 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 |
| 1O | 0 | 1235 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 |
| 1P | 0 | 1235 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 |
| 2 | 0 | 7 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 7 | 0 | 162 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 8 | 0 | 9 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | | | |
| 1A | 108 | -1771 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.03 | 0.00 |
| 1B | 108 | -1771 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.03 | 0.00 |
| 1C | 108 | -1771 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.03 | 0.00 |
| 1D | 108 | -1771 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.03 | 0.00 |
| 1E | 108 | 2098 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.03 | 0.00 |
| 1F | 108 | 2098 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.03 | 0.00 |
| 1G | 108 | 2098 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.03 | 0.00 |
| 1H | 108 | 2098 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.03 | 0.00 |
| 1I | 108 | -908 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 |
| 1J | 108 | -908 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 |
| 1K | 108 | -908 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 |
| 1L | 108 | -908 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 |
| 1M | 108 | 1235 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.02 | 0.00 |
| 1N | 108 | 1235 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.02 | 0.00 |
| 1O | 108 | 1235 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.02 | 0.00 |
| 1P | 108 | 1235 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.02 | 0.00 |
| 2 | 108 | 7 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 108 | 162 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| 8 | 108 | 9 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | | | |
| 1A | 215 | -1771 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 |
| 1B | 215 | -1771 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 |
| 1C | 215 | -1771 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 |
| 1D | 215 | -1771 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.00 |
| 1E | 215 | 2098 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.03 | 0.00 |
| 1F | 215 | 2098 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.03 | 0.00 |
| 1G | 215 | 2098 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.03 | 0.00 |
| 1H | 215 | 2098 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.03 | 0.00 |
| 1I | 215 | -908 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1J | 215 | -908 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1K | 215 | -908 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1L | 215 | -908 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1M | 215 | 1235 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 |
| 1N | 215 | 1235 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 |
| 1O | 215 | 1235 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 |
| 1P | 215 | 1235 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.02 | 0.00 |
| 2 | 215 | 7 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 7 | 215 | 162 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 8 | 215 | 9 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -1771 | -0 | 14 | 1 | 0.4693 | 1.0644 | 1.0091 | -- | -- | 0.06 | -- | 0.06 | Snell. 'zx'= 105 |
| 1B | -1771 | -0 | 14 | 1 | 0.4693 | 1.0644 | 1.0091 | -- | -- | 0.06 | -- | 0.06 | Snell. 'zx'= 105 |
| 1C | -1771 | -0 | 14 | 1 | 0.4693 | 1.0644 | 1.0091 | -- | -- | 0.06 | -- | 0.06 | Snell. 'zx'= 105 |
| 1D | -1771 | -0 | 14 | 1 | 0.4693 | 1.0644 | 1.0091 | -- | -- | 0.06 | -- | 0.06 | Snell. 'zx'= 105 |
| 1I | -908 | -0 | 14 | 1 | 0.4693 | 1.0331 | 1.0046 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 105 |
| 1J | -908 | -0 | 14 | 1 | 0.4693 | 1.0331 | 1.0046 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 105 |
| 1K | -908 | -0 | 14 | 1 | 0.4693 | 1.0331 | 1.0046 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 105 |
| 1L | -908 | -0 | 14 | 1 | 0.4693 | 1.0331 | 1.0046 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 105 |

**ASTA NUM. 41** NI 85 NF 49 Lungh. 175.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -23 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | -23 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | -23 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | -23 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | -8 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 0 | -8 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 0 | -8 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 0 | -8 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 0 | -23 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | -23 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 0 | -23 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 0 | -23 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 0 | -7 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 0 | -7 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 0 | -7 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 0 | -7 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 0 | -0 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | -15 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | -0 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| | | | | | | | | | | | | |
| 1A | 88 | -23 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 88 | -23 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 88 | -23 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 88 | -23 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 88 | -8 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 88 | -8 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 88 | -8 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 88 | -8 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 88 | -23 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 88 | -23 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 88 | -23 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 88 | -23 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 88 | -7 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 88 | -7 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 | |



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| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1O | 88 | -7 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 |
| 1P | 88 | -7 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 |
| 2 | 88 | -0 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 88 | -15 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 |
| 8 | 88 | -0 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 |
| 1A | 175 | -23 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1B | 175 | -23 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1C | 175 | -23 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1D | 175 | -23 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1E | 175 | -8 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1F | 175 | -8 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1G | 175 | -8 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1H | 175 | -8 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1I | 175 | -23 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1J | 175 | -23 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1K | 175 | -23 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1L | 175 | -23 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1M | 175 | -7 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1N | 175 | -7 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1O | 175 | -7 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1P | 175 | -7 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 2 | 175 | -0 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 175 | -15 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 8 | 175 | -0 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -23 | -0 | 9 | 1 | 0.6034 | 1.0005 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1B | -23 | -0 | 9 | 1 | 0.6034 | 1.0005 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1C | -23 | -0 | 9 | 1 | 0.6034 | 1.0005 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1D | -23 | -0 | 9 | 1 | 0.6034 | 1.0005 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1E | -8 | -0 | 9 | 1 | 0.6034 | 1.0002 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1F | -8 | -0 | 9 | 1 | 0.6034 | 1.0002 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1G | -8 | -0 | 9 | 1 | 0.6034 | 1.0002 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1H | -8 | -0 | 9 | 1 | 0.6034 | 1.0002 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1I | -23 | -0 | 9 | 1 | 0.6034 | 1.0005 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1J | -23 | -0 | 9 | 1 | 0.6034 | 1.0005 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1K | -23 | -0 | 9 | 1 | 0.6034 | 1.0005 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1L | -23 | -0 | 9 | 1 | 0.6034 | 1.0005 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1M | -7 | -0 | 9 | 1 | 0.6034 | 1.0002 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1N | -7 | -0 | 9 | 1 | 0.6034 | 1.0002 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1O | -7 | -0 | 9 | 1 | 0.6034 | 1.0002 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 1P | -7 | -0 | 9 | 1 | 0.6034 | 1.0002 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 2 | -0 | -0 | 9 | 1 | 0.6034 | 1.0000 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 7 | -15 | -0 | 9 | 1 | 0.6034 | 1.0003 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |
| 8 | -0 | -0 | 9 | 1 | 0.6034 | 1.0000 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 85 |

**ASTA NUM. 42** NI 49 NF 69 Lungh. 180.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -171 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | -171 | 22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | -171 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | -171 | 22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | 154 | 22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 0 | 154 | 22 | 0 | 0 | 0 | -0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 0 | 154 | 22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 0 | 154 | 22 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 0 | -106 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | -106 | 22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 0 | -106 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 0 | -106 | 22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 0 | 89 | 22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 0 | 89 | 22 | 0 | 0 | 0 | -0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 0 | 89 | 22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 0 | 89 | 22 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 0 | -1 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | -9 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | -1 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 90 | -171 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 90 | -171 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 90 | -171 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 90 | -171 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 90 | 154 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 90 | 154 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 90 | 154 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 90 | 154 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 90 | -106 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 90 | -106 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 90 | -106 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 90 | -106 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 90 | 89 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 90 | 89 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 90 | 89 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 90 | 89 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 90 | -1 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 90 | -9 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 90 | -1 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 180 | -171 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 180 | -171 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 180 | -171 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 180 | -171 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 180 | 154 | -22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 180 | 154 | -22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 180 | 154 | -22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 180 | 154 | -22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 180 | -106 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 180 | -106 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 180 | -106 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 180 | -106 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1M | 180 | 89 | -22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1N | 180 | 89 | -22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1O | 180 | 89 | -22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1P | 180 | 89 | -22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 2 | 180 | -1 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 180 | -9 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 8 | 180 | -1 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -171 | -0 | 10 | 1 | 0.5854 | 1.0038 | 1.0007 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 88 |
| 1B | -171 | -0 | 10 | 1 | 0.5854 | 1.0038 | 1.0007 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 88 |
| 1C | -171 | -0 | 10 | 1 | 0.5854 | 1.0038 | 1.0007 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 88 |
| 1D | -171 | -0 | 10 | 1 | 0.5854 | 1.0038 | 1.0007 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 88 |
| 1I | -106 | -0 | 10 | 1 | 0.5854 | 1.0023 | 1.0004 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 88 |
| 1J | -106 | -0 | 10 | 1 | 0.5854 | 1.0023 | 1.0004 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 88 |
| 1K | -106 | -0 | 10 | 1 | 0.5854 | 1.0023 | 1.0004 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 88 |
| 1L | -106 | -0 | 10 | 1 | 0.5854 | 1.0023 | 1.0004 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 88 |
| 2 | -1 | -0 | 10 | 1 | 0.5854 | 1.0000 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 88 |
| 7 | -9 | -0 | 10 | 1 | 0.5854 | 1.0002 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 88 |
| 8 | -1 | -0 | 10 | 1 | 0.5854 | 1.0000 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 88 |

**ASTA NUM. 43** NI 69 NF 25 Lungh. 197.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -188 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | -188 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | -188 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | -188 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | 189 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 0 | 189 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 0 | 189 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 0 | 189 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 0 | -111 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | -111 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 0 | -111 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 0 | -111 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 0 | 112 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 0 | 112 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 0 | 112 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 0 | 112 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 0 | -2 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | -1 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 98 | -188 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 98 | -188 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 98 | -188 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 98 | -188 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 98 | 189 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 98 | 189 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 98 | 189 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 98 | 189 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 98 | -111 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 98 | -111 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 98 | -111 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 98 | -111 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 98 | 112 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 98 | 112 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 98 | 112 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 98 | 112 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 98 | -2 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 98 | 0 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 98 | -1 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 197 | -188 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 197 | -188 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 197 | -188 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 197 | -188 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 197 | 189 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 197 | 189 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 197 | 189 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 197 | 189 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 197 | -111 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 197 | -111 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 197 | -111 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 197 | -111 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 197 | 112 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 197 | 112 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 197 | 112 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 197 | 112 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 197 | -2 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 197 | 0 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 8 | 197 | -1 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -188 | -0 | 12 | 1 | 0.5266 | 1.0053 | 1.0008 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 96 |
| 1B | -188 | -0 | 12 | 1 | 0.5266 | 1.0053 | 1.0008 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 96 |
| 1C | -188 | -0 | 12 | 1 | 0.5266 | 1.0053 | 1.0008 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 96 |
| 1D | -188 | -0 | 12 | 1 | 0.5266 | 1.0053 | 1.0008 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 96 |
| 1I | -111 | -0 | 12 | 1 | 0.5266 | 1.0032 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1J | -111 | -0 | 12 | 1 | 0.5266 | 1.0032 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1K | -111 | -0 | 12 | 1 | 0.5266 | 1.0032 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1L | -111 | -0 | 12 | 1 | 0.5266 | 1.0032 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 2 | -2 | -0 | 12 | 1 | 0.5266 | 1.0000 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |



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| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | -1 | -0 | 12 | 1 | 0.5266 | 1.0000 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= | 96 |

**ASTA NUM. 44** NI 25 NF 79 Lungh. 215.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -98 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | -98 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | -98 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | -98 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | 106 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 0 | 106 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 0 | 106 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 0 | 106 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 0 | -53 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | -53 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 0 | -53 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 0 | -53 | 26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 0 | 61 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 0 | 61 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 0 | 61 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 0 | 61 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 0 | -1 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | 4 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | -1 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 108 | -98 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 108 | -98 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 108 | -98 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 108 | -98 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 108 | 106 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 108 | 106 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 108 | 106 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 108 | 106 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 108 | -53 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 108 | -53 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 108 | -53 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 108 | -53 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 108 | 61 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 108 | 61 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 108 | 61 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 108 | 61 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 108 | -1 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 108 | 4 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 108 | -1 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 215 | -98 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 215 | -98 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 215 | -98 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 215 | -98 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 215 | 106 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 215 | 106 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 215 | 106 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 215 | 106 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 215 | -53 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 215 | -53 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 215 | -53 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 215 | -53 | -26 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 215 | 61 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 215 | 61 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 215 | 61 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 215 | 61 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 215 | -1 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 215 | 4 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 8 | 215 | -1 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -98 | -0 | 14 | 1 | 0.4693 | 1.0036 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 105 |
| 1B | -98 | -0 | 14 | 1 | 0.4693 | 1.0036 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 105 |
| 1C | -98 | -0 | 14 | 1 | 0.4693 | 1.0036 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 105 |
| 1D | -98 | -0 | 14 | 1 | 0.4693 | 1.0036 | 1.0005 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 105 |
| 1I | -53 | -0 | 14 | 1 | 0.4693 | 1.0019 | 1.0003 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 1J | -53 | -0 | 14 | 1 | 0.4693 | 1.0019 | 1.0003 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 1K | -53 | -0 | 14 | 1 | 0.4693 | 1.0019 | 1.0003 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 1L | -53 | -0 | 14 | 1 | 0.4693 | 1.0019 | 1.0003 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 2 | -1 | -0 | 14 | 1 | 0.4693 | 1.0000 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 8 | -1 | -0 | 14 | 1 | 0.4693 | 1.0000 | 1.0000 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |

**ASTA NUM. 45** NI 45 NF 32 Lungh. 175.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -1022 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1B | 0 | -1022 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1C | 0 | -1022 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1D | 0 | -1022 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 | |
| 1E | 0 | -320 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1F | 0 | -320 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1G | 0 | -320 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1H | 0 | -320 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1I | 0 | -874 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1J | 0 | -874 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1K | 0 | -874 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1L | 0 | -874 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1M | 0 | -468 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1N | 0 | -468 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1O | 0 | -468 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1P | 0 | -468 | 21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 2 | 0 | 10 | 21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 7 | 0 | -672 | 21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 8 | 0 | 11 | 21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1A | 88 | -1022 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 |
| 1B | 88 | -1022 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 |
| 1C | 88 | -1022 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 |
| 1D | 88 | -1022 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.02 | 0.00 |
| 1E | 88 | -320 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 |
| 1F | 88 | -320 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 |
| 1G | 88 | -320 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 |
| 1H | 88 | -320 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 |
| 1I | 88 | -874 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 |
| 1J | 88 | -874 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 |
| 1K | 88 | -874 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 |
| 1L | 88 | -874 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 |
| 1M | 88 | -468 | -0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 |
| 1N | 88 | -468 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 |
| 1O | 88 | -468 | -0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 |
| 1P | 88 | -468 | 0 | -0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 |
| 2 | 88 | 10 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 88 | -672 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.01 | 0.00 |
| 8 | 88 | 11 | 0 | 0 | 0 | -0 | 9 | 1 | 0.00 | 0.00 | 0.00 |
| 1A | 175 | -1022 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 1B | 175 | -1022 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 1C | 175 | -1022 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 1D | 175 | -1022 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.00 |
| 1E | 175 | -320 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1F | 175 | -320 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1G | 175 | -320 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1H | 175 | -320 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1I | 175 | -874 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1J | 175 | -874 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1K | 175 | -874 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1L | 175 | -874 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1M | 175 | -468 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1N | 175 | -468 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1O | 175 | -468 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1P | 175 | -468 | -21 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 2 | 175 | 10 | -21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 7 | 175 | -672 | -21 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 8 | 175 | 11 | -21 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -1022 | -0 | 9 | 1 | 0.6034 | 1.0209 | 1.0038 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 85 |
| 1B | -1022 | -0 | 9 | 1 | 0.6034 | 1.0209 | 1.0038 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 85 |
| 1C | -1022 | -0 | 9 | 1 | 0.6034 | 1.0209 | 1.0038 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 85 |
| 1D | -1022 | -0 | 9 | 1 | 0.6034 | 1.0209 | 1.0038 | -- | -- | 0.03 | -- | 0.03 | Snell. 'zx'= 85 |
| 1E | -320 | -0 | 9 | 1 | 0.6034 | 1.0065 | 1.0012 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 85 |
| 1F | -320 | -0 | 9 | 1 | 0.6034 | 1.0065 | 1.0012 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 85 |
| 1G | -320 | -0 | 9 | 1 | 0.6034 | 1.0065 | 1.0012 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 85 |
| 1H | -320 | -0 | 9 | 1 | 0.6034 | 1.0065 | 1.0012 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 85 |
| 1I | -874 | -0 | 9 | 1 | 0.6034 | 1.0179 | 1.0032 | -- | -- | 0.02 | -- | 0.02 | Snell. 'zx'= 85 |
| 1J | -874 | -0 | 9 | 1 | 0.6034 | 1.0179 | 1.0032 | -- | -- | 0.02 | -- | 0.02 | Snell. 'zx'= 85 |
| 1K | -874 | -0 | 9 | 1 | 0.6034 | 1.0179 | 1.0032 | -- | -- | 0.02 | -- | 0.02 | Snell. 'zx'= 85 |
| 1L | -874 | -0 | 9 | 1 | 0.6034 | 1.0179 | 1.0032 | -- | -- | 0.02 | -- | 0.02 | Snell. 'zx'= 85 |
| 1M | -468 | -0 | 9 | 1 | 0.6034 | 1.0096 | 1.0017 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 85 |
| 1N | -468 | -0 | 9 | 1 | 0.6034 | 1.0096 | 1.0017 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 85 |
| 1O | -468 | -0 | 9 | 1 | 0.6034 | 1.0096 | 1.0017 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 85 |
| 1P | -468 | -0 | 9 | 1 | 0.6034 | 1.0096 | 1.0017 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 85 |
| 7 | -672 | -0 | 9 | 1 | 0.6034 | 1.0138 | 1.0025 | -- | -- | 0.02 | -- | 0.02 | Snell. 'zx'= 85 |

**ASTA NUM. 46** NI 32 NF 67 Lungh. 180.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -568 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1B | 0 | -568 | 22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1C | 0 | -568 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1D | 0 | -568 | 22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1E | 0 | 149 | 22 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1F | 0 | 149 | 22 | 0 | 0 | 0 | -0 | -- | 0.00 | 0.00 | 0.00 | |
| 1G | 0 | 149 | 22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1H | 0 | 149 | 22 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.00 | 0.00 | |
| 1I | 0 | -379 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1J | 0 | -379 | 22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1K | 0 | -379 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1L | 0 | -379 | 22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1M | 0 | -39 | 22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 0 | -39 | 22 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 0 | -39 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 0 | -39 | 22 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 0 | -23 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | -211 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | -21 | 22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 90 | -568 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1B | 90 | -568 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1C | 90 | -568 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1D | 90 | -568 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1E | 90 | 149 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1F | 90 | 149 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1G | 90 | 149 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1H | 90 | 149 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1I | 90 | -379 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1J | 90 | -379 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1K | 90 | -379 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1L | 90 | -379 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.01 | 0.00 | |
| 1M | 90 | -39 | -0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 90 | -39 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1O | 90 | -39 | -0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 |
| 1P | 90 | -39 | 0 | -0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 |
| 2 | 90 | -23 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 90 | -211 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 |
| 8 | 90 | -21 | 0 | 0 | 0 | -0 | 10 | 1 | 0.00 | 0.00 | 0.00 |
| 1A | 180 | -568 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1B | 180 | -568 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1C | 180 | -568 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1D | 180 | -568 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1E | 180 | 149 | -22 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1F | 180 | 149 | -22 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1G | 180 | 149 | -22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1H | 180 | 149 | -22 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 1I | 180 | -379 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1J | 180 | -379 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1K | 180 | -379 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1L | 180 | -379 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 |
| 1M | 180 | -39 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1N | 180 | -39 | -22 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1O | 180 | -39 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 1P | 180 | -39 | -22 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 2 | 180 | -23 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 180 | -211 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 8 | 180 | -21 | -22 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -568 | -0 | 10 | 1 | 0.5854 | 1.0126 | 1.0022 | -- | -- | 0.02 | -- | 0.02 | Snell. 'zx'= 88 |
| 1B | -568 | -0 | 10 | 1 | 0.5854 | 1.0126 | 1.0022 | -- | -- | 0.02 | -- | 0.02 | Snell. 'zx'= 88 |
| 1C | -568 | -0 | 10 | 1 | 0.5854 | 1.0126 | 1.0022 | -- | -- | 0.02 | -- | 0.02 | Snell. 'zx'= 88 |
| 1D | -568 | -0 | 10 | 1 | 0.5854 | 1.0126 | 1.0022 | -- | -- | 0.02 | -- | 0.02 | Snell. 'zx'= 88 |
| 1I | -379 | -0 | 10 | 1 | 0.5854 | 1.0084 | 1.0015 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1J | -379 | -0 | 10 | 1 | 0.5854 | 1.0084 | 1.0015 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1K | -379 | -0 | 10 | 1 | 0.5854 | 1.0084 | 1.0015 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1L | -379 | -0 | 10 | 1 | 0.5854 | 1.0084 | 1.0015 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 1M | -39 | -0 | 10 | 1 | 0.5854 | 1.0009 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 88 |
| 1N | -39 | -0 | 10 | 1 | 0.5854 | 1.0009 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 88 |
| 1O | -39 | -0 | 10 | 1 | 0.5854 | 1.0009 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 88 |
| 1P | -39 | -0 | 10 | 1 | 0.5854 | 1.0009 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 88 |
| 2 | -23 | -0 | 10 | 1 | 0.5854 | 1.0005 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 88 |
| 7 | -211 | -0 | 10 | 1 | 0.5854 | 1.0047 | 1.0008 | -- | -- | 0.01 | -- | 0.01 | Snell. 'zx'= 88 |
| 8 | -21 | -0 | 10 | 1 | 0.5854 | 1.0005 | 1.0001 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 88 |

**ASTA NUM. 47** NI 67 NF 42 Lungh. 197.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -445 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1B | 0 | -445 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1C | 0 | -445 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1D | 0 | -445 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1E | 0 | 499 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1F | 0 | 499 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1G | 0 | 499 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1H | 0 | 499 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1I | 0 | -164 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | -164 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 0 | -164 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 0 | -164 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 0 | 219 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 0 | 219 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 0 | 219 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 0 | 219 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 2 | 0 | -60 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | 25 | 24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | -59 | 24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 98 | -445 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.01 | 0.00 | |
| 1B | 98 | -445 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.01 | 0.00 | |
| 1C | 98 | -445 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.01 | 0.00 | |
| 1D | 98 | -445 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.01 | 0.00 | |
| 1E | 98 | 499 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.01 | 0.00 | |
| 1F | 98 | 499 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.01 | 0.00 | |
| 1G | 98 | 499 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.01 | 0.00 | |
| 1H | 98 | 499 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.01 | 0.00 | |
| 1I | 98 | -164 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 98 | -164 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 98 | -164 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 98 | -164 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 98 | 219 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1N | 98 | 219 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1O | 98 | 219 | -0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1P | 98 | 219 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 2 | 98 | -60 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 98 | 25 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 98 | -59 | 0 | 0 | 0 | -0 | 12 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 197 | -445 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1B | 197 | -445 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1C | 197 | -445 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1D | 197 | -445 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.00 | |
| 1E | 197 | 499 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1F | 197 | 499 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1G | 197 | 499 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1H | 197 | 499 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1I | 197 | -164 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 197 | -164 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 197 | -164 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 197 | -164 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 197 | 219 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1N | 197 | 219 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1O | 197 | 219 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1P | 197 | 219 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |



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| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 197 | -60 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |
| 7 | 197 | 25 | -24 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 |
| 8 | 197 | -59 | -24 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | -- | | | | | | | | | | | |
| | kg | kg*m | | | | | | | | | | | |
| 1A | -445 | -0 | 12 | 1 | 0.5266 | 1.0126 | 1.0020 | -- | -- | 0.01 | -- | 0.02 | Snell. 'zx'= 96 |
| 1B | -445 | -0 | 12 | 1 | 0.5266 | 1.0126 | 1.0020 | -- | -- | 0.01 | -- | 0.02 | Snell. 'zx'= 96 |
| 1C | -445 | -0 | 12 | 1 | 0.5266 | 1.0126 | 1.0020 | -- | -- | 0.01 | -- | 0.02 | Snell. 'zx'= 96 |
| 1D | -445 | -0 | 12 | 1 | 0.5266 | 1.0126 | 1.0020 | -- | -- | 0.01 | -- | 0.02 | Snell. 'zx'= 96 |
| 1I | -164 | -0 | 12 | 1 | 0.5266 | 1.0047 | 1.0007 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1J | -164 | -0 | 12 | 1 | 0.5266 | 1.0047 | 1.0007 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1K | -164 | -0 | 12 | 1 | 0.5266 | 1.0047 | 1.0007 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 1L | -164 | -0 | 12 | 1 | 0.5266 | 1.0047 | 1.0007 | -- | -- | 0.00 | -- | 0.01 | Snell. 'zx'= 96 |
| 2 | -60 | -0 | 12 | 1 | 0.5266 | 1.0017 | 1.0003 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |
| 8 | -59 | -0 | 12 | 1 | 0.5266 | 1.0017 | 1.0003 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 96 |

**ASTA NUM. 48** NI 42 NF 44 Lungh. 215.0 cm SEZ. 11 Ps IPE 180

categoria: p.p. y qy tot.
qy medio: 0.1876 0.1876 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | | | | | | | | | | | |
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | 183 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1B | 0 | 183 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1C | 0 | 183 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1D | 0 | 183 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1E | 0 | 425 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1F | 0 | 425 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1G | 0 | 425 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1H | 0 | 425 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1I | 0 | 229 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1J | 0 | 229 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1K | 0 | 229 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1L | 0 | 229 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1M | 0 | 380 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1N | 0 | 380 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1O | 0 | 380 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1P | 0 | 380 | 26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 2 | 0 | -31 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | 303 | 26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | -30 | 26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 108 | 183 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1B | 108 | 183 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1C | 108 | 183 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1D | 108 | 183 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1E | 108 | 425 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1F | 108 | 425 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1G | 108 | 425 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1H | 108 | 425 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1I | 108 | 229 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1J | 108 | 229 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1K | 108 | 229 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1L | 108 | 229 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1M | 108 | 380 | -0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1N | 108 | 380 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1O | 108 | 380 | -0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 1P | 108 | 380 | 0 | -0 | 0 | -0 | 14 | 1 | 0.00 | 0.01 | 0.00 | |
| 2 | 108 | -31 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 108 | 303 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 108 | -30 | 0 | 0 | 0 | -0 | 14 | 1 | 0.00 | 0.00 | 0.00 | |
| 1A | 215 | 183 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1B | 215 | 183 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1C | 215 | 183 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1D | 215 | 183 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1E | 215 | 425 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1F | 215 | 425 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1G | 215 | 425 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1H | 215 | 425 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1I | 215 | 229 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1J | 215 | 229 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1K | 215 | 229 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1L | 215 | 229 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 1M | 215 | 380 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1N | 215 | 380 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1O | 215 | 380 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1P | 215 | 380 | -26 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 2 | 215 | -31 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 215 | 303 | -26 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.00 | 0.00 | |
| 8 | 215 | -30 | -26 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | -- | | | | | | | | | | | |
| | kg | kg*m | | | | | | | | | | | |
| 2 | -31 | -0 | 14 | 1 | 0.4693 | 1.0011 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |
| 8 | -30 | -0 | 14 | 1 | 0.4693 | 1.0011 | 1.0002 | -- | -- | 0.00 | -- | 0.00 | Snell. 'zx'= 105 |

**ASTA NUM. 49** NI 16 NF 13 Lungh. 182.5 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 1.8813 1.0675 3.2557 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | | | | | | | | | | | |
| | cm | kg | | | kg*m | | | | | | | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 0 | 640 | 585 | 135 | 0 | 124 | -132 | 1 | 0.02 | 0.01 | 0.06 |
| 1B | 0 | 640 | 767 | 135 | 0 | 124 | -400 | 1 | 0.03 | 0.01 | 0.06 |
| 1C | 0 | 640 | 585 | -138 | 0 | -126 | -132 | 1 | 0.02 | 0.01 | 0.06 |
| 1D | 0 | 640 | 767 | -138 | 0 | -126 | -400 | 1 | 0.03 | 0.01 | 0.07 |
| 1E | 0 | 1874 | 585 | 135 | 0 | 124 | -132 | 1 | 0.02 | 0.02 | 0.06 |
| 1F | 0 | 1874 | 767 | 135 | 0 | 124 | -400 | 1 | 0.03 | 0.02 | 0.06 |
| 1G | 0 | 1874 | 585 | -138 | 0 | -126 | -132 | 1 | 0.02 | 0.02 | 0.06 |
| 1H | 0 | 1874 | 767 | -138 | 0 | -126 | -400 | 1 | 0.03 | 0.02 | 0.07 |
| 1I | 0 | -114 | 493 | 86 | 0 | 78 | 15 | 2 | 0.02 | 0.00 | 0.04 |
| 1J | 0 | -114 | 859 | 86 | 0 | 78 | -546 | 2 | 0.03 | 0.00 | 0.06 |
| 1K | 0 | -114 | 493 | -88 | 0 | -81 | 15 | 2 | 0.02 | 0.00 | 0.04 |
| 1L | 0 | -114 | 859 | -88 | 0 | -81 | -546 | 2 | 0.03 | 0.00 | 0.06 |
| 1M | 0 | 2628 | 493 | 86 | 0 | 78 | 15 | 1 | 0.02 | 0.03 | 0.04 |
| 1N | 0 | 2628 | 859 | 86 | 0 | 78 | -546 | 1 | 0.03 | 0.03 | 0.06 |
| 1O | 0 | 2628 | 493 | -88 | 0 | -81 | 15 | 1 | 0.02 | 0.03 | 0.04 |
| 1P | 0 | 2628 | 859 | -88 | 0 | -81 | -546 | 1 | 0.03 | 0.03 | 0.06 |
| 2 | 0 | 1371 | 667 | -0 | 0 | -0 | -248 | 1 | 0.02 | 0.01 | 0.03 |
| 7 | 0 | 1364 | 669 | -1 | 0 | -1 | -251 | 1 | 0.02 | 0.01 | 0.03 |
| 8 | 0 | 1264 | 673 | -0 | 0 | -0 | -263 | 1 | 0.02 | 0.01 | 0.03 |
| 1A | 91 | 640 | 179 | 135 | 0 | 0 | 217 | 1 | 0.01 | 0.01 | 0.02 |
| 1B | 91 | 640 | 361 | 135 | 0 | 0 | 115 | 1 | 0.01 | 0.01 | 0.01 |
| 1C | 91 | 640 | 179 | -138 | 0 | 0 | 217 | 1 | 0.01 | 0.01 | 0.02 |
| 1D | 91 | 640 | 361 | -138 | 0 | 0 | 115 | 1 | 0.01 | 0.01 | 0.01 |
| 1E | 91 | 1874 | 179 | 135 | 0 | 0 | 217 | 1 | 0.01 | 0.02 | 0.02 |
| 1F | 91 | 1874 | 361 | 135 | 0 | 0 | 115 | 1 | 0.01 | 0.02 | 0.01 |
| 1G | 91 | 1874 | 179 | -138 | 0 | 0 | 217 | 1 | 0.01 | 0.02 | 0.02 |
| 1H | 91 | 1874 | 361 | -138 | 0 | 0 | 115 | 1 | 0.01 | 0.02 | 0.01 |
| 1I | 91 | -114 | 87 | 86 | 0 | 0 | 280 | 1 | 0.00 | 0.00 | 0.03 |
| 1J | 91 | -114 | 453 | 86 | 0 | 0 | 52 | 1 | 0.02 | 0.00 | 0.01 |
| 1K | 91 | -114 | 87 | -88 | 0 | 0 | 280 | 1 | 0.00 | 0.00 | 0.03 |
| 1L | 91 | -114 | 453 | -88 | 0 | 0 | 52 | 1 | 0.02 | 0.00 | 0.01 |
| 1M | 91 | 2628 | 87 | 86 | 0 | 0 | 280 | 1 | 0.00 | 0.03 | 0.03 |
| 1N | 91 | 2628 | 453 | 86 | 0 | 0 | 52 | 1 | 0.02 | 0.03 | 0.01 |
| 1O | 91 | 2628 | 87 | -88 | 0 | 0 | 280 | 1 | 0.00 | 0.03 | 0.03 |
| 1P | 91 | 2628 | 453 | -88 | 0 | 0 | 52 | 1 | 0.02 | 0.03 | 0.01 |
| 2 | 91 | 1371 | 261 | -0 | 0 | 0 | 175 | 1 | 0.01 | 0.01 | 0.02 |
| 7 | 91 | 1364 | 264 | -1 | 0 | 0 | 175 | 1 | 0.01 | 0.01 | 0.02 |
| 8 | 91 | 1264 | 268 | -0 | 0 | 0 | 167 | 1 | 0.01 | 0.01 | 0.02 |
| 1A | 182 | 640 | -226 | 135 | 0 | -124 | 196 | 1 | 0.01 | 0.01 | 0.06 |
| 1B | 182 | 640 | -45 | 135 | 0 | -124 | 259 | 1 | 0.00 | 0.01 | 0.06 |
| 1C | 182 | 640 | -226 | -138 | 0 | 126 | 196 | 1 | 0.01 | 0.01 | 0.06 |
| 1D | 182 | 640 | -45 | -138 | 0 | 126 | 259 | 1 | 0.00 | 0.01 | 0.06 |
| 1E | 182 | 1874 | -226 | 135 | 0 | -124 | 196 | 1 | 0.01 | 0.02 | 0.06 |
| 1F | 182 | 1874 | -45 | 135 | 0 | -124 | 259 | 1 | 0.00 | 0.02 | 0.06 |
| 1G | 182 | 1874 | -226 | -138 | 0 | 126 | 196 | 1 | 0.01 | 0.02 | 0.06 |
| 1H | 182 | 1874 | -45 | -138 | 0 | 126 | 259 | 1 | 0.00 | 0.02 | 0.06 |
| 1I | 182 | -114 | -319 | 86 | 0 | -78 | 174 | 2 | 0.01 | 0.00 | 0.04 |
| 1J | 182 | -114 | 48 | 86 | 0 | -78 | 281 | 2 | 0.00 | 0.00 | 0.04 |
| 1K | 182 | -114 | -319 | -88 | 0 | 81 | 174 | 2 | 0.01 | 0.00 | 0.04 |
| 1L | 182 | -114 | 48 | -88 | 0 | 81 | 281 | 2 | 0.00 | 0.00 | 0.04 |
| 1M | 182 | 2628 | -319 | 86 | 0 | -78 | 174 | 1 | 0.01 | 0.03 | 0.04 |
| 1N | 182 | 2628 | 48 | 86 | 0 | -78 | 281 | 1 | 0.00 | 0.03 | 0.04 |
| 1O | 182 | 2628 | -319 | -88 | 0 | 81 | 174 | 1 | 0.01 | 0.03 | 0.04 |
| 1P | 182 | 2628 | 48 | -88 | 0 | 81 | 281 | 1 | 0.00 | 0.03 | 0.04 |
| 2 | 182 | 1371 | -144 | -0 | 0 | 0 | 229 | 1 | 0.00 | 0.01 | 0.02 |
| 7 | 182 | 1364 | -142 | -1 | 0 | 1 | 230 | 1 | 0.00 | 0.01 | 0.02 |
| 8 | 182 | 1264 | -138 | -0 | 0 | 0 | 226 | 1 | 0.00 | 0.01 | 0.02 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1I | -114 | 78 | 280 | 2 | 0.7321 | 0.9987 | 1.0001 | -- | -- | 0.00 | -- | 0.07 | Snell. 'zx'= 68 |
| 1J | -114 | 78 | -546 | 2 | 0.7321 | 0.9987 | 0.9999 | -- | -- | 0.00 | -- | 0.10 | Snell. 'zx'= 68 |
| 1K | -114 | -81 | 280 | 2 | 0.7321 | 0.9987 | 1.0001 | -- | -- | 0.00 | -- | 0.07 | Snell. 'zx'= 68 |
| 1L | -114 | -81 | -546 | 2 | 0.7321 | 0.9987 | 0.9999 | -- | -- | 0.00 | -- | 0.10 | Snell. 'zx'= 68 |

**ASTA NUM. 50** NI 13 NF 83 Lungh. 182.5 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 1.8813 1.0675 3.2557 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -329 | -253 | 139 | 0 | 127 | 451 | 2 | 0.01 | 0.00 | 0.07 | |
| 1B | 0 | -329 | -60 | 139 | 0 | 127 | 320 | 2 | 0.00 | 0.00 | 0.07 | |
| 1C | 0 | -329 | -253 | -125 | 0 | -114 | 451 | 2 | 0.01 | 0.00 | 0.06 | |
| 1D | 0 | -329 | -60 | -125 | 0 | -114 | 320 | 2 | 0.00 | 0.00 | 0.06 | |
| 1E | 0 | 215 | -253 | 139 | 0 | 127 | 451 | 1 | 0.01 | 0.00 | 0.07 | |
| 1F | 0 | 215 | -60 | 139 | 0 | 127 | 320 | 1 | 0.00 | 0.00 | 0.07 | |
| 1G | 0 | 215 | -253 | -125 | 0 | -114 | 451 | 1 | 0.01 | 0.00 | 0.06 | |
| 1H | 0 | 215 | -60 | -125 | 0 | -114 | 320 | 1 | 0.00 | 0.00 | 0.06 | |
| 1I | 0 | -471 | -340 | 90 | 0 | 82 | 518 | 2 | 0.01 | 0.00 | 0.05 | |
| 1J | 0 | -471 | 26 | 90 | 0 | 82 | 252 | 2 | 0.00 | 0.00 | 0.04 | |
| 1K | 0 | -471 | -340 | -75 | 0 | -69 | 518 | 2 | 0.01 | 0.00 | 0.05 | |
| 1L | 0 | -471 | 26 | -75 | 0 | -69 | 252 | 2 | 0.00 | 0.00 | 0.04 | |
| 1M | 0 | 356 | -340 | 90 | 0 | 82 | 518 | 1 | 0.01 | 0.00 | 0.05 | |
| 1N | 0 | 356 | 26 | 90 | 0 | 82 | 252 | 1 | 0.00 | 0.00 | 0.04 | |
| 1O | 0 | 356 | -340 | -75 | 0 | -69 | 518 | 1 | 0.01 | 0.00 | 0.05 | |
| 1P | 0 | 356 | 26 | -75 | 0 | -69 | 252 | 1 | 0.00 | 0.00 | 0.04 | |
| 2 | 0 | -23 | -166 | 0 | 0 | 0 | 396 | 2 | 0.01 | 0.00 | 0.04 | |
| 7 | 0 | -8 | -163 | 7 | 0 | 7 | 395 | 2 | 0.01 | 0.00 | 0.04 | |
| 8 | 0 | -72 | -159 | 0 | 0 | 0 | 386 | 2 | 0.01 | 0.00 | 0.04 | |
| 1A | 91 | -329 | -659 | 139 | 0 | 0 | 34 | 2 | 0.02 | 0.00 | 0.00 | |
| 1B | 91 | -329 | -466 | 139 | 0 | 0 | 79 | 2 | 0.02 | 0.00 | 0.01 | |
| 1C | 91 | -329 | -659 | -125 | 0 | 0 | 34 | 2 | 0.02 | 0.00 | 0.00 | |
| 1D | 91 | -329 | -466 | -125 | 0 | 0 | 79 | 2 | 0.02 | 0.00 | 0.01 | |
| 1E | 91 | 215 | -659 | 139 | 0 | 0 | 34 | 1 | 0.02 | 0.00 | 0.00 | |
| 1F | 91 | 215 | -466 | 139 | 0 | 0 | 79 | 1 | 0.02 | 0.00 | 0.01 | |
| 1G | 91 | 215 | -659 | -125 | 0 | 0 | 34 | 1 | 0.02 | 0.00 | 0.00 | |
| 1H | 91 | 215 | -466 | -125 | 0 | 0 | 79 | 1 | 0.02 | 0.00 | 0.01 | |
| 1I | 91 | -471 | -746 | 90 | 0 | 0 | 23 | 2 | 0.03 | 0.00 | 0.00 | |
| 1J | 91 | -471 | -380 | 90 | 0 | 0 | 91 | 2 | 0.01 | 0.00 | 0.01 | |
| 1K | 91 | -471 | -746 | -75 | 0 | 0 | 23 | 2 | 0.03 | 0.00 | 0.00 | |
| 1L | 91 | -471 | -380 | -75 | 0 | 0 | 91 | 2 | 0.01 | 0.00 | 0.01 | |
| 1M | 91 | 356 | -746 | 90 | 0 | 0 | 23 | 1 | 0.03 | 0.00 | 0.00 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1N | 91 | 356 | -380 | 90 | 0 | 0 | 91 | 1 | 0.01 | 0.00 | 0.01 |
| 1O | 91 | 356 | -746 | -75 | 0 | 0 | 23 | 1 | 0.03 | 0.00 | 0.00 |
| 1P | 91 | 356 | -380 | -75 | 0 | 0 | 91 | 1 | 0.01 | 0.00 | 0.01 |
| 2 | 91 | -23 | -571 | 0 | 0 | 0 | 60 | 1 | 0.02 | 0.00 | 0.01 |
| 7 | 91 | -8 | -569 | 7 | 0 | 0 | 61 | 1 | 0.02 | 0.00 | 0.01 |
| 8 | 91 | -72 | -565 | 0 | 0 | 0 | 56 | 1 | 0.02 | 0.00 | 0.01 |
| 1A | 182 | -329 | -1065 | 139 | 0 | -127 | -752 | 2 | 0.04 | 0.00 | 0.08 |
| 1B | 182 | -329 | -872 | 139 | 0 | -127 | -531 | 2 | 0.03 | 0.00 | 0.07 |
| 1C | 182 | -329 | -1065 | -125 | 0 | 114 | -752 | 2 | 0.04 | 0.00 | 0.08 |
| 1D | 182 | -329 | -872 | -125 | 0 | 114 | -531 | 2 | 0.03 | 0.00 | 0.06 |
| 1E | 182 | 215 | -1065 | 139 | 0 | -127 | -752 | 1 | 0.04 | 0.00 | 0.08 |
| 1F | 182 | 215 | -872 | 139 | 0 | -127 | -531 | 1 | 0.03 | 0.00 | 0.07 |
| 1G | 182 | 215 | -1065 | -125 | 0 | 114 | -752 | 1 | 0.04 | 0.00 | 0.08 |
| 1H | 182 | 215 | -872 | -125 | 0 | 114 | -531 | 1 | 0.03 | 0.00 | 0.06 |
| 1I | 182 | -471 | -1151 | 90 | 0 | -82 | -843 | 2 | 0.04 | 0.00 | 0.09 |
| 1J | 182 | -471 | -785 | 90 | 0 | -82 | -440 | 2 | 0.03 | 0.00 | 0.04 |
| 1K | 182 | -471 | -1151 | -75 | 0 | 69 | -843 | 2 | 0.04 | 0.00 | 0.09 |
| 1L | 182 | -471 | -785 | -75 | 0 | 69 | -440 | 2 | 0.03 | 0.00 | 0.04 |
| 1M | 182 | 356 | -1151 | 90 | 0 | -82 | -843 | 1 | 0.04 | 0.00 | 0.09 |
| 1N | 182 | 356 | -785 | 90 | 0 | -82 | -440 | 1 | 0.03 | 0.00 | 0.04 |
| 1O | 182 | 356 | -1151 | -75 | 0 | 69 | -843 | 1 | 0.04 | 0.00 | 0.09 |
| 1P | 182 | 356 | -785 | -75 | 0 | 69 | -440 | 1 | 0.03 | 0.00 | 0.04 |
| 2 | 182 | -23 | -977 | 0 | 0 | -0 | -647 | 2 | 0.03 | 0.00 | 0.07 |
| 7 | 182 | -8 | -975 | 7 | 0 | -7 | -643 | 2 | 0.03 | 0.00 | 0.07 |
| 8 | 182 | -72 | -971 | 0 | 0 | -0 | -645 | 2 | 0.03 | 0.00 | 0.07 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -329 | 127 | -752 | 2 | 0.7321 | 0.9963 | 0.9995 | -- | -- | 0.00 | -- | 0.15 | Snell. 'zx'= 68 |
| 1B | -329 | 127 | -531 | 2 | 0.7321 | 0.9963 | 0.9996 | -- | -- | 0.00 | -- | 0.12 | Snell. 'zx'= 68 |
| 1C | -329 | -114 | -752 | 2 | 0.7321 | 0.9963 | 0.9995 | -- | -- | 0.00 | -- | 0.14 | Snell. 'zx'= 68 |
| 1D | -329 | -114 | -531 | 2 | 0.7321 | 0.9963 | 0.9996 | -- | -- | 0.00 | -- | 0.12 | Snell. 'zx'= 68 |
| 1I | -471 | 82 | -843 | 2 | 0.7321 | 0.9947 | 0.9992 | -- | -- | 0.01 | -- | 0.13 | Snell. 'zx'= 68 |
| 1J | -471 | 82 | -440 | 2 | 0.7321 | 0.9947 | 0.9995 | -- | -- | 0.01 | -- | 0.09 | Snell. 'zx'= 68 |
| 1K | -471 | -69 | -843 | 2 | 0.7321 | 0.9947 | 0.9992 | -- | -- | 0.01 | -- | 0.13 | Snell. 'zx'= 68 |
| 1L | -471 | -69 | -440 | 2 | 0.7321 | 0.9947 | 0.9995 | -- | -- | 0.01 | -- | 0.09 | Snell. 'zx'= 68 |
| 2 | -23 | 0 | -647 | 2 | 0.7321 | 0.9997 | 1.0000 | -- | -- | 0.00 | -- | 0.07 | Snell. 'zx'= 68 |
| 7 | -8 | 7 | -643 | 2 | 0.7321 | 0.9999 | 1.0000 | -- | -- | 0.00 | -- | 0.07 | Snell. 'zx'= 68 |
| 8 | -72 | 0 | -645 | 2 | 0.7321 | 0.9992 | 0.9999 | -- | -- | 0.00 | -- | 0.07 | Snell. 'zx'= 68 |

**ASTA NUM. 51** NI 83 NF 84 Lungh. 182.5 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 1.8813 1.0675 3.2557 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -538 | 793 | 110 | 0 | 100 | -452 | 2 | 0.03 | 0.01 | 0.05 | |
| 1B | 0 | -538 | 952 | 110 | 0 | 100 | -666 | 2 | 0.03 | 0.01 | 0.07 | |
| 1C | 0 | -538 | 793 | -124 | 0 | -113 | -452 | 2 | 0.03 | 0.01 | 0.06 | |
| 1D | 0 | -538 | 952 | -124 | 0 | -113 | -666 | 2 | 0.03 | 0.01 | 0.07 | |
| 1E | 0 | 296 | 793 | 110 | 0 | 100 | -452 | 1 | 0.03 | 0.00 | 0.05 | |
| 1F | 0 | 296 | 952 | 110 | 0 | 100 | -666 | 1 | 0.03 | 0.00 | 0.07 | |
| 1G | 0 | 296 | 793 | -124 | 0 | -113 | -452 | 1 | 0.03 | 0.00 | 0.06 | |
| 1H | 0 | 296 | 952 | -124 | 0 | -113 | -666 | 1 | 0.03 | 0.00 | 0.07 | |
| 1I | 0 | -950 | 697 | 53 | 0 | 49 | -331 | 2 | 0.02 | 0.01 | 0.03 | |
| 1J | 0 | -950 | 1047 | 53 | 0 | 49 | -788 | 2 | 0.04 | 0.01 | 0.08 | |
| 1K | 0 | -950 | 697 | -67 | 0 | -62 | -331 | 2 | 0.02 | 0.01 | 0.03 | |
| 1L | 0 | -950 | 1047 | -67 | 0 | -62 | -788 | 2 | 0.04 | 0.01 | 0.08 | |
| 1M | 0 | 707 | 697 | 53 | 0 | 49 | -331 | 1 | 0.02 | 0.01 | 0.03 | |
| 1N | 0 | 707 | 1047 | 53 | 0 | 49 | -788 | 1 | 0.04 | 0.01 | 0.08 | |
| 1O | 0 | 707 | 697 | -67 | 0 | -62 | -331 | 1 | 0.02 | 0.01 | 0.03 | |
| 1P | 0 | 707 | 1047 | -67 | 0 | -62 | -788 | 1 | 0.04 | 0.01 | 0.08 | |
| 2 | 0 | -239 | 891 | 0 | 0 | 0 | -586 | 2 | 0.03 | 0.00 | 0.06 | |
| 7 | 0 | -225 | 890 | -7 | 0 | -6 | -584 | 2 | 0.03 | 0.00 | 0.06 | |
| 8 | 0 | -135 | 873 | 0 | 0 | 0 | -562 | 2 | 0.03 | 0.00 | 0.06 | |
| 1A | 91 | -538 | 387 | 110 | 0 | 0 | 86 | 2 | 0.01 | 0.01 | 0.01 | |
| 1B | 91 | -538 | 546 | 110 | 0 | 0 | 17 | 2 | 0.02 | 0.01 | 0.00 | |
| 1C | 91 | -538 | 387 | -124 | 0 | 0 | 86 | 2 | 0.01 | 0.01 | 0.01 | |
| 1D | 91 | -538 | 546 | -124 | 0 | 0 | 17 | 2 | 0.02 | 0.01 | 0.00 | |
| 1E | 91 | 296 | 387 | 110 | 0 | 0 | 86 | 1 | 0.01 | 0.00 | 0.01 | |
| 1F | 91 | 296 | 546 | 110 | 0 | 0 | 17 | 1 | 0.02 | 0.00 | 0.00 | |
| 1G | 91 | 296 | 387 | -124 | 0 | 0 | 86 | 1 | 0.01 | 0.00 | 0.01 | |
| 1H | 91 | 296 | 546 | -124 | 0 | 0 | 17 | 1 | 0.02 | 0.00 | 0.00 | |
| 1I | 91 | -950 | 292 | 53 | 0 | 0 | 120 | 2 | 0.01 | 0.01 | 0.01 | |
| 1J | 91 | -950 | 642 | 53 | 0 | 0 | -17 | 2 | 0.02 | 0.01 | 0.00 | |
| 1K | 91 | -950 | 292 | -67 | 0 | 0 | 120 | 2 | 0.01 | 0.01 | 0.01 | |
| 1L | 91 | -950 | 642 | -67 | 0 | 0 | -17 | 2 | 0.02 | 0.01 | 0.00 | |
| 1M | 91 | 707 | 292 | 53 | 0 | 0 | 120 | 1 | 0.01 | 0.01 | 0.01 | |
| 1N | 91 | 707 | 642 | 53 | 0 | 0 | -17 | 1 | 0.02 | 0.01 | 0.00 | |
| 1O | 91 | 707 | 292 | -67 | 0 | 0 | 120 | 1 | 0.01 | 0.01 | 0.01 | |
| 1P | 91 | 707 | 642 | -67 | 0 | 0 | -17 | 1 | 0.02 | 0.01 | 0.00 | |
| 2 | 91 | -239 | 485 | 0 | 0 | 0 | 42 | 2 | 0.02 | 0.00 | 0.00 | |
| 7 | 91 | -225 | 484 | -7 | 0 | 0 | 43 | 2 | 0.02 | 0.00 | 0.00 | |
| 8 | 91 | -135 | 468 | 0 | 0 | 0 | 50 | 1 | 0.02 | 0.00 | 0.01 | |
| 1A | 182 | -538 | -19 | 110 | 0 | -100 | 254 | 2 | 0.00 | 0.01 | 0.05 | |
| 1B | 182 | -538 | 141 | 110 | 0 | -100 | 331 | 2 | 0.00 | 0.01 | 0.05 | |
| 1C | 182 | -538 | -19 | -124 | 0 | 113 | 254 | 2 | 0.00 | 0.01 | 0.06 | |
| 1D | 182 | -538 | 141 | -124 | 0 | 113 | 331 | 2 | 0.00 | 0.01 | 0.06 | |
| 1E | 182 | 296 | -19 | 110 | 0 | -100 | 254 | 1 | 0.00 | 0.00 | 0.05 | |
| 1F | 182 | 296 | 141 | 110 | 0 | -100 | 331 | 1 | 0.00 | 0.00 | 0.05 | |
| 1G | 182 | 296 | -19 | -124 | 0 | 113 | 254 | 1 | 0.00 | 0.00 | 0.06 | |
| 1H | 182 | 296 | 141 | -124 | 0 | 113 | 331 | 1 | 0.00 | 0.00 | 0.06 | |
| 1I | 182 | -950 | -114 | 53 | 0 | -49 | 201 | 2 | 0.00 | 0.01 | 0.03 | |
| 1J | 182 | -950 | 236 | 53 | 0 | -49 | 383 | 2 | 0.01 | 0.01 | 0.04 | |
| 1K | 182 | -950 | -114 | -67 | 0 | 62 | 201 | 2 | 0.00 | 0.01 | 0.03 | |
| 1L | 182 | -950 | 236 | -67 | 0 | 62 | 383 | 2 | 0.01 | 0.01 | 0.04 | |
| 1M | 182 | 707 | -114 | 53 | 0 | -49 | 201 | 1 | 0.00 | 0.01 | 0.03 | |
| 1N | 182 | 707 | 236 | 53 | 0 | -49 | 383 | 1 | 0.01 | 0.01 | 0.04 | |
| 1O | 182 | 707 | -114 | -67 | 0 | 62 | 201 | 1 | 0.00 | 0.01 | 0.03 | |
| 1P | 182 | 707 | 236 | -67 | 0 | 62 | 383 | 1 | 0.01 | 0.01 | 0.04 | |
| 2 | 182 | -239 | 80 | 0 | 0 | -0 | 300 | 2 | 0.00 | 0.00 | 0.03 | |
| 7 | 182 | -225 | 78 | -7 | 0 | 6 | 300 | 2 | 0.00 | 0.00 | 0.03 | |
| 8 | 182 | -135 | 62 | 0 | 0 | -0 | 292 | 2 | 0.00 | 0.00 | 0.03 | |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -538 | 100 | -452 | 2 | 0.7321 | 0.9940 | 0.9994 | -- | -- | 0.01 | -- | 0.10 Snell. 'zx'= | 68 |
| 1B | -538 | 100 | -666 | 2 | 0.7321 | 0.9940 | 0.9994 | -- | -- | 0.01 | -- | 0.13 Snell. 'zx'= | 68 |
| 1C | -538 | -113 | -452 | 2 | 0.7321 | 0.9940 | 0.9994 | -- | -- | 0.01 | -- | 0.11 Snell. 'zx'= | 68 |
| 1D | -538 | -113 | -666 | 2 | 0.7321 | 0.9940 | 0.9994 | -- | -- | 0.01 | -- | 0.13 Snell. 'zx'= | 68 |
| 1I | -950 | 49 | -331 | 2 | 0.7321 | 0.9893 | 0.9992 | -- | -- | 0.01 | -- | 0.07 Snell. 'zx'= | 68 |
| 1J | -950 | 49 | -788 | 2 | 0.7321 | 0.9893 | 0.9988 | -- | -- | 0.01 | -- | 0.12 Snell. 'zx'= | 68 |
| 1K | -950 | -62 | -331 | 2 | 0.7321 | 0.9893 | 0.9992 | -- | -- | 0.01 | -- | 0.08 Snell. 'zx'= | 68 |
| 1L | -950 | -62 | -788 | 2 | 0.7321 | 0.9893 | 0.9988 | -- | -- | 0.01 | -- | 0.12 Snell. 'zx'= | 68 |
| 2 | -239 | 0 | -586 | 2 | 0.7321 | 0.9973 | 0.9997 | -- | -- | 0.00 | -- | 0.06 Snell. 'zx'= | 68 |
| 7 | -225 | -6 | -584 | 2 | 0.7321 | 0.9975 | 0.9997 | -- | -- | 0.00 | -- | 0.07 Snell. 'zx'= | 68 |
| 8 | -135 | 0 | -561 | 2 | 0.7321 | 0.9985 | 0.9998 | -- | -- | 0.00 | -- | 0.06 Snell. 'zx'= | 68 |

**ASTA NUM. 52** NI 84 NF 12 Lungh. 182.5 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 1.8813 1.0675 3.2557 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -30 | -31 | 124 | 0 | 113 | 277 | 2 | 0.00 | 0.00 | 0.06 | |
| 1B | 0 | -30 | 111 | 124 | 0 | 113 | 199 | 2 | 0.00 | 0.00 | 0.06 | |
| 1C | 0 | -30 | -31 | -116 | 0 | -106 | 277 | 2 | 0.00 | 0.00 | 0.05 | |
| 1D | 0 | -30 | 111 | -116 | 0 | -106 | 199 | 2 | 0.00 | 0.00 | 0.05 | |
| 1E | 0 | 691 | -31 | 124 | 0 | 113 | 277 | 1 | 0.00 | 0.01 | 0.06 | |
| 1F | 0 | 691 | 111 | 124 | 0 | 113 | 199 | 1 | 0.00 | 0.01 | 0.06 | |
| 1G | 0 | 691 | -31 | -116 | 0 | -106 | 277 | 1 | 0.00 | 0.01 | 0.05 | |
| 1H | 0 | 691 | 111 | -116 | 0 | -106 | 199 | 1 | 0.00 | 0.01 | 0.05 | |
| 1I | 0 | -475 | -115 | 65 | 0 | 60 | 313 | 2 | 0.00 | 0.00 | 0.03 | |
| 1J | 0 | -475 | 194 | 65 | 0 | 60 | 163 | 2 | 0.01 | 0.00 | 0.03 | |
| 1K | 0 | -475 | -115 | -58 | 0 | -52 | 313 | 2 | 0.00 | 0.00 | 0.03 | |
| 1L | 0 | -475 | 194 | -58 | 0 | -52 | 163 | 2 | 0.01 | 0.00 | 0.03 | |
| 1M | 0 | 1136 | -115 | 65 | 0 | 60 | 313 | 1 | 0.00 | 0.01 | 0.03 | |
| 1N | 0 | 1136 | 194 | 65 | 0 | 60 | 163 | 1 | 0.01 | 0.01 | 0.03 | |
| 1O | 0 | 1136 | -115 | -58 | 0 | -52 | 313 | 1 | 0.00 | 0.01 | 0.03 | |
| 1P | 0 | 1136 | 194 | -58 | 0 | -52 | 163 | 1 | 0.01 | 0.01 | 0.03 | |
| 2 | 0 | 380 | 58 | 1 | 0 | 1 | 225 | 1 | 0.00 | 0.00 | 0.02 | |
| 7 | 0 | 385 | 57 | 4 | 0 | 4 | 227 | 1 | 0.00 | 0.00 | 0.02 | |
| 8 | 0 | 327 | 41 | 1 | 0 | 1 | 237 | 1 | 0.00 | 0.00 | 0.02 | |
| 1A | 91 | -30 | -437 | 124 | 0 | 0 | 63 | 1 | 0.01 | 0.00 | 0.01 | |
| 1B | 91 | -30 | -295 | 124 | 0 | 0 | 115 | 1 | 0.01 | 0.00 | 0.01 | |
| 1C | 91 | -30 | -437 | -116 | 0 | 0 | 63 | 1 | 0.01 | 0.00 | 0.01 | |
| 1D | 91 | -30 | -295 | -116 | 0 | 0 | 115 | 1 | 0.01 | 0.00 | 0.01 | |
| 1E | 91 | 691 | -437 | 124 | 0 | 0 | 63 | 1 | 0.01 | 0.01 | 0.01 | |
| 1F | 91 | 691 | -295 | 124 | 0 | 0 | 115 | 1 | 0.01 | 0.01 | 0.01 | |
| 1G | 91 | 691 | -437 | -116 | 0 | 0 | 63 | 1 | 0.01 | 0.01 | 0.01 | |
| 1H | 91 | 691 | -295 | -116 | 0 | 0 | 115 | 1 | 0.01 | 0.01 | 0.01 | |
| 1I | 91 | -475 | -520 | 65 | 0 | 0 | 24 | 2 | 0.02 | 0.00 | 0.00 | |
| 1J | 91 | -475 | -212 | 65 | 0 | 0 | 155 | 1 | 0.01 | 0.00 | 0.02 | |
| 1K | 91 | -475 | -520 | -58 | 0 | 0 | 24 | 2 | 0.02 | 0.00 | 0.00 | |
| 1L | 91 | -475 | -212 | -58 | 0 | 0 | 155 | 1 | 0.01 | 0.00 | 0.02 | |
| 1M | 91 | 1136 | -520 | 65 | 0 | 0 | 24 | 1 | 0.02 | 0.01 | 0.00 | |
| 1N | 91 | 1136 | -212 | 65 | 0 | 0 | 155 | 1 | 0.01 | 0.01 | 0.02 | |
| 1O | 91 | 1136 | -520 | -58 | 0 | 0 | 24 | 1 | 0.02 | 0.01 | 0.00 | |
| 1P | 91 | 1136 | -212 | -58 | 0 | 0 | 155 | 1 | 0.01 | 0.01 | 0.02 | |
| 2 | 91 | 380 | -348 | 1 | 0 | 0 | 93 | 1 | 0.01 | 0.00 | 0.01 | |
| 7 | 91 | 385 | -349 | 4 | 0 | 0 | 94 | 1 | 0.01 | 0.00 | 0.01 | |
| 8 | 91 | 327 | -365 | 1 | 0 | 0 | 89 | 1 | 0.01 | 0.00 | 0.01 | |
| 1A | 182 | -30 | -843 | 124 | 0 | -113 | -520 | 2 | 0.03 | 0.00 | 0.06 | |
| 1B | 182 | -30 | -701 | 124 | 0 | -113 | -340 | 2 | 0.02 | 0.00 | 0.06 | |
| 1C | 182 | -30 | -843 | -116 | 0 | 106 | -520 | 2 | 0.03 | 0.00 | 0.06 | |
| 1D | 182 | -30 | -701 | -116 | 0 | 106 | -340 | 2 | 0.02 | 0.00 | 0.06 | |
| 1E | 182 | 691 | -843 | 124 | 0 | -113 | -520 | 1 | 0.03 | 0.01 | 0.06 | |
| 1F | 182 | 691 | -701 | 124 | 0 | -113 | -340 | 1 | 0.02 | 0.01 | 0.06 | |
| 1G | 182 | 691 | -843 | -116 | 0 | 106 | -520 | 1 | 0.03 | 0.01 | 0.06 | |
| 1H | 182 | 691 | -701 | -116 | 0 | 106 | -340 | 1 | 0.02 | 0.01 | 0.06 | |
| 1I | 182 | -475 | -926 | 65 | 0 | -60 | -636 | 2 | 0.03 | 0.00 | 0.06 | |
| 1J | 182 | -475 | -618 | 65 | 0 | -60 | -224 | 2 | 0.02 | 0.00 | 0.03 | |
| 1K | 182 | -475 | -926 | -58 | 0 | 52 | -636 | 2 | 0.03 | 0.00 | 0.06 | |
| 1L | 182 | -475 | -618 | -58 | 0 | 52 | -224 | 2 | 0.02 | 0.00 | 0.03 | |
| 1M | 182 | 1136 | -926 | 65 | 0 | -60 | -636 | 1 | 0.03 | 0.01 | 0.06 | |
| 1N | 182 | 1136 | -618 | 65 | 0 | -60 | -224 | 1 | 0.02 | 0.01 | 0.03 | |
| 1O | 182 | 1136 | -926 | -58 | 0 | 52 | -636 | 1 | 0.03 | 0.01 | 0.06 | |
| 1P | 182 | 1136 | -618 | -58 | 0 | 52 | -224 | 1 | 0.02 | 0.01 | 0.03 | |
| 2 | 182 | 380 | -753 | 1 | 0 | -1 | -409 | 1 | 0.03 | 0.00 | 0.04 | |
| 7 | 182 | 385 | -754 | 4 | 0 | -4 | -410 | 1 | 0.03 | 0.00 | 0.04 | |
| 8 | 182 | 327 | -771 | 1 | 0 | -1 | -429 | 1 | 0.03 | 0.00 | 0.04 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -30 | 113 | -521 | 2 | 0.7321 | 0.9997 | 1.0000 | -- | -- | 0.00 | -- | 0.11 Snell. 'zx'= | 68 |
| 1B | -30 | 113 | -339 | 2 | 0.7321 | 0.9997 | 1.0000 | -- | -- | 0.00 | -- | 0.09 Snell. 'zx'= | 68 |
| 1C | -30 | -106 | -521 | 2 | 0.7321 | 0.9997 | 1.0000 | -- | -- | 0.00 | -- | 0.11 Snell. 'zx'= | 68 |
| 1D | -30 | -106 | -339 | 2 | 0.7321 | 0.9997 | 1.0000 | -- | -- | 0.00 | -- | 0.09 Snell. 'zx'= | 68 |
| 1I | -475 | 60 | -636 | 2 | 0.7321 | 0.9947 | 0.9995 | -- | -- | 0.01 | -- | 0.10 Snell. 'zx'= | 68 |
| 1J | -475 | 60 | -224 | 2 | 0.7321 | 0.9947 | 0.9997 | -- | -- | 0.01 | -- | 0.06 Snell. 'zx'= | 68 |
| 1K | -475 | -52 | -636 | 2 | 0.7321 | 0.9947 | 0.9995 | -- | -- | 0.01 | -- | 0.10 Snell. 'zx'= | 68 |
| 1L | -475 | -52 | -224 | 2 | 0.7321 | 0.9947 | 0.9997 | -- | -- | 0.01 | -- | 0.06 Snell. 'zx'= | 68 |

**ASTA NUM. 53** NI 12 NF 92 Lungh. 205.0 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 1.8813 1.0675 3.2557 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | -- | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | | | kg | | | kg*m | | | | |
| 1A | 0 | -1000 | 284 | 2 | 0 | 2 | -63 | 2 | 0.01 | 0.01 | 0.01 |
| 1B | 0 | -1000 | 638 | 2 | 0 | 2 | -375 | 2 | 0.02 | 0.01 | 0.04 |
| 1C | 0 | -1000 | 284 | -2 | 0 | -2 | -63 | 2 | 0.01 | 0.01 | 0.01 |
| 1D | 0 | -1000 | 638 | -2 | 0 | -2 | -375 | 2 | 0.02 | 0.01 | 0.04 |
| 1E | 0 | -386 | 284 | 2 | 0 | 2 | -63 | 2 | 0.01 | 0.00 | 0.01 |
| 1F | 0 | -386 | 638 | 2 | 0 | 2 | -375 | 2 | 0.02 | 0.00 | 0.04 |
| 1G | 0 | -386 | 284 | -2 | 0 | -2 | -63 | 2 | 0.01 | 0.00 | 0.01 |
| 1H | 0 | -386 | 638 | -2 | 0 | -2 | -375 | 2 | 0.02 | 0.00 | 0.04 |
| 1I | 0 | -1416 | 60 | 1 | 0 | 1 | 133 | 2 | 0.00 | 0.01 | 0.01 |
| 1J | 0 | -1416 | 863 | 1 | 0 | 1 | -570 | 2 | 0.03 | 0.01 | 0.06 |
| 1K | 0 | -1416 | 60 | -1 | 0 | -1 | 133 | 2 | 0.00 | 0.01 | 0.01 |
| 1L | 0 | -1416 | 863 | -1 | 0 | -1 | -570 | 2 | 0.03 | 0.01 | 0.06 |
| 1M | 0 | 30 | 60 | 1 | 0 | 1 | 133 | 1 | 0.00 | 0.00 | 0.01 |
| 1N | 0 | 30 | 863 | 1 | 0 | 1 | -570 | 1 | 0.03 | 0.00 | 0.06 |
| 1O | 0 | 30 | 60 | -1 | 0 | -1 | 133 | 1 | 0.00 | 0.00 | 0.01 |
| 1P | 0 | 30 | 863 | -1 | 0 | -1 | -570 | 1 | 0.03 | 0.00 | 0.06 |
| 2 | 0 | -631 | 494 | -0 | 0 | -0 | -248 | 2 | 0.02 | 0.01 | 0.03 |
| 7 | 0 | -632 | 493 | -0 | 0 | -0 | -246 | 2 | 0.02 | 0.01 | 0.03 |
| 8 | 0 | -691 | 463 | -0 | 0 | -0 | -220 | 2 | 0.02 | 0.01 | 0.02 |
| 1A | 102 | -1000 | -171 | 2 | 0 | 0 | -5 | 2 | 0.01 | 0.01 | 0.00 |
| 1B | 102 | -1000 | 182 | 2 | 0 | 0 | 46 | 2 | 0.01 | 0.01 | 0.00 |
| 1C | 102 | -1000 | -171 | -2 | 0 | 0 | -5 | 2 | 0.01 | 0.01 | 0.00 |
| 1D | 102 | -1000 | 182 | -2 | 0 | 0 | 46 | 2 | 0.01 | 0.01 | 0.00 |
| 1E | 102 | -386 | -171 | 2 | 0 | 0 | -5 | 2 | 0.01 | 0.00 | 0.00 |
| 1F | 102 | -386 | 182 | 2 | 0 | 0 | 46 | 2 | 0.01 | 0.00 | 0.00 |
| 1G | 102 | -386 | -171 | -2 | 0 | 0 | -5 | 2 | 0.01 | 0.00 | 0.00 |
| 1H | 102 | -386 | 182 | -2 | 0 | 0 | 46 | 2 | 0.01 | 0.00 | 0.00 |
| 1I | 102 | -1416 | -396 | 1 | 0 | 0 | -40 | 2 | 0.01 | 0.01 | 0.00 |
| 1J | 102 | -1416 | 407 | 1 | 0 | 0 | 80 | 2 | 0.01 | 0.01 | 0.01 |
| 1K | 102 | -1416 | -396 | -1 | 0 | 0 | -40 | 2 | 0.01 | 0.01 | 0.00 |
| 1L | 102 | -1416 | 407 | -1 | 0 | 0 | 80 | 2 | 0.01 | 0.01 | 0.01 |
| 1M | 102 | 30 | -396 | 1 | 0 | 0 | -40 | 1 | 0.01 | 0.00 | 0.00 |
| 1N | 102 | 30 | 407 | 1 | 0 | 0 | 80 | 1 | 0.01 | 0.00 | 0.01 |
| 1O | 102 | 30 | -396 | -1 | 0 | 0 | -40 | 1 | 0.01 | 0.00 | 0.00 |
| 1P | 102 | 30 | 407 | -1 | 0 | 0 | 80 | 1 | 0.01 | 0.00 | 0.01 |
| 2 | 102 | -631 | 39 | -0 | 0 | 0 | 26 | 2 | 0.00 | 0.01 | 0.00 |
| 7 | 102 | -632 | 37 | -0 | 0 | 0 | 25 | 2 | 0.00 | 0.01 | 0.00 |
| 8 | 102 | -691 | 7 | -0 | 0 | 0 | 20 | 2 | 0.00 | 0.01 | 0.00 |
| 1A | 205 | -1000 | -627 | 2 | 0 | -2 | -414 | 2 | 0.02 | 0.01 | 0.04 |
| 1B | 205 | -1000 | -273 | 2 | 0 | -2 | -1 | 2 | 0.01 | 0.01 | 0.00 |
| 1C | 205 | -1000 | -627 | -2 | 0 | 2 | -414 | 2 | 0.02 | 0.01 | 0.04 |
| 1D | 205 | -1000 | -273 | -2 | 0 | 2 | -1 | 2 | 0.01 | 0.01 | 0.00 |
| 1E | 205 | -386 | -627 | 2 | 0 | -2 | -414 | 2 | 0.02 | 0.00 | 0.04 |
| 1F | 205 | -386 | -273 | 2 | 0 | -2 | -1 | 2 | 0.01 | 0.00 | 0.00 |
| 1G | 205 | -386 | -627 | -2 | 0 | 2 | -414 | 2 | 0.02 | 0.00 | 0.04 |
| 1H | 205 | -386 | -273 | -2 | 0 | 2 | -1 | 2 | 0.01 | 0.00 | 0.00 |
| 1I | 205 | -1416 | -852 | 1 | 0 | -1 | -679 | 2 | 0.03 | 0.01 | 0.07 |
| 1J | 205 | -1416 | -49 | 1 | 0 | -1 | 264 | 2 | 0.00 | 0.01 | 0.03 |
| 1K | 205 | -1416 | -852 | -1 | 0 | 1 | -679 | 2 | 0.03 | 0.01 | 0.07 |
| 1L | 205 | -1416 | -49 | -1 | 0 | 1 | 264 | 2 | 0.00 | 0.01 | 0.03 |
| 1M | 205 | 30 | -852 | 1 | 0 | -1 | -679 | 1 | 0.03 | 0.00 | 0.07 |
| 1N | 205 | 30 | -49 | 1 | 0 | -1 | 264 | 1 | 0.00 | 0.00 | 0.03 |
| 1O | 205 | 30 | -852 | -1 | 0 | 1 | -679 | 1 | 0.03 | 0.00 | 0.07 |
| 1P | 205 | 30 | -49 | -1 | 0 | 1 | 264 | 1 | 0.00 | 0.00 | 0.03 |
| 2 | 205 | -631 | -417 | -0 | 0 | 0 | -168 | 2 | 0.01 | 0.01 | 0.02 |
| 7 | 205 | -632 | -419 | -0 | 0 | 0 | -170 | 2 | 0.01 | 0.01 | 0.02 |
| 8 | 205 | -691 | -449 | -0 | 0 | 0 | -206 | 2 | 0.02 | 0.01 | 0.02 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | ---------- | | | | | | | | | | | |
| | kg | kg*m | | | | | | | | | | | |
| 1A | -1000 | 2 | -414 | 2 | 0.6711 | 0.9878 | 1.0011 | -- | -- | 0.01 | -- | 0.06 | Snell. 'zx'= 76 |
| 1B | -1000 | 2 | -375 | 2 | 0.6711 | 0.9878 | 1.0009 | -- | -- | 0.01 | -- | 0.05 | Snell. 'zx'= 76 |
| 1C | -1000 | -2 | -414 | 2 | 0.6711 | 0.9878 | 1.0011 | -- | -- | 0.01 | -- | 0.06 | Snell. 'zx'= 76 |
| 1D | -1000 | -2 | -375 | 2 | 0.6711 | 0.9878 | 1.0009 | -- | -- | 0.01 | -- | 0.05 | Snell. 'zx'= 76 |
| 1E | -386 | 2 | -414 | 2 | 0.6711 | 0.9953 | 1.0004 | -- | -- | 0.01 | -- | 0.05 | Snell. 'zx'= 76 |
| 1F | -386 | 2 | -375 | 2 | 0.6711 | 0.9953 | 1.0003 | -- | -- | 0.01 | -- | 0.04 | Snell. 'zx'= 76 |
| 1G | -386 | -2 | -414 | 2 | 0.6711 | 0.9953 | 1.0004 | -- | -- | 0.01 | -- | 0.05 | Snell. 'zx'= 76 |
| 1H | -386 | -2 | -375 | 2 | 0.6711 | 0.9953 | 1.0003 | -- | -- | 0.01 | -- | 0.04 | Snell. 'zx'= 76 |
| 1I | -1416 | 1 | -679 | 2 | 0.6711 | 0.9827 | 0.9998 | -- | -- | 0.02 | -- | 0.09 | Snell. 'zx'= 76 |
| 1J | -1416 | 1 | -570 | 2 | 0.6711 | 0.9827 | 0.9990 | -- | -- | 0.02 | -- | 0.08 | Snell. 'zx'= 76 |
| 1K | -1416 | -1 | -679 | 2 | 0.6711 | 0.9827 | 0.9998 | -- | -- | 0.02 | -- | 0.09 | Snell. 'zx'= 76 |
| 1L | -1416 | -1 | -570 | 2 | 0.6711 | 0.9827 | 0.9990 | -- | -- | 0.02 | -- | 0.08 | Snell. 'zx'= 76 |
| 2 | -631 | -0 | -248 | 2 | 0.6711 | 0.9923 | 1.0012 | -- | -- | 0.01 | -- | 0.03 | Snell. 'zx'= 76 |
| 7 | -632 | -0 | -246 | 2 | 0.6711 | 0.9923 | 1.0012 | -- | -- | 0.01 | -- | 0.03 | Snell. 'zx'= 76 |
| 8 | -691 | -0 | -220 | 2 | 0.6711 | 0.9915 | 1.0013 | -- | -- | 0.01 | -- | 0.03 | Snell. 'zx'= 76 |

**ASTA NUM. 54** NI 92 NF 81 Lungh. 135.0 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 1.8813 1.0675 3.2557 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | ---------- | | | ---------- | | | | ---------- | | | |
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -39 | 623 | 208 | 0 | 140 | -265 | 2 | 0.02 | 0.00 | 0.07 | |
| 1B | 0 | -39 | 697 | 208 | 0 | 140 | -339 | 2 | 0.02 | 0.00 | 0.07 | |
| 1C | 0 | -39 | 623 | -225 | 0 | -152 | -265 | 2 | 0.02 | 0.00 | 0.08 | |
| 1D | 0 | -39 | 697 | -225 | 0 | -152 | -339 | 2 | 0.02 | 0.00 | 0.08 | |
| 1E | 0 | 246 | 623 | 208 | 0 | 140 | -265 | 1 | 0.02 | 0.00 | 0.07 | |
| 1F | 0 | 246 | 697 | 208 | 0 | 140 | -339 | 1 | 0.02 | 0.00 | 0.07 | |
| 1G | 0 | 246 | 623 | -225 | 0 | -152 | -265 | 1 | 0.02 | 0.00 | 0.08 | |
| 1H | 0 | 246 | 697 | -225 | 0 | -152 | -339 | 1 | 0.02 | 0.00 | 0.08 | |
| 1I | 0 | -234 | 576 | 63 | 0 | 43 | -217 | 2 | 0.02 | 0.00 | 0.02 | |
| 1J | 0 | -234 | 744 | 63 | 0 | 43 | -387 | 2 | 0.03 | 0.00 | 0.04 | |
| 1K | 0 | -234 | 576 | -80 | 0 | -54 | -217 | 2 | 0.02 | 0.00 | 0.03 | |
| 1L | 0 | -234 | 744 | -80 | 0 | -54 | -387 | 2 | 0.03 | 0.00 | 0.04 | |
| 1M | 0 | 441 | 576 | 63 | 0 | 43 | -217 | 1 | 0.02 | 0.00 | 0.02 | |
| 1N | 0 | 441 | 744 | 63 | 0 | 43 | -387 | 1 | 0.03 | 0.00 | 0.04 | |
| 1O | 0 | 441 | 576 | -80 | 0 | -54 | -217 | 1 | 0.02 | 0.00 | 0.03 | |
| 1P | 0 | 441 | 744 | -80 | 0 | -54 | -387 | 1 | 0.03 | 0.00 | 0.04 | |
| 2 | 0 | 131 | 654 | -1 | 0 | -1 | -295 | 1 | 0.02 | 0.00 | 0.03 | |
| 7 | 0 | 128 | 654 | -9 | 0 | -6 | -296 | 1 | 0.02 | 0.00 | 0.03 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 0 | 107 | 659 | -1 | 0 | -1 | -301 | 1 | 0.02 | 0.00 | 0.03 |
| 1A | 68 | -39 | 323 | 208 | 0 | 0 | 54 | 1 | 0.01 | 0.00 | 0.01 |
| 1B | 68 | -39 | 397 | 208 | 0 | 0 | 30 | 1 | 0.01 | 0.00 | 0.00 |
| 1C | 68 | -39 | 323 | -225 | 0 | 0 | 54 | 1 | 0.01 | 0.00 | 0.01 |
| 1D | 68 | -39 | 397 | -225 | 0 | 0 | 30 | 1 | 0.01 | 0.00 | 0.00 |
| 1E | 68 | 246 | 323 | 208 | 0 | 0 | 54 | 1 | 0.01 | 0.00 | 0.01 |
| 1F | 68 | 246 | 397 | 208 | 0 | 0 | 30 | 1 | 0.01 | 0.00 | 0.00 |
| 1G | 68 | 246 | 323 | -225 | 0 | 0 | 54 | 1 | 0.01 | 0.00 | 0.01 |
| 1H | 68 | 246 | 397 | -225 | 0 | 0 | 30 | 1 | 0.01 | 0.00 | 0.00 |
| 1I | 68 | -234 | 276 | 63 | 0 | 0 | 70 | 1 | 0.01 | 0.00 | 0.01 |
| 1J | 68 | -234 | 444 | 63 | 0 | 0 | 14 | 2 | 0.02 | 0.00 | 0.00 |
| 1K | 68 | -234 | 276 | -80 | 0 | 0 | 70 | 1 | 0.01 | 0.00 | 0.01 |
| 1L | 68 | -234 | 444 | -80 | 0 | 0 | 14 | 2 | 0.02 | 0.00 | 0.00 |
| 1M | 68 | 441 | 276 | 63 | 0 | 0 | 70 | 1 | 0.01 | 0.00 | 0.01 |
| 1N | 68 | 441 | 444 | 63 | 0 | 0 | 14 | 1 | 0.02 | 0.00 | 0.00 |
| 1O | 68 | 441 | 276 | -80 | 0 | 0 | 70 | 1 | 0.01 | 0.00 | 0.01 |
| 1P | 68 | 441 | 444 | -80 | 0 | 0 | 14 | 1 | 0.02 | 0.00 | 0.00 |
| 2 | 68 | 131 | 353 | -1 | 0 | 0 | 45 | 1 | 0.01 | 0.00 | 0.00 |
| 7 | 68 | 128 | 354 | -9 | 0 | 0 | 44 | 1 | 0.01 | 0.00 | 0.00 |
| 8 | 68 | 107 | 359 | -1 | 0 | 0 | 43 | 1 | 0.01 | 0.00 | 0.00 |
| 1A | 135 | -39 | 23 | 208 | 0 | -140 | 171 | 2 | 0.01 | 0.00 | 0.07 |
| 1B | 135 | -39 | 97 | 208 | 0 | -140 | 197 | 2 | 0.01 | 0.00 | 0.07 |
| 1C | 135 | -39 | 23 | -225 | 0 | 152 | 171 | 2 | 0.01 | 0.00 | 0.08 |
| 1D | 135 | -39 | 97 | -225 | 0 | 152 | 197 | 2 | 0.01 | 0.00 | 0.08 |
| 1E | 135 | 246 | 23 | 208 | 0 | -140 | 171 | 1 | 0.01 | 0.00 | 0.07 |
| 1F | 135 | 246 | 97 | 208 | 0 | -140 | 197 | 1 | 0.01 | 0.00 | 0.07 |
| 1G | 135 | 246 | 23 | -225 | 0 | 152 | 171 | 1 | 0.01 | 0.00 | 0.08 |
| 1H | 135 | 246 | 97 | -225 | 0 | 152 | 197 | 1 | 0.01 | 0.00 | 0.08 |
| 1I | 135 | -234 | -24 | 63 | 0 | -43 | 155 | 2 | 0.00 | 0.00 | 0.02 |
| 1J | 135 | -234 | 144 | 63 | 0 | -43 | 213 | 2 | 0.00 | 0.00 | 0.02 |
| 1K | 135 | -234 | -24 | -80 | 0 | 54 | 155 | 2 | 0.00 | 0.00 | 0.03 |
| 1L | 135 | -234 | 144 | -80 | 0 | 54 | 213 | 2 | 0.00 | 0.00 | 0.03 |
| 1M | 135 | 441 | -24 | 63 | 0 | -43 | 155 | 1 | 0.00 | 0.00 | 0.02 |
| 1N | 135 | 441 | 144 | 63 | 0 | -43 | 213 | 1 | 0.00 | 0.00 | 0.02 |
| 1O | 135 | 441 | -24 | -80 | 0 | 54 | 155 | 1 | 0.00 | 0.00 | 0.03 |
| 1P | 135 | 441 | 144 | -80 | 0 | 54 | 213 | 1 | 0.00 | 0.00 | 0.03 |
| 2 | 135 | 131 | 53 | -1 | 0 | 1 | 182 | 1 | 0.00 | 0.00 | 0.02 |
| 7 | 135 | 128 | 54 | -9 | 0 | 6 | 182 | 1 | 0.00 | 0.00 | 0.02 |
| 8 | 135 | 107 | 59 | -1 | 0 | 1 | 184 | 1 | 0.00 | 0.00 | 0.02 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -39 | 140 | -265 | 2 | 0.8457 | 0.9996 | 0.9999 | -- | -- | 0.00 | -- | 0.10 | Snell. 'zx'= 50 |
| 1B | -39 | 140 | -339 | 2 | 0.8457 | 0.9996 | 0.9999 | -- | -- | 0.00 | -- | 0.11 | Snell. 'zx'= 50 |
| 1C | -39 | -152 | -265 | 2 | 0.8457 | 0.9996 | 0.9999 | -- | -- | 0.00 | -- | 0.10 | Snell. 'zx'= 50 |
| 1D | -39 | -152 | -339 | 2 | 0.8457 | 0.9996 | 0.9999 | -- | -- | 0.00 | -- | 0.11 | Snell. 'zx'= 50 |
| 1I | -234 | 43 | -217 | 2 | 0.8457 | 0.9977 | 0.9997 | -- | -- | 0.00 | -- | 0.05 | Snell. 'zx'= 50 |
| 1J | -234 | 43 | -387 | 2 | 0.8457 | 0.9977 | 0.9997 | -- | -- | 0.00 | -- | 0.06 | Snell. 'zx'= 50 |
| 1K | -234 | -54 | -217 | 2 | 0.8457 | 0.9977 | 0.9997 | -- | -- | 0.00 | -- | 0.05 | Snell. 'zx'= 50 |
| 1L | -234 | -54 | -387 | 2 | 0.8457 | 0.9977 | 0.9997 | -- | -- | 0.00 | -- | 0.07 | Snell. 'zx'= 50 |

**ASTA NUM. 55** NI 81 NF 9 Lungh. 170.0 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 1.8813 1.0675 3.2557 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -29 | -1 | 119 | 0 | 101 | 212 | 2 | 0.00 | 0.00 | 0.05 | |
| 1B | 0 | -29 | 78 | 119 | 0 | 101 | 163 | 2 | 0.00 | 0.00 | 0.05 | |
| 1C | 0 | -29 | -1 | -104 | 0 | -88 | 212 | 2 | 0.00 | 0.00 | 0.05 | |
| 1D | 0 | -29 | 78 | -104 | 0 | -88 | 163 | 2 | 0.00 | 0.00 | 0.05 | |
| 1E | 0 | 177 | -1 | 119 | 0 | 101 | 212 | 1 | 0.00 | 0.00 | 0.05 | |
| 1F | 0 | 177 | 78 | 119 | 0 | 101 | 163 | 1 | 0.00 | 0.00 | 0.05 | |
| 1G | 0 | 177 | -1 | -104 | 0 | -88 | 212 | 1 | 0.00 | 0.00 | 0.05 | |
| 1H | 0 | 177 | 78 | -104 | 0 | -88 | 163 | 1 | 0.00 | 0.00 | 0.05 | |
| 1I | 0 | -125 | -50 | 46 | 0 | 39 | 247 | 2 | 0.00 | 0.00 | 0.03 | |
| 1J | 0 | -125 | 127 | 46 | 0 | 39 | 129 | 2 | 0.00 | 0.00 | 0.02 | |
| 1K | 0 | -125 | -50 | -31 | 0 | -26 | 247 | 2 | 0.00 | 0.00 | 0.03 | |
| 1L | 0 | -125 | 127 | -31 | 0 | -26 | 129 | 2 | 0.00 | 0.00 | 0.01 | |
| 1M | 0 | 273 | -50 | 46 | 0 | 39 | 247 | 1 | 0.00 | 0.00 | 0.03 | |
| 1N | 0 | 273 | 127 | 46 | 0 | 39 | 129 | 1 | 0.00 | 0.00 | 0.02 | |
| 1O | 0 | 273 | -50 | -31 | 0 | -26 | 247 | 1 | 0.00 | 0.00 | 0.03 | |
| 1P | 0 | 273 | 127 | -31 | 0 | -26 | 129 | 1 | 0.00 | 0.00 | 0.01 | |
| 2 | 0 | 53 | 32 | 1 | 0 | 1 | 191 | 1 | 0.00 | 0.00 | 0.02 | |
| 7 | 0 | 55 | 33 | 8 | 0 | 6 | 191 | 1 | 0.00 | 0.00 | 0.02 | |
| 8 | 0 | 73 | 38 | 1 | 0 | 1 | 188 | 1 | 0.00 | 0.00 | 0.02 | |
| 1A | 85 | -29 | -379 | 119 | 0 | 0 | 51 | 1 | 0.01 | 0.00 | 0.01 | |
| 1B | 85 | -29 | -300 | 119 | 0 | 0 | 68 | 1 | 0.01 | 0.00 | 0.01 | |
| 1C | 85 | -29 | -379 | -104 | 0 | 0 | 51 | 1 | 0.01 | 0.00 | 0.01 | |
| 1D | 85 | -29 | -300 | -104 | 0 | 0 | 68 | 1 | 0.01 | 0.00 | 0.01 | |
| 1E | 85 | 177 | -379 | 119 | 0 | 0 | 51 | 1 | 0.01 | 0.00 | 0.01 | |
| 1F | 85 | 177 | -300 | 119 | 0 | 0 | 68 | 1 | 0.01 | 0.00 | 0.01 | |
| 1G | 85 | 177 | -379 | -104 | 0 | 0 | 51 | 1 | 0.01 | 0.00 | 0.01 | |
| 1H | 85 | 177 | -300 | -104 | 0 | 0 | 68 | 1 | 0.01 | 0.00 | 0.01 | |
| 1I | 85 | -125 | -428 | 46 | 0 | -0 | 43 | 1 | 0.01 | 0.00 | 0.00 | |
| 1J | 85 | -125 | -251 | 46 | 0 | -0 | 76 | 1 | 0.01 | 0.00 | 0.01 | |
| 1K | 85 | -125 | -428 | -31 | 0 | 0 | 43 | 1 | 0.01 | 0.00 | 0.00 | |
| 1L | 85 | -125 | -251 | -31 | 0 | 0 | 76 | 1 | 0.01 | 0.00 | 0.01 | |
| 1M | 85 | 273 | -428 | 46 | 0 | -0 | 43 | 1 | 0.01 | 0.00 | 0.00 | |
| 1N | 85 | 273 | -251 | 46 | 0 | -0 | 76 | 1 | 0.01 | 0.00 | 0.01 | |
| 1O | 85 | 273 | -428 | -31 | 0 | 0 | 43 | 1 | 0.01 | 0.00 | 0.00 | |
| 1P | 85 | 273 | -251 | -31 | 0 | 0 | 76 | 1 | 0.01 | 0.00 | 0.01 | |
| 2 | 85 | 53 | -346 | 1 | 0 | 0 | 58 | 1 | 0.01 | 0.00 | 0.01 | |
| 7 | 85 | 55 | -345 | 8 | 0 | 0 | 58 | 1 | 0.01 | 0.00 | 0.01 | |
| 8 | 85 | 73 | -340 | 1 | 0 | 0 | 60 | 1 | 0.01 | 0.00 | 0.01 | |
| 1A | 170 | -29 | -757 | 119 | 0 | -101 | -431 | 2 | 0.03 | 0.00 | 0.05 | |
| 1B | 170 | -29 | -678 | 119 | 0 | -101 | -348 | 2 | 0.02 | 0.00 | 0.05 | |
| 1C | 170 | -29 | -757 | -104 | 0 | 88 | -431 | 2 | 0.03 | 0.00 | 0.05 | |
| 1D | 170 | -29 | -678 | -104 | 0 | 88 | -348 | 2 | 0.02 | 0.00 | 0.05 | |
| 1E | 170 | 177 | -757 | 119 | 0 | -101 | -431 | 1 | 0.03 | 0.00 | 0.05 | |
| 1F | 170 | 177 | -678 | 119 | 0 | -101 | -348 | 1 | 0.02 | 0.00 | 0.05 | |
| 1G | 170 | 177 | -757 | -104 | 0 | 88 | -431 | 1 | 0.03 | 0.00 | 0.05 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1H | 170 | 177 | -678 | -104 | 0 | 88 | -348 | 1 | 0.02 | 0.00 | 0.05 |
| 1I | 170 | -125 | -806 | 46 | 0 | -39 | -482 | 2 | 0.03 | 0.00 | 0.05 |
| 1J | 170 | -125 | -628 | 46 | 0 | -39 | -297 | 2 | 0.02 | 0.00 | 0.03 |
| 1K | 170 | -125 | -806 | -31 | 0 | 26 | -482 | 2 | 0.03 | 0.00 | 0.05 |
| 1L | 170 | -125 | -628 | -31 | 0 | 26 | -297 | 2 | 0.02 | 0.00 | 0.03 |
| 1M | 170 | 273 | -806 | 46 | 0 | -39 | -482 | 1 | 0.03 | 0.00 | 0.05 |
| 1N | 170 | 273 | -628 | 46 | 0 | -39 | -297 | 1 | 0.02 | 0.00 | 0.03 |
| 1O | 170 | 273 | -806 | -31 | 0 | 26 | -482 | 1 | 0.03 | 0.00 | 0.05 |
| 1P | 170 | 273 | -628 | -31 | 0 | 26 | -297 | 1 | 0.02 | 0.00 | 0.03 |
| 2 | 170 | 53 | -724 | 1 | 0 | -1 | -397 | 1 | 0.02 | 0.00 | 0.04 |
| 7 | 170 | 55 | -723 | 8 | 0 | -6 | -396 | 1 | 0.02 | 0.00 | 0.04 |
| 8 | 170 | 73 | -718 | 1 | 0 | -1 | -390 | 1 | 0.02 | 0.00 | 0.04 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -29 | 101 | -431 | 2 | 0.7644 | 0.9997 | 1.0000 | -- | -- | 0.00 | -- | 0.10 Snell. 'zx'= | 63 |
| 1B | -29 | 101 | -348 | 2 | 0.7644 | 0.9997 | 1.0000 | -- | -- | 0.00 | -- | 0.09 Snell. 'zx'= | 63 |
| 1C | -29 | -88 | -431 | 2 | 0.7644 | 0.9997 | 1.0000 | -- | -- | 0.00 | -- | 0.09 Snell. 'zx'= | 63 |
| 1D | -29 | -88 | -348 | 2 | 0.7644 | 0.9997 | 1.0000 | -- | -- | 0.00 | -- | 0.08 Snell. 'zx'= | 63 |
| 1I | -125 | -39 | -482 | 2 | 0.7644 | 0.9987 | 0.9999 | -- | -- | 0.00 | -- | 0.07 Snell. 'zx'= | 63 |
| 1J | -125 | -39 | -297 | 2 | 0.7644 | 0.9987 | 0.9999 | -- | -- | 0.00 | -- | 0.05 Snell. 'zx'= | 63 |
| 1K | -125 | 26 | -482 | 2 | 0.7644 | 0.9987 | 0.9999 | -- | -- | 0.00 | -- | 0.06 Snell. 'zx'= | 63 |
| 1L | -125 | 26 | -297 | 2 | 0.7644 | 0.9987 | 0.9999 | -- | -- | 0.00 | -- | 0.05 Snell. 'zx'= | 63 |

**ASTA NUM. 56** NI 9 NF 80 Lungh. 182.5 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 1.8813 1.0675 3.2557 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -411 | 648 | 114 | 0 | 104 | -250 | 2 | 0.02 | 0.00 | 0.05 | |
| 1B | 0 | -411 | 836 | 114 | 0 | 104 | -551 | 2 | 0.03 | 0.00 | 0.06 | |
| 1C | 0 | -411 | 648 | -126 | 0 | -115 | -250 | 2 | 0.02 | 0.00 | 0.06 | |
| 1D | 0 | -411 | 836 | -126 | 0 | -115 | -551 | 2 | 0.03 | 0.00 | 0.06 | |
| 1E | 0 | 1142 | 648 | 114 | 0 | 104 | -250 | 1 | 0.02 | 0.01 | 0.05 | |
| 1F | 0 | 1142 | 836 | 114 | 0 | 104 | -551 | 1 | 0.03 | 0.01 | 0.06 | |
| 1G | 0 | 1142 | 648 | -126 | 0 | -115 | -250 | 1 | 0.02 | 0.01 | 0.06 | |
| 1H | 0 | 1142 | 836 | -126 | 0 | -115 | -551 | 1 | 0.03 | 0.01 | 0.06 | |
| 1I | 0 | -1325 | 527 | 55 | 0 | 50 | -64 | 2 | 0.02 | 0.01 | 0.03 | |
| 1J | 0 | -1325 | 958 | 55 | 0 | 50 | -737 | 2 | 0.03 | 0.01 | 0.08 | |
| 1K | 0 | -1325 | 527 | -66 | 0 | -61 | -64 | 2 | 0.02 | 0.01 | 0.03 | |
| 1L | 0 | -1325 | 958 | -66 | 0 | -61 | -737 | 2 | 0.03 | 0.01 | 0.08 | |
| 1M | 0 | 2056 | 527 | 55 | 0 | 50 | -64 | 1 | 0.02 | 0.02 | 0.03 | |
| 1N | 0 | 2056 | 958 | 55 | 0 | 50 | -737 | 1 | 0.03 | 0.02 | 0.08 | |
| 1O | 0 | 2056 | 527 | -66 | 0 | -61 | -64 | 1 | 0.02 | 0.02 | 0.03 | |
| 1P | 0 | 2056 | 958 | -66 | 0 | -61 | -737 | 1 | 0.03 | 0.02 | 0.08 | |
| 2 | 0 | 234 | 764 | -1 | 0 | -1 | -431 | 1 | 0.03 | 0.00 | 0.04 | |
| 7 | 0 | 242 | 764 | -6 | 0 | -5 | -430 | 1 | 0.03 | 0.00 | 0.04 | |
| 8 | 0 | 357 | 742 | -1 | 0 | -1 | -401 | 1 | 0.03 | 0.00 | 0.04 | |
| 1A | 91 | -411 | 243 | 114 | 0 | 0 | 153 | 1 | 0.01 | 0.00 | 0.02 | |
| 1B | 91 | -411 | 431 | 114 | 0 | 0 | 31 | 2 | 0.01 | 0.00 | 0.00 | |
| 1C | 91 | -411 | 243 | -126 | 0 | 0 | 153 | 1 | 0.01 | 0.00 | 0.02 | |
| 1D | 91 | -411 | 431 | -126 | 0 | 0 | 31 | 2 | 0.01 | 0.00 | 0.00 | |
| 1E | 91 | 1142 | 243 | 114 | 0 | 0 | 153 | 1 | 0.01 | 0.01 | 0.02 | |
| 1F | 91 | 1142 | 431 | 114 | 0 | 0 | 31 | 1 | 0.01 | 0.01 | 0.00 | |
| 1G | 91 | 1142 | 243 | -126 | 0 | 0 | 153 | 1 | 0.01 | 0.01 | 0.02 | |
| 1H | 91 | 1142 | 431 | -126 | 0 | 0 | 31 | 1 | 0.01 | 0.01 | 0.00 | |
| 1I | 91 | -1325 | 122 | 55 | 0 | 0 | 231 | 2 | 0.00 | 0.01 | 0.02 | |
| 1J | 91 | -1325 | 552 | 55 | 0 | 0 | -47 | 2 | 0.02 | 0.01 | 0.00 | |
| 1K | 91 | -1325 | 122 | -66 | 0 | 0 | 231 | 2 | 0.00 | 0.01 | 0.02 | |
| 1L | 91 | -1325 | 552 | -66 | 0 | 0 | -47 | 2 | 0.02 | 0.01 | 0.00 | |
| 1M | 91 | 2056 | 122 | 55 | 0 | 0 | 231 | 1 | 0.00 | 0.02 | 0.02 | |
| 1N | 91 | 2056 | 552 | 55 | 0 | 0 | -47 | 1 | 0.02 | 0.02 | 0.00 | |
| 1O | 91 | 2056 | 122 | -66 | 0 | 0 | 231 | 1 | 0.00 | 0.02 | 0.02 | |
| 1P | 91 | 2056 | 552 | -66 | 0 | 0 | -47 | 1 | 0.02 | 0.02 | 0.00 | |
| 2 | 91 | 234 | 358 | -1 | 0 | 0 | 81 | 1 | 0.01 | 0.00 | 0.01 | |
| 7 | 91 | 242 | 358 | -6 | 0 | 0 | 82 | 1 | 0.01 | 0.00 | 0.01 | |
| 8 | 91 | 357 | 337 | -1 | 0 | 0 | 91 | 1 | 0.01 | 0.00 | 0.01 | |
| 1A | 182 | -411 | -163 | 114 | 0 | -104 | 185 | 2 | 0.01 | 0.00 | 0.05 | |
| 1B | 182 | -411 | 25 | 114 | 0 | -104 | 243 | 2 | 0.00 | 0.00 | 0.05 | |
| 1C | 182 | -411 | -163 | -126 | 0 | 115 | 185 | 2 | 0.01 | 0.00 | 0.06 | |
| 1D | 182 | -411 | 25 | -126 | 0 | 115 | 243 | 2 | 0.00 | 0.00 | 0.06 | |
| 1E | 182 | 1142 | -163 | 114 | 0 | -104 | 185 | 1 | 0.01 | 0.01 | 0.05 | |
| 1F | 182 | 1142 | 25 | 114 | 0 | -104 | 243 | 1 | 0.00 | 0.01 | 0.05 | |
| 1G | 182 | 1142 | -163 | -126 | 0 | 115 | 185 | 1 | 0.01 | 0.01 | 0.06 | |
| 1H | 182 | 1142 | 25 | -126 | 0 | 115 | 243 | 1 | 0.00 | 0.01 | 0.06 | |
| 1I | 182 | -1325 | -284 | 55 | 0 | -50 | 156 | 2 | 0.01 | 0.01 | 0.03 | |
| 1J | 182 | -1325 | 146 | 55 | 0 | -50 | 273 | 2 | 0.00 | 0.01 | 0.03 | |
| 1K | 182 | -1325 | -284 | -66 | 0 | 61 | 156 | 2 | 0.01 | 0.01 | 0.03 | |
| 1L | 182 | -1325 | 146 | -66 | 0 | 61 | 273 | 2 | 0.00 | 0.01 | 0.03 | |
| 1M | 182 | 2056 | -284 | 55 | 0 | -50 | 156 | 1 | 0.01 | 0.02 | 0.03 | |
| 1N | 182 | 2056 | 146 | 55 | 0 | -50 | 273 | 1 | 0.00 | 0.02 | 0.03 | |
| 1O | 182 | 2056 | -284 | -66 | 0 | 61 | 156 | 1 | 0.01 | 0.02 | 0.03 | |
| 1P | 182 | 2056 | 146 | -66 | 0 | 61 | 273 | 1 | 0.00 | 0.02 | 0.03 | |
| 2 | 182 | 234 | -48 | -1 | 0 | 1 | 223 | 1 | 0.00 | 0.00 | 0.02 | |
| 7 | 182 | 242 | -47 | -6 | 0 | 5 | 224 | 1 | 0.00 | 0.00 | 0.02 | |
| 8 | 182 | 357 | -69 | -1 | 0 | 1 | 213 | 1 | 0.00 | 0.00 | 0.02 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -411 | 104 | -250 | 2 | 0.7321 | 0.9954 | 0.9997 | -- | -- | 0.01 | -- | 0.08 Snell. 'zx'= | 68 |
| 1B | -411 | 104 | -551 | 2 | 0.7321 | 0.9954 | 0.9996 | -- | -- | 0.01 | -- | 0.11 Snell. 'zx'= | 68 |
| 1C | -411 | -115 | -250 | 2 | 0.7321 | 0.9954 | 0.9997 | -- | -- | 0.01 | -- | 0.09 Snell. 'zx'= | 68 |
| 1D | -411 | -115 | -551 | 2 | 0.7321 | 0.9954 | 0.9996 | -- | -- | 0.01 | -- | 0.12 Snell. 'zx'= | 68 |
| 1I | -1325 | 50 | 231 | 2 | 0.7321 | 0.9851 | 1.0005 | -- | -- | 0.02 | -- | 0.07 Snell. 'zx'= | 68 |
| 1J | -1325 | 50 | -737 | 2 | 0.7321 | 0.9851 | 0.9988 | -- | -- | 0.02 | -- | 0.12 Snell. 'zx'= | 68 |
| 1K | -1325 | -61 | 231 | 2 | 0.7321 | 0.9851 | 1.0005 | -- | -- | 0.02 | -- | 0.07 Snell. 'zx'= | 68 |



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| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1L | -1325 | -61 | -737 | 2 | 0.7321 | 0.9851 | 0.9988 | -- | -- | 0.02 | -- | 0.12 Snell. 'zx'= 68 |

**ASTA NUM. 57** NI 80 NF 38 Lungh. 182.5 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 1.8813 1.0675 3.2557 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -643 | -198 | 124 | 0 | 114 | 384 | 2 | 0.01 | 0.01 | 0.06 | |
| 1B | 0 | -643 | 18 | 124 | 0 | 114 | 217 | 2 | 0.00 | 0.01 | 0.06 | |
| 1C | 0 | -643 | -198 | -111 | 0 | -102 | 384 | 2 | 0.01 | 0.01 | 0.05 | |
| 1D | 0 | -643 | 18 | -111 | 0 | -102 | 217 | 2 | 0.00 | 0.01 | 0.05 | |
| 1E | 0 | -58 | -198 | 124 | 0 | 114 | 384 | 2 | 0.01 | 0.00 | 0.06 | |
| 1F | 0 | -58 | 18 | 124 | 0 | 114 | 217 | 2 | 0.00 | 0.00 | 0.06 | |
| 1G | 0 | -58 | -198 | -111 | 0 | -102 | 384 | 2 | 0.01 | 0.00 | 0.05 | |
| 1H | 0 | -58 | 18 | -111 | 0 | -102 | 217 | 2 | 0.00 | 0.00 | 0.05 | |
| 1I | 0 | -957 | -348 | 67 | 0 | 61 | 487 | 2 | 0.01 | 0.01 | 0.05 | |
| 1J | 0 | -957 | 167 | 67 | 0 | 61 | 113 | 2 | 0.01 | 0.01 | 0.03 | |
| 1K | 0 | -957 | -348 | -54 | 0 | -49 | 487 | 2 | 0.01 | 0.01 | 0.05 | |
| 1L | 0 | -957 | 167 | -54 | 0 | -49 | 113 | 2 | 0.01 | 0.01 | 0.02 | |
| 1M | 0 | 257 | -348 | 67 | 0 | 61 | 487 | 1 | 0.01 | 0.00 | 0.05 | |
| 1N | 0 | 257 | 167 | 67 | 0 | 61 | 113 | 1 | 0.01 | 0.00 | 0.03 | |
| 1O | 0 | 257 | -348 | -54 | 0 | -49 | 487 | 1 | 0.01 | 0.00 | 0.05 | |
| 1P | 0 | 257 | 167 | -54 | 0 | -49 | 113 | 1 | 0.01 | 0.00 | 0.02 | |
| 2 | 0 | -290 | -69 | -0 | 0 | -0 | 286 | 2 | 0.00 | 0.00 | 0.03 | |
| 7 | 0 | -280 | -69 | 7 | 0 | 6 | 286 | 2 | 0.00 | 0.00 | 0.03 | |
| 8 | 0 | -360 | -90 | -0 | 0 | -0 | 299 | 2 | 0.00 | 0.00 | 0.03 | |
| 1A | 91 | -643 | -604 | 124 | 0 | 0 | 16 | 2 | 0.02 | 0.01 | 0.00 | |
| 1B | 91 | -643 | -388 | 124 | 0 | 0 | 50 | 2 | 0.01 | 0.01 | 0.01 | |
| 1C | 91 | -643 | -604 | -111 | 0 | 0 | 16 | 2 | 0.02 | 0.01 | 0.00 | |
| 1D | 91 | -643 | -388 | -111 | 0 | 0 | 50 | 2 | 0.01 | 0.01 | 0.01 | |
| 1E | 91 | -58 | -604 | 124 | 0 | 0 | 16 | 1 | 0.02 | 0.00 | 0.00 | |
| 1F | 91 | -58 | -388 | 124 | 0 | 0 | 50 | 1 | 0.01 | 0.00 | 0.01 | |
| 1G | 91 | -58 | -604 | -111 | 0 | 0 | 16 | 1 | 0.02 | 0.00 | 0.00 | |
| 1H | 91 | -58 | -388 | -111 | 0 | 0 | 50 | 1 | 0.01 | 0.00 | 0.01 | |
| 1I | 91 | -957 | -753 | 67 | 0 | 0 | -16 | 2 | 0.03 | 0.01 | 0.00 | |
| 1J | 91 | -957 | -238 | 67 | 0 | 0 | 81 | 2 | 0.01 | 0.01 | 0.01 | |
| 1K | 91 | -957 | -753 | -54 | 0 | 0 | -16 | 2 | 0.03 | 0.01 | 0.00 | |
| 1L | 91 | -957 | -238 | -54 | 0 | 0 | 81 | 2 | 0.01 | 0.01 | 0.01 | |
| 1M | 91 | 257 | -753 | 67 | 0 | 0 | -16 | 1 | 0.03 | 0.00 | 0.00 | |
| 1N | 91 | 257 | -238 | 67 | 0 | 0 | 81 | 1 | 0.01 | 0.00 | 0.01 | |
| 1O | 91 | 257 | -753 | -54 | 0 | 0 | -16 | 1 | 0.03 | 0.00 | 0.00 | |
| 1P | 91 | 257 | -238 | -54 | 0 | 0 | 81 | 1 | 0.01 | 0.00 | 0.01 | |
| 2 | 91 | -290 | -475 | -0 | 0 | 0 | 38 | 2 | 0.02 | 0.00 | 0.00 | |
| 7 | 91 | -280 | -474 | 7 | 0 | 0 | 38 | 2 | 0.02 | 0.00 | 0.00 | |
| 8 | 91 | -360 | -496 | -0 | 0 | 0 | 32 | 2 | 0.02 | 0.00 | 0.00 | |
| 1A | 182 | -643 | -1010 | 124 | 0 | -114 | -723 | 2 | 0.03 | 0.01 | 0.07 | |
| 1B | 182 | -643 | -794 | 124 | 0 | -114 | -487 | 2 | 0.03 | 0.01 | 0.06 | |
| 1C | 182 | -643 | -1010 | -111 | 0 | 102 | -723 | 2 | 0.03 | 0.01 | 0.07 | |
| 1D | 182 | -643 | -794 | -111 | 0 | 102 | -487 | 2 | 0.03 | 0.01 | 0.05 | |
| 1E | 182 | -58 | -1010 | 124 | 0 | -114 | -723 | 2 | 0.03 | 0.00 | 0.07 | |
| 1F | 182 | -58 | -794 | 124 | 0 | -114 | -487 | 2 | 0.03 | 0.00 | 0.06 | |
| 1G | 182 | -58 | -1010 | -111 | 0 | 102 | -723 | 2 | 0.03 | 0.00 | 0.07 | |
| 1H | 182 | -58 | -794 | -111 | 0 | 102 | -487 | 2 | 0.03 | 0.00 | 0.05 | |
| 1I | 182 | -957 | -1159 | 67 | 0 | -61 | -889 | 2 | 0.04 | 0.01 | 0.09 | |
| 1J | 182 | -957 | -644 | 67 | 0 | -61 | -321 | 2 | 0.02 | 0.01 | 0.03 | |
| 1K | 182 | -957 | -1159 | -54 | 0 | 49 | -889 | 2 | 0.04 | 0.01 | 0.09 | |
| 1L | 182 | -957 | -644 | -54 | 0 | 49 | -321 | 2 | 0.02 | 0.01 | 0.03 | |
| 1M | 182 | 257 | -1159 | 67 | 0 | -61 | -889 | 1 | 0.04 | 0.00 | 0.09 | |
| 1N | 182 | 257 | -644 | 67 | 0 | -61 | -321 | 1 | 0.02 | 0.00 | 0.03 | |
| 1O | 182 | 257 | -1159 | -54 | 0 | 49 | -889 | 1 | 0.04 | 0.00 | 0.09 | |
| 1P | 182 | 257 | -644 | -54 | 0 | 49 | -321 | 1 | 0.02 | 0.00 | 0.03 | |
| 2 | 182 | -290 | -880 | -0 | 0 | 0 | -580 | 2 | 0.03 | 0.00 | 0.06 | |
| 7 | 182 | -280 | -880 | 7 | 0 | -6 | -580 | 2 | 0.03 | 0.00 | 0.06 | |
| 8 | 182 | -360 | -902 | -0 | 0 | 0 | -606 | 2 | 0.03 | 0.00 | 0.06 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -643 | 114 | -723 | 2 | 0.7321 | 0.9928 | 0.9992 | -- | -- | 0.01 | -- | 0.14 Snell. 'zx'= 68 | |
| 1B | -643 | 114 | -487 | 2 | 0.7321 | 0.9928 | 0.9995 | -- | -- | 0.01 | -- | 0.12 Snell. 'zx'= 68 | |
| 1C | -643 | -102 | -723 | 2 | 0.7321 | 0.9928 | 0.9992 | -- | -- | 0.01 | -- | 0.13 Snell. 'zx'= 68 | |
| 1D | -643 | -102 | -487 | 2 | 0.7321 | 0.9928 | 0.9995 | -- | -- | 0.01 | -- | 0.11 Snell. 'zx'= 68 | |
| 1E | -58 | 114 | -723 | 2 | 0.7321 | 0.9994 | 0.9999 | -- | -- | 0.00 | -- | 0.13 Snell. 'zx'= 68 | |
| 1F | -58 | 114 | -487 | 2 | 0.7321 | 0.9994 | 1.0000 | -- | -- | 0.00 | -- | 0.11 Snell. 'zx'= 68 | |
| 1G | -58 | -102 | -723 | 2 | 0.7321 | 0.9994 | 0.9999 | -- | -- | 0.00 | -- | 0.13 Snell. 'zx'= 68 | |
| 1H | -58 | -102 | -487 | 2 | 0.7321 | 0.9994 | 1.0000 | -- | -- | 0.00 | -- | 0.10 Snell. 'zx'= 68 | |
| 1I | -957 | 61 | -889 | 2 | 0.7321 | 0.9893 | 0.9986 | -- | -- | 0.01 | -- | 0.13 Snell. 'zx'= 68 | |
| 1J | -957 | 61 | -321 | 2 | 0.7321 | 0.9893 | 0.9999 | -- | -- | 0.01 | -- | 0.08 Snell. 'zx'= 68 | |
| 1K | -957 | -49 | -889 | 2 | 0.7321 | 0.9893 | 0.9986 | -- | -- | 0.01 | -- | 0.13 Snell. 'zx'= 68 | |
| 1L | -957 | -49 | -321 | 2 | 0.7321 | 0.9893 | 0.9999 | -- | -- | 0.01 | -- | 0.07 Snell. 'zx'= 68 | |
| 2 | -290 | -0 | -580 | 2 | 0.7321 | 0.9968 | 0.9997 | -- | -- | 0.00 | -- | 0.06 Snell. 'zx'= 68 | |
| 7 | -280 | 6 | -580 | 2 | 0.7321 | 0.9969 | 0.9997 | -- | -- | 0.00 | -- | 0.07 Snell. 'zx'= 68 | |
| 8 | -360 | -0 | -606 | 2 | 0.7321 | 0.9960 | 0.9996 | -- | -- | 0.00 | -- | 0.07 Snell. 'zx'= 68 | |

**ASTA NUM. 58** NI 38 NF 85 Lungh. 182.5 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 1.8813 1.0675 3.2557 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -201 | 859 | 118 | 0 | 108 | -510 | 2 | 0.03 | 0.00 | 0.06 | |
| 1B | 0 | -201 | 1067 | 118 | 0 | 108 | -743 | 2 | 0.04 | 0.00 | 0.08 | |
| 1C | 0 | -201 | 859 | -133 | 0 | -122 | -510 | 2 | 0.03 | 0.00 | 0.06 | |
| 1D | 0 | -201 | 1067 | -133 | 0 | -122 | -743 | 2 | 0.04 | 0.00 | 0.08 | |
| 1E | 0 | 326 | 859 | 118 | 0 | 108 | -510 | 1 | 0.03 | 0.00 | 0.06 | |
| 1F | 0 | 326 | 1067 | 118 | 0 | 108 | -743 | 1 | 0.04 | 0.00 | 0.08 | |
| 1G | 0 | 326 | 859 | -133 | 0 | -122 | -510 | 1 | 0.03 | 0.00 | 0.06 | |
| 1H | 0 | 326 | 1067 | -133 | 0 | -122 | -743 | 1 | 0.04 | 0.00 | 0.08 | |
| 1I | 0 | -325 | 777 | 71 | 0 | 65 | -425 | 2 | 0.03 | 0.00 | 0.04 | |



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| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1J | 0 | -325 | 1149 | 71 | 0 | 65 | -829 | 2 | 0.04 | 0.00 | 0.08 | |
| 1K | 0 | -325 | 777 | -87 | 0 | -79 | -425 | 2 | 0.03 | 0.00 | 0.04 | |
| 1L | 0 | -325 | 1149 | -87 | 0 | -79 | -829 | 2 | 0.04 | 0.00 | 0.08 | |
| 1M | 0 | 450 | 777 | 71 | 0 | 65 | -425 | 1 | 0.03 | 0.00 | 0.04 | |
| 1N | 0 | 450 | 1149 | 71 | 0 | 65 | -829 | 1 | 0.04 | 0.00 | 0.08 | |
| 1O | 0 | 450 | 777 | -87 | 0 | -79 | -425 | 1 | 0.03 | 0.00 | 0.04 | |
| 1P | 0 | 450 | 1149 | -87 | 0 | -79 | -829 | 1 | 0.04 | 0.00 | 0.08 | |
| 2 | 0 | 11 | 970 | 0 | 0 | 0 | -638 | 1 | 0.03 | 0.00 | 0.07 | |
| 7 | 0 | 25 | 968 | -8 | 0 | -7 | -634 | 1 | 0.03 | 0.00 | 0.06 | |
| 8 | 0 | 48 | 966 | 0 | 0 | 0 | -631 | 1 | 0.03 | 0.00 | 0.06 | |
| 1A | 91 | -201 | 454 | 118 | 0 | 0 | 89 | 1 | 0.02 | 0.00 | 0.01 | |
| 1B | 91 | -201 | 661 | 118 | 0 | 0 | 45 | 2 | 0.02 | 0.00 | 0.00 | |
| 1C | 91 | -201 | 454 | -133 | 0 | 0 | 89 | 1 | 0.02 | 0.00 | 0.01 | |
| 1D | 91 | -201 | 661 | -133 | 0 | 0 | 45 | 2 | 0.02 | 0.00 | 0.00 | |
| 1E | 91 | 326 | 454 | 118 | 0 | 0 | 89 | 1 | 0.02 | 0.00 | 0.01 | |
| 1F | 91 | 326 | 661 | 118 | 0 | 0 | 45 | 1 | 0.02 | 0.00 | 0.00 | |
| 1G | 91 | 326 | 454 | -133 | 0 | 0 | 89 | 1 | 0.02 | 0.00 | 0.01 | |
| 1H | 91 | 326 | 661 | -133 | 0 | 0 | 45 | 1 | 0.02 | 0.00 | 0.00 | |
| 1I | 91 | -325 | 371 | 71 | 0 | 0 | 99 | 1 | 0.01 | 0.00 | 0.01 | |
| 1J | 91 | -325 | 743 | 71 | 0 | 0 | 35 | 2 | 0.03 | 0.00 | 0.00 | |
| 1K | 91 | -325 | 371 | -87 | 0 | 0 | 99 | 1 | 0.01 | 0.00 | 0.01 | |
| 1L | 91 | -325 | 743 | -87 | 0 | 0 | 35 | 2 | 0.03 | 0.00 | 0.00 | |
| 1M | 91 | 450 | 371 | 71 | 0 | 0 | 99 | 1 | 0.01 | 0.00 | 0.01 | |
| 1N | 91 | 450 | 743 | 71 | 0 | 0 | 35 | 1 | 0.03 | 0.00 | 0.00 | |
| 1O | 91 | 450 | 371 | -87 | 0 | 0 | 99 | 1 | 0.01 | 0.00 | 0.01 | |
| 1P | 91 | 450 | 743 | -87 | 0 | 0 | 35 | 1 | 0.03 | 0.00 | 0.00 | |
| 2 | 91 | 11 | 565 | 0 | 0 | 0 | 63 | 1 | 0.02 | 0.00 | 0.01 | |
| 7 | 91 | 25 | 562 | -8 | 0 | 0 | 64 | 1 | 0.02 | 0.00 | 0.01 | |
| 8 | 91 | 48 | 560 | 0 | 0 | 0 | 66 | 1 | 0.02 | 0.00 | 0.01 | |
| 1A | 182 | -201 | 48 | 118 | 0 | -108 | 318 | 2 | 0.00 | 0.00 | 0.06 | |
| 1B | 182 | -201 | 255 | 118 | 0 | -108 | 463 | 2 | 0.01 | 0.00 | 0.06 | |
| 1C | 182 | -201 | 48 | -133 | 0 | 122 | 318 | 2 | 0.00 | 0.00 | 0.06 | |
| 1D | 182 | -201 | 255 | -133 | 0 | 122 | 463 | 2 | 0.01 | 0.00 | 0.06 | |
| 1E | 182 | 326 | 48 | 118 | 0 | -108 | 318 | 1 | 0.00 | 0.00 | 0.06 | |
| 1F | 182 | 326 | 255 | 118 | 0 | -108 | 463 | 1 | 0.01 | 0.00 | 0.06 | |
| 1G | 182 | 326 | 48 | -133 | 0 | 122 | 318 | 1 | 0.00 | 0.00 | 0.06 | |
| 1H | 182 | 326 | 255 | -133 | 0 | 122 | 463 | 1 | 0.01 | 0.00 | 0.06 | |
| 1I | 182 | -325 | -34 | 71 | 0 | -65 | 253 | 2 | 0.00 | 0.00 | 0.03 | |
| 1J | 182 | -325 | 338 | 71 | 0 | -65 | 528 | 2 | 0.01 | 0.00 | 0.05 | |
| 1K | 182 | -325 | -34 | -87 | 0 | 79 | 253 | 2 | 0.00 | 0.00 | 0.04 | |
| 1L | 182 | -325 | 338 | -87 | 0 | 79 | 528 | 2 | 0.01 | 0.00 | 0.05 | |
| 1M | 182 | 450 | -34 | 71 | 0 | -65 | 253 | 1 | 0.00 | 0.00 | 0.03 | |
| 1N | 182 | 450 | 338 | 71 | 0 | -65 | 528 | 1 | 0.01 | 0.00 | 0.05 | |
| 1O | 182 | 450 | -34 | -87 | 0 | 79 | 253 | 1 | 0.00 | 0.00 | 0.04 | |
| 1P | 182 | 450 | 338 | -87 | 0 | 79 | 528 | 1 | 0.01 | 0.00 | 0.05 | |
| 2 | 182 | 11 | 159 | 0 | 0 | -0 | 393 | 1 | 0.01 | 0.00 | 0.04 | |
| 7 | 182 | 25 | 156 | -8 | 0 | 7 | 391 | 1 | 0.01 | 0.00 | 0.04 | |
| 8 | 182 | 48 | 154 | 0 | 0 | -0 | 392 | 1 | 0.01 | 0.00 | 0.04 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -201 | 108 | -510 | 2 | 0.7321 | 0.9977 | 0.9997 | -- | -- | 0.00 | -- | 0.11 | Snell. 'zx'= 68 |
| 1B | -201 | 108 | -743 | 2 | 0.7321 | 0.9977 | 0.9997 | -- | -- | 0.00 | -- | 0.13 | Snell. 'zx'= 68 |
| 1C | -201 | -122 | -510 | 2 | 0.7321 | 0.9977 | 0.9997 | -- | -- | 0.00 | -- | 0.12 | Snell. 'zx'= 68 |
| 1D | -201 | -122 | -743 | 2 | 0.7321 | 0.9977 | 0.9997 | -- | -- | 0.00 | -- | 0.14 | Snell. 'zx'= 68 |
| 1I | -325 | 65 | -425 | 2 | 0.7321 | 0.9964 | 0.9997 | -- | -- | 0.00 | -- | 0.08 | Snell. 'zx'= 68 |
| 1J | -325 | 65 | -829 | 2 | 0.7321 | 0.9964 | 0.9995 | -- | -- | 0.00 | -- | 0.12 | Snell. 'zx'= 68 |
| 1K | -325 | -79 | -425 | 2 | 0.7321 | 0.9964 | 0.9997 | -- | -- | 0.00 | -- | 0.09 | Snell. 'zx'= 68 |
| 1L | -325 | -79 | -829 | 2 | 0.7321 | 0.9964 | 0.9995 | -- | -- | 0.00 | -- | 0.13 | Snell. 'zx'= 68 |

**ASTA NUM. 59** NI 85 NF 45 Lungh. 182.5 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 1.8813 1.0675 3.2557 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | 625 | 30 | 137 | 0 | 125 | 272 | 1 | 0.00 | 0.01 | 0.06 | |
| 1B | 0 | 625 | 231 | 137 | 0 | 125 | 205 | 1 | 0.01 | 0.01 | 0.06 | |
| 1C | 0 | 625 | 30 | -135 | 0 | -123 | 272 | 1 | 0.00 | 0.01 | 0.06 | |
| 1D | 0 | 625 | 231 | -135 | 0 | -123 | 205 | 1 | 0.01 | 0.01 | 0.06 | |
| 1E | 0 | 2035 | 30 | 137 | 0 | 125 | 272 | 1 | 0.00 | 0.02 | 0.06 | |
| 1F | 0 | 2035 | 231 | 137 | 0 | 125 | 205 | 1 | 0.01 | 0.02 | 0.06 | |
| 1G | 0 | 2035 | 30 | -135 | 0 | -123 | 272 | 1 | 0.00 | 0.02 | 0.06 | |
| 1H | 0 | 2035 | 231 | -135 | 0 | -123 | 205 | 1 | 0.01 | 0.02 | 0.06 | |
| 1I | 0 | -124 | -62 | 87 | 0 | 79 | 293 | 2 | 0.00 | 0.00 | 0.04 | |
| 1J | 0 | -124 | 323 | 87 | 0 | 79 | 183 | 2 | 0.01 | 0.00 | 0.04 | |
| 1K | 0 | -124 | -62 | -85 | 0 | -77 | 293 | 2 | 0.00 | 0.00 | 0.04 | |
| 1L | 0 | -124 | 323 | -85 | 0 | -77 | 183 | 2 | 0.01 | 0.00 | 0.04 | |
| 1M | 0 | 2784 | -62 | 87 | 0 | 79 | 293 | 1 | 0.00 | 0.03 | 0.04 | |
| 1N | 0 | 2784 | 323 | 87 | 0 | 79 | 183 | 1 | 0.01 | 0.03 | 0.04 | |
| 1O | 0 | 2784 | -62 | -85 | 0 | -77 | 293 | 1 | 0.00 | 0.03 | 0.04 | |
| 1P | 0 | 2784 | 323 | -85 | 0 | -77 | 183 | 1 | 0.01 | 0.03 | 0.04 | |
| 2 | 0 | 1345 | 138 | 0 | 0 | 0 | 233 | 1 | 0.00 | 0.01 | 0.02 | |
| 7 | 0 | 1334 | 135 | 1 | 0 | 1 | 234 | 1 | 0.00 | 0.01 | 0.02 | |
| 8 | 0 | 1341 | 133 | 0 | 0 | 0 | 236 | 1 | 0.00 | 0.01 | 0.02 | |
| 1A | 91 | 625 | -376 | 137 | 0 | 0 | 114 | 1 | 0.01 | 0.01 | 0.01 | |
| 1B | 91 | 625 | -175 | 137 | 0 | 0 | 230 | 1 | 0.01 | 0.01 | 0.02 | |
| 1C | 91 | 625 | -376 | -135 | 0 | 0 | 114 | 1 | 0.01 | 0.01 | 0.01 | |
| 1D | 91 | 625 | -175 | -135 | 0 | 0 | 230 | 1 | 0.01 | 0.01 | 0.02 | |
| 1E | 91 | 2035 | -376 | 137 | 0 | 0 | 114 | 1 | 0.01 | 0.02 | 0.01 | |
| 1F | 91 | 2035 | -175 | 137 | 0 | 0 | 230 | 1 | 0.01 | 0.02 | 0.02 | |
| 1G | 91 | 2035 | -376 | -135 | 0 | 0 | 114 | 1 | 0.01 | 0.02 | 0.01 | |
| 1H | 91 | 2035 | -175 | -135 | 0 | 0 | 230 | 1 | 0.01 | 0.02 | 0.02 | |
| 1I | 91 | -124 | -468 | 87 | 0 | 0 | 51 | 1 | 0.02 | 0.00 | 0.01 | |
| 1J | 91 | -124 | -83 | 87 | 0 | 0 | 293 | 1 | 0.00 | 0.00 | 0.03 | |
| 1K | 91 | -124 | -468 | -85 | 0 | 0 | 51 | 1 | 0.02 | 0.00 | 0.01 | |
| 1L | 91 | -124 | -83 | -85 | 0 | 0 | 293 | 1 | 0.00 | 0.00 | 0.03 | |
| 1M | 91 | 2784 | -468 | 87 | 0 | 0 | 51 | 1 | 0.02 | 0.03 | 0.01 | |
| 1N | 91 | 2784 | -83 | 87 | 0 | 0 | 293 | 1 | 0.00 | 0.03 | 0.03 | |
| 1O | 91 | 2784 | -468 | -85 | 0 | 0 | 51 | 1 | 0.02 | 0.03 | 0.01 | |
| 1P | 91 | 2784 | -83 | -85 | 0 | 0 | 293 | 1 | 0.00 | 0.03 | 0.03 | |
| 2 | 91 | 1345 | -268 | 0 | 0 | 0 | 173 | 1 | 0.01 | 0.01 | 0.02 | |
| 7 | 91 | 1334 | -271 | 1 | 0 | 0 | 172 | 1 | 0.01 | 0.01 | 0.02 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 91 | 1341 | -272 | 0 | 0 | 0 | 173 | 1 | 0.01 | 0.01 | 0.02 |
| 1A | 182 | 625 | -782 | 137 | 0 | -125 | -415 | 1 | 0.03 | 0.01 | 0.07 |
| 1B | 182 | 625 | -580 | 137 | 0 | -125 | -114 | 1 | 0.02 | 0.01 | 0.06 |
| 1C | 182 | 625 | -782 | -135 | 0 | 123 | -415 | 1 | 0.03 | 0.01 | 0.06 |
| 1D | 182 | 625 | -580 | -135 | 0 | 123 | -114 | 1 | 0.02 | 0.01 | 0.06 |
| 1E | 182 | 2035 | -782 | 137 | 0 | -125 | -415 | 1 | 0.03 | 0.02 | 0.07 |
| 1F | 182 | 2035 | -580 | 137 | 0 | -125 | -114 | 1 | 0.02 | 0.02 | 0.06 |
| 1G | 182 | 2035 | -782 | -135 | 0 | 123 | -415 | 1 | 0.03 | 0.02 | 0.06 |
| 1H | 182 | 2035 | -580 | -135 | 0 | 123 | -114 | 1 | 0.02 | 0.02 | 0.06 |
| 1I | 182 | -124 | -874 | 87 | 0 | -79 | -561 | 2 | 0.03 | 0.00 | 0.06 |
| 1J | 182 | -124 | -488 | 87 | 0 | -79 | 32 | 2 | 0.02 | 0.00 | 0.04 |
| 1K | 182 | -124 | -874 | -85 | 0 | 77 | -561 | 2 | 0.03 | 0.00 | 0.06 |
| 1L | 182 | -124 | -488 | -85 | 0 | 77 | 32 | 2 | 0.02 | 0.00 | 0.04 |
| 1M | 182 | 2784 | -874 | 87 | 0 | -79 | -561 | 1 | 0.03 | 0.03 | 0.06 |
| 1N | 182 | 2784 | -488 | 87 | 0 | -79 | 32 | 1 | 0.02 | 0.03 | 0.04 |
| 1O | 182 | 2784 | -874 | -85 | 0 | 77 | -561 | 1 | 0.03 | 0.03 | 0.06 |
| 1P | 182 | 2784 | -488 | -85 | 0 | 77 | 32 | 1 | 0.02 | 0.03 | 0.04 |
| 2 | 182 | 1345 | -674 | 0 | 0 | -0 | -256 | 1 | 0.02 | 0.01 | 0.03 |
| 7 | 182 | 1334 | -677 | 1 | 0 | -1 | -260 | 1 | 0.02 | 0.01 | 0.03 |
| 8 | 182 | 1341 | -678 | 0 | 0 | -0 | -261 | 1 | 0.02 | 0.01 | 0.03 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1I | -124 | 79 | -561 | 2 | 0.7321 | 0.9986 | 0.9999 | -- | -- | 0.00 | -- | 0.10 | Snell. 'zx'= 68 |
| 1J | -124 | 79 | 293 | 2 | 0.7321 | 0.9986 | 1.0001 | -- | -- | 0.00 | -- | 0.07 | Snell. 'zx'= 68 |
| 1K | -124 | -77 | -561 | 2 | 0.7321 | 0.9986 | 0.9999 | -- | -- | 0.00 | -- | 0.10 | Snell. 'zx'= 68 |
| 1L | -124 | -77 | 293 | 2 | 0.7321 | 0.9986 | 1.0001 | -- | -- | 0.00 | -- | 0.07 | Snell. 'zx'= 68 |

**ASTA NUM. 60** NI 17 NF 27 Lungh. 182.5 cm SEZ. 2 Ps IPE 300

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.4223 3.8162 2.1655 6.4041 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | 1542 | 1151 | 349 | 0 | 318 | -302 | 1 | 0.03 | 0.01 | 0.10 | |
| 1B | 0 | 1542 | 1395 | 349 | 0 | 318 | -627 | 1 | 0.04 | 0.01 | 0.10 | |
| 1C | 0 | 1542 | 1151 | -336 | 0 | -307 | -302 | 1 | 0.03 | 0.01 | 0.09 | |
| 1D | 0 | 1542 | 1395 | -336 | 0 | -307 | -627 | 1 | 0.04 | 0.01 | 0.09 | |
| 1E | 0 | 2542 | 1151 | 349 | 0 | 318 | -302 | 1 | 0.03 | 0.02 | 0.10 | |
| 1F | 0 | 2542 | 1395 | 349 | 0 | 318 | -627 | 1 | 0.04 | 0.02 | 0.10 | |
| 1G | 0 | 2542 | 1151 | -336 | 0 | -307 | -302 | 1 | 0.03 | 0.02 | 0.09 | |
| 1H | 0 | 2542 | 1395 | -336 | 0 | -307 | -627 | 1 | 0.04 | 0.02 | 0.09 | |
| 1I | 0 | 782 | 1100 | 228 | 0 | 208 | -177 | 1 | 0.03 | 0.01 | 0.06 | |
| 1J | 0 | 782 | 1446 | 228 | 0 | 208 | -752 | 1 | 0.04 | 0.01 | 0.06 | |
| 1K | 0 | 782 | 1100 | -216 | 0 | -197 | -177 | 1 | 0.03 | 0.01 | 0.06 | |
| 1L | 0 | 782 | 1446 | -216 | 0 | -197 | -752 | 1 | 0.04 | 0.01 | 0.06 | |
| 1M | 0 | 3302 | 1100 | 228 | 0 | 208 | -177 | 1 | 0.03 | 0.02 | 0.06 | |
| 1N | 0 | 3302 | 1446 | 228 | 0 | 208 | -752 | 1 | 0.04 | 0.02 | 0.06 | |
| 1O | 0 | 3302 | 1100 | -216 | 0 | -197 | -177 | 1 | 0.03 | 0.02 | 0.06 | |
| 1P | 0 | 3302 | 1446 | -216 | 0 | -197 | -752 | 1 | 0.04 | 0.02 | 0.06 | |
| 2 | 0 | 2345 | 1232 | -0 | 0 | -0 | -395 | 1 | 0.03 | 0.02 | 0.02 | |
| 7 | 0 | 2343 | 1242 | 6 | 0 | 6 | -405 | 1 | 0.03 | 0.02 | 0.02 | |
| 8 | 0 | 2045 | 1263 | -0 | 0 | -0 | -454 | 1 | 0.03 | 0.01 | 0.03 | |
| 1A | 91 | 1542 | 352 | 349 | 0 | 0 | 384 | 1 | 0.01 | 0.01 | 0.02 | |
| 1B | 91 | 1542 | 596 | 349 | 0 | 0 | 282 | 1 | 0.02 | 0.01 | 0.02 | |
| 1C | 91 | 1542 | 352 | -336 | 0 | 0 | 384 | 1 | 0.01 | 0.01 | 0.02 | |
| 1D | 91 | 1542 | 596 | -336 | 0 | 0 | 282 | 1 | 0.02 | 0.01 | 0.02 | |
| 1E | 91 | 2542 | 352 | 349 | 0 | 0 | 384 | 1 | 0.01 | 0.02 | 0.02 | |
| 1F | 91 | 2542 | 596 | 349 | 0 | 0 | 282 | 1 | 0.02 | 0.02 | 0.02 | |
| 1G | 91 | 2542 | 352 | -336 | 0 | 0 | 384 | 1 | 0.01 | 0.02 | 0.02 | |
| 1H | 91 | 2542 | 596 | -336 | 0 | 0 | 282 | 1 | 0.02 | 0.02 | 0.02 | |
| 1I | 91 | 782 | 301 | 228 | 0 | 0 | 462 | 1 | 0.01 | 0.01 | 0.03 | |
| 1J | 91 | 782 | 647 | 228 | 0 | 0 | 204 | 1 | 0.02 | 0.01 | 0.01 | |
| 1K | 91 | 782 | 301 | -216 | 0 | 0 | 462 | 1 | 0.01 | 0.01 | 0.03 | |
| 1L | 91 | 782 | 647 | -216 | 0 | 0 | 204 | 1 | 0.02 | 0.01 | 0.01 | |
| 1M | 91 | 3302 | 301 | 228 | 0 | 0 | 462 | 1 | 0.01 | 0.02 | 0.03 | |
| 1N | 91 | 3302 | 647 | 228 | 0 | 0 | 204 | 1 | 0.02 | 0.02 | 0.01 | |
| 1O | 91 | 3302 | 301 | -216 | 0 | 0 | 462 | 1 | 0.01 | 0.02 | 0.03 | |
| 1P | 91 | 3302 | 647 | -216 | 0 | 0 | 204 | 1 | 0.02 | 0.02 | 0.01 | |
| 2 | 91 | 2345 | 433 | -0 | 0 | 0 | 364 | 1 | 0.01 | 0.02 | 0.02 | |
| 7 | 91 | 2343 | 443 | 6 | 0 | 0 | 364 | 1 | 0.01 | 0.02 | 0.02 | |
| 8 | 91 | 2045 | 464 | -0 | 0 | 0 | 333 | 1 | 0.01 | 0.01 | 0.02 | |
| 1A | 182 | 1542 | -446 | 349 | 0 | -318 | 342 | 1 | 0.01 | 0.01 | 0.10 | |
| 1B | 182 | 1542 | -203 | 349 | 0 | -318 | 461 | 1 | 0.01 | 0.01 | 0.10 | |
| 1C | 182 | 1542 | -446 | -336 | 0 | 307 | 342 | 1 | 0.01 | 0.01 | 0.09 | |
| 1D | 182 | 1542 | -203 | -336 | 0 | 307 | 461 | 1 | 0.01 | 0.01 | 0.09 | |
| 1E | 182 | 2542 | -446 | 349 | 0 | -318 | 342 | 1 | 0.01 | 0.02 | 0.10 | |
| 1F | 182 | 2542 | -203 | 349 | 0 | -318 | 461 | 1 | 0.01 | 0.02 | 0.10 | |
| 1G | 182 | 2542 | -446 | -336 | 0 | 307 | 342 | 1 | 0.01 | 0.02 | 0.09 | |
| 1H | 182 | 2542 | -203 | -336 | 0 | 307 | 461 | 1 | 0.01 | 0.02 | 0.09 | |
| 1I | 182 | 782 | -498 | 228 | 0 | -208 | 372 | 1 | 0.01 | 0.01 | 0.06 | |
| 1J | 182 | 782 | -152 | 228 | 0 | -208 | 430 | 1 | 0.00 | 0.01 | 0.06 | |
| 1K | 182 | 782 | -498 | -216 | 0 | 197 | 372 | 1 | 0.01 | 0.01 | 0.06 | |
| 1L | 182 | 782 | -152 | -216 | 0 | 197 | 430 | 1 | 0.00 | 0.01 | 0.06 | |
| 1M | 182 | 3302 | -498 | 228 | 0 | -208 | 372 | 1 | 0.01 | 0.02 | 0.06 | |
| 1N | 182 | 3302 | -152 | 228 | 0 | -208 | 430 | 1 | 0.00 | 0.02 | 0.06 | |
| 1O | 182 | 3302 | -498 | -216 | 0 | 197 | 372 | 1 | 0.01 | 0.02 | 0.06 | |
| 1P | 182 | 3302 | -152 | -216 | 0 | 197 | 430 | 1 | 0.00 | 0.02 | 0.06 | |
| 2 | 182 | 2345 | -367 | -0 | 0 | 0 | 394 | 1 | 0.01 | 0.02 | 0.02 | |
| 7 | 182 | 2343 | -356 | 6 | 0 | -6 | 404 | 1 | 0.01 | 0.02 | 0.02 | |
| 8 | 182 | 2045 | -335 | -0 | 0 | 0 | 392 | 1 | 0.01 | 0.01 | 0.02 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |

**ASTA NUM. 61** NI 27 NF 62 Lungh. 182.5 cm SEZ. 2 Ps IPE 300



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categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.4223 3.8162 2.1655 6.4041 kg/cm
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -1011 | -516 | 334 | 0 | 305 | 853 | 2 | 0.01 | 0.01 | 0.09 | |
| 1B | 0 | -1011 | -220 | 334 | 0 | 305 | 698 | 2 | 0.01 | 0.01 | 0.09 | |
| 1C | 0 | -1011 | -516 | -329 | 0 | -300 | 853 | 2 | 0.01 | 0.01 | 0.09 | |
| 1D | 0 | -1011 | -220 | -329 | 0 | -300 | 698 | 2 | 0.01 | 0.01 | 0.09 | |
| 1E | 0 | 109 | -516 | 334 | 0 | 305 | 853 | 1 | 0.01 | 0.00 | 0.09 | |
| 1F | 0 | 109 | -220 | 334 | 0 | 305 | 698 | 1 | 0.01 | 0.00 | 0.09 | |
| 1G | 0 | 109 | -516 | -329 | 0 | -300 | 853 | 1 | 0.01 | 0.00 | 0.09 | |
| 1H | 0 | 109 | -220 | -329 | 0 | -300 | 698 | 1 | 0.01 | 0.00 | 0.09 | |
| 1I | 0 | -744 | -549 | 211 | 0 | 193 | 911 | 2 | 0.01 | 0.01 | 0.06 | |
| 1J | 0 | -744 | -187 | 211 | 0 | 193 | 640 | 2 | 0.00 | 0.01 | 0.06 | |
| 1K | 0 | -744 | -549 | -206 | 0 | -188 | 911 | 2 | 0.01 | 0.01 | 0.06 | |
| 1L | 0 | -744 | -187 | -206 | 0 | -188 | 640 | 2 | 0.00 | 0.01 | 0.06 | |
| 1M | 0 | -158 | -549 | 211 | 0 | 193 | 911 | 2 | 0.01 | 0.00 | 0.06 | |
| 1N | 0 | -158 | -187 | 211 | 0 | 193 | 640 | 2 | 0.00 | 0.00 | 0.06 | |
| 1O | 0 | -158 | -549 | -206 | 0 | -188 | 911 | 2 | 0.01 | 0.00 | 0.06 | |
| 1P | 0 | -158 | -187 | -206 | 0 | -188 | 640 | 2 | 0.00 | 0.00 | 0.06 | |
| 2 | 0 | -449 | -410 | 1 | 0 | 1 | 814 | 2 | 0.01 | 0.00 | 0.05 | |
| 7 | 0 | -376 | -400 | 3 | 0 | 2 | 812 | 2 | 0.01 | 0.00 | 0.05 | |
| 8 | 0 | -525 | -379 | 1 | 0 | 1 | 778 | 2 | 0.01 | 0.00 | 0.05 | |
| 1A | 91 | -1011 | -1316 | 334 | 0 | 0 | 17 | 2 | 0.03 | 0.01 | 0.00 | |
| 1B | 91 | -1011 | -1020 | 334 | 0 | 0 | 133 | 2 | 0.03 | 0.01 | 0.01 | |
| 1C | 91 | -1011 | -1316 | -329 | 0 | 0 | 17 | 2 | 0.03 | 0.01 | 0.00 | |
| 1D | 91 | -1011 | -1020 | -329 | 0 | 0 | 133 | 2 | 0.03 | 0.01 | 0.01 | |
| 1E | 91 | 109 | -1316 | 334 | 0 | 0 | 17 | 1 | 0.03 | 0.00 | 0.00 | |
| 1F | 91 | 109 | -1020 | 334 | 0 | 0 | 133 | 1 | 0.03 | 0.00 | 0.01 | |
| 1G | 91 | 109 | -1316 | -329 | 0 | 0 | 17 | 1 | 0.03 | 0.00 | 0.00 | |
| 1H | 91 | 109 | -1020 | -329 | 0 | 0 | 133 | 1 | 0.03 | 0.00 | 0.01 | |
| 1I | 91 | -744 | -1349 | 211 | 0 | 0 | 45 | 2 | 0.03 | 0.01 | 0.00 | |
| 1J | 91 | -744 | -987 | 211 | 0 | 0 | 104 | 2 | 0.02 | 0.01 | 0.01 | |
| 1K | 91 | -744 | -1349 | -206 | 0 | 0 | 45 | 2 | 0.03 | 0.01 | 0.00 | |
| 1L | 91 | -744 | -987 | -206 | 0 | 0 | 104 | 2 | 0.02 | 0.01 | 0.01 | |
| 1M | 91 | -158 | -1349 | 211 | 0 | 0 | 45 | 2 | 0.03 | 0.00 | 0.00 | |
| 1N | 91 | -158 | -987 | 211 | 0 | 0 | 104 | 1 | 0.02 | 0.00 | 0.01 | |
| 1O | 91 | -158 | -1349 | -206 | 0 | 0 | 45 | 2 | 0.03 | 0.00 | 0.00 | |
| 1P | 91 | -158 | -987 | -206 | 0 | 0 | 104 | 1 | 0.02 | 0.00 | 0.01 | |
| 2 | 91 | -449 | -1210 | 1 | 0 | 0 | 75 | 2 | 0.03 | 0.00 | 0.00 | |
| 7 | 91 | -376 | -1199 | 3 | 0 | 0 | 83 | 2 | 0.03 | 0.00 | 0.00 | |
| 8 | 91 | -525 | -1178 | 1 | 0 | 0 | 67 | 2 | 0.03 | 0.00 | 0.00 | |
| 1A | 182 | -1011 | -2115 | 334 | 0 | -305 | -1548 | 2 | 0.05 | 0.01 | 0.10 | |
| 1B | 182 | -1011 | -1819 | 334 | 0 | -305 | -1162 | 2 | 0.05 | 0.01 | 0.10 | |
| 1C | 182 | -1011 | -2115 | -329 | 0 | 300 | -1548 | 2 | 0.05 | 0.01 | 0.10 | |
| 1D | 182 | -1011 | -1819 | -329 | 0 | 300 | -1162 | 2 | 0.05 | 0.01 | 0.09 | |
| 1E | 182 | 109 | -2115 | 334 | 0 | -305 | -1548 | 1 | 0.05 | 0.00 | 0.10 | |
| 1F | 182 | 109 | -1819 | 334 | 0 | -305 | -1162 | 1 | 0.05 | 0.00 | 0.10 | |
| 1G | 182 | 109 | -2115 | -329 | 0 | 300 | -1548 | 1 | 0.05 | 0.00 | 0.10 | |
| 1H | 182 | 109 | -1819 | -329 | 0 | 300 | -1162 | 1 | 0.05 | 0.00 | 0.09 | |
| 1I | 182 | -744 | -2148 | 211 | 0 | -193 | -1550 | 2 | 0.05 | 0.01 | 0.09 | |
| 1J | 182 | -744 | -1786 | 211 | 0 | -193 | -1160 | 2 | 0.05 | 0.01 | 0.07 | |
| 1K | 182 | -744 | -2148 | -206 | 0 | 188 | -1550 | 2 | 0.05 | 0.01 | 0.09 | |
| 1L | 182 | -744 | -1786 | -206 | 0 | 188 | -1160 | 2 | 0.05 | 0.01 | 0.07 | |
| 1M | 182 | -158 | -2148 | 211 | 0 | -193 | -1550 | 2 | 0.05 | 0.00 | 0.09 | |
| 1N | 182 | -158 | -1786 | 211 | 0 | -193 | -1160 | 2 | 0.05 | 0.00 | 0.07 | |
| 1O | 182 | -158 | -2148 | -206 | 0 | 188 | -1550 | 2 | 0.05 | 0.00 | 0.09 | |
| 1P | 182 | -158 | -1786 | -206 | 0 | 188 | -1160 | 2 | 0.05 | 0.00 | 0.07 | |
| 2 | 182 | -449 | -2009 | 1 | 0 | -1 | -1393 | 2 | 0.05 | 0.00 | 0.08 | |
| 7 | 182 | -376 | -1998 | 3 | 0 | -2 | -1376 | 2 | 0.05 | 0.00 | 0.08 | |
| 8 | 182 | -525 | -1977 | 1 | 0 | -1 | -1372 | 2 | 0.05 | 0.00 | 0.08 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -1011 | 305 | -1548 | 2 | 0.8199 | 0.9926 | 0.9990 | -- | -- | 0.01 | -- | 0.19 | Snell. 'zx'= 54 |
| 1B | -1011 | 305 | -1162 | 2 | 0.8199 | 0.9926 | 0.9990 | -- | -- | 0.01 | -- | 0.17 | Snell. 'zx'= 54 |
| 1C | -1011 | -300 | -1548 | 2 | 0.8199 | 0.9926 | 0.9990 | -- | -- | 0.01 | -- | 0.19 | Snell. 'zx'= 54 |
| 1D | -1011 | -300 | -1162 | 2 | 0.8199 | 0.9926 | 0.9990 | -- | -- | 0.01 | -- | 0.17 | Snell. 'zx'= 54 |
| 1I | -744 | 193 | -1550 | 2 | 0.8199 | 0.9946 | 0.9992 | -- | -- | 0.01 | -- | 0.16 | Snell. 'zx'= 54 |
| 1J | -744 | 193 | -1160 | 2 | 0.8199 | 0.9946 | 0.9994 | -- | -- | 0.01 | -- | 0.13 | Snell. 'zx'= 54 |
| 1K | -744 | -188 | -1550 | 2 | 0.8199 | 0.9946 | 0.9992 | -- | -- | 0.01 | -- | 0.15 | Snell. 'zx'= 54 |
| 1L | -744 | -188 | -1160 | 2 | 0.8199 | 0.9946 | 0.9994 | -- | -- | 0.01 | -- | 0.13 | Snell. 'zx'= 54 |
| 1M | -158 | 193 | -1550 | 2 | 0.8199 | 0.9988 | 0.9998 | -- | -- | 0.00 | -- | 0.15 | Snell. 'zx'= 54 |
| 1N | -158 | 193 | -1160 | 2 | 0.8199 | 0.9988 | 0.9999 | -- | -- | 0.00 | -- | 0.13 | Snell. 'zx'= 54 |
| 1O | -158 | -188 | -1550 | 2 | 0.8199 | 0.9988 | 0.9998 | -- | -- | 0.00 | -- | 0.15 | Snell. 'zx'= 54 |
| 1P | -158 | -188 | -1160 | 2 | 0.8199 | 0.9988 | 0.9999 | -- | -- | 0.00 | -- | 0.13 | Snell. 'zx'= 54 |
| 2 | -449 | 1 | -1393 | 2 | 0.8199 | 0.9967 | 0.9996 | -- | -- | 0.00 | -- | 0.09 | Snell. 'zx'= 54 |
| 7 | -376 | 2 | -1376 | 2 | 0.8199 | 0.9973 | 0.9996 | -- | -- | 0.00 | -- | 0.09 | Snell. 'zx'= 54 |
| 8 | -525 | 1 | -1372 | 2 | 0.8199 | 0.9962 | 0.9995 | -- | -- | 0.00 | -- | 0.09 | Snell. 'zx'= 54 |

**ASTA NUM. 62** NI 62 NF 60 Lungh. 182.5 cm SEZ. 2 Ps IPE 300

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.4223 3.8162 2.1655 6.4041 kg/cm
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -1237 | 1747 | 289 | 0 | 264 | -1102 | 2 | 0.04 | 0.01 | 0.08 | |
| 1B | 0 | -1237 | 1987 | 289 | 0 | 264 | -1454 | 2 | 0.05 | 0.01 | 0.09 | |
| 1C | 0 | -1237 | 1747 | -293 | 0 | -267 | -1102 | 2 | 0.04 | 0.01 | 0.08 | |
| 1D | 0 | -1237 | 1987 | -293 | 0 | -267 | -1454 | 2 | 0.05 | 0.01 | 0.09 | |
| 1E | 0 | 68 | 1747 | 289 | 0 | 264 | -1102 | 1 | 0.04 | 0.00 | 0.08 | |
| 1F | 0 | 68 | 1987 | 289 | 0 | 264 | -1454 | 1 | 0.05 | 0.00 | 0.09 | |
| 1G | 0 | 68 | 1747 | -293 | 0 | -267 | -1102 | 1 | 0.04 | 0.00 | 0.08 | |
| 1H | 0 | 68 | 1987 | -293 | 0 | -267 | -1454 | 1 | 0.05 | 0.00 | 0.09 | |
| 1I | 0 | -1378 | 1646 | 148 | 0 | 135 | -995 | 2 | 0.04 | 0.01 | 0.06 | |
| 1J | 0 | -1378 | 2088 | 148 | 0 | 135 | -1561 | 2 | 0.05 | 0.01 | 0.09 | |
| 1K | 0 | -1378 | 1646 | -152 | 0 | -139 | -995 | 2 | 0.04 | 0.01 | 0.06 | |
| 1L | 0 | -1378 | 2088 | -152 | 0 | -139 | -1561 | 2 | 0.05 | 0.01 | 0.09 | |



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| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1M | 0 | 209 | 1646 | 148 | 0 | 135 | -995 | 1 | 0.04 | 0.00 | 0.06 | |
| 1N | 0 | 209 | 2088 | 148 | 0 | 135 | -1561 | 1 | 0.05 | 0.00 | 0.09 | |
| 1O | 0 | 209 | 1646 | -152 | 0 | -139 | -995 | 1 | 0.04 | 0.00 | 0.06 | |
| 1P | 0 | 209 | 2088 | -152 | 0 | -139 | -1561 | 1 | 0.05 | 0.00 | 0.09 | |
| 2 | 0 | -764 | 1900 | 1 | 0 | 1 | -1327 | 2 | 0.05 | 0.01 | 0.08 | |
| 7 | 0 | -701 | 1892 | -2 | 0 | -2 | -1313 | 2 | 0.05 | 0.00 | 0.08 | |
| 8 | 0 | -647 | 1875 | 1 | 0 | 1 | -1292 | 2 | 0.05 | 0.00 | 0.08 | |
| 1A | 91 | -1237 | 948 | 289 | 0 | 0 | 125 | 2 | 0.02 | 0.01 | 0.01 | |
| 1B | 91 | -1237 | 1188 | 289 | 0 | 0 | -3 | 2 | 0.03 | 0.01 | 0.00 | |
| 1C | 91 | -1237 | 948 | -293 | 0 | 0 | 125 | 2 | 0.02 | 0.01 | 0.01 | |
| 1D | 91 | -1237 | 1188 | -293 | 0 | 0 | -3 | 2 | 0.03 | 0.01 | 0.00 | |
| 1E | 91 | 68 | 948 | 289 | 0 | 0 | 125 | 1 | 0.02 | 0.00 | 0.01 | |
| 1F | 91 | 68 | 1188 | 289 | 0 | 0 | -3 | 1 | 0.03 | 0.00 | 0.00 | |
| 1G | 91 | 68 | 948 | -293 | 0 | 0 | 125 | 1 | 0.02 | 0.00 | 0.01 | |
| 1H | 91 | 68 | 1188 | -293 | 0 | 0 | -3 | 1 | 0.03 | 0.00 | 0.00 | |
| 1I | 91 | -1378 | 847 | 148 | 0 | 0 | 142 | 2 | 0.02 | 0.01 | 0.01 | |
| 1J | 91 | -1378 | 1288 | 148 | 0 | 0 | -20 | 2 | 0.03 | 0.01 | 0.00 | |
| 1K | 91 | -1378 | 847 | -152 | 0 | 0 | 142 | 2 | 0.02 | 0.01 | 0.01 | |
| 1L | 91 | -1378 | 1288 | -152 | 0 | 0 | -20 | 2 | 0.03 | 0.01 | 0.00 | |
| 1M | 91 | 209 | 847 | 148 | 0 | 0 | 142 | 1 | 0.02 | 0.00 | 0.01 | |
| 1N | 91 | 209 | 1288 | 148 | 0 | 0 | -20 | 1 | 0.03 | 0.00 | 0.00 | |
| 1O | 91 | 209 | 847 | -152 | 0 | 0 | 142 | 1 | 0.02 | 0.00 | 0.01 | |
| 1P | 91 | 209 | 1288 | -152 | 0 | 0 | -20 | 1 | 0.03 | 0.00 | 0.00 | |
| 2 | 91 | -764 | 1101 | 1 | 0 | 0 | 42 | 2 | 0.03 | 0.01 | 0.00 | |
| 7 | 91 | -701 | 1093 | -2 | 0 | 0 | 49 | 2 | 0.03 | 0.00 | 0.00 | |
| 8 | 91 | -647 | 1076 | 1 | 0 | 0 | 55 | 2 | 0.03 | 0.00 | 0.00 | |
| 1A | 182 | -1237 | 149 | 289 | 0 | -264 | 623 | 2 | 0.01 | 0.01 | 0.08 | |
| 1B | 182 | -1237 | 389 | 289 | 0 | -264 | 719 | 2 | 0.01 | 0.01 | 0.08 | |
| 1C | 182 | -1237 | 149 | -293 | 0 | 267 | 623 | 2 | 0.01 | 0.01 | 0.08 | |
| 1D | 182 | -1237 | 389 | -293 | 0 | 267 | 719 | 2 | 0.01 | 0.01 | 0.08 | |
| 1E | 182 | 68 | 149 | 289 | 0 | -264 | 623 | 1 | 0.01 | 0.00 | 0.08 | |
| 1F | 182 | 68 | 389 | 289 | 0 | -264 | 719 | 1 | 0.01 | 0.00 | 0.08 | |
| 1G | 182 | 68 | 149 | -293 | 0 | 267 | 623 | 1 | 0.01 | 0.00 | 0.08 | |
| 1H | 182 | 68 | 389 | -293 | 0 | 267 | 719 | 1 | 0.01 | 0.00 | 0.08 | |
| 1I | 182 | -1378 | 48 | 148 | 0 | -135 | 550 | 2 | 0.00 | 0.01 | 0.04 | |
| 1J | 182 | -1378 | 489 | 148 | 0 | -135 | 792 | 2 | 0.01 | 0.01 | 0.05 | |
| 1K | 182 | -1378 | 48 | -152 | 0 | 139 | 550 | 2 | 0.00 | 0.01 | 0.04 | |
| 1L | 182 | -1378 | 489 | -152 | 0 | 139 | 792 | 2 | 0.01 | 0.01 | 0.05 | |
| 1M | 182 | 209 | 48 | 148 | 0 | -135 | 550 | 1 | 0.00 | 0.00 | 0.04 | |
| 1N | 182 | 209 | 489 | 148 | 0 | -135 | 792 | 1 | 0.01 | 0.00 | 0.05 | |
| 1O | 182 | 209 | 48 | -152 | 0 | 139 | 550 | 1 | 0.00 | 0.00 | 0.04 | |
| 1P | 182 | 209 | 489 | -152 | 0 | 139 | 792 | 1 | 0.01 | 0.00 | 0.05 | |
| 2 | 182 | -764 | 302 | 1 | 0 | -1 | 683 | 2 | 0.01 | 0.01 | 0.04 | |
| 7 | 182 | -701 | 294 | -2 | 0 | 2 | 682 | 2 | 0.01 | 0.00 | 0.04 | |
| 8 | 182 | -647 | 277 | 1 | 0 | -1 | 672 | 2 | 0.01 | 0.00 | 0.04 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | | kg*m | | | | | | | | | | |
| 1A | -1237 | 264 | -1102 | 2 | 0.8199 | 0.9910 | 0.9989 | -- | -- | 0.01 | -- | 0.15 | Snell. 'zx'= 54 |
| 1B | -1237 | 264 | -1454 | 2 | 0.8199 | 0.9910 | 0.9989 | -- | -- | 0.01 | -- | 0.18 | Snell. 'zx'= 54 |
| 1C | -1237 | -267 | -1102 | 2 | 0.8199 | 0.9910 | 0.9989 | -- | -- | 0.01 | -- | 0.16 | Snell. 'zx'= 54 |
| 1D | -1237 | -267 | -1454 | 2 | 0.8199 | 0.9910 | 0.9989 | -- | -- | 0.01 | -- | 0.18 | Snell. 'zx'= 54 |
| 1I | -1378 | 135 | -995 | 2 | 0.8199 | 0.9900 | 0.9989 | -- | -- | 0.01 | -- | 0.11 | Snell. 'zx'= 54 |
| 1J | -1378 | 135 | -1561 | 2 | 0.8199 | 0.9900 | 0.9988 | -- | -- | 0.01 | -- | 0.14 | Snell. 'zx'= 54 |
| 1K | -1378 | -139 | -995 | 2 | 0.8199 | 0.9900 | 0.9989 | -- | -- | 0.01 | -- | 0.11 | Snell. 'zx'= 54 |
| 1L | -1378 | -139 | -1561 | 2 | 0.8199 | 0.9900 | 0.9988 | -- | -- | 0.01 | -- | 0.15 | Snell. 'zx'= 54 |
| 2 | -764 | 1 | -1327 | 2 | 0.8199 | 0.9944 | 0.9993 | -- | -- | 0.01 | -- | 0.09 | Snell. 'zx'= 54 |
| 7 | -701 | -2 | -1313 | 2 | 0.8199 | 0.9949 | 0.9994 | -- | -- | 0.01 | -- | 0.08 | Snell. 'zx'= 54 |
| 8 | -647 | 1 | -1292 | 2 | 0.8199 | 0.9953 | 0.9994 | -- | -- | 0.01 | -- | 0.08 | Snell. 'zx'= 54 |

**ASTA NUM. 63** NI 60 NF 30 Lungh. 182.5 cm SEZ. 2 Ps IPE 300

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.4223 3.8162 2.1655 6.4041 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | 697 | 117 | 309 | 0 | 282 | 475 | 1 | 0.01 | 0.00 | 0.09 | |
| 1B | 0 | 697 | 334 | 309 | 0 | 282 | 333 | 1 | 0.01 | 0.00 | 0.08 | |
| 1C | 0 | 697 | 117 | -317 | 0 | -290 | 475 | 1 | 0.01 | 0.00 | 0.09 | |
| 1D | 0 | 697 | 334 | -317 | 0 | -290 | 333 | 1 | 0.01 | 0.00 | 0.09 | |
| 1E | 0 | 1687 | 117 | 309 | 0 | 282 | 475 | 1 | 0.01 | 0.01 | 0.09 | |
| 1F | 0 | 1687 | 334 | 309 | 0 | 282 | 333 | 1 | 0.01 | 0.01 | 0.08 | |
| 1G | 0 | 1687 | 117 | -317 | 0 | -290 | 475 | 1 | 0.01 | 0.01 | 0.09 | |
| 1H | 0 | 1687 | 334 | -317 | 0 | -290 | 333 | 1 | 0.01 | 0.01 | 0.09 | |
| 1I | 0 | 148 | 30 | 156 | 0 | 143 | 481 | 1 | 0.00 | 0.00 | 0.04 | |
| 1J | 0 | 148 | 421 | 156 | 0 | 143 | 327 | 1 | 0.01 | 0.00 | 0.04 | |
| 1K | 0 | 148 | 30 | -164 | 0 | -150 | 481 | 1 | 0.00 | 0.00 | 0.05 | |
| 1L | 0 | 148 | 421 | -164 | 0 | -150 | 327 | 1 | 0.01 | 0.00 | 0.05 | |
| 1M | 0 | 2236 | 30 | 156 | 0 | 143 | 481 | 1 | 0.00 | 0.02 | 0.04 | |
| 1N | 0 | 2236 | 421 | 156 | 0 | 143 | 327 | 1 | 0.01 | 0.02 | 0.04 | |
| 1O | 0 | 2236 | 30 | -164 | 0 | -150 | 481 | 1 | 0.00 | 0.02 | 0.05 | |
| 1P | 0 | 2236 | 421 | -164 | 0 | -150 | 327 | 1 | 0.01 | 0.02 | 0.05 | |
| 2 | 0 | 1253 | 259 | 2 | 0 | 2 | 380 | 1 | 0.01 | 0.01 | 0.02 | |
| 7 | 0 | 1257 | 251 | -4 | 0 | -4 | 388 | 1 | 0.01 | 0.01 | 0.02 | |
| 8 | 0 | 1188 | 234 | 2 | 0 | 2 | 396 | 1 | 0.01 | 0.01 | 0.02 | |
| 1A | 91 | 697 | -683 | 309 | 0 | 0 | 217 | 1 | 0.02 | 0.00 | 0.01 | |
| 1B | 91 | 697 | -465 | 309 | 0 | 0 | 273 | 1 | 0.01 | 0.00 | 0.02 | |
| 1C | 91 | 697 | -683 | -317 | 0 | -0 | 217 | 1 | 0.02 | 0.00 | 0.01 | |
| 1D | 91 | 697 | -465 | -317 | 0 | -0 | 273 | 1 | 0.01 | 0.00 | 0.02 | |
| 1E | 91 | 1687 | -683 | 309 | 0 | 0 | 217 | 1 | 0.02 | 0.01 | 0.01 | |
| 1F | 91 | 1687 | -465 | 309 | 0 | 0 | 273 | 1 | 0.01 | 0.01 | 0.02 | |
| 1G | 91 | 1687 | -683 | -317 | 0 | -0 | 217 | 1 | 0.02 | 0.01 | 0.01 | |
| 1H | 91 | 1687 | -465 | -317 | 0 | -0 | 273 | 1 | 0.01 | 0.01 | 0.02 | |
| 1I | 91 | 148 | -769 | 156 | 0 | 0 | 144 | 1 | 0.02 | 0.00 | 0.01 | |
| 1J | 91 | 148 | -379 | 156 | 0 | 0 | 346 | 1 | 0.01 | 0.00 | 0.02 | |
| 1K | 91 | 148 | -769 | -164 | 0 | 0 | 144 | 1 | 0.02 | 0.00 | 0.01 | |
| 1L | 91 | 148 | -379 | -164 | 0 | 0 | 346 | 1 | 0.01 | 0.00 | 0.02 | |
| 1M | 91 | 2236 | -769 | 156 | 0 | 0 | 144 | 1 | 0.02 | 0.02 | 0.01 | |
| 1N | 91 | 2236 | -379 | 156 | 0 | 0 | 346 | 1 | 0.01 | 0.02 | 0.02 | |
| 1O | 91 | 2236 | -769 | -164 | 0 | 0 | 144 | 1 | 0.02 | 0.02 | 0.01 | |
| 1P | 91 | 2236 | -379 | -164 | 0 | 0 | 346 | 1 | 0.01 | 0.02 | 0.02 | |
| 2 | 91 | 1253 | -541 | 2 | 0 | 0 | 251 | 1 | 0.01 | 0.01 | 0.01 | |
| 7 | 91 | 1257 | -549 | -4 | 0 | 0 | 252 | 1 | 0.01 | 0.01 | 0.02 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 91 | 1188 | -566 | 2 | 0 | 0 | 245 | 1 | 0.01 | 0.01 | 0.01 |
| 1A | 182 | 697 | -1482 | 309 | 0 | -282 | -771 | 1 | 0.04 | 0.00 | 0.09 |
| 1B | 182 | 697 | -1264 | 309 | 0 | -282 | -515 | 1 | 0.03 | 0.00 | 0.09 |
| 1C | 182 | 697 | -1482 | -317 | 0 | 290 | -771 | 1 | 0.04 | 0.00 | 0.09 |
| 1D | 182 | 697 | -1264 | -317 | 0 | 290 | -515 | 1 | 0.03 | 0.00 | 0.09 |
| 1E | 182 | 1687 | -1482 | 309 | 0 | -282 | -771 | 1 | 0.04 | 0.01 | 0.09 |
| 1F | 182 | 1687 | -1264 | 309 | 0 | -282 | -515 | 1 | 0.03 | 0.01 | 0.09 |
| 1G | 182 | 1687 | -1482 | -317 | 0 | 290 | -771 | 1 | 0.04 | 0.01 | 0.09 |
| 1H | 182 | 1687 | -1264 | -317 | 0 | 290 | -515 | 1 | 0.03 | 0.01 | 0.09 |
| 1I | 182 | 148 | -1568 | 156 | 0 | -143 | -923 | 1 | 0.04 | 0.00 | 0.05 |
| 1J | 182 | 148 | -1178 | 156 | 0 | -143 | -364 | 1 | 0.03 | 0.00 | 0.04 |
| 1K | 182 | 148 | -1568 | -164 | 0 | 150 | -923 | 1 | 0.04 | 0.00 | 0.05 |
| 1L | 182 | 148 | -1178 | -164 | 0 | 150 | -364 | 1 | 0.03 | 0.00 | 0.05 |
| 1M | 182 | 2236 | -1568 | 156 | 0 | -143 | -923 | 1 | 0.04 | 0.02 | 0.05 |
| 1N | 182 | 2236 | -1178 | 156 | 0 | -143 | -364 | 1 | 0.03 | 0.02 | 0.04 |
| 1O | 182 | 2236 | -1568 | -164 | 0 | 150 | -923 | 1 | 0.04 | 0.02 | 0.05 |
| 1P | 182 | 2236 | -1178 | -164 | 0 | 150 | -364 | 1 | 0.03 | 0.02 | 0.05 |
| 2 | 182 | 1253 | -1340 | 2 | 0 | -2 | -607 | 1 | 0.03 | 0.01 | 0.04 |
| 7 | 182 | 1257 | -1348 | -4 | 0 | 4 | -614 | 1 | 0.03 | 0.01 | 0.04 |
| 8 | 182 | 1188 | -1365 | 2 | 0 | -2 | -636 | 1 | 0.03 | 0.01 | 0.04 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |

**ASTA NUM. 64** NI 30 NF 87 Lungh. 205.0 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 3.8162 2.1655 6.2887 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -1242 | 681 | 3 | 0 | 3 | -198 | 2 | 0.02 | 0.01 | 0.02 | |
| 1B | 0 | -1242 | 846 | 3 | 0 | 3 | -331 | 2 | 0.03 | 0.01 | 0.03 | |
| 1C | 0 | -1242 | 681 | -2 | 0 | -2 | -198 | 2 | 0.02 | 0.01 | 0.02 | |
| 1D | 0 | -1242 | 846 | -2 | 0 | -2 | -331 | 2 | 0.03 | 0.01 | 0.03 | |
| 1E | 0 | -800 | 681 | 3 | 0 | 3 | -198 | 2 | 0.02 | 0.01 | 0.02 | |
| 1F | 0 | -800 | 846 | 3 | 0 | 3 | -331 | 2 | 0.03 | 0.01 | 0.03 | |
| 1G | 0 | -800 | 681 | -2 | 0 | -2 | -198 | 2 | 0.02 | 0.01 | 0.02 | |
| 1H | 0 | -800 | 846 | -2 | 0 | -2 | -331 | 2 | 0.03 | 0.01 | 0.03 | |
| 1I | 0 | -1539 | 575 | 2 | 0 | 2 | -114 | 2 | 0.02 | 0.01 | 0.01 | |
| 1J | 0 | -1539 | 953 | 2 | 0 | 2 | -415 | 2 | 0.03 | 0.01 | 0.04 | |
| 1K | 0 | -1539 | 575 | -1 | 0 | -1 | -114 | 2 | 0.02 | 0.01 | 0.01 | |
| 1L | 0 | -1539 | 953 | -1 | 0 | -1 | -415 | 2 | 0.03 | 0.01 | 0.04 | |
| 1M | 0 | -503 | 575 | 2 | 0 | 2 | -114 | 2 | 0.02 | 0.00 | 0.01 | |
| 1N | 0 | -503 | 953 | 2 | 0 | 2 | -415 | 2 | 0.03 | 0.00 | 0.04 | |
| 1O | 0 | -503 | 575 | -1 | 0 | -1 | -114 | 2 | 0.02 | 0.00 | 0.01 | |
| 1P | 0 | -503 | 953 | -1 | 0 | -1 | -415 | 2 | 0.03 | 0.00 | 0.04 | |
| 2 | 0 | -986 | 770 | -0 | 0 | -0 | -268 | 2 | 0.03 | 0.01 | 0.03 | |
| 7 | 0 | -975 | 779 | 0 | 0 | 0 | -277 | 2 | 0.03 | 0.01 | 0.03 | |
| 8 | 0 | -1031 | 754 | -0 | 0 | -0 | -256 | 2 | 0.03 | 0.01 | 0.03 | |
| 1A | 102 | -1242 | -201 | 3 | 0 | 0 | 48 | 2 | 0.01 | 0.01 | 0.00 | |
| 1B | 102 | -1242 | -36 | 3 | 0 | 0 | 84 | 2 | 0.00 | 0.01 | 0.01 | |
| 1C | 102 | -1242 | -201 | -2 | 0 | 0 | 48 | 2 | 0.01 | 0.01 | 0.00 | |
| 1D | 102 | -1242 | -36 | -2 | 0 | 0 | 84 | 2 | 0.00 | 0.01 | 0.01 | |
| 1E | 102 | -800 | -201 | 3 | 0 | 0 | 48 | 2 | 0.01 | 0.01 | 0.00 | |
| 1F | 102 | -800 | -36 | 3 | 0 | 0 | 84 | 2 | 0.00 | 0.01 | 0.01 | |
| 1G | 102 | -800 | -201 | -2 | 0 | 0 | 48 | 2 | 0.01 | 0.01 | 0.00 | |
| 1H | 102 | -800 | -36 | -2 | 0 | 0 | 84 | 2 | 0.00 | 0.01 | 0.01 | |
| 1I | 102 | -1539 | -307 | 2 | 0 | 0 | 23 | 2 | 0.01 | 0.01 | 0.00 | |
| 1J | 102 | -1539 | 70 | 2 | 0 | 0 | 109 | 2 | 0.00 | 0.01 | 0.01 | |
| 1K | 102 | -1539 | -307 | -1 | 0 | 0 | 23 | 2 | 0.01 | 0.01 | 0.00 | |
| 1L | 102 | -1539 | 70 | -1 | 0 | 0 | 109 | 2 | 0.00 | 0.01 | 0.01 | |
| 1M | 102 | -503 | -307 | 2 | 0 | 0 | 23 | 2 | 0.01 | 0.00 | 0.00 | |
| 1N | 102 | -503 | 70 | 2 | 0 | 0 | 109 | 2 | 0.00 | 0.00 | 0.01 | |
| 1O | 102 | -503 | -307 | -1 | 0 | 0 | 23 | 2 | 0.01 | 0.00 | 0.00 | |
| 1P | 102 | -503 | 70 | -1 | 0 | 0 | 109 | 2 | 0.00 | 0.00 | 0.01 | |
| 2 | 102 | -986 | -113 | -0 | 0 | 0 | 69 | 2 | 0.00 | 0.01 | 0.01 | |
| 7 | 102 | -975 | -103 | 0 | 0 | 0 | 70 | 2 | 0.00 | 0.01 | 0.01 | |
| 8 | 102 | -1031 | -128 | -0 | 0 | 0 | 65 | 2 | 0.00 | 0.01 | 0.01 | |
| 1A | 205 | -1242 | -1084 | 3 | 0 | -3 | -611 | 2 | 0.04 | 0.01 | 0.06 | |
| 1B | 205 | -1242 | -918 | 3 | 0 | -3 | -405 | 2 | 0.03 | 0.01 | 0.04 | |
| 1C | 205 | -1242 | -1084 | -2 | 0 | 2 | -611 | 2 | 0.04 | 0.01 | 0.06 | |
| 1D | 205 | -1242 | -918 | -2 | 0 | 2 | -405 | 2 | 0.03 | 0.01 | 0.04 | |
| 1E | 205 | -800 | -1084 | 3 | 0 | -3 | -611 | 2 | 0.04 | 0.01 | 0.06 | |
| 1F | 205 | -800 | -918 | 3 | 0 | -3 | -405 | 2 | 0.03 | 0.01 | 0.04 | |
| 1G | 205 | -800 | -1084 | -2 | 0 | 2 | -611 | 2 | 0.04 | 0.01 | 0.06 | |
| 1H | 205 | -800 | -918 | -2 | 0 | 2 | -405 | 2 | 0.03 | 0.01 | 0.04 | |
| 1I | 205 | -1539 | -1190 | 2 | 0 | -2 | -744 | 2 | 0.04 | 0.01 | 0.08 | |
| 1J | 205 | -1539 | -812 | 2 | 0 | -2 | -271 | 2 | 0.03 | 0.01 | 0.03 | |
| 1K | 205 | -1539 | -1190 | -1 | 0 | 1 | -744 | 2 | 0.04 | 0.01 | 0.08 | |
| 1L | 205 | -1539 | -812 | -1 | 0 | 1 | -271 | 2 | 0.03 | 0.01 | 0.03 | |
| 1M | 205 | -503 | -1190 | 2 | 0 | -2 | -744 | 2 | 0.04 | 0.00 | 0.08 | |
| 1N | 205 | -503 | -812 | 2 | 0 | -2 | -271 | 2 | 0.03 | 0.00 | 0.03 | |
| 1O | 205 | -503 | -1190 | -1 | 0 | 1 | -744 | 2 | 0.04 | 0.00 | 0.08 | |
| 1P | 205 | -503 | -812 | -1 | 0 | 1 | -271 | 2 | 0.03 | 0.00 | 0.03 | |
| 2 | 205 | -986 | -995 | -0 | 0 | 0 | -498 | 2 | 0.03 | 0.01 | 0.05 | |
| 7 | 205 | -975 | -985 | 0 | 0 | -0 | -488 | 2 | 0.03 | 0.01 | 0.05 | |
| 8 | 205 | -1031 | -1010 | -0 | 0 | 0 | -518 | 2 | 0.03 | 0.01 | 0.05 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -1242 | 3 | -611 | 2 | 0.6711 | 0.9848 | 1.0019 | -- | -- | 0.02 | -- | 0.08 | Snell. 'zx'= 76 |
| 1B | -1242 | 3 | -405 | 2 | 0.6711 | 0.9848 | 1.0024 | -- | -- | 0.02 | -- | 0.06 | Snell. 'zx'= 76 |
| 1C | -1242 | -2 | -611 | 2 | 0.6711 | 0.9848 | 1.0019 | -- | -- | 0.02 | -- | 0.08 | Snell. 'zx'= 76 |
| 1D | -1242 | -2 | -405 | 2 | 0.6711 | 0.9848 | 1.0024 | -- | -- | 0.02 | -- | 0.06 | Snell. 'zx'= 76 |
| 1E | -800 | 3 | -611 | 2 | 0.6711 | 0.9902 | 1.0012 | -- | -- | 0.01 | -- | 0.08 | Snell. 'zx'= 76 |
| 1F | -800 | 3 | -405 | 2 | 0.6711 | 0.9902 | 1.0015 | -- | -- | 0.01 | -- | 0.05 | Snell. 'zx'= 76 |



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| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1G | -800 | -2 | -611 | 2 | 0.6711 | 0.9902 | 1.0012 | -- | -- | 0.01 | -- | 0.07 Snell. 'zx'= | 76 |
| 1H | -800 | -2 | -405 | 2 | 0.6711 | 0.9902 | 1.0015 | -- | -- | 0.01 | -- | 0.05 Snell. 'zx'= | 76 |
| 1I | -1539 | 2 | -744 | 2 | 0.6711 | 0.9812 | 1.0018 | -- | -- | 0.02 | -- | 0.10 Snell. 'zx'= | 76 |
| 1J | -1539 | 2 | -415 | 2 | 0.6711 | 0.9812 | 1.0028 | -- | -- | 0.02 | -- | 0.07 Snell. 'zx'= | 76 |
| 1K | -1539 | -1 | -744 | 2 | 0.6711 | 0.9812 | 1.0018 | -- | -- | 0.02 | -- | 0.10 Snell. 'zx'= | 76 |
| 1L | -1539 | -1 | -415 | 2 | 0.6711 | 0.9812 | 1.0028 | -- | -- | 0.02 | -- | 0.06 Snell. 'zx'= | 76 |
| 1M | -503 | 2 | -744 | 2 | 0.6711 | 0.9938 | 1.0006 | -- | -- | 0.01 | -- | 0.08 Snell. 'zx'= | 76 |
| 1N | -503 | 2 | -415 | 2 | 0.6711 | 0.9938 | 1.0009 | -- | -- | 0.01 | -- | 0.05 Snell. 'zx'= | 76 |
| 1O | -503 | -1 | -744 | 2 | 0.6711 | 0.9938 | 1.0006 | -- | -- | 0.01 | -- | 0.08 Snell. 'zx'= | 76 |
| 1P | -503 | -1 | -415 | 2 | 0.6711 | 0.9938 | 1.0009 | -- | -- | 0.01 | -- | 0.05 Snell. 'zx'= | 76 |
| 2 | -986 | -0 | -499 | 2 | 0.6711 | 0.9879 | 1.0017 | -- | -- | 0.01 | -- | 0.07 Snell. 'zx'= | 76 |
| 7 | -975 | 0 | -488 | 2 | 0.6711 | 0.9881 | 1.0017 | -- | -- | 0.01 | -- | 0.06 Snell. 'zx'= | 76 |
| 8 | -1031 | -0 | -518 | 2 | 0.6711 | 0.9874 | 1.0018 | -- | -- | 0.01 | -- | 0.07 Snell. 'zx'= | 76 |

**ASTA NUM. 65** NI 87 NF 65 Lungh. 135.0 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 3.8162 2.1655 6.2887 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -233 | 1354 | 216 | 0 | 146 | -626 | 2 | 0.05 | 0.00 | 0.08 | |
| 1B | 0 | -233 | 1404 | 216 | 0 | 146 | -705 | 2 | 0.05 | 0.00 | 0.08 | |
| 1C | 0 | -233 | 1354 | -211 | 0 | -143 | -626 | 2 | 0.05 | 0.00 | 0.08 | |
| 1D | 0 | -233 | 1404 | -211 | 0 | -143 | -705 | 2 | 0.05 | 0.00 | 0.08 | |
| 1E | 0 | 318 | 1354 | 216 | 0 | 146 | -626 | 1 | 0.05 | 0.00 | 0.08 | |
| 1F | 0 | 318 | 1404 | 216 | 0 | 146 | -705 | 1 | 0.05 | 0.00 | 0.08 | |
| 1G | 0 | 318 | 1354 | -211 | 0 | -143 | -626 | 1 | 0.05 | 0.00 | 0.08 | |
| 1H | 0 | 318 | 1404 | -211 | 0 | -143 | -705 | 1 | 0.05 | 0.00 | 0.08 | |
| 1I | 0 | -525 | 1337 | 73 | 0 | 49 | -590 | 2 | 0.05 | 0.01 | 0.06 | |
| 1J | 0 | -525 | 1421 | 73 | 0 | 49 | -741 | 2 | 0.05 | 0.01 | 0.08 | |
| 1K | 0 | -525 | 1337 | -69 | 0 | -46 | -590 | 2 | 0.05 | 0.01 | 0.06 | |
| 1L | 0 | -525 | 1421 | -69 | 0 | -46 | -741 | 2 | 0.05 | 0.01 | 0.08 | |
| 1M | 0 | 610 | 1337 | 73 | 0 | 49 | -590 | 1 | 0.05 | 0.01 | 0.06 | |
| 1N | 0 | 610 | 1421 | 73 | 0 | 49 | -741 | 1 | 0.05 | 0.01 | 0.08 | |
| 1O | 0 | 610 | 1337 | -69 | 0 | -46 | -590 | 1 | 0.05 | 0.01 | 0.06 | |
| 1P | 0 | 610 | 1421 | -69 | 0 | -46 | -741 | 1 | 0.05 | 0.01 | 0.08 | |
| 2 | 0 | -41 | 1391 | -1 | 0 | -0 | -680 | 2 | 0.05 | 0.00 | 0.07 | |
| 7 | 0 | -3 | 1384 | 2 | 0 | 2 | -673 | 2 | 0.05 | 0.00 | 0.07 | |
| 8 | 0 | 5 | 1385 | -1 | 0 | -0 | -673 | 1 | 0.05 | 0.00 | 0.07 | |
| 1A | 68 | -233 | 773 | 216 | 0 | 0 | 93 | 1 | 0.03 | 0.00 | 0.01 | |
| 1B | 68 | -233 | 822 | 216 | 0 | 0 | 45 | 2 | 0.03 | 0.00 | 0.00 | |
| 1C | 68 | -233 | 773 | -211 | 0 | 0 | 93 | 1 | 0.03 | 0.00 | 0.01 | |
| 1D | 68 | -233 | 822 | -211 | 0 | 0 | 45 | 2 | 0.03 | 0.00 | 0.00 | |
| 1E | 68 | 318 | 773 | 216 | 0 | 0 | 93 | 1 | 0.03 | 0.00 | 0.01 | |
| 1F | 68 | 318 | 822 | 216 | 0 | 0 | 45 | 1 | 0.03 | 0.00 | 0.00 | |
| 1G | 68 | 318 | 773 | -211 | 0 | 0 | 93 | 1 | 0.03 | 0.00 | 0.01 | |
| 1H | 68 | 318 | 822 | -211 | 0 | 0 | 45 | 1 | 0.03 | 0.00 | 0.00 | |
| 1I | 68 | -525 | 756 | 73 | 0 | 0 | 116 | 2 | 0.03 | 0.01 | 0.01 | |
| 1J | 68 | -525 | 840 | 73 | 0 | 0 | 21 | 2 | 0.03 | 0.01 | 0.00 | |
| 1K | 68 | -525 | 756 | -69 | 0 | 0 | 116 | 2 | 0.03 | 0.01 | 0.01 | |
| 1L | 68 | -525 | 840 | -69 | 0 | 0 | 21 | 2 | 0.03 | 0.01 | 0.00 | |
| 1M | 68 | 610 | 756 | 73 | 0 | 0 | 116 | 1 | 0.03 | 0.01 | 0.01 | |
| 1N | 68 | 610 | 840 | 73 | 0 | 0 | 21 | 1 | 0.03 | 0.01 | 0.00 | |
| 1O | 68 | 610 | 756 | -69 | 0 | 0 | 116 | 1 | 0.03 | 0.01 | 0.01 | |
| 1P | 68 | 610 | 840 | -69 | 0 | 0 | 21 | 1 | 0.03 | 0.01 | 0.00 | |
| 2 | 68 | -41 | 810 | -1 | 0 | 0 | 62 | 1 | 0.03 | 0.00 | 0.01 | |
| 7 | 68 | -3 | 803 | 2 | 0 | 0 | 65 | 1 | 0.03 | 0.00 | 0.01 | |
| 8 | 68 | 5 | 804 | -1 | 0 | 0 | 66 | 1 | 0.03 | 0.00 | 0.01 | |
| 1A | 135 | -233 | 192 | 216 | 0 | -146 | 420 | 2 | 0.01 | 0.00 | 0.08 | |
| 1B | 135 | -233 | 241 | 216 | 0 | -146 | 403 | 2 | 0.01 | 0.00 | 0.08 | |
| 1C | 135 | -233 | 192 | -211 | 0 | 143 | 420 | 2 | 0.01 | 0.00 | 0.07 | |
| 1D | 135 | -233 | 241 | -211 | 0 | 143 | 403 | 2 | 0.01 | 0.00 | 0.07 | |
| 1E | 135 | 318 | 192 | 216 | 0 | -146 | 420 | 1 | 0.01 | 0.00 | 0.08 | |
| 1F | 135 | 318 | 241 | 216 | 0 | -146 | 403 | 1 | 0.01 | 0.00 | 0.08 | |
| 1G | 135 | 318 | 192 | -211 | 0 | 143 | 420 | 1 | 0.01 | 0.00 | 0.07 | |
| 1H | 135 | 318 | 241 | -211 | 0 | 143 | 403 | 1 | 0.01 | 0.00 | 0.07 | |
| 1I | 135 | -525 | 175 | 73 | 0 | -49 | 431 | 2 | 0.01 | 0.01 | 0.04 | |
| 1J | 135 | -525 | 258 | 73 | 0 | -49 | 391 | 2 | 0.01 | 0.01 | 0.04 | |
| 1K | 135 | -525 | 175 | -69 | 0 | 46 | 431 | 2 | 0.01 | 0.01 | 0.04 | |
| 1L | 135 | -525 | 258 | -69 | 0 | 46 | 391 | 2 | 0.01 | 0.01 | 0.04 | |
| 1M | 135 | 610 | 175 | 73 | 0 | -49 | 431 | 1 | 0.01 | 0.01 | 0.04 | |
| 1N | 135 | 610 | 258 | 73 | 0 | -49 | 391 | 1 | 0.01 | 0.01 | 0.04 | |
| 1O | 135 | 610 | 175 | -69 | 0 | 46 | 431 | 1 | 0.01 | 0.01 | 0.04 | |
| 1P | 135 | 610 | 258 | -69 | 0 | 46 | 391 | 1 | 0.01 | 0.01 | 0.04 | |
| 2 | 135 | -41 | 228 | -1 | 0 | 0 | 412 | 2 | 0.01 | 0.00 | 0.04 | |
| 7 | 135 | -3 | 222 | 2 | 0 | -2 | 411 | 2 | 0.01 | 0.00 | 0.04 | |
| 8 | 135 | 5 | 223 | -1 | 0 | 0 | 412 | 1 | 0.01 | 0.00 | 0.04 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -233 | 146 | -626 | 2 | 0.8457 | 0.9977 | 0.9997 | -- | -- | 0.00 | -- | 0.14 Snell. 'zx'= | 50 |
| 1B | -233 | 146 | -705 | 2 | 0.8457 | 0.9977 | 0.9997 | -- | -- | 0.00 | -- | 0.15 Snell. 'zx'= | 50 |
| 1C | -233 | -143 | -626 | 2 | 0.8457 | 0.9977 | 0.9997 | -- | -- | 0.00 | -- | 0.14 Snell. 'zx'= | 50 |
| 1D | -233 | -143 | -705 | 2 | 0.8457 | 0.9977 | 0.9997 | -- | -- | 0.00 | -- | 0.15 Snell. 'zx'= | 50 |
| 1I | -525 | 49 | -590 | 2 | 0.8457 | 0.9949 | 0.9992 | -- | -- | 0.01 | -- | 0.09 Snell. 'zx'= | 50 |
| 1J | -525 | 49 | -741 | 2 | 0.8457 | 0.9949 | 0.9993 | -- | -- | 0.01 | -- | 0.11 Snell. 'zx'= | 50 |
| 1K | -525 | -46 | -590 | 2 | 0.8457 | 0.9949 | 0.9992 | -- | -- | 0.01 | -- | 0.09 Snell. 'zx'= | 50 |
| 1L | -525 | -46 | -741 | 2 | 0.8457 | 0.9949 | 0.9993 | -- | -- | 0.01 | -- | 0.10 Snell. 'zx'= | 50 |
| 2 | -41 | -0 | -680 | 2 | 0.8457 | 0.9996 | 0.9999 | -- | -- | 0.00 | -- | 0.07 Snell. 'zx'= | 50 |
| 7 | -3 | 2 | -673 | 2 | 0.8457 | 1.0000 | 1.0000 | -- | -- | 0.00 | -- | 0.07 Snell. 'zx'= | 50 |

**ASTA NUM. 66** NI 65 NF 24 Lungh. 170.0 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 3.8162 2.1655 6.2887 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | 706 | 147 | 110 | 0 | 94 | 351 | 1 | 0.00 | 0.01 | 0.05 | |
| 1B | 0 | 706 | 199 | 110 | 0 | 94 | 305 | 1 | 0.01 | 0.01 | 0.05 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1C | 0 | 706 | 147 | -112 | 0 | -95 | 351 | 1 | 0.00 | 0.01 | 0.05 |
| 1D | 0 | 706 | 199 | -112 | 0 | -95 | 305 | 1 | 0.01 | 0.01 | 0.05 |
| 1E | 0 | 760 | 147 | 110 | 0 | 94 | 351 | 1 | 0.00 | 0.01 | 0.05 |
| 1F | 0 | 760 | 199 | 110 | 0 | 94 | 305 | 1 | 0.01 | 0.01 | 0.05 |
| 1G | 0 | 760 | 147 | -112 | 0 | -95 | 351 | 1 | 0.00 | 0.01 | 0.05 |
| 1H | 0 | 760 | 199 | -112 | 0 | -95 | 305 | 1 | 0.01 | 0.01 | 0.05 |
| 1I | 0 | 706 | 125 | 37 | 0 | 32 | 370 | 1 | 0.00 | 0.01 | 0.04 |
| 1J | 0 | 706 | 221 | 37 | 0 | 32 | 287 | 1 | 0.01 | 0.01 | 0.03 |
| 1K | 0 | 706 | 125 | -39 | 0 | -33 | 370 | 1 | 0.00 | 0.01 | 0.04 |
| 1L | 0 | 706 | 221 | -39 | 0 | -33 | 287 | 1 | 0.01 | 0.01 | 0.03 |
| 1M | 0 | 761 | 125 | 37 | 0 | 32 | 370 | 1 | 0.00 | 0.01 | 0.04 |
| 1N | 0 | 761 | 221 | 37 | 0 | 32 | 287 | 1 | 0.01 | 0.01 | 0.03 |
| 1O | 0 | 761 | 125 | -39 | 0 | -33 | 370 | 1 | 0.00 | 0.01 | 0.04 |
| 1P | 0 | 761 | 221 | -39 | 0 | -33 | 287 | 1 | 0.01 | 0.01 | 0.03 |
| 2 | 0 | 739 | 185 | 1 | 0 | 1 | 319 | 1 | 0.01 | 0.01 | 0.03 |
| 7 | 0 | 729 | 179 | -1 | 0 | -1 | 323 | 1 | 0.01 | 0.01 | 0.03 |
| 8 | 0 | 744 | 180 | 1 | 0 | 1 | 324 | 1 | 0.01 | 0.01 | 0.03 |
| | | | | | | | | | | | |
| 1A | 85 | 706 | -585 | 110 | 0 | 0 | 165 | 1 | 0.02 | 0.01 | 0.02 |
| 1B | 85 | 706 | -532 | 110 | 0 | 0 | 164 | 1 | 0.02 | 0.01 | 0.02 |
| 1C | 85 | 706 | -585 | -112 | 0 | 0 | 165 | 1 | 0.02 | 0.01 | 0.02 |
| 1D | 85 | 706 | -532 | -112 | 0 | 0 | 164 | 1 | 0.02 | 0.01 | 0.02 |
| 1E | 85 | 760 | -585 | 110 | 0 | 0 | 165 | 1 | 0.02 | 0.01 | 0.02 |
| 1F | 85 | 760 | -532 | 110 | 0 | 0 | 164 | 1 | 0.02 | 0.01 | 0.02 |
| 1G | 85 | 760 | -585 | -112 | 0 | 0 | 165 | 1 | 0.02 | 0.01 | 0.02 |
| 1H | 85 | 760 | -532 | -112 | 0 | 0 | 164 | 1 | 0.02 | 0.01 | 0.02 |
| 1I | 85 | 706 | -606 | 37 | 0 | 0 | 165 | 1 | 0.02 | 0.01 | 0.02 |
| 1J | 85 | 706 | -510 | 37 | 0 | 0 | 164 | 1 | 0.02 | 0.01 | 0.02 |
| 1K | 85 | 706 | -606 | -39 | 0 | 0 | 165 | 1 | 0.02 | 0.01 | 0.02 |
| 1L | 85 | 706 | -510 | -39 | 0 | 0 | 164 | 1 | 0.02 | 0.01 | 0.02 |
| 1M | 85 | 761 | -606 | 37 | 0 | 0 | 165 | 1 | 0.02 | 0.01 | 0.02 |
| 1N | 85 | 761 | -510 | 37 | 0 | 0 | 164 | 1 | 0.02 | 0.01 | 0.02 |
| 1O | 85 | 761 | -606 | -39 | 0 | 0 | 165 | 1 | 0.02 | 0.01 | 0.02 |
| 1P | 85 | 761 | -510 | -39 | 0 | 0 | 164 | 1 | 0.02 | 0.01 | 0.02 |
| 2 | 85 | 739 | -546 | 1 | 0 | 0 | 165 | 1 | 0.02 | 0.01 | 0.02 |
| 7 | 85 | 729 | -553 | -1 | 0 | 0 | 164 | 1 | 0.02 | 0.01 | 0.02 |
| 8 | 85 | 744 | -552 | 1 | 0 | 0 | 165 | 1 | 0.02 | 0.01 | 0.02 |
| | | | | | | | | | | | |
| 1A | 170 | 706 | -1316 | 110 | 0 | -94 | -644 | 1 | 0.04 | 0.01 | 0.07 |
| 1B | 170 | 706 | -1264 | 110 | 0 | -94 | -598 | 1 | 0.04 | 0.01 | 0.06 |
| 1C | 170 | 706 | -1316 | -112 | 0 | 95 | -644 | 1 | 0.04 | 0.01 | 0.07 |
| 1D | 170 | 706 | -1264 | -112 | 0 | 95 | -598 | 1 | 0.04 | 0.01 | 0.06 |
| 1E | 170 | 760 | -1316 | 110 | 0 | -94 | -644 | 1 | 0.04 | 0.01 | 0.07 |
| 1F | 170 | 760 | -1264 | 110 | 0 | -94 | -598 | 1 | 0.04 | 0.01 | 0.06 |
| 1G | 170 | 760 | -1316 | -112 | 0 | 95 | -644 | 1 | 0.04 | 0.01 | 0.07 |
| 1H | 170 | 760 | -1264 | -112 | 0 | 95 | -598 | 1 | 0.04 | 0.01 | 0.06 |
| 1I | 170 | 706 | -1338 | 37 | 0 | -32 | -662 | 1 | 0.05 | 0.01 | 0.07 |
| 1J | 170 | 706 | -1242 | 37 | 0 | -32 | -581 | 1 | 0.04 | 0.01 | 0.06 |
| 1K | 170 | 706 | -1338 | -39 | 0 | 33 | -662 | 1 | 0.05 | 0.01 | 0.07 |
| 1L | 170 | 706 | -1242 | -39 | 0 | 33 | -581 | 1 | 0.04 | 0.01 | 0.06 |
| 1M | 170 | 761 | -1338 | 37 | 0 | -32 | -662 | 1 | 0.05 | 0.01 | 0.07 |
| 1N | 170 | 761 | -1242 | 37 | 0 | -32 | -581 | 1 | 0.04 | 0.01 | 0.06 |
| 1O | 170 | 761 | -1338 | -39 | 0 | 33 | -662 | 1 | 0.05 | 0.01 | 0.07 |
| 1P | 170 | 761 | -1242 | -39 | 0 | 33 | -581 | 1 | 0.04 | 0.01 | 0.06 |
| 2 | 170 | 739 | -1278 | 1 | 0 | -1 | -611 | 1 | 0.04 | 0.01 | 0.06 |
| 7 | 170 | 729 | -1285 | -1 | 0 | 1 | -617 | 1 | 0.04 | 0.01 | 0.06 |
| 8 | 170 | 744 | -1284 | 1 | 0 | -1 | -615 | 1 | 0.04 | 0.01 | 0.06 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | ---------- | | | | | | | | | | | |
| | kg | kg*m | | | | | | | | | | | |

**ASTA NUM. 67** NI 24 NF 73 Lungh. 182.5 cm SEZ. 2 Ps IPE 300

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.4223 3.8162 2.1655 6.4041 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | ---------- | ---------- | | ---------- | ---------- | ------ | | ---------- | | | |
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | 457 | 1246 | 315 | 0 | 288 | -516 | 1 | 0.03 | 0.00 | 0.09 | |
| 1B | 0 | 457 | 1434 | 315 | 0 | 288 | -745 | 1 | 0.04 | 0.00 | 0.09 | |
| 1C | 0 | 457 | 1246 | -311 | 0 | -284 | -516 | 1 | 0.03 | 0.00 | 0.09 | |
| 1D | 0 | 457 | 1434 | -311 | 0 | -284 | -745 | 1 | 0.04 | 0.00 | 0.09 | |
| 1E | 0 | 1591 | 1246 | 315 | 0 | 288 | -516 | 1 | 0.03 | 0.01 | 0.09 | |
| 1F | 0 | 1591 | 1434 | 315 | 0 | 288 | -745 | 1 | 0.04 | 0.01 | 0.09 | |
| 1G | 0 | 1591 | 1246 | -311 | 0 | -284 | -516 | 1 | 0.03 | 0.01 | 0.09 | |
| 1H | 0 | 1591 | 1434 | -311 | 0 | -284 | -745 | 1 | 0.04 | 0.01 | 0.09 | |
| 1I | 0 | -110 | 1170 | 161 | 0 | 147 | -367 | 2 | 0.03 | 0.00 | 0.04 | |
| 1J | 0 | -110 | 1510 | 161 | 0 | 147 | -895 | 2 | 0.04 | 0.00 | 0.05 | |
| 1K | 0 | -110 | 1170 | -156 | 0 | -142 | -367 | 2 | 0.03 | 0.00 | 0.04 | |
| 1L | 0 | -110 | 1510 | -156 | 0 | -142 | -895 | 2 | 0.04 | 0.00 | 0.05 | |
| 1M | 0 | 2158 | 1170 | 161 | 0 | 147 | -367 | 1 | 0.03 | 0.02 | 0.04 | |
| 1N | 0 | 2158 | 1510 | 161 | 0 | 147 | -895 | 1 | 0.04 | 0.02 | 0.05 | |
| 1O | 0 | 2158 | 1170 | -156 | 0 | -142 | -367 | 1 | 0.03 | 0.02 | 0.04 | |
| 1P | 0 | 2158 | 1510 | -156 | 0 | -142 | -895 | 1 | 0.04 | 0.02 | 0.05 | |
| 2 | 0 | 941 | 1354 | -2 | 0 | -2 | -652 | 1 | 0.03 | 0.01 | 0.04 | |
| 7 | 0 | 948 | 1361 | 2 | 0 | 2 | -657 | 1 | 0.03 | 0.01 | 0.04 | |
| 8 | 0 | 1017 | 1333 | -2 | 0 | -2 | -625 | 1 | 0.03 | 0.01 | 0.04 | |
| | | | | | | | | | | | | |
| 1A | 91 | 457 | 447 | 315 | 0 | 0 | 255 | 1 | 0.01 | 0.00 | 0.02 | |
| 1B | 91 | 457 | 635 | 315 | 0 | 0 | 200 | 1 | 0.02 | 0.00 | 0.01 | |
| 1C | 91 | 457 | 447 | -311 | 0 | 0 | 255 | 1 | 0.01 | 0.00 | 0.02 | |
| 1D | 91 | 457 | 635 | -311 | 0 | 0 | 200 | 1 | 0.02 | 0.00 | 0.01 | |
| 1E | 91 | 1591 | 447 | 315 | 0 | 0 | 255 | 1 | 0.01 | 0.01 | 0.02 | |
| 1F | 91 | 1591 | 635 | 315 | 0 | 0 | 200 | 1 | 0.02 | 0.01 | 0.01 | |
| 1G | 91 | 1591 | 447 | -311 | 0 | 0 | 255 | 1 | 0.01 | 0.01 | 0.02 | |
| 1H | 91 | 1591 | 635 | -311 | 0 | 0 | 200 | 1 | 0.02 | 0.01 | 0.01 | |
| 1I | 91 | -110 | 371 | 161 | 0 | 0 | 335 | 1 | 0.01 | 0.00 | 0.02 | |
| 1J | 91 | -110 | 711 | 161 | 0 | 0 | 120 | 1 | 0.02 | 0.00 | 0.01 | |
| 1K | 91 | -110 | 371 | -156 | 0 | 0 | 335 | 1 | 0.01 | 0.00 | 0.02 | |
| 1L | 91 | -110 | 711 | -156 | 0 | 0 | 120 | 1 | 0.02 | 0.00 | 0.01 | |
| 1M | 91 | 2158 | 371 | 161 | 0 | 0 | 335 | 1 | 0.01 | 0.02 | 0.02 | |
| 1N | 91 | 2158 | 711 | 161 | 0 | 0 | 120 | 1 | 0.02 | 0.02 | 0.01 | |
| 1O | 91 | 2158 | 371 | -156 | 0 | 0 | 335 | 1 | 0.01 | 0.02 | 0.02 | |
| 1P | 91 | 2158 | 711 | -156 | 0 | 0 | 120 | 1 | 0.02 | 0.02 | 0.01 | |
| 2 | 91 | 941 | 555 | -2 | 0 | 0 | 219 | 1 | 0.01 | 0.01 | 0.01 | |
| 7 | 91 | 948 | 562 | 2 | 0 | 0 | 220 | 1 | 0.01 | 0.01 | 0.01 | |
| 8 | 91 | 1017 | 534 | -2 | 0 | 0 | 227 | 1 | 0.01 | 0.01 | 0.01 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 182 | 457 | -352 | 315 | 0 | -288 | 297 | 1 | 0.01 | 0.00 | 0.09 |
| 1B | 182 | 457 | -164 | 315 | 0 | -288 | 416 | 1 | 0.01 | 0.00 | 0.09 |
| 1C | 182 | 457 | -352 | -311 | 0 | 284 | 297 | 1 | 0.01 | 0.00 | 0.09 |
| 1D | 182 | 457 | -164 | -311 | 0 | 284 | 416 | 1 | 0.01 | 0.00 | 0.09 |
| 1E | 182 | 1591 | -352 | 315 | 0 | -288 | 297 | 1 | 0.01 | 0.01 | 0.09 |
| 1F | 182 | 1591 | -164 | 315 | 0 | -288 | 416 | 1 | 0.01 | 0.01 | 0.09 |
| 1G | 182 | 1591 | -352 | -311 | 0 | 284 | 297 | 1 | 0.01 | 0.01 | 0.09 |
| 1H | 182 | 1591 | -164 | -311 | 0 | 284 | 416 | 1 | 0.01 | 0.01 | 0.09 |
| 1I | 182 | -110 | -428 | 161 | 0 | -147 | 309 | 2 | 0.01 | 0.00 | 0.04 |
| 1J | 182 | -110 | -88 | 161 | 0 | -147 | 405 | 2 | 0.00 | 0.00 | 0.04 |
| 1K | 182 | -110 | -428 | -156 | 0 | 142 | 309 | 2 | 0.01 | 0.00 | 0.04 |
| 1L | 182 | -110 | -88 | -156 | 0 | 142 | 405 | 2 | 0.00 | 0.00 | 0.04 |
| 1M | 182 | 2158 | -428 | 161 | 0 | -147 | 309 | 1 | 0.01 | 0.02 | 0.04 |
| 1N | 182 | 2158 | -88 | 161 | 0 | -147 | 405 | 1 | 0.00 | 0.02 | 0.04 |
| 1O | 182 | 2158 | -428 | -156 | 0 | 142 | 309 | 1 | 0.01 | 0.02 | 0.04 |
| 1P | 182 | 2158 | -88 | -156 | 0 | 142 | 405 | 1 | 0.00 | 0.02 | 0.04 |
| 2 | 182 | 941 | -245 | -2 | 0 | 2 | 360 | 1 | 0.01 | 0.01 | 0.02 |
| 7 | 182 | 948 | -238 | 2 | 0 | -2 | 368 | 1 | 0.01 | 0.01 | 0.02 |
| 8 | 182 | 1017 | -265 | -2 | 0 | 2 | 349 | 1 | 0.01 | 0.01 | 0.02 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | -- | -- | | | | | | | | | | |
| | kg | kg*m | | | | | | | | | | | |
| 1I | -110 | 147 | -367 | 2 | 0.8199 | 0.9992 | 1.0000 | -- | -- | 0.00 | -- | 0.07 | Snell. 'zx'= 54 |
| 1J | -110 | 147 | -895 | 2 | 0.8199 | 0.9992 | 0.9999 | -- | -- | 0.00 | -- | 0.10 | Snell. 'zx'= 54 |
| 1K | -110 | -142 | -367 | 2 | 0.8199 | 0.9992 | 1.0000 | -- | -- | 0.00 | -- | 0.07 | Snell. 'zx'= 54 |
| 1L | -110 | -142 | -895 | 2 | 0.8199 | 0.9992 | 0.9999 | -- | -- | 0.00 | -- | 0.10 | Snell. 'zx'= 54 |

**ASTA NUM. 68** NI 73 NF 33 Lungh. 182.5 cm SEZ. 2 Ps IPE 300

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.4223 3.8162 2.1655 6.4041 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | -- | -- | -- | -- | -- | -- | ------ | -- | -- | -- | |
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -1562 | -410 | 295 | 0 | 269 | 716 | 2 | 0.01 | 0.01 | 0.08 | |
| 1B | 0 | -1562 | -193 | 295 | 0 | 269 | 601 | 2 | 0.01 | 0.01 | 0.08 | |
| 1C | 0 | -1562 | -410 | -293 | 0 | -268 | 716 | 2 | 0.01 | 0.01 | 0.08 | |
| 1D | 0 | -1562 | -193 | -293 | 0 | -268 | 601 | 2 | 0.01 | 0.01 | 0.08 | |
| 1E | 0 | -414 | -410 | 295 | 0 | 269 | 716 | 2 | 0.01 | 0.00 | 0.08 | |
| 1F | 0 | -414 | -193 | 295 | 0 | 269 | 601 | 2 | 0.01 | 0.00 | 0.08 | |
| 1G | 0 | -414 | -410 | -293 | 0 | -268 | 716 | 2 | 0.01 | 0.00 | 0.08 | |
| 1H | 0 | -414 | -193 | -293 | 0 | -268 | 601 | 2 | 0.01 | 0.00 | 0.08 | |
| 1I | 0 | -1579 | -508 | 150 | 0 | 137 | 792 | 2 | 0.01 | 0.01 | 0.05 | |
| 1J | 0 | -1579 | -95 | 150 | 0 | 137 | 526 | 2 | 0.00 | 0.01 | 0.04 | |
| 1K | 0 | -1579 | -508 | -149 | 0 | -136 | 792 | 2 | 0.01 | 0.01 | 0.05 | |
| 1L | 0 | -1579 | -95 | -149 | 0 | -136 | 526 | 2 | 0.00 | 0.01 | 0.04 | |
| 1M | 0 | -397 | -508 | 150 | 0 | 137 | 792 | 2 | 0.01 | 0.00 | 0.05 | |
| 1N | 0 | -397 | -95 | 150 | 0 | 137 | 526 | 2 | 0.00 | 0.00 | 0.04 | |
| 1O | 0 | -397 | -508 | -149 | 0 | -136 | 792 | 2 | 0.01 | 0.00 | 0.05 | |
| 1P | 0 | -397 | -95 | -149 | 0 | -136 | 526 | 2 | 0.00 | 0.00 | 0.04 | |
| 2 | 0 | -975 | -288 | -1 | 0 | -1 | 648 | 2 | 0.01 | 0.01 | 0.04 | |
| 7 | 0 | -916 | -281 | 1 | 0 | 1 | 648 | 2 | 0.01 | 0.01 | 0.04 | |
| 8 | 0 | -1047 | -309 | -1 | 0 | -1 | 659 | 2 | 0.01 | 0.01 | 0.04 | |
| 1A | 91 | -1562 | -1209 | 295 | 0 | 0 | -29 | 2 | 0.03 | 0.01 | 0.00 | |
| 1B | 91 | -1562 | -992 | 295 | 0 | 0 | 67 | 2 | 0.03 | 0.01 | 0.00 | |
| 1C | 91 | -1562 | -1209 | -293 | 0 | 0 | -29 | 2 | 0.03 | 0.01 | 0.00 | |
| 1D | 91 | -1562 | -992 | -293 | 0 | 0 | 67 | 2 | 0.03 | 0.01 | 0.00 | |
| 1E | 91 | -414 | -1209 | 295 | 0 | 0 | -29 | 2 | 0.03 | 0.00 | 0.00 | |
| 1F | 91 | -414 | -992 | 295 | 0 | 0 | 67 | 2 | 0.03 | 0.00 | 0.00 | |
| 1G | 91 | -414 | -1209 | -293 | 0 | 0 | -29 | 2 | 0.03 | 0.00 | 0.00 | |
| 1H | 91 | -414 | -992 | -293 | 0 | 0 | 67 | 2 | 0.03 | 0.00 | 0.00 | |
| 1I | 91 | -1579 | -1307 | 150 | 0 | 0 | -39 | 2 | 0.03 | 0.01 | 0.00 | |
| 1J | 91 | -1579 | -894 | 150 | 0 | 0 | 77 | 2 | 0.02 | 0.01 | 0.00 | |
| 1K | 91 | -1579 | -1307 | -149 | 0 | 0 | -39 | 2 | 0.03 | 0.01 | 0.00 | |
| 1L | 91 | -1579 | -894 | -149 | 0 | 0 | 77 | 2 | 0.02 | 0.01 | 0.00 | |
| 1M | 91 | -397 | -1307 | 150 | 0 | 0 | -39 | 2 | 0.03 | 0.00 | 0.00 | |
| 1N | 91 | -397 | -894 | 150 | 0 | 0 | 77 | 2 | 0.02 | 0.00 | 0.00 | |
| 1O | 91 | -397 | -1307 | -149 | 0 | 0 | -39 | 2 | 0.03 | 0.00 | 0.00 | |
| 1P | 91 | -397 | -894 | -149 | 0 | 0 | 77 | 2 | 0.02 | 0.00 | 0.00 | |
| 2 | 91 | -975 | -1087 | -1 | 0 | 0 | 21 | 2 | 0.03 | 0.01 | 0.00 | |
| 7 | 91 | -916 | -1080 | 1 | 0 | 0 | 26 | 2 | 0.03 | 0.01 | 0.00 | |
| 8 | 91 | -1047 | -1108 | -1 | 0 | 0 | 13 | 2 | 0.03 | 0.01 | 0.00 | |
| 1A | 182 | -1562 | -2008 | 295 | 0 | -269 | -1504 | 2 | 0.05 | 0.01 | 0.09 | |
| 1B | 182 | -1562 | -1792 | 295 | 0 | -269 | -1196 | 2 | 0.05 | 0.01 | 0.09 | |
| 1C | 182 | -1562 | -2008 | -293 | 0 | 268 | -1504 | 2 | 0.05 | 0.01 | 0.09 | |
| 1D | 182 | -1562 | -1792 | -293 | 0 | 268 | -1196 | 2 | 0.05 | 0.01 | 0.09 | |
| 1E | 182 | -414 | -2008 | 295 | 0 | -269 | -1504 | 2 | 0.05 | 0.00 | 0.09 | |
| 1F | 182 | -414 | -1792 | 295 | 0 | -269 | -1196 | 2 | 0.05 | 0.00 | 0.09 | |
| 1G | 182 | -414 | -2008 | -293 | 0 | 268 | -1504 | 2 | 0.05 | 0.00 | 0.09 | |
| 1H | 182 | -414 | -1792 | -293 | 0 | 268 | -1196 | 2 | 0.05 | 0.00 | 0.09 | |
| 1I | 182 | -1579 | -2106 | 150 | 0 | -137 | -1598 | 2 | 0.05 | 0.01 | 0.10 | |
| 1J | 182 | -1579 | -1694 | 150 | 0 | -137 | -1102 | 2 | 0.04 | 0.01 | 0.07 | |
| 1K | 182 | -1579 | -2106 | -149 | 0 | 136 | -1598 | 2 | 0.05 | 0.01 | 0.10 | |
| 1L | 182 | -1579 | -1694 | -149 | 0 | 136 | -1102 | 2 | 0.04 | 0.01 | 0.07 | |
| 1M | 182 | -397 | -2106 | 150 | 0 | -137 | -1598 | 2 | 0.05 | 0.00 | 0.10 | |
| 1N | 182 | -397 | -1694 | 150 | 0 | -137 | -1102 | 2 | 0.04 | 0.00 | 0.07 | |
| 1O | 182 | -397 | -2106 | -149 | 0 | 136 | -1598 | 2 | 0.05 | 0.00 | 0.10 | |
| 1P | 182 | -397 | -1694 | -149 | 0 | 136 | -1102 | 2 | 0.04 | 0.00 | 0.07 | |
| 2 | 182 | -975 | -1886 | -1 | 0 | 1 | -1336 | 2 | 0.05 | 0.01 | 0.08 | |
| 7 | 182 | -916 | -1879 | 1 | 0 | -1 | -1324 | 2 | 0.05 | 0.01 | 0.08 | |
| 8 | 182 | -1047 | -1907 | -1 | 0 | 1 | -1362 | 2 | 0.05 | 0.01 | 0.08 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | -- | -- | | | | | | | | | | |
| | kg | kg*m | | | | | | | | | | | |
| 1A | -1562 | 269 | -1504 | 2 | 0.8199 | 0.9886 | 0.9987 | -- | -- | 0.01 | -- | 0.18 | Snell. 'zx'= 54 |
| 1B | -1562 | 269 | -1196 | 2 | 0.8199 | 0.9886 | 0.9987 | -- | -- | 0.01 | -- | 0.16 | Snell. 'zx'= 54 |
| 1C | -1562 | -268 | -1504 | 2 | 0.8199 | 0.9886 | 0.9987 | -- | -- | 0.01 | -- | 0.18 | Snell. 'zx'= 54 |



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| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1D | -1562 | -268 | -1196 | 2 | 0.8199 | 0.9886 | 0.9987 | -- | -- | 0.01 | -- | 0.16 Snell. 'zx'= 54 |
| 1E | -414 | 269 | -1504 | 2 | 0.8199 | 0.9970 | 0.9997 | -- | -- | 0.00 | -- | 0.17 Snell. 'zx'= 54 |
| 1F | -414 | 269 | -1196 | 2 | 0.8199 | 0.9970 | 0.9997 | -- | -- | 0.00 | -- | 0.16 Snell. 'zx'= 54 |
| 1G | -414 | -268 | -1504 | 2 | 0.8199 | 0.9970 | 0.9997 | -- | -- | 0.00 | -- | 0.17 Snell. 'zx'= 54 |
| 1H | -414 | -268 | -1196 | 2 | 0.8199 | 0.9970 | 0.9997 | -- | -- | 0.00 | -- | 0.15 Snell. 'zx'= 54 |
| 1I | -1579 | 137 | -1598 | 2 | 0.8199 | 0.9885 | 0.9986 | -- | -- | 0.01 | -- | 0.15 Snell. 'zx'= 54 |
| 1J | -1579 | 137 | -1102 | 2 | 0.8199 | 0.9885 | 0.9988 | -- | -- | 0.01 | -- | 0.12 Snell. 'zx'= 54 |
| 1K | -1579 | -136 | -1598 | 2 | 0.8199 | 0.9885 | 0.9986 | -- | -- | 0.01 | -- | 0.15 Snell. 'zx'= 54 |
| 1L | -1579 | -136 | -1102 | 2 | 0.8199 | 0.9885 | 0.9988 | -- | -- | 0.01 | -- | 0.12 Snell. 'zx'= 54 |
| 1M | -397 | 137 | -1598 | 2 | 0.8199 | 0.9971 | 0.9996 | -- | -- | 0.00 | -- | 0.14 Snell. 'zx'= 54 |
| 1N | -397 | 137 | -1102 | 2 | 0.8199 | 0.9971 | 0.9997 | -- | -- | 0.00 | -- | 0.11 Snell. 'zx'= 54 |
| 1O | -397 | -136 | -1598 | 2 | 0.8199 | 0.9971 | 0.9996 | -- | -- | 0.00 | -- | 0.14 Snell. 'zx'= 54 |
| 1P | -397 | -136 | -1102 | 2 | 0.8199 | 0.9971 | 0.9997 | -- | -- | 0.00 | -- | 0.11 Snell. 'zx'= 54 |
| 2 | -975 | -1 | -1336 | 2 | 0.8199 | 0.9929 | 0.9992 | -- | -- | 0.01 | -- | 0.09 Snell. 'zx'= 54 |
| 7 | -916 | 1 | -1324 | 2 | 0.8199 | 0.9933 | 0.9992 | -- | -- | 0.01 | -- | 0.09 Snell. 'zx'= 54 |
| 8 | -1047 | -1 | -1362 | 2 | 0.8199 | 0.9924 | 0.9991 | -- | -- | 0.01 | -- | 0.09 Snell. 'zx'= 54 |

**ASTA NUM. 69** NI 33 NF 49 Lungh. 182.5 cm SEZ. 2 Ps IPE 300

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.4223 3.8162 2.1655 6.4041 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -1007 | 1847 | 311 | 0 | 284 | -1175 | 2 | 0.05 | 0.01 | 0.09 | |
| 1B | 0 | -1007 | 2165 | 311 | 0 | 284 | -1593 | 2 | 0.05 | 0.01 | 0.09 | |
| 1C | 0 | -1007 | 1847 | -318 | 0 | -290 | -1175 | 2 | 0.05 | 0.01 | 0.09 | |
| 1D | 0 | -1007 | 2165 | -318 | 0 | -290 | -1593 | 2 | 0.05 | 0.01 | 0.10 | |
| 1E | 0 | 235 | 1847 | 311 | 0 | 284 | -1175 | 1 | 0.05 | 0.00 | 0.09 | |
| 1F | 0 | 235 | 2165 | 311 | 0 | 284 | -1593 | 1 | 0.05 | 0.00 | 0.09 | |
| 1G | 0 | 235 | 1847 | -318 | 0 | -290 | -1175 | 1 | 0.05 | 0.00 | 0.09 | |
| 1H | 0 | 235 | 2165 | -318 | 0 | -290 | -1593 | 1 | 0.05 | 0.00 | 0.10 | |
| 1I | 0 | -866 | 1805 | 196 | 0 | 179 | -1151 | 2 | 0.05 | 0.01 | 0.07 | |
| 1J | 0 | -866 | 2207 | 196 | 0 | 179 | -1617 | 2 | 0.06 | 0.01 | 0.10 | |
| 1K | 0 | -866 | 1805 | -203 | 0 | -185 | -1151 | 2 | 0.05 | 0.01 | 0.07 | |
| 1L | 0 | -866 | 2207 | -203 | 0 | -185 | -1617 | 2 | 0.06 | 0.01 | 0.10 | |
| 1M | 0 | 94 | 1805 | 196 | 0 | 179 | -1151 | 1 | 0.05 | 0.00 | 0.07 | |
| 1N | 0 | 94 | 2207 | 196 | 0 | 179 | -1617 | 1 | 0.06 | 0.00 | 0.10 | |
| 1O | 0 | 94 | 1805 | -203 | 0 | -185 | -1151 | 1 | 0.05 | 0.00 | 0.07 | |
| 1P | 0 | 94 | 2207 | -203 | 0 | -185 | -1617 | 1 | 0.06 | 0.00 | 0.10 | |
| 2 | 0 | -515 | 2011 | 0 | 0 | 0 | -1402 | 2 | 0.05 | 0.00 | 0.08 | |
| 7 | 0 | -442 | 2000 | -3 | 0 | -3 | -1384 | 2 | 0.05 | 0.00 | 0.08 | |
| 8 | 0 | -459 | 2017 | 0 | 0 | 0 | -1402 | 2 | 0.05 | 0.00 | 0.08 | |
| 1A | 91 | -1007 | 1048 | 311 | 0 | 0 | 146 | 2 | 0.03 | 0.01 | 0.01 | |
| 1B | 91 | -1007 | 1366 | 311 | 0 | 0 | 18 | 2 | 0.03 | 0.01 | 0.00 | |
| 1C | 91 | -1007 | 1048 | -318 | 0 | 0 | 146 | 2 | 0.03 | 0.01 | 0.01 | |
| 1D | 91 | -1007 | 1366 | -318 | 0 | 0 | 18 | 2 | 0.03 | 0.01 | 0.00 | |
| 1E | 91 | 235 | 1048 | 311 | 0 | 0 | 146 | 1 | 0.03 | 0.00 | 0.01 | |
| 1F | 91 | 235 | 1366 | 311 | 0 | 0 | 18 | 1 | 0.03 | 0.00 | 0.00 | |
| 1G | 91 | 235 | 1048 | -318 | 0 | 0 | 146 | 1 | 0.03 | 0.00 | 0.01 | |
| 1H | 91 | 235 | 1366 | -318 | 0 | 0 | 18 | 1 | 0.03 | 0.00 | 0.00 | |
| 1I | 91 | -866 | 1006 | 196 | 0 | 0 | 131 | 2 | 0.03 | 0.01 | 0.01 | |
| 1J | 91 | -866 | 1408 | 196 | 0 | 0 | 32 | 2 | 0.04 | 0.01 | 0.00 | |
| 1K | 91 | -866 | 1006 | -203 | 0 | 0 | 131 | 2 | 0.03 | 0.01 | 0.01 | |
| 1L | 91 | -866 | 1408 | -203 | 0 | 0 | 32 | 2 | 0.04 | 0.01 | 0.00 | |
| 1M | 91 | 94 | 1006 | 196 | 0 | 0 | 131 | 1 | 0.03 | 0.00 | 0.01 | |
| 1N | 91 | 94 | 1408 | 196 | 0 | 0 | 32 | 1 | 0.04 | 0.00 | 0.00 | |
| 1O | 91 | 94 | 1006 | -203 | 0 | 0 | 131 | 1 | 0.03 | 0.00 | 0.01 | |
| 1P | 91 | 94 | 1408 | -203 | 0 | 0 | 32 | 1 | 0.04 | 0.00 | 0.00 | |
| 2 | 91 | -515 | 1212 | 0 | 0 | 0 | 68 | 2 | 0.03 | 0.00 | 0.00 | |
| 7 | 91 | -442 | 1201 | -3 | 0 | 0 | 76 | 2 | 0.03 | 0.00 | 0.00 | |
| 8 | 91 | -459 | 1218 | 0 | 0 | 0 | 74 | 2 | 0.03 | 0.00 | 0.00 | |
| 1A | 182 | -1007 | 249 | 311 | 0 | -284 | 737 | 2 | 0.01 | 0.01 | 0.09 | |
| 1B | 182 | -1007 | 567 | 311 | 0 | -284 | 899 | 2 | 0.01 | 0.01 | 0.09 | |
| 1C | 182 | -1007 | 249 | -318 | 0 | 290 | 737 | 2 | 0.01 | 0.01 | 0.09 | |
| 1D | 182 | -1007 | 567 | -318 | 0 | 290 | 899 | 2 | 0.01 | 0.01 | 0.09 | |
| 1E | 182 | 235 | 249 | 311 | 0 | -284 | 737 | 1 | 0.01 | 0.00 | 0.09 | |
| 1F | 182 | 235 | 567 | 311 | 0 | -284 | 899 | 1 | 0.01 | 0.00 | 0.09 | |
| 1G | 182 | 235 | 249 | -318 | 0 | 290 | 737 | 1 | 0.01 | 0.00 | 0.09 | |
| 1H | 182 | 235 | 567 | -318 | 0 | 290 | 899 | 1 | 0.01 | 0.00 | 0.09 | |
| 1I | 182 | -866 | 207 | 196 | 0 | -179 | 684 | 2 | 0.01 | 0.01 | 0.06 | |
| 1J | 182 | -866 | 609 | 196 | 0 | -179 | 952 | 2 | 0.02 | 0.01 | 0.06 | |
| 1K | 182 | -866 | 207 | -203 | 0 | 185 | 684 | 2 | 0.01 | 0.01 | 0.06 | |
| 1L | 182 | -866 | 609 | -203 | 0 | 185 | 952 | 2 | 0.02 | 0.01 | 0.06 | |
| 1M | 182 | 94 | 207 | 196 | 0 | -179 | 684 | 1 | 0.01 | 0.00 | 0.06 | |
| 1N | 182 | 94 | 609 | 196 | 0 | -179 | 952 | 1 | 0.02 | 0.00 | 0.06 | |
| 1O | 182 | 94 | 207 | -203 | 0 | 185 | 684 | 1 | 0.01 | 0.00 | 0.06 | |
| 1P | 182 | 94 | 609 | -203 | 0 | 185 | 952 | 1 | 0.02 | 0.00 | 0.06 | |
| 2 | 182 | -515 | 412 | 0 | 0 | -0 | 809 | 2 | 0.01 | 0.00 | 0.05 | |
| 7 | 182 | -442 | 401 | -3 | 0 | 3 | 807 | 2 | 0.01 | 0.00 | 0.05 | |
| 8 | 182 | -459 | 419 | 0 | 0 | -0 | 821 | 2 | 0.01 | 0.00 | 0.05 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -1007 | 284 | -1175 | 2 | 0.8199 | 0.9927 | 0.9990 | -- | -- | 0.01 | -- | 0.16 Snell. 'zx'= 54 | |
| 1B | -1007 | 284 | -1593 | 2 | 0.8199 | 0.9927 | 0.9990 | -- | -- | 0.01 | -- | 0.19 Snell. 'zx'= 54 | |
| 1C | -1007 | -290 | -1175 | 2 | 0.8199 | 0.9927 | 0.9990 | -- | -- | 0.01 | -- | 0.16 Snell. 'zx'= 54 | |
| 1D | -1007 | -290 | -1593 | 2 | 0.8199 | 0.9927 | 0.9990 | -- | -- | 0.01 | -- | 0.19 Snell. 'zx'= 54 | |
| 1I | -866 | 179 | -1151 | 2 | 0.8199 | 0.9937 | 0.9992 | -- | -- | 0.01 | -- | 0.13 Snell. 'zx'= 54 | |
| 1J | -866 | 179 | -1617 | 2 | 0.8199 | 0.9937 | 0.9991 | -- | -- | 0.01 | -- | 0.16 Snell. 'zx'= 54 | |
| 1K | -866 | -185 | -1151 | 2 | 0.8199 | 0.9937 | 0.9992 | -- | -- | 0.01 | -- | 0.13 Snell. 'zx'= 54 | |
| 1L | -866 | -185 | -1617 | 2 | 0.8199 | 0.9937 | 0.9991 | -- | -- | 0.01 | -- | 0.16 Snell. 'zx'= 54 | |
| 2 | -515 | 0 | -1402 | 2 | 0.8199 | 0.9963 | 0.9995 | -- | -- | 0.00 | -- | 0.09 Snell. 'zx'= 54 | |
| 7 | -442 | -3 | -1384 | 2 | 0.8199 | 0.9968 | 0.9996 | -- | -- | 0.00 | -- | 0.09 Snell. 'zx'= 54 | |
| 8 | -459 | 0 | -1402 | 2 | 0.8199 | 0.9967 | 0.9995 | -- | -- | 0.00 | -- | 0.09 Snell. 'zx'= 54 | |

**ASTA NUM. 70** NI 49 NF 32 Lungh. 182.5 cm SEZ. 2 Ps IPE 300

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.4223 3.8162 2.1655 6.4041 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 0 | 1857 | 228 | 347 | 0 | 316 | 471 | 1 | 0.01 | 0.01 | 0.10 |
| 1B | 0 | 1857 | 501 | 347 | 0 | 316 | 332 | 1 | 0.01 | 0.01 | 0.10 |
| 1C | 0 | 1857 | 228 | -361 | 0 | -329 | 471 | 1 | 0.01 | 0.01 | 0.10 |
| 1D | 0 | 1857 | 501 | -361 | 0 | -329 | 332 | 1 | 0.01 | 0.01 | 0.10 |
| 1E | 0 | 2925 | 228 | 347 | 0 | 316 | 471 | 1 | 0.01 | 0.02 | 0.10 |
| 1F | 0 | 2925 | 501 | 347 | 0 | 316 | 332 | 1 | 0.01 | 0.02 | 0.10 |
| 1G | 0 | 2925 | 228 | -361 | 0 | -329 | 471 | 1 | 0.01 | 0.02 | 0.10 |
| 1H | 0 | 2925 | 501 | -361 | 0 | -329 | 332 | 1 | 0.01 | 0.02 | 0.10 |
| 1I | 0 | 1141 | 161 | 216 | 0 | 197 | 459 | 1 | 0.00 | 0.01 | 0.06 |
| 1J | 0 | 1141 | 568 | 216 | 0 | 197 | 344 | 1 | 0.01 | 0.01 | 0.06 |
| 1K | 0 | 1141 | 161 | -230 | 0 | -210 | 459 | 1 | 0.00 | 0.01 | 0.06 |
| 1L | 0 | 1141 | 568 | -230 | 0 | -210 | 344 | 1 | 0.01 | 0.01 | 0.06 |
| 1M | 0 | 3641 | 161 | 216 | 0 | 197 | 459 | 1 | 0.00 | 0.03 | 0.06 |
| 1N | 0 | 3641 | 568 | 216 | 0 | 197 | 344 | 1 | 0.01 | 0.03 | 0.06 |
| 1O | 0 | 3641 | 161 | -230 | 0 | -210 | 459 | 1 | 0.00 | 0.03 | 0.06 |
| 1P | 0 | 3641 | 568 | -230 | 0 | -210 | 344 | 1 | 0.01 | 0.03 | 0.06 |
| 2 | 0 | 2295 | 369 | 1 | 0 | 1 | 387 | 1 | 0.01 | 0.02 | 0.02 |
| 7 | 0 | 2289 | 358 | -7 | 0 | -6 | 396 | 1 | 0.01 | 0.02 | 0.02 |
| 8 | 0 | 2397 | 375 | 1 | 0 | 1 | 392 | 1 | 0.01 | 0.02 | 0.02 |
| 1A | 91 | 1857 | -571 | 347 | 0 | 0 | 314 | 1 | 0.01 | 0.01 | 0.02 |
| 1B | 91 | 1857 | -298 | 347 | 0 | 0 | 424 | 1 | 0.01 | 0.01 | 0.03 |
| 1C | 91 | 1857 | -571 | -361 | 0 | 0 | 314 | 1 | 0.01 | 0.01 | 0.02 |
| 1D | 91 | 1857 | -298 | -361 | 0 | 0 | 424 | 1 | 0.01 | 0.01 | 0.03 |
| 1E | 91 | 2925 | -571 | 347 | 0 | 0 | 314 | 1 | 0.01 | 0.02 | 0.02 |
| 1F | 91 | 2925 | -298 | 347 | 0 | 0 | 424 | 1 | 0.01 | 0.02 | 0.03 |
| 1G | 91 | 2925 | -571 | -361 | 0 | 0 | 314 | 1 | 0.01 | 0.02 | 0.02 |
| 1H | 91 | 2925 | -298 | -361 | 0 | 0 | 424 | 1 | 0.01 | 0.02 | 0.03 |
| 1I | 91 | 1141 | -638 | 216 | 0 | 0 | 241 | 1 | 0.02 | 0.01 | 0.01 |
| 1J | 91 | 1141 | -231 | 216 | 0 | 0 | 498 | 1 | 0.01 | 0.01 | 0.03 |
| 1K | 91 | 1141 | -638 | -230 | 0 | 0 | 241 | 1 | 0.02 | 0.01 | 0.01 |
| 1L | 91 | 1141 | -231 | -230 | 0 | 0 | 498 | 1 | 0.01 | 0.01 | 0.03 |
| 1M | 91 | 3641 | -638 | 216 | 0 | 0 | 241 | 1 | 0.02 | 0.03 | 0.01 |
| 1N | 91 | 3641 | -231 | 216 | 0 | 0 | 498 | 1 | 0.01 | 0.03 | 0.03 |
| 1O | 91 | 3641 | -638 | -230 | 0 | 0 | 241 | 1 | 0.02 | 0.03 | 0.01 |
| 1P | 91 | 3641 | -231 | -230 | 0 | 0 | 498 | 1 | 0.01 | 0.03 | 0.03 |
| 2 | 91 | 2295 | -430 | 1 | 0 | 0 | 359 | 1 | 0.01 | 0.02 | 0.02 |
| 7 | 91 | 2289 | -441 | -7 | 0 | 0 | 359 | 1 | 0.01 | 0.02 | 0.02 |
| 8 | 91 | 2397 | -424 | 1 | 0 | 0 | 370 | 1 | 0.01 | 0.02 | 0.02 |
| 1A | 182 | 1857 | -1370 | 347 | 0 | -316 | -572 | 1 | 0.03 | 0.01 | 0.10 |
| 1B | 182 | 1857 | -1097 | 347 | 0 | -316 | -213 | 1 | 0.03 | 0.01 | 0.09 |
| 1C | 182 | 1857 | -1370 | -361 | 0 | 329 | -572 | 1 | 0.03 | 0.01 | 0.10 |
| 1D | 182 | 1857 | -1097 | -361 | 0 | 329 | -213 | 1 | 0.03 | 0.01 | 0.10 |
| 1E | 182 | 2925 | -1370 | 347 | 0 | -316 | -572 | 1 | 0.03 | 0.02 | 0.10 |
| 1F | 182 | 2925 | -1097 | 347 | 0 | -316 | -213 | 1 | 0.03 | 0.02 | 0.09 |
| 1G | 182 | 2925 | -1370 | -361 | 0 | 329 | -572 | 1 | 0.03 | 0.02 | 0.10 |
| 1H | 182 | 2925 | -1097 | -361 | 0 | 329 | -213 | 1 | 0.03 | 0.02 | 0.10 |
| 1I | 182 | 1141 | -1437 | 216 | 0 | -197 | -707 | 1 | 0.04 | 0.01 | 0.06 |
| 1J | 182 | 1141 | -1031 | 216 | 0 | -197 | -78 | 1 | 0.03 | 0.01 | 0.06 |
| 1K | 182 | 1141 | -1437 | -230 | 0 | 210 | -707 | 1 | 0.04 | 0.01 | 0.06 |
| 1L | 182 | 1141 | -1031 | -230 | 0 | 210 | -78 | 1 | 0.03 | 0.01 | 0.06 |
| 1M | 182 | 3641 | -1437 | 216 | 0 | -197 | -707 | 1 | 0.04 | 0.03 | 0.06 |
| 1N | 182 | 3641 | -1031 | 216 | 0 | -197 | -78 | 1 | 0.03 | 0.03 | 0.06 |
| 1O | 182 | 3641 | -1437 | -230 | 0 | 210 | -707 | 1 | 0.04 | 0.03 | 0.06 |
| 1P | 182 | 3641 | -1031 | -230 | 0 | 210 | -78 | 1 | 0.03 | 0.03 | 0.06 |
| 2 | 182 | 2295 | -1229 | 1 | 0 | -1 | -398 | 1 | 0.03 | 0.02 | 0.02 |
| 7 | 182 | 2289 | -1240 | -7 | 0 | 6 | -409 | 1 | 0.03 | 0.02 | 0.02 |
| 8 | 182 | 2397 | -1223 | 1 | 0 | -1 | -382 | 1 | 0.03 | 0.02 | 0.02 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |

**ASTA NUM. 71** NI 70 NF 52 Lungh. 182.5 cm SEZ. 2 Ps IPE 300

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.4223 4.0527 2.2997 6.7748 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | 3721 | 3022 | 307 | 0 | 280 | -1775 | 1 | 0.08 | 0.03 | 0.11 | |
| 1B | 0 | 3721 | 3238 | 307 | 0 | 280 | -2009 | 1 | 0.08 | 0.03 | 0.12 | |
| 1C | 0 | 3721 | 3022 | -291 | 0 | -265 | -1775 | 1 | 0.08 | 0.03 | 0.11 | |
| 1D | 0 | 3721 | 3238 | -291 | 0 | -265 | -2009 | 1 | 0.08 | 0.03 | 0.12 | |
| 1E | 0 | 4975 | 3022 | 307 | 0 | 280 | -1775 | 1 | 0.08 | 0.03 | 0.11 | |
| 1F | 0 | 4975 | 3238 | 307 | 0 | 280 | -2009 | 1 | 0.08 | 0.03 | 0.12 | |
| 1G | 0 | 4975 | 3022 | -291 | 0 | -265 | -1775 | 1 | 0.08 | 0.03 | 0.11 | |
| 1H | 0 | 4975 | 3238 | -291 | 0 | -265 | -2009 | 1 | 0.08 | 0.03 | 0.12 | |
| 1I | 0 | 2887 | 2984 | 213 | 0 | 194 | -1636 | 1 | 0.08 | 0.02 | 0.10 | |
| 1J | 0 | 2887 | 3276 | 213 | 0 | 194 | -2148 | 1 | 0.08 | 0.02 | 0.13 | |
| 1K | 0 | 2887 | 2984 | -197 | 0 | -179 | -1636 | 1 | 0.08 | 0.02 | 0.10 | |
| 1L | 0 | 2887 | 3276 | -197 | 0 | -179 | -2148 | 1 | 0.08 | 0.02 | 0.13 | |
| 1M | 0 | 5809 | 2984 | 213 | 0 | 194 | -1636 | 1 | 0.08 | 0.04 | 0.10 | |
| 1N | 0 | 5809 | 3276 | 213 | 0 | 194 | -2148 | 1 | 0.08 | 0.04 | 0.13 | |
| 1O | 0 | 5809 | 2984 | -197 | 0 | -179 | -1636 | 1 | 0.08 | 0.04 | 0.10 | |
| 1P | 0 | 5809 | 3276 | -197 | 0 | -179 | -2148 | 1 | 0.08 | 0.04 | 0.13 | |
| 2 | 0 | 4703 | 3114 | 3 | 0 | 3 | -1840 | 1 | 0.08 | 0.03 | 0.11 | |
| 7 | 0 | 4695 | 3116 | 8 | 0 | 7 | -1843 | 1 | 0.08 | 0.03 | 0.11 | |
| 8 | 0 | 4356 | 3128 | 3 | 0 | 3 | -1889 | 1 | 0.08 | 0.03 | 0.11 | |
| 1A | 91 | 3721 | 2176 | 307 | 0 | 0 | 581 | 1 | 0.06 | 0.03 | 0.03 | |
| 1B | 91 | 3721 | 2393 | 307 | 0 | 0 | 577 | 1 | 0.06 | 0.03 | 0.03 | |
| 1C | 91 | 3721 | 2176 | -291 | 0 | 0 | 581 | 1 | 0.06 | 0.03 | 0.03 | |
| 1D | 91 | 3721 | 2393 | -291 | 0 | 0 | 577 | 1 | 0.06 | 0.03 | 0.03 | |
| 1E | 91 | 4975 | 2176 | 307 | 0 | 0 | 581 | 1 | 0.06 | 0.03 | 0.03 | |
| 1F | 91 | 4975 | 2393 | 307 | 0 | 0 | 577 | 1 | 0.06 | 0.03 | 0.03 | |
| 1G | 91 | 4975 | 2176 | -291 | 0 | 0 | 581 | 1 | 0.06 | 0.03 | 0.03 | |
| 1H | 91 | 4975 | 2393 | -291 | 0 | 0 | 577 | 1 | 0.06 | 0.03 | 0.03 | |
| 1I | 91 | 2887 | 2139 | 213 | 0 | 0 | 646 | 1 | 0.05 | 0.02 | 0.04 | |
| 1J | 91 | 2887 | 2430 | 213 | 0 | 0 | 512 | 1 | 0.06 | 0.02 | 0.03 | |
| 1K | 91 | 2887 | 2139 | -197 | 0 | 0 | 646 | 1 | 0.05 | 0.02 | 0.04 | |
| 1L | 91 | 2887 | 2430 | -197 | 0 | 0 | 512 | 1 | 0.06 | 0.02 | 0.03 | |
| 1M | 91 | 5809 | 2139 | 213 | 0 | 0 | 646 | 1 | 0.05 | 0.04 | 0.04 | |
| 1N | 91 | 5809 | 2430 | 213 | 0 | 0 | 512 | 1 | 0.06 | 0.04 | 0.03 | |
| 1O | 91 | 5809 | 2139 | -197 | 0 | 0 | 646 | 1 | 0.05 | 0.04 | 0.04 | |



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| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1P | 91 | 5809 | 2430 | -197 | 0 | 0 | 512 | 1 | 0.06 | 0.04 | 0.03 | |
| 2 | 91 | 4703 | 2268 | 3 | 0 | 0 | 616 | 1 | 0.06 | 0.03 | 0.04 | |
| 7 | 91 | 4695 | 2270 | 8 | 0 | 0 | 615 | 1 | 0.06 | 0.03 | 0.04 | |
| 8 | 91 | 4356 | 2282 | 3 | 0 | 0 | 579 | 1 | 0.06 | 0.03 | 0.03 | |
| 1A | 182 | 3721 | 1331 | 307 | 0 | -280 | 2164 | 1 | 0.03 | 0.03 | 0.13 | |
| 1B | 182 | 3721 | 1547 | 307 | 0 | -280 | 2392 | 1 | 0.04 | 0.03 | 0.14 | |
| 1C | 182 | 3721 | 1331 | -291 | 0 | 265 | 2164 | 1 | 0.03 | 0.03 | 0.13 | |
| 1D | 182 | 3721 | 1547 | -291 | 0 | 265 | 2392 | 1 | 0.04 | 0.03 | 0.14 | |
| 1E | 182 | 4975 | 1331 | 307 | 0 | -280 | 2164 | 1 | 0.03 | 0.03 | 0.13 | |
| 1F | 182 | 4975 | 1547 | 307 | 0 | -280 | 2392 | 1 | 0.04 | 0.03 | 0.14 | |
| 1G | 182 | 4975 | 1331 | -291 | 0 | 265 | 2164 | 1 | 0.03 | 0.03 | 0.13 | |
| 1H | 182 | 4975 | 1547 | -291 | 0 | 265 | 2392 | 1 | 0.04 | 0.03 | 0.14 | |
| 1I | 182 | 2887 | 1293 | 213 | 0 | -194 | 2156 | 1 | 0.03 | 0.02 | 0.13 | |
| 1J | 182 | 2887 | 1585 | 213 | 0 | -194 | 2400 | 1 | 0.04 | 0.02 | 0.14 | |
| 1K | 182 | 2887 | 1293 | -197 | 0 | 179 | 2156 | 1 | 0.03 | 0.02 | 0.13 | |
| 1L | 182 | 2887 | 1585 | -197 | 0 | 179 | 2400 | 1 | 0.04 | 0.02 | 0.14 | |
| 1M | 182 | 5809 | 1293 | 213 | 0 | -194 | 2156 | 1 | 0.03 | 0.04 | 0.13 | |
| 1N | 182 | 5809 | 1585 | 213 | 0 | -194 | 2400 | 1 | 0.04 | 0.04 | 0.14 | |
| 1O | 182 | 5809 | 1293 | -197 | 0 | 179 | 2156 | 1 | 0.03 | 0.04 | 0.13 | |
| 1P | 182 | 5809 | 1585 | -197 | 0 | 179 | 2400 | 1 | 0.04 | 0.04 | 0.14 | |
| 2 | 182 | 4703 | 1423 | 3 | 0 | -3 | 2300 | 1 | 0.04 | 0.03 | 0.14 | |
| 7 | 182 | 4695 | 1425 | 8 | 0 | -7 | 2301 | 1 | 0.04 | 0.03 | 0.14 | |
| 8 | 182 | 4356 | 1437 | 3 | 0 | -3 | 2276 | 1 | 0.04 | 0.03 | 0.14 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | -- | | | | | | | | | | | |
| | kg | kg*m | | | | | | | | | | | |

**ASTA NUM. 72** NI 52 NF 50 Lungh. 182.5 cm SEZ. 2 Ps IPE 300

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.4223 4.0527 2.2997 6.7748 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | 13885 | 1344 | 306 | 0 | 279 | 835 | 1 | 0.03 | 0.10 | 0.09 | |
| 1B | 0 | 13885 | 1442 | 306 | 0 | 279 | 662 | 1 | 0.04 | 0.10 | 0.09 | |
| 1C | 0 | 13885 | 1344 | -297 | 0 | -271 | 835 | 1 | 0.03 | 0.10 | 0.08 | |
| 1D | 0 | 13885 | 1442 | -297 | 0 | -271 | 662 | 1 | 0.04 | 0.10 | 0.08 | |
| 1E | 0 | 15195 | 1344 | 306 | 0 | 279 | 835 | 1 | 0.03 | 0.11 | 0.09 | |
| 1F | 0 | 15195 | 1442 | 306 | 0 | 279 | 662 | 1 | 0.04 | 0.11 | 0.09 | |
| 1G | 0 | 15195 | 1344 | -297 | 0 | -271 | 835 | 1 | 0.03 | 0.11 | 0.08 | |
| 1H | 0 | 15195 | 1442 | -297 | 0 | -271 | 662 | 1 | 0.04 | 0.11 | 0.08 | |
| 1I | 0 | 13792 | 1284 | 197 | 0 | 180 | 896 | 1 | 0.03 | 0.10 | 0.06 | |
| 1J | 0 | 13792 | 1502 | 197 | 0 | 180 | 602 | 1 | 0.04 | 0.10 | 0.06 | |
| 1K | 0 | 13792 | 1284 | -188 | 0 | -171 | 896 | 1 | 0.03 | 0.10 | 0.05 | |
| 1L | 0 | 13792 | 1502 | -188 | 0 | -171 | 602 | 1 | 0.04 | 0.10 | 0.05 | |
| 1M | 0 | 15288 | 1284 | 197 | 0 | 180 | 896 | 1 | 0.03 | 0.11 | 0.06 | |
| 1N | 0 | 15288 | 1502 | 197 | 0 | 180 | 602 | 1 | 0.04 | 0.11 | 0.06 | |
| 1O | 0 | 15288 | 1284 | -188 | 0 | -171 | 896 | 1 | 0.03 | 0.11 | 0.05 | |
| 1P | 0 | 15288 | 1502 | -188 | 0 | -171 | 602 | 1 | 0.04 | 0.11 | 0.05 | |
| 2 | 0 | 14780 | 1377 | 1 | 0 | 1 | 788 | 1 | 0.03 | 0.10 | 0.05 | |
| 7 | 0 | 14790 | 1379 | 4 | 0 | 4 | 787 | 1 | 0.03 | 0.10 | 0.05 | |
| 8 | 0 | 14530 | 1391 | 1 | 0 | 1 | 750 | 1 | 0.04 | 0.10 | 0.04 | |
| 1A | 91 | 13885 | 499 | 306 | 0 | 0 | 1636 | 1 | 0.01 | 0.10 | 0.10 | |
| 1B | 91 | 13885 | 596 | 306 | 0 | 0 | 1632 | 1 | 0.02 | 0.10 | 0.10 | |
| 1C | 91 | 13885 | 499 | -297 | 0 | 0 | 1636 | 1 | 0.01 | 0.10 | 0.10 | |
| 1D | 91 | 13885 | 596 | -297 | 0 | 0 | 1632 | 1 | 0.02 | 0.10 | 0.10 | |
| 1E | 91 | 15195 | 499 | 306 | 0 | 0 | 1636 | 1 | 0.01 | 0.11 | 0.10 | |
| 1F | 91 | 15195 | 596 | 306 | 0 | 0 | 1632 | 1 | 0.02 | 0.11 | 0.10 | |
| 1G | 91 | 15195 | 499 | -297 | 0 | 0 | 1636 | 1 | 0.01 | 0.11 | 0.10 | |
| 1H | 91 | 15195 | 596 | -297 | 0 | 0 | 1632 | 1 | 0.02 | 0.11 | 0.10 | |
| 1I | 91 | 13792 | 438 | 197 | 0 | 0 | 1657 | 1 | 0.01 | 0.10 | 0.10 | |
| 1J | 91 | 13792 | 656 | 197 | 0 | 0 | 1611 | 1 | 0.02 | 0.10 | 0.10 | |
| 1K | 91 | 13792 | 438 | -188 | 0 | 0 | 1657 | 1 | 0.01 | 0.10 | 0.10 | |
| 1L | 91 | 13792 | 656 | -188 | 0 | 0 | 1611 | 1 | 0.02 | 0.10 | 0.10 | |
| 1M | 91 | 15288 | 438 | 197 | 0 | 0 | 1657 | 1 | 0.01 | 0.11 | 0.10 | |
| 1N | 91 | 15288 | 656 | 197 | 0 | 0 | 1611 | 1 | 0.02 | 0.11 | 0.10 | |
| 1O | 91 | 15288 | 438 | -188 | 0 | 0 | 1657 | 1 | 0.01 | 0.11 | 0.10 | |
| 1P | 91 | 15288 | 656 | -188 | 0 | 0 | 1611 | 1 | 0.02 | 0.11 | 0.10 | |
| 2 | 91 | 14780 | 531 | 1 | 0 | 0 | 1659 | 1 | 0.01 | 0.10 | 0.10 | |
| 7 | 91 | 14790 | 533 | 4 | 0 | 0 | 1660 | 1 | 0.01 | 0.10 | 0.10 | |
| 8 | 91 | 14530 | 545 | 1 | 0 | 0 | 1633 | 1 | 0.01 | 0.10 | 0.10 | |
| 1A | 182 | 13885 | -347 | 306 | 0 | -279 | 1666 | 1 | 0.01 | 0.10 | 0.10 | |
| 1B | 182 | 13885 | -250 | 306 | 0 | -279 | 1830 | 1 | 0.01 | 0.10 | 0.11 | |
| 1C | 182 | 13885 | -347 | -297 | 0 | 271 | 1666 | 1 | 0.01 | 0.10 | 0.10 | |
| 1D | 182 | 13885 | -250 | -297 | 0 | 271 | 1830 | 1 | 0.01 | 0.10 | 0.11 | |
| 1E | 182 | 15195 | -347 | 306 | 0 | -279 | 1666 | 1 | 0.01 | 0.11 | 0.10 | |
| 1F | 182 | 15195 | -250 | 306 | 0 | -279 | 1830 | 1 | 0.01 | 0.11 | 0.11 | |
| 1G | 182 | 15195 | -347 | -297 | 0 | 271 | 1666 | 1 | 0.01 | 0.11 | 0.10 | |
| 1H | 182 | 15195 | -250 | -297 | 0 | 271 | 1830 | 1 | 0.01 | 0.11 | 0.11 | |
| 1I | 182 | 13792 | -407 | 197 | 0 | -180 | 1647 | 1 | 0.01 | 0.10 | 0.10 | |
| 1J | 182 | 13792 | -189 | 197 | 0 | -180 | 1849 | 1 | 0.00 | 0.10 | 0.11 | |
| 1K | 182 | 13792 | -407 | -188 | 0 | 171 | 1647 | 1 | 0.01 | 0.10 | 0.10 | |
| 1L | 182 | 13792 | -189 | -188 | 0 | 171 | 1849 | 1 | 0.00 | 0.10 | 0.11 | |
| 1M | 182 | 15288 | -407 | 197 | 0 | -180 | 1647 | 1 | 0.01 | 0.11 | 0.10 | |
| 1N | 182 | 15288 | -189 | 197 | 0 | -180 | 1849 | 1 | 0.00 | 0.11 | 0.11 | |
| 1O | 182 | 15288 | -407 | -188 | 0 | 171 | 1647 | 1 | 0.01 | 0.11 | 0.10 | |
| 1P | 182 | 15288 | -189 | -188 | 0 | 171 | 1849 | 1 | 0.00 | 0.11 | 0.11 | |
| 2 | 182 | 14780 | -314 | 1 | 0 | -1 | 1758 | 1 | 0.01 | 0.10 | 0.10 | |
| 7 | 182 | 14790 | -312 | 4 | 0 | -4 | 1761 | 1 | 0.01 | 0.10 | 0.10 | |
| 8 | 182 | 14530 | -300 | 1 | 0 | -1 | 1745 | 1 | 0.01 | 0.10 | 0.10 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | -- | | | | | | | | | | | |
| | kg | kg*m | | | | | | | | | | | |

**ASTA NUM. 73** NI 50 NF 63 Lungh. 182.5 cm SEZ. 2 Ps IPE 300



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.4223 4.0527 2.2997 6.7748 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | 11705 | -425 | 256 | 0 | 234 | 2197 | 1 | 0.01 | 0.08 | 0.13 | |
| 1B | 0 | 11705 | -263 | 256 | 0 | 234 | 1991 | 1 | 0.01 | 0.08 | 0.12 | |
| 1C | 0 | 11705 | -425 | -264 | 0 | -241 | 2197 | 1 | 0.01 | 0.08 | 0.13 | |
| 1D | 0 | 11705 | -263 | -264 | 0 | -241 | 1991 | 1 | 0.01 | 0.08 | 0.12 | |
| 1E | 0 | 12755 | -425 | 256 | 0 | 234 | 2197 | 1 | 0.01 | 0.09 | 0.13 | |
| 1F | 0 | 12755 | -263 | 256 | 0 | 234 | 1991 | 1 | 0.01 | 0.09 | 0.12 | |
| 1G | 0 | 12755 | -425 | -264 | 0 | -241 | 2197 | 1 | 0.01 | 0.09 | 0.13 | |
| 1H | 0 | 12755 | -263 | -264 | 0 | -241 | 1991 | 1 | 0.01 | 0.09 | 0.12 | |
| 1I | 0 | 11463 | -446 | 129 | 0 | 118 | 2195 | 1 | 0.01 | 0.08 | 0.13 | |
| 1J | 0 | 11463 | -242 | 129 | 0 | 118 | 1993 | 1 | 0.01 | 0.08 | 0.12 | |
| 1K | 0 | 11463 | -446 | -137 | 0 | -125 | 2195 | 1 | 0.01 | 0.08 | 0.13 | |
| 1L | 0 | 11463 | -242 | -137 | 0 | -125 | 1993 | 1 | 0.01 | 0.08 | 0.12 | |
| 1M | 0 | 12997 | -446 | 129 | 0 | 118 | 2195 | 1 | 0.01 | 0.09 | 0.13 | |
| 1N | 0 | 12997 | -242 | 129 | 0 | 118 | 1993 | 1 | 0.01 | 0.09 | 0.12 | |
| 1O | 0 | 12997 | -446 | -137 | 0 | -125 | 2195 | 1 | 0.01 | 0.09 | 0.13 | |
| 1P | 0 | 12997 | -242 | -137 | 0 | -125 | 1993 | 1 | 0.01 | 0.09 | 0.12 | |
| 2 | 0 | 12350 | -360 | 1 | 0 | 0 | 2122 | 1 | 0.01 | 0.09 | 0.13 | |
| 7 | 0 | 12370 | -358 | -4 | 0 | -4 | 2122 | 1 | 0.01 | 0.09 | 0.13 | |
| 8 | 0 | 12200 | -346 | 1 | 0 | 0 | 2094 | 1 | 0.01 | 0.08 | 0.12 | |
| 1A | 91 | 11705 | -1271 | 256 | 0 | 0 | 1411 | 1 | 0.03 | 0.08 | 0.08 | |
| 1B | 91 | 11705 | -1109 | 256 | 0 | 0 | 1377 | 1 | 0.03 | 0.08 | 0.08 | |
| 1C | 91 | 11705 | -1271 | -264 | 0 | 0 | 1411 | 1 | 0.03 | 0.08 | 0.08 | |
| 1D | 91 | 11705 | -1109 | -264 | 0 | 0 | 1377 | 1 | 0.03 | 0.08 | 0.08 | |
| 1E | 91 | 12755 | -1271 | 256 | 0 | 0 | 1411 | 1 | 0.03 | 0.09 | 0.08 | |
| 1F | 91 | 12755 | -1109 | 256 | 0 | 0 | 1377 | 1 | 0.03 | 0.09 | 0.08 | |
| 1G | 91 | 12755 | -1271 | -264 | 0 | 0 | 1411 | 1 | 0.03 | 0.09 | 0.08 | |
| 1H | 91 | 12755 | -1109 | -264 | 0 | 0 | 1377 | 1 | 0.03 | 0.09 | 0.08 | |
| 1I | 91 | 11463 | -1291 | 129 | 0 | 0 | 1378 | 1 | 0.03 | 0.08 | 0.08 | |
| 1J | 91 | 11463 | -1088 | 129 | 0 | 0 | 1411 | 1 | 0.03 | 0.08 | 0.08 | |
| 1K | 91 | 11463 | -1291 | -137 | 0 | 0 | 1378 | 1 | 0.03 | 0.08 | 0.08 | |
| 1L | 91 | 11463 | -1088 | -137 | 0 | 0 | 1411 | 1 | 0.03 | 0.08 | 0.08 | |
| 1M | 91 | 12997 | -1291 | 129 | 0 | 0 | 1378 | 1 | 0.03 | 0.09 | 0.08 | |
| 1N | 91 | 12997 | -1088 | 129 | 0 | 0 | 1411 | 1 | 0.03 | 0.09 | 0.08 | |
| 1O | 91 | 12997 | -1291 | -137 | 0 | 0 | 1378 | 1 | 0.03 | 0.09 | 0.08 | |
| 1P | 91 | 12997 | -1088 | -137 | 0 | 0 | 1411 | 1 | 0.03 | 0.09 | 0.08 | |
| 2 | 91 | 12350 | -1206 | 1 | 0 | 0 | 1407 | 1 | 0.03 | 0.09 | 0.08 | |
| 7 | 91 | 12370 | -1204 | -4 | 0 | 0 | 1410 | 1 | 0.03 | 0.09 | 0.08 | |
| 8 | 91 | 12200 | -1192 | 1 | 0 | 0 | 1392 | 1 | 0.03 | 0.08 | 0.08 | |
| 1A | 182 | 11705 | -2116 | 256 | 0 | -234 | -146 | 1 | 0.05 | 0.08 | 0.07 | |
| 1B | 182 | 11705 | -1954 | 256 | 0 | -234 | -8 | 1 | 0.05 | 0.08 | 0.07 | |
| 1C | 182 | 11705 | -2116 | -264 | 0 | 241 | -146 | 1 | 0.05 | 0.08 | 0.07 | |
| 1D | 182 | 11705 | -1954 | -264 | 0 | 241 | -8 | 1 | 0.05 | 0.08 | 0.07 | |
| 1E | 182 | 12755 | -2116 | 256 | 0 | -234 | -146 | 1 | 0.05 | 0.09 | 0.07 | |
| 1F | 182 | 12755 | -1954 | 256 | 0 | -234 | -8 | 1 | 0.05 | 0.09 | 0.07 | |
| 1G | 182 | 12755 | -2116 | -264 | 0 | 241 | -146 | 1 | 0.05 | 0.09 | 0.07 | |
| 1H | 182 | 12755 | -1954 | -264 | 0 | 241 | -8 | 1 | 0.05 | 0.09 | 0.07 | |
| 1I | 182 | 11463 | -2137 | 129 | 0 | -118 | -212 | 1 | 0.05 | 0.08 | 0.04 | |
| 1J | 182 | 11463 | -1933 | 129 | 0 | -118 | 58 | 1 | 0.05 | 0.08 | 0.04 | |
| 1K | 182 | 11463 | -2137 | -137 | 0 | 125 | -212 | 1 | 0.05 | 0.08 | 0.04 | |
| 1L | 182 | 11463 | -1933 | -137 | 0 | 125 | 58 | 1 | 0.05 | 0.08 | 0.04 | |
| 1M | 182 | 12997 | -2137 | 129 | 0 | -118 | -212 | 1 | 0.05 | 0.09 | 0.04 | |
| 1N | 182 | 12997 | -1933 | 129 | 0 | -118 | 58 | 1 | 0.05 | 0.09 | 0.04 | |
| 1O | 182 | 12997 | -2137 | -137 | 0 | 125 | -212 | 1 | 0.05 | 0.09 | 0.04 | |
| 1P | 182 | 12997 | -1933 | -137 | 0 | 125 | 58 | 1 | 0.05 | 0.09 | 0.04 | |
| 2 | 182 | 12350 | -2052 | 1 | 0 | -0 | -79 | 1 | 0.05 | 0.09 | 0.00 | |
| 7 | 182 | 12370 | -2049 | -4 | 0 | 4 | -74 | 1 | 0.05 | 0.09 | 0.00 | |
| 8 | 182 | 12200 | -2038 | 1 | 0 | -0 | -82 | 1 | 0.05 | 0.08 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |

**ASTA NUM. 74** NI 63 NF 58 Lungh. 182.5 cm SEZ. 2 Ps IPE 300

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.4223 4.0527 2.2997 6.7748 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -3246 | -2197 | 305 | 0 | 278 | 2243 | 2 | 0.06 | 0.02 | 0.13 | |
| 1B | 0 | -3246 | -1965 | 305 | 0 | 278 | 2049 | 2 | 0.05 | 0.02 | 0.12 | |
| 1C | 0 | -3246 | -2197 | -323 | 0 | -295 | 2243 | 2 | 0.06 | 0.02 | 0.13 | |
| 1D | 0 | -3246 | -1965 | -323 | 0 | -295 | 2049 | 2 | 0.05 | 0.02 | 0.12 | |
| 1E | 0 | -1932 | -2197 | 305 | 0 | 278 | 2243 | 2 | 0.06 | 0.01 | 0.13 | |
| 1F | 0 | -1932 | -1965 | 305 | 0 | 278 | 2049 | 2 | 0.05 | 0.01 | 0.12 | |
| 1G | 0 | -1932 | -2197 | -323 | 0 | -295 | 2243 | 2 | 0.06 | 0.01 | 0.13 | |
| 1H | 0 | -1932 | -1965 | -323 | 0 | -295 | 2049 | 2 | 0.05 | 0.01 | 0.12 | |
| 1I | 0 | -3880 | -2195 | 151 | 0 | 138 | 2284 | 2 | 0.06 | 0.03 | 0.14 | |
| 1J | 0 | -3880 | -1967 | 151 | 0 | 138 | 2008 | 2 | 0.05 | 0.03 | 0.12 | |
| 1K | 0 | -3880 | -2195 | -170 | 0 | -155 | 2284 | 2 | 0.06 | 0.03 | 0.14 | |
| 1L | 0 | -3880 | -1967 | -170 | 0 | -155 | 2008 | 2 | 0.05 | 0.03 | 0.12 | |
| 1M | 0 | -1298 | -2195 | 151 | 0 | 138 | 2284 | 2 | 0.06 | 0.01 | 0.14 | |
| 1N | 0 | -1298 | -1967 | 151 | 0 | 138 | 2008 | 2 | 0.05 | 0.01 | 0.12 | |
| 1O | 0 | -1298 | -2195 | -170 | 0 | -155 | 2284 | 2 | 0.06 | 0.01 | 0.14 | |
| 1P | 0 | -1298 | -1967 | -170 | 0 | -155 | 2008 | 2 | 0.05 | 0.01 | 0.12 | |
| 2 | 0 | -2583 | -2098 | 1 | 0 | 1 | 2161 | 2 | 0.05 | 0.02 | 0.13 | |
| 7 | 0 | -2543 | -2095 | -9 | 0 | -8 | 2163 | 2 | 0.05 | 0.02 | 0.13 | |
| 8 | 0 | -2629 | -2084 | 1 | 0 | 1 | 2144 | 2 | 0.05 | 0.02 | 0.13 | |
| 1A | 91 | -3246 | -3043 | 305 | 0 | 0 | -170 | 2 | 0.08 | 0.02 | 0.01 | |
| 1B | 91 | -3246 | -2811 | 305 | 0 | 0 | -108 | 2 | 0.07 | 0.02 | 0.01 | |
| 1C | 91 | -3246 | -3043 | -323 | 0 | -0 | -170 | 2 | 0.08 | 0.02 | 0.01 | |
| 1D | 91 | -3246 | -2811 | -323 | 0 | -0 | -108 | 2 | 0.07 | 0.02 | 0.01 | |
| 1E | 91 | -1932 | -3043 | 305 | 0 | 0 | -170 | 2 | 0.08 | 0.01 | 0.01 | |
| 1F | 91 | -1932 | -2811 | 305 | 0 | 0 | -108 | 2 | 0.07 | 0.01 | 0.01 | |
| 1G | 91 | -1932 | -3043 | -323 | 0 | -0 | -170 | 2 | 0.08 | 0.01 | 0.01 | |
| 1H | 91 | -1932 | -2811 | -323 | 0 | -0 | -108 | 2 | 0.07 | 0.01 | 0.01 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1I | 91 | -3880 | -3041 | 151 | 0 | 0 | -171 | 2 | 0.08 | 0.03 | 0.01 |
| 1J | 91 | -3880 | -2813 | 151 | 0 | 0 | -107 | 2 | 0.07 | 0.03 | 0.01 |
| 1K | 91 | -3880 | -3041 | -170 | 0 | 0 | -171 | 2 | 0.08 | 0.03 | 0.01 |
| 1L | 91 | -3880 | -2813 | -170 | 0 | 0 | -107 | 2 | 0.07 | 0.03 | 0.01 |
| 1M | 91 | -1298 | -3041 | 151 | 0 | 0 | -171 | 2 | 0.08 | 0.01 | 0.01 |
| 1N | 91 | -1298 | -2813 | 151 | 0 | 0 | -107 | 2 | 0.07 | 0.01 | 0.01 |
| 1O | 91 | -1298 | -3041 | -170 | 0 | 0 | -171 | 2 | 0.08 | 0.01 | 0.01 |
| 1P | 91 | -1298 | -2813 | -170 | 0 | 0 | -107 | 2 | 0.07 | 0.01 | 0.01 |
| 2 | 91 | -2583 | -2944 | 1 | 0 | 0 | -139 | 2 | 0.07 | 0.02 | 0.01 |
| 7 | 91 | -2543 | -2941 | -9 | 0 | 0 | -135 | 2 | 0.07 | 0.02 | 0.01 |
| 8 | 91 | -2629 | -2930 | 1 | 0 | 0 | -143 | 2 | 0.07 | 0.02 | 0.01 |
| 1A | 182 | -3246 | -3889 | 305 | 0 | -278 | -3354 | 2 | 0.10 | 0.02 | 0.20 |
| 1B | 182 | -3246 | -3657 | 305 | 0 | -278 | -3038 | 2 | 0.09 | 0.02 | 0.18 |
| 1C | 182 | -3246 | -3889 | -323 | 0 | 295 | -3354 | 2 | 0.10 | 0.02 | 0.20 |
| 1D | 182 | -3246 | -3657 | -323 | 0 | 295 | -3038 | 2 | 0.09 | 0.02 | 0.18 |
| 1E | 182 | -1932 | -3889 | 305 | 0 | -278 | -3354 | 2 | 0.10 | 0.01 | 0.20 |
| 1F | 182 | -1932 | -3657 | 305 | 0 | -278 | -3038 | 2 | 0.09 | 0.01 | 0.18 |
| 1G | 182 | -1932 | -3889 | -323 | 0 | 295 | -3354 | 2 | 0.10 | 0.01 | 0.20 |
| 1H | 182 | -1932 | -3657 | -323 | 0 | 295 | -3038 | 2 | 0.09 | 0.01 | 0.18 |
| 1I | 182 | -3880 | -3887 | 151 | 0 | -138 | -3397 | 2 | 0.10 | 0.03 | 0.20 |
| 1J | 182 | -3880 | -3659 | 151 | 0 | -138 | -2995 | 2 | 0.09 | 0.03 | 0.18 |
| 1K | 182 | -3880 | -3887 | -170 | 0 | 155 | -3397 | 2 | 0.10 | 0.03 | 0.20 |
| 1L | 182 | -3880 | -3659 | -170 | 0 | 155 | -2995 | 2 | 0.09 | 0.03 | 0.18 |
| 1M | 182 | -1298 | -3887 | 151 | 0 | -138 | -3397 | 2 | 0.10 | 0.01 | 0.20 |
| 1N | 182 | -1298 | -3659 | 151 | 0 | -138 | -2995 | 2 | 0.09 | 0.01 | 0.18 |
| 1O | 182 | -1298 | -3887 | -170 | 0 | 155 | -3397 | 2 | 0.10 | 0.01 | 0.20 |
| 1P | 182 | -1298 | -3659 | -170 | 0 | 155 | -2995 | 2 | 0.09 | 0.01 | 0.18 |
| 2 | 182 | -2583 | -3789 | 1 | 0 | -1 | -3210 | 2 | 0.10 | 0.02 | 0.19 |
| 7 | 182 | -2543 | -3787 | -9 | 0 | 8 | -3204 | 2 | 0.10 | 0.02 | 0.19 |
| 8 | 182 | -2629 | -3775 | 1 | 0 | -1 | -3202 | 2 | 0.10 | 0.02 | 0.19 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -3246 | 278 | -3354 | 2 | 0.8199 | 0.9764 | 0.9958 | -- | -- | 0.03 | -- | 0.31 | Snell. 'zx'= 54 |
| 1B | -3246 | 278 | -3038 | 2 | 0.8199 | 0.9764 | 0.9958 | -- | -- | 0.03 | -- | 0.29 | Snell. 'zx'= 54 |
| 1C | -3246 | -295 | -3354 | 2 | 0.8199 | 0.9764 | 0.9958 | -- | -- | 0.03 | -- | 0.31 | Snell. 'zx'= 54 |
| 1D | -3246 | -295 | -3038 | 2 | 0.8199 | 0.9764 | 0.9958 | -- | -- | 0.03 | -- | 0.29 | Snell. 'zx'= 54 |
| 1E | -1932 | 278 | -3354 | 2 | 0.8199 | 0.9859 | 0.9975 | -- | -- | 0.02 | -- | 0.30 | Snell. 'zx'= 54 |
| 1F | -1932 | 278 | -3038 | 2 | 0.8199 | 0.9859 | 0.9975 | -- | -- | 0.02 | -- | 0.28 | Snell. 'zx'= 54 |
| 1G | -1932 | -295 | -3354 | 2 | 0.8199 | 0.9859 | 0.9975 | -- | -- | 0.02 | -- | 0.30 | Snell. 'zx'= 54 |
| 1H | -1932 | -295 | -3038 | 2 | 0.8199 | 0.9859 | 0.9975 | -- | -- | 0.02 | -- | 0.28 | Snell. 'zx'= 54 |
| 1I | -3880 | 138 | -3397 | 2 | 0.8199 | 0.9718 | 0.9949 | -- | -- | 0.03 | -- | 0.27 | Snell. 'zx'= 54 |
| 1J | -3880 | 138 | -2995 | 2 | 0.8199 | 0.9718 | 0.9950 | -- | -- | 0.03 | -- | 0.25 | Snell. 'zx'= 54 |
| 1K | -3880 | -155 | -3397 | 2 | 0.8199 | 0.9718 | 0.9949 | -- | -- | 0.03 | -- | 0.28 | Snell. 'zx'= 54 |
| 1L | -3880 | -155 | -2995 | 2 | 0.8199 | 0.9718 | 0.9950 | -- | -- | 0.03 | -- | 0.26 | Snell. 'zx'= 54 |
| 1M | -1298 | 138 | -3397 | 2 | 0.8199 | 0.9906 | 0.9983 | -- | -- | 0.01 | -- | 0.25 | Snell. 'zx'= 54 |
| 1N | -1298 | 138 | -2995 | 2 | 0.8199 | 0.9906 | 0.9983 | -- | -- | 0.01 | -- | 0.23 | Snell. 'zx'= 54 |
| 1O | -1298 | -155 | -3397 | 2 | 0.8199 | 0.9906 | 0.9983 | -- | -- | 0.01 | -- | 0.26 | Snell. 'zx'= 54 |
| 1P | -1298 | -155 | -2995 | 2 | 0.8199 | 0.9906 | 0.9983 | -- | -- | 0.01 | -- | 0.24 | Snell. 'zx'= 54 |
| 2 | -2583 | 1 | -3210 | 2 | 0.8199 | 0.9812 | 0.9966 | -- | -- | 0.02 | -- | 0.21 | Snell. 'zx'= 54 |
| 7 | -2543 | -8 | -3204 | 2 | 0.8199 | 0.9815 | 0.9967 | -- | -- | 0.02 | -- | 0.21 | Snell. 'zx'= 54 |
| 8 | -2629 | 1 | -3202 | 2 | 0.8199 | 0.9809 | 0.9966 | -- | -- | 0.02 | -- | 0.21 | Snell. 'zx'= 54 |

**ASTA NUM. 75** NI 58 NF 88 Lungh. 205.0 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 4.0527 2.2997 6.6594 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -6047 | 2333 | 8 | 0 | 8 | -2175 | 2 | 0.08 | 0.06 | 0.22 | |
| 1B | 0 | -6047 | 2383 | 8 | 0 | 8 | -2289 | 2 | 0.08 | 0.06 | 0.23 | |
| 1C | 0 | -6047 | 2333 | -4 | 0 | -4 | -2175 | 2 | 0.08 | 0.06 | 0.22 | |
| 1D | 0 | -6047 | 2383 | -4 | 0 | -4 | -2289 | 2 | 0.08 | 0.06 | 0.23 | |
| 1E | 0 | -4877 | 2333 | 8 | 0 | 8 | -2175 | 2 | 0.08 | 0.05 | 0.22 | |
| 1F | 0 | -4877 | 2383 | 8 | 0 | 8 | -2289 | 2 | 0.08 | 0.05 | 0.23 | |
| 1G | 0 | -4877 | 2333 | -4 | 0 | -4 | -2175 | 2 | 0.08 | 0.05 | 0.22 | |
| 1H | 0 | -4877 | 2383 | -4 | 0 | -4 | -2289 | 2 | 0.08 | 0.05 | 0.23 | |
| 1I | 0 | -6086 | 2322 | 4 | 0 | 4 | -2150 | 2 | 0.08 | 0.06 | 0.22 | |
| 1J | 0 | -6086 | 2394 | 4 | 0 | 4 | -2314 | 2 | 0.08 | 0.06 | 0.24 | |
| 1K | 0 | -6086 | 2322 | -0 | 0 | -0 | -2150 | 2 | 0.08 | 0.06 | 0.22 | |
| 1L | 0 | -6086 | 2394 | -0 | 0 | -0 | -2314 | 2 | 0.08 | 0.06 | 0.24 | |
| 1M | 0 | -4838 | 2322 | 4 | 0 | 4 | -2150 | 2 | 0.08 | 0.05 | 0.22 | |
| 1N | 0 | -4838 | 2394 | 4 | 0 | 4 | -2314 | 2 | 0.08 | 0.05 | 0.24 | |
| 1O | 0 | -4838 | 2322 | -0 | 0 | -0 | -2150 | 2 | 0.08 | 0.05 | 0.22 | |
| 1P | 0 | -4838 | 2394 | -0 | 0 | -0 | -2314 | 2 | 0.08 | 0.05 | 0.24 | |
| 2 | 0 | -5607 | 2370 | -0 | 0 | -0 | -2256 | 2 | 0.08 | 0.05 | 0.23 | |
| 7 | 0 | -5571 | 2370 | 2 | 0 | 2 | -2253 | 2 | 0.08 | 0.05 | 0.23 | |
| 8 | 0 | -5499 | 2359 | -0 | 0 | -0 | -2235 | 2 | 0.08 | 0.05 | 0.23 | |
| 1A | 102 | -6047 | 1398 | 8 | 0 | 0 | -240 | 2 | 0.05 | 0.06 | 0.02 | |
| 1B | 102 | -6047 | 1449 | 8 | 0 | 0 | -347 | 2 | 0.05 | 0.06 | 0.04 | |
| 1C | 102 | -6047 | 1398 | -4 | 0 | 0 | -240 | 2 | 0.05 | 0.06 | 0.02 | |
| 1D | 102 | -6047 | 1449 | -4 | 0 | 0 | -347 | 2 | 0.05 | 0.06 | 0.04 | |
| 1E | 102 | -4877 | 1398 | 8 | 0 | 0 | -240 | 2 | 0.05 | 0.05 | 0.02 | |
| 1F | 102 | -4877 | 1449 | 8 | 0 | 0 | -347 | 2 | 0.05 | 0.05 | 0.04 | |
| 1G | 102 | -4877 | 1398 | -4 | 0 | 0 | -240 | 2 | 0.05 | 0.05 | 0.02 | |
| 1H | 102 | -4877 | 1449 | -4 | 0 | 0 | -347 | 2 | 0.05 | 0.05 | 0.04 | |
| 1I | 102 | -6086 | 1388 | 4 | 0 | 0 | -237 | 2 | 0.05 | 0.06 | 0.02 | |
| 1J | 102 | -6086 | 1459 | 4 | 0 | 0 | -350 | 2 | 0.05 | 0.06 | 0.04 | |
| 1K | 102 | -6086 | 1388 | -0 | 0 | 0 | -237 | 2 | 0.05 | 0.06 | 0.02 | |
| 1L | 102 | -6086 | 1459 | -0 | 0 | 0 | -350 | 2 | 0.05 | 0.06 | 0.04 | |
| 1M | 102 | -4838 | 1388 | 4 | 0 | 0 | -237 | 2 | 0.05 | 0.05 | 0.02 | |
| 1N | 102 | -4838 | 1459 | 4 | 0 | 0 | -350 | 2 | 0.05 | 0.05 | 0.04 | |
| 1O | 102 | -4838 | 1388 | -0 | 0 | 0 | -237 | 2 | 0.05 | 0.05 | 0.02 | |
| 1P | 102 | -4838 | 1459 | -0 | 0 | 0 | -350 | 2 | 0.05 | 0.05 | 0.04 | |
| 2 | 102 | -5607 | 1436 | -0 | 0 | -0 | -306 | 2 | 0.05 | 0.05 | 0.03 | |
| 7 | 102 | -5571 | 1435 | 2 | 0 | 0 | -303 | 2 | 0.05 | 0.05 | 0.03 | |
| 8 | 102 | -5499 | 1424 | -0 | 0 | 0 | -296 | 2 | 0.05 | 0.05 | 0.03 | |
| 1A | 205 | -6047 | 464 | 8 | 0 | -8 | 737 | 2 | 0.02 | 0.06 | 0.08 | |
| 1B | 205 | -6047 | 515 | 8 | 0 | -8 | 637 | 2 | 0.02 | 0.06 | 0.07 | |
| 1C | 205 | -6047 | 464 | -4 | 0 | 4 | 737 | 2 | 0.02 | 0.06 | 0.08 | |
| 1D | 205 | -6047 | 515 | -4 | 0 | 4 | 637 | 2 | 0.02 | 0.06 | 0.07 | |
| 1E | 205 | -4877 | 464 | 8 | 0 | -8 | 737 | 2 | 0.02 | 0.05 | 0.08 | |
| 1F | 205 | -4877 | 515 | 8 | 0 | -8 | 637 | 2 | 0.02 | 0.05 | 0.07 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1G | 205 | -4877 | 464 | -4 | 0 | 4 | 737 | 2 | 0.02 | 0.05 | 0.08 |
| 1H | 205 | -4877 | 515 | -4 | 0 | 4 | 637 | 2 | 0.02 | 0.05 | 0.07 |
| 1I | 205 | -6086 | 454 | 4 | 0 | -4 | 718 | 2 | 0.02 | 0.06 | 0.07 |
| 1J | 205 | -6086 | 525 | 4 | 0 | -4 | 656 | 2 | 0.02 | 0.06 | 0.07 |
| 1K | 205 | -6086 | 454 | -0 | 0 | 0 | 718 | 2 | 0.02 | 0.06 | 0.07 |
| 1L | 205 | -6086 | 525 | -0 | 0 | 0 | 656 | 2 | 0.02 | 0.06 | 0.07 |
| 1M | 205 | -4838 | 454 | 4 | 0 | -4 | 718 | 2 | 0.02 | 0.05 | 0.07 |
| 1N | 205 | -4838 | 525 | 4 | 0 | -4 | 656 | 2 | 0.02 | 0.05 | 0.07 |
| 1O | 205 | -4838 | 454 | -0 | 0 | 0 | 718 | 2 | 0.02 | 0.05 | 0.07 |
| 1P | 205 | -4838 | 525 | -0 | 0 | 0 | 656 | 2 | 0.02 | 0.05 | 0.07 |
| 2 | 205 | -5607 | 501 | -0 | 0 | 0 | 687 | 2 | 0.02 | 0.05 | 0.07 |
| 7 | 205 | -5571 | 501 | 2 | 0 | -2 | 690 | 2 | 0.02 | 0.05 | 0.07 |
| 8 | 205 | -5499 | 489 | -0 | 0 | 0 | 684 | 2 | 0.02 | 0.05 | 0.07 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -6047 | 8 | -2175 | 2 | 0.6711 | 0.9260 | 0.9949 | -- | -- | 0.09 | -- | 0.31 | Snell. 'zx'= 76 |
| 1B | -6047 | 8 | -2289 | 2 | 0.6711 | 0.9260 | 0.9958 | -- | -- | 0.09 | -- | 0.32 | Snell. 'zx'= 76 |
| 1C | -6047 | -4 | -2175 | 2 | 0.6711 | 0.9260 | 0.9949 | -- | -- | 0.09 | -- | 0.31 | Snell. 'zx'= 76 |
| 1D | -6047 | -4 | -2289 | 2 | 0.6711 | 0.9260 | 0.9958 | -- | -- | 0.09 | -- | 0.32 | Snell. 'zx'= 76 |
| 1E | -4877 | 8 | -2175 | 2 | 0.6711 | 0.9403 | 0.9959 | -- | -- | 0.07 | -- | 0.29 | Snell. 'zx'= 76 |
| 1F | -4877 | 8 | -2289 | 2 | 0.6711 | 0.9403 | 0.9966 | -- | -- | 0.07 | -- | 0.31 | Snell. 'zx'= 76 |
| 1G | -4877 | -4 | -2175 | 2 | 0.6711 | 0.9403 | 0.9959 | -- | -- | 0.07 | -- | 0.29 | Snell. 'zx'= 76 |
| 1H | -4877 | -4 | -2289 | 2 | 0.6711 | 0.9403 | 0.9966 | -- | -- | 0.07 | -- | 0.30 | Snell. 'zx'= 76 |
| 1I | -6086 | -4 | -2150 | 2 | 0.6711 | 0.9255 | 0.9950 | -- | -- | 0.09 | -- | 0.31 | Snell. 'zx'= 76 |
| 1J | -6086 | -4 | -2314 | 2 | 0.6711 | 0.9255 | 0.9957 | -- | -- | 0.09 | -- | 0.32 | Snell. 'zx'= 76 |
| 1K | -6086 | 0 | -2150 | 2 | 0.6711 | 0.9255 | 0.9950 | -- | -- | 0.09 | -- | 0.31 | Snell. 'zx'= 76 |
| 1L | -6086 | 0 | -2314 | 2 | 0.6711 | 0.9255 | 0.9957 | -- | -- | 0.09 | -- | 0.32 | Snell. 'zx'= 76 |
| 1M | -4838 | -4 | -2150 | 2 | 0.6711 | 0.9408 | 0.9960 | -- | -- | 0.07 | -- | 0.29 | Snell. 'zx'= 76 |
| 1N | -4838 | -4 | -2314 | 2 | 0.6711 | 0.9408 | 0.9966 | -- | -- | 0.07 | -- | 0.31 | Snell. 'zx'= 76 |
| 1O | -4838 | 0 | -2150 | 2 | 0.6711 | 0.9408 | 0.9960 | -- | -- | 0.07 | -- | 0.29 | Snell. 'zx'= 76 |
| 1P | -4838 | 0 | -2314 | 2 | 0.6711 | 0.9408 | 0.9966 | -- | -- | 0.07 | -- | 0.30 | Snell. 'zx'= 76 |
| 2 | -5607 | -0 | -2256 | 2 | 0.6711 | 0.9314 | 0.9958 | -- | -- | 0.08 | -- | 0.31 | Snell. 'zx'= 76 |
| 7 | -5571 | 2 | -2253 | 2 | 0.6711 | 0.9318 | 0.9958 | -- | -- | 0.08 | -- | 0.31 | Snell. 'zx'= 76 |
| 8 | -5499 | -0 | -2235 | 2 | 0.6711 | 0.9327 | 0.9958 | -- | -- | 0.08 | -- | 0.31 | Snell. 'zx'= 76 |

**ASTA NUM. 76** NI 88 NF 48 Lungh. 135.0 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 4.0527 2.2997 6.6594 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -189 | 427 | 203 | 0 | 137 | 46 | 2 | 0.01 | 0.00 | 0.07 | |
| 1B | 0 | -189 | 459 | 203 | 0 | 137 | -47 | 2 | 0.02 | 0.00 | 0.07 | |
| 1C | 0 | -189 | 427 | -200 | 0 | -135 | 46 | 2 | 0.01 | 0.00 | 0.07 | |
| 1D | 0 | -189 | 459 | -200 | 0 | -135 | -47 | 2 | 0.02 | 0.00 | 0.07 | |
| 1E | 0 | 721 | 427 | 203 | 0 | 137 | 46 | 1 | 0.01 | 0.01 | 0.07 | |
| 1F | 0 | 721 | 459 | 203 | 0 | 137 | -47 | 1 | 0.02 | 0.01 | 0.07 | |
| 1G | 0 | 721 | 427 | -200 | 0 | -135 | 46 | 1 | 0.01 | 0.01 | 0.07 | |
| 1H | 0 | 721 | 459 | -200 | 0 | -135 | -47 | 1 | 0.02 | 0.01 | 0.07 | |
| 1I | 0 | 96 | 410 | 69 | 0 | 47 | 34 | 1 | 0.01 | 0.00 | 0.02 | |
| 1J | 0 | 96 | 477 | 69 | 0 | 47 | -35 | 1 | 0.02 | 0.00 | 0.02 | |
| 1K | 0 | 96 | 410 | -66 | 0 | -44 | 34 | 1 | 0.01 | 0.00 | 0.02 | |
| 1L | 0 | 96 | 477 | -66 | 0 | -44 | -35 | 1 | 0.02 | 0.00 | 0.02 | |
| 1M | 0 | 436 | 410 | 69 | 0 | 47 | 34 | 1 | 0.01 | 0.00 | 0.02 | |
| 1N | 0 | 436 | 477 | 69 | 0 | 47 | -35 | 1 | 0.02 | 0.00 | 0.02 | |
| 1O | 0 | 436 | 410 | -66 | 0 | -44 | 34 | 1 | 0.01 | 0.00 | 0.02 | |
| 1P | 0 | 436 | 477 | -66 | 0 | -44 | -35 | 1 | 0.02 | 0.00 | 0.02 | |
| 2 | 0 | 220 | 455 | 0 | 0 | 0 | -12 | 1 | 0.02 | 0.00 | 0.00 | |
| 7 | 0 | 255 | 455 | 2 | 0 | 1 | -9 | 1 | 0.02 | 0.00 | 0.00 | |
| 8 | 0 | 231 | 444 | 0 | 0 | 0 | -3 | 1 | 0.02 | 0.00 | 0.00 | |
| 1A | 68 | -189 | -188 | 203 | 0 | 0 | 137 | 1 | 0.01 | 0.00 | 0.01 | |
| 1B | 68 | -189 | -156 | 203 | 0 | 0 | 45 | 2 | 0.01 | 0.00 | 0.00 | |
| 1C | 68 | -189 | -188 | -200 | 0 | 0 | 137 | 1 | 0.01 | 0.00 | 0.01 | |
| 1D | 68 | -189 | -156 | -200 | 0 | 0 | 45 | 2 | 0.01 | 0.00 | 0.00 | |
| 1E | 68 | 721 | -188 | 203 | 0 | 0 | 137 | 1 | 0.01 | 0.01 | 0.01 | |
| 1F | 68 | 721 | -156 | 203 | 0 | 0 | 45 | 1 | 0.01 | 0.01 | 0.00 | |
| 1G | 68 | 721 | -188 | -200 | 0 | 0 | 137 | 1 | 0.01 | 0.01 | 0.01 | |
| 1H | 68 | 721 | -156 | -200 | 0 | 0 | 45 | 1 | 0.01 | 0.01 | 0.00 | |
| 1I | 68 | 96 | -205 | 69 | 0 | 0 | 92 | 1 | 0.01 | 0.00 | 0.01 | |
| 1J | 68 | 96 | -139 | 69 | 0 | 0 | 90 | 1 | 0.00 | 0.00 | 0.01 | |
| 1K | 68 | 96 | -205 | -66 | 0 | 0 | 92 | 1 | 0.01 | 0.00 | 0.01 | |
| 1L | 68 | 96 | -139 | -66 | 0 | 0 | 90 | 1 | 0.00 | 0.00 | 0.01 | |
| 1M | 68 | 436 | -205 | 69 | 0 | 0 | 92 | 1 | 0.01 | 0.00 | 0.01 | |
| 1N | 68 | 436 | -139 | 69 | 0 | 0 | 90 | 1 | 0.00 | 0.00 | 0.01 | |
| 1O | 68 | 436 | -205 | -66 | 0 | 0 | 92 | 1 | 0.01 | 0.00 | 0.01 | |
| 1P | 68 | 436 | -139 | -66 | 0 | 0 | 90 | 1 | 0.00 | 0.00 | 0.01 | |
| 2 | 68 | 220 | -160 | 0 | 0 | 0 | 87 | 1 | 0.01 | 0.00 | 0.01 | |
| 7 | 68 | 255 | -160 | 2 | 0 | 0 | 90 | 1 | 0.01 | 0.00 | 0.01 | |
| 8 | 68 | 231 | -172 | 0 | 0 | 0 | 88 | 1 | 0.01 | 0.00 | 0.01 | |
| 1A | 135 | -189 | -803 | 203 | 0 | -137 | -188 | 2 | 0.03 | 0.00 | 0.07 | |
| 1B | 135 | -189 | -771 | 203 | 0 | -137 | -277 | 2 | 0.03 | 0.00 | 0.07 | |
| 1C | 135 | -189 | -803 | -200 | 0 | 135 | -188 | 2 | 0.03 | 0.00 | 0.07 | |
| 1D | 135 | -189 | -771 | -200 | 0 | 135 | -277 | 2 | 0.03 | 0.00 | 0.07 | |
| 1E | 135 | 721 | -803 | 203 | 0 | -137 | -188 | 1 | 0.03 | 0.01 | 0.07 | |
| 1F | 135 | 721 | -771 | 203 | 0 | -137 | -277 | 1 | 0.03 | 0.01 | 0.07 | |
| 1G | 135 | 721 | -803 | -200 | 0 | 135 | -188 | 1 | 0.03 | 0.01 | 0.07 | |
| 1H | 135 | 721 | -771 | -200 | 0 | 135 | -277 | 1 | 0.03 | 0.01 | 0.07 | |
| 1I | 135 | 96 | -821 | 69 | 0 | -47 | -265 | 1 | 0.03 | 0.00 | 0.03 | |
| 1J | 135 | 96 | -754 | 69 | 0 | -47 | -200 | 1 | 0.03 | 0.00 | 0.02 | |
| 1K | 135 | 96 | -821 | -66 | 0 | 44 | -265 | 1 | 0.03 | 0.00 | 0.03 | |
| 1L | 135 | 96 | -754 | -66 | 0 | 44 | -200 | 1 | 0.03 | 0.00 | 0.02 | |
| 1M | 135 | 436 | -821 | 69 | 0 | -47 | -265 | 1 | 0.03 | 0.00 | 0.03 | |
| 1N | 135 | 436 | -754 | 69 | 0 | -47 | -200 | 1 | 0.03 | 0.00 | 0.02 | |
| 1O | 135 | 436 | -821 | -66 | 0 | 44 | -265 | 1 | 0.03 | 0.00 | 0.03 | |
| 1P | 135 | 436 | -754 | -66 | 0 | 44 | -200 | 1 | 0.03 | 0.00 | 0.02 | |
| 2 | 135 | 220 | -776 | 0 | 0 | -0 | -228 | 1 | 0.03 | 0.00 | 0.02 | |
| 7 | 135 | 255 | -776 | 2 | 0 | -1 | -226 | 1 | 0.03 | 0.00 | 0.02 | |
| 8 | 135 | 231 | -787 | 0 | 0 | -0 | -235 | 1 | 0.03 | 0.00 | 0.02 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**



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| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -189 | 137 | -188 | 2 | 0.8457 | 0.9982 | 1.0000 | -- | -- | 0.00 | -- | 0.09 | Snell. 'zx'= 50 |
| 1B | -189 | 137 | -277 | 2 | 0.8457 | 0.9982 | 1.0001 | -- | -- | 0.00 | -- | 0.10 | Snell. 'zx'= 50 |
| 1C | -189 | -135 | -188 | 2 | 0.8457 | 0.9982 | 1.0000 | -- | -- | 0.00 | -- | 0.09 | Snell. 'zx'= 50 |
| 1D | -189 | -135 | -277 | 2 | 0.8457 | 0.9982 | 1.0001 | -- | -- | 0.00 | -- | 0.10 | Snell. 'zx'= 50 |

**ASTA NUM. 77** NI 48 NF 59 Lungh. 170.0 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 4.0527 2.2997 6.6594 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -7209 | -861 | 107 | 0 | 91 | 642 | 2 | 0.03 | 0.07 | 0.07 | |
| 1B | 0 | -7209 | -806 | 107 | 0 | 91 | 551 | 2 | 0.03 | 0.07 | 0.06 | |
| 1C | 0 | -7209 | -861 | -115 | 0 | -98 | 642 | 2 | 0.03 | 0.07 | 0.07 | |
| 1D | 0 | -7209 | -806 | -115 | 0 | -98 | 551 | 2 | 0.03 | 0.07 | 0.06 | |
| 1E | 0 | -6075 | -861 | 107 | 0 | 91 | 642 | 2 | 0.03 | 0.06 | 0.07 | |
| 1F | 0 | -6075 | -806 | 107 | 0 | 91 | 551 | 2 | 0.03 | 0.06 | 0.06 | |
| 1G | 0 | -6075 | -861 | -115 | 0 | -98 | 642 | 2 | 0.03 | 0.06 | 0.07 | |
| 1H | 0 | -6075 | -806 | -115 | 0 | -98 | 551 | 2 | 0.03 | 0.06 | 0.06 | |
| 1I | 0 | -7217 | -874 | 34 | 0 | 29 | 621 | 2 | 0.03 | 0.07 | 0.06 | |
| 1J | 0 | -7217 | -792 | 34 | 0 | 29 | 572 | 2 | 0.03 | 0.07 | 0.06 | |
| 1K | 0 | -7217 | -874 | -42 | 0 | -36 | 621 | 2 | 0.03 | 0.07 | 0.06 | |
| 1L | 0 | -7217 | -792 | -42 | 0 | -36 | 572 | 2 | 0.03 | 0.07 | 0.06 | |
| 1M | 0 | -6067 | -874 | 34 | 0 | 29 | 621 | 2 | 0.03 | 0.06 | 0.06 | |
| 1N | 0 | -6067 | -792 | 34 | 0 | 29 | 572 | 2 | 0.03 | 0.06 | 0.06 | |
| 1O | 0 | -6067 | -874 | -42 | 0 | -36 | 621 | 2 | 0.03 | 0.06 | 0.06 | |
| 1P | 0 | -6067 | -792 | -42 | 0 | -36 | 572 | 2 | 0.03 | 0.06 | 0.06 | |
| 2 | 0 | -6601 | -822 | 1 | 0 | 1 | 590 | 2 | 0.03 | 0.06 | 0.06 | |
| 7 | 0 | -6567 | -822 | -4 | 0 | -3 | 593 | 2 | 0.03 | 0.06 | 0.06 | |
| 8 | 0 | -6676 | -833 | 1 | 0 | 1 | 594 | 2 | 0.03 | 0.06 | 0.06 | |
| 1A | 85 | -7209 | -1636 | 107 | 0 | 0 | -391 | 2 | 0.06 | 0.07 | 0.04 | |
| 1B | 85 | -7209 | -1581 | 107 | 0 | 0 | -492 | 2 | 0.05 | 0.07 | 0.05 | |
| 1C | 85 | -7209 | -1636 | -115 | 0 | 0 | -391 | 2 | 0.06 | 0.07 | 0.04 | |
| 1D | 85 | -7209 | -1581 | -115 | 0 | 0 | -492 | 2 | 0.05 | 0.07 | 0.05 | |
| 1E | 85 | -6075 | -1636 | 107 | 0 | 0 | -391 | 2 | 0.06 | 0.06 | 0.04 | |
| 1F | 85 | -6075 | -1581 | 107 | 0 | 0 | -492 | 2 | 0.05 | 0.06 | 0.05 | |
| 1G | 85 | -6075 | -1636 | -115 | 0 | 0 | -391 | 2 | 0.06 | 0.06 | 0.04 | |
| 1H | 85 | -6075 | -1581 | -115 | 0 | 0 | -492 | 2 | 0.05 | 0.06 | 0.05 | |
| 1I | 85 | -7217 | -1649 | 34 | 0 | 0 | -390 | 2 | 0.06 | 0.07 | 0.04 | |
| 1J | 85 | -7217 | -1567 | 34 | 0 | 0 | -492 | 2 | 0.05 | 0.07 | 0.05 | |
| 1K | 85 | -7217 | -1649 | -42 | 0 | 0 | -390 | 2 | 0.06 | 0.07 | 0.04 | |
| 1L | 85 | -7217 | -1567 | -42 | 0 | 0 | -492 | 2 | 0.05 | 0.07 | 0.05 | |
| 1M | 85 | -6067 | -1649 | 34 | 0 | 0 | -390 | 2 | 0.06 | 0.06 | 0.04 | |
| 1N | 85 | -6067 | -1567 | 34 | 0 | 0 | -492 | 2 | 0.05 | 0.06 | 0.05 | |
| 1O | 85 | -6067 | -1649 | -42 | 0 | 0 | -390 | 2 | 0.06 | 0.06 | 0.04 | |
| 1P | 85 | -6067 | -1567 | -42 | 0 | 0 | -492 | 2 | 0.05 | 0.06 | 0.05 | |
| 2 | 85 | -6601 | -1597 | 1 | 0 | -0 | -438 | 2 | 0.05 | 0.06 | 0.04 | |
| 7 | 85 | -6567 | -1597 | -4 | 0 | 0 | -435 | 2 | 0.05 | 0.06 | 0.04 | |
| 8 | 85 | -6676 | -1608 | 1 | 0 | 0 | -444 | 2 | 0.05 | 0.06 | 0.05 | |
| 1A | 170 | -7209 | -2410 | 107 | 0 | -91 | -2083 | 2 | 0.08 | 0.07 | 0.21 | |
| 1B | 170 | -7209 | -2356 | 107 | 0 | -91 | -2193 | 2 | 0.08 | 0.07 | 0.22 | |
| 1C | 170 | -7209 | -2410 | -115 | 0 | 98 | -2083 | 2 | 0.08 | 0.07 | 0.21 | |
| 1D | 170 | -7209 | -2356 | -115 | 0 | 98 | -2193 | 2 | 0.08 | 0.07 | 0.22 | |
| 1E | 170 | -6075 | -2410 | 107 | 0 | -91 | -2083 | 2 | 0.08 | 0.06 | 0.21 | |
| 1F | 170 | -6075 | -2356 | 107 | 0 | -91 | -2193 | 2 | 0.08 | 0.06 | 0.22 | |
| 1G | 170 | -6075 | -2410 | -115 | 0 | 98 | -2083 | 2 | 0.08 | 0.06 | 0.21 | |
| 1H | 170 | -6075 | -2356 | -115 | 0 | 98 | -2193 | 2 | 0.08 | 0.06 | 0.22 | |
| 1I | 170 | -7217 | -2424 | 34 | 0 | -29 | -2061 | 2 | 0.08 | 0.07 | 0.21 | |
| 1J | 170 | -7217 | -2342 | 34 | 0 | -29 | -2215 | 2 | 0.08 | 0.07 | 0.23 | |
| 1K | 170 | -7217 | -2424 | -42 | 0 | 36 | -2061 | 2 | 0.08 | 0.07 | 0.21 | |
| 1L | 170 | -7217 | -2342 | -42 | 0 | 36 | -2215 | 2 | 0.08 | 0.07 | 0.23 | |
| 1M | 170 | -6067 | -2424 | 34 | 0 | -29 | -2061 | 2 | 0.08 | 0.06 | 0.21 | |
| 1N | 170 | -6067 | -2342 | 34 | 0 | -29 | -2215 | 2 | 0.08 | 0.06 | 0.23 | |
| 1O | 170 | -6067 | -2424 | -42 | 0 | 36 | -2061 | 2 | 0.08 | 0.06 | 0.21 | |
| 1P | 170 | -6067 | -2342 | -42 | 0 | 36 | -2215 | 2 | 0.08 | 0.06 | 0.23 | |
| 2 | 170 | -6601 | -2372 | 1 | 0 | -1 | -2124 | 2 | 0.08 | 0.06 | 0.22 | |
| 7 | 170 | -6567 | -2372 | -4 | 0 | 3 | -2122 | 2 | 0.08 | 0.06 | 0.22 | |
| 8 | 170 | -6676 | -2383 | 1 | 0 | -1 | -2140 | 2 | 0.08 | 0.06 | 0.22 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -7209 | 91 | -2083 | 2 | 0.7644 | 0.9226 | 0.9932 | -- | -- | 0.09 | -- | 0.34 | Snell. 'zx'= 63 |
| 1B | -7209 | 91 | -2193 | 2 | 0.7644 | 0.9226 | 0.9941 | -- | -- | 0.09 | -- | 0.36 | Snell. 'zx'= 63 |
| 1C | -7209 | -98 | -2083 | 2 | 0.7644 | 0.9226 | 0.9932 | -- | -- | 0.09 | -- | 0.35 | Snell. 'zx'= 63 |
| 1D | -7209 | -98 | -2193 | 2 | 0.7644 | 0.9226 | 0.9941 | -- | -- | 0.09 | -- | 0.36 | Snell. 'zx'= 63 |
| 1E | -6075 | 91 | -2083 | 2 | 0.7644 | 0.9347 | 0.9943 | -- | -- | 0.08 | -- | 0.33 | Snell. 'zx'= 63 |
| 1F | -6075 | 91 | -2193 | 2 | 0.7644 | 0.9347 | 0.9950 | -- | -- | 0.08 | -- | 0.34 | Snell. 'zx'= 63 |
| 1G | -6075 | -98 | -2083 | 2 | 0.7644 | 0.9347 | 0.9943 | -- | -- | 0.08 | -- | 0.33 | Snell. 'zx'= 63 |
| 1H | -6075 | -98 | -2193 | 2 | 0.7644 | 0.9347 | 0.9950 | -- | -- | 0.08 | -- | 0.35 | Snell. 'zx'= 63 |
| 1I | -7217 | -29 | -2061 | 2 | 0.7644 | 0.9225 | 0.9933 | -- | -- | 0.09 | -- | 0.31 | Snell. 'zx'= 63 |
| 1J | -7217 | -29 | -2215 | 2 | 0.7644 | 0.9225 | 0.9939 | -- | -- | 0.09 | -- | 0.33 | Snell. 'zx'= 63 |
| 1K | -7217 | 36 | -2061 | 2 | 0.7644 | 0.9225 | 0.9933 | -- | -- | 0.09 | -- | 0.32 | Snell. 'zx'= 63 |
| 1L | -7217 | 36 | -2215 | 2 | 0.7644 | 0.9225 | 0.9939 | -- | -- | 0.09 | -- | 0.33 | Snell. 'zx'= 63 |
| 1M | -6067 | -29 | -2061 | 2 | 0.7644 | 0.9348 | 0.9944 | -- | -- | 0.08 | -- | 0.30 | Snell. 'zx'= 63 |
| 1N | -6067 | -29 | -2215 | 2 | 0.7644 | 0.9348 | 0.9949 | -- | -- | 0.08 | -- | 0.32 | Snell. 'zx'= 63 |
| 1O | -6067 | 36 | -2061 | 2 | 0.7644 | 0.9348 | 0.9944 | -- | -- | 0.08 | -- | 0.30 | Snell. 'zx'= 63 |
| 1P | -6067 | 36 | -2215 | 2 | 0.7644 | 0.9348 | 0.9949 | -- | -- | 0.08 | -- | 0.32 | Snell. 'zx'= 63 |
| 2 | -6601 | -1 | -2124 | 2 | 0.7644 | 0.9291 | 0.9942 | -- | -- | 0.08 | -- | 0.30 | Snell. 'zx'= 63 |
| 7 | -6567 | -3 | -2122 | 2 | 0.7644 | 0.9295 | 0.9942 | -- | -- | 0.08 | -- | 0.30 | Snell. 'zx'= 63 |
| 8 | -6676 | 1 | -2140 | 2 | 0.7644 | 0.9283 | 0.9942 | -- | -- | 0.08 | -- | 0.30 | Snell. 'zx'= 63 |

**ASTA NUM. 78** NI 59 NF 71 Lungh. 182.5 cm SEZ. 2 Ps IPE 300

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.4223 4.0527 2.2997 6.7748 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|



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| | cm | | kg | | | kg*m | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 0 | -3069 | 3663 | 323 | 0 | 294 | -3021 | 2 | 0.09 | 0.02 | 0.18 |
| 1B | 0 | -3069 | 3903 | 323 | 0 | 294 | -3353 | 2 | 0.10 | 0.02 | 0.20 |
| 1C | 0 | -3069 | 3663 | -305 | 0 | -278 | -3021 | 2 | 0.09 | 0.02 | 0.18 |
| 1D | 0 | -3069 | 3903 | -305 | 0 | -278 | -3353 | 2 | 0.10 | 0.02 | 0.20 |
| 1E | 0 | -1751 | 3663 | 323 | 0 | 294 | -3021 | 2 | 0.09 | 0.01 | 0.18 |
| 1F | 0 | -1751 | 3903 | 323 | 0 | 294 | -3353 | 2 | 0.10 | 0.01 | 0.20 |
| 1G | 0 | -1751 | 3663 | -305 | 0 | -278 | -3021 | 2 | 0.09 | 0.01 | 0.18 |
| 1H | 0 | -1751 | 3903 | -305 | 0 | -278 | -3353 | 2 | 0.10 | 0.01 | 0.20 |
| 1I | 0 | -3613 | 3673 | 168 | 0 | 153 | -2985 | 2 | 0.09 | 0.03 | 0.18 |
| 1J | 0 | -3613 | 3893 | 168 | 0 | 153 | -3389 | 2 | 0.10 | 0.03 | 0.20 |
| 1K | 0 | -3613 | 3673 | -150 | 0 | -137 | -2985 | 2 | 0.09 | 0.03 | 0.18 |
| 1L | 0 | -3613 | 3893 | -150 | 0 | -137 | -3389 | 2 | 0.10 | 0.03 | 0.20 |
| 1M | 0 | -1207 | 3673 | 168 | 0 | 153 | -2985 | 2 | 0.09 | 0.01 | 0.18 |
| 1N | 0 | -1207 | 3893 | 168 | 0 | 153 | -3389 | 2 | 0.10 | 0.01 | 0.20 |
| 1O | 0 | -1207 | 3673 | -150 | 0 | -137 | -2985 | 2 | 0.09 | 0.01 | 0.18 |
| 1P | 0 | -1207 | 3893 | -150 | 0 | -137 | -3389 | 2 | 0.10 | 0.01 | 0.20 |
| 2 | 0 | -2506 | 3782 | -1 | 0 | -1 | -3196 | 2 | 0.10 | 0.02 | 0.19 |
| 7 | 0 | -2464 | 3780 | 9 | 0 | 8 | -3190 | 2 | 0.10 | 0.02 | 0.19 |
| 8 | 0 | -2452 | 3785 | -1 | 0 | -1 | -3193 | 2 | 0.10 | 0.02 | 0.19 |
| 1A | 91 | -3069 | 2817 | 323 | 0 | 0 | -84 | 2 | 0.07 | 0.02 | 0.00 |
| 1B | 91 | -3069 | 3057 | 323 | 0 | 0 | -159 | 2 | 0.08 | 0.02 | 0.01 |
| 1C | 91 | -3069 | 2817 | -305 | 0 | 0 | -84 | 2 | 0.07 | 0.02 | 0.00 |
| 1D | 91 | -3069 | 3057 | -305 | 0 | 0 | -159 | 2 | 0.08 | 0.02 | 0.01 |
| 1E | 91 | -1751 | 2817 | 323 | 0 | 0 | -84 | 2 | 0.07 | 0.01 | 0.00 |
| 1F | 91 | -1751 | 3057 | 323 | 0 | 0 | -159 | 2 | 0.08 | 0.01 | 0.01 |
| 1G | 91 | -1751 | 2817 | -305 | 0 | 0 | -84 | 2 | 0.07 | 0.01 | 0.00 |
| 1H | 91 | -1751 | 3057 | -305 | 0 | 0 | -159 | 2 | 0.08 | 0.01 | 0.01 |
| 1I | 91 | -3613 | 2827 | 168 | 0 | 0 | 35 | 2 | 0.07 | 0.03 | 0.00 |
| 1J | 91 | -3613 | 3047 | 168 | 0 | 0 | -278 | 2 | 0.08 | 0.03 | 0.02 |
| 1K | 91 | -3613 | 2827 | -150 | 0 | 0 | 35 | 2 | 0.07 | 0.03 | 0.00 |
| 1L | 91 | -3613 | 3047 | -150 | 0 | 0 | -278 | 2 | 0.08 | 0.03 | 0.02 |
| 1M | 91 | -1207 | 2827 | 168 | 0 | 0 | 35 | 2 | 0.07 | 0.01 | 0.00 |
| 1N | 91 | -1207 | 3047 | 168 | 0 | 0 | -278 | 2 | 0.08 | 0.01 | 0.02 |
| 1O | 91 | -1207 | 2827 | -150 | 0 | 0 | 35 | 2 | 0.07 | 0.01 | 0.00 |
| 1P | 91 | -1207 | 3047 | -150 | 0 | 0 | -278 | 2 | 0.08 | 0.01 | 0.02 |
| 2 | 91 | -2506 | 2936 | -1 | 0 | 0 | -131 | 2 | 0.07 | 0.02 | 0.01 |
| 7 | 91 | -2464 | 2934 | 9 | 0 | 0 | -127 | 2 | 0.07 | 0.02 | 0.01 |
| 8 | 91 | -2452 | 2940 | -1 | 0 | 0 | -125 | 2 | 0.07 | 0.02 | 0.01 |
| 1A | 182 | -3069 | 1971 | 323 | 0 | -294 | 2082 | 2 | 0.05 | 0.02 | 0.12 |
| 1B | 182 | -3069 | 2211 | 323 | 0 | -294 | 2264 | 2 | 0.06 | 0.02 | 0.13 |
| 1C | 182 | -3069 | 1971 | -305 | 0 | 278 | 2082 | 2 | 0.05 | 0.02 | 0.12 |
| 1D | 182 | -3069 | 2211 | -305 | 0 | 278 | 2264 | 2 | 0.06 | 0.02 | 0.13 |
| 1E | 182 | -1751 | 1971 | 323 | 0 | -294 | 2082 | 2 | 0.05 | 0.01 | 0.12 |
| 1F | 182 | -1751 | 2211 | 323 | 0 | -294 | 2264 | 2 | 0.06 | 0.01 | 0.13 |
| 1G | 182 | -1751 | 1971 | -305 | 0 | 278 | 2082 | 2 | 0.05 | 0.01 | 0.12 |
| 1H | 182 | -1751 | 2211 | -305 | 0 | 278 | 2264 | 2 | 0.06 | 0.01 | 0.13 |
| 1I | 182 | -3613 | 1981 | 168 | 0 | -153 | 2284 | 2 | 0.05 | 0.03 | 0.14 |
| 1J | 182 | -3613 | 2201 | 168 | 0 | -153 | 2062 | 2 | 0.06 | 0.03 | 0.12 |
| 1K | 182 | -3613 | 1981 | -150 | 0 | 137 | 2284 | 2 | 0.05 | 0.03 | 0.14 |
| 1L | 182 | -3613 | 2201 | -150 | 0 | 137 | 2062 | 2 | 0.06 | 0.03 | 0.12 |
| 1M | 182 | -1207 | 1981 | 168 | 0 | -153 | 2284 | 2 | 0.05 | 0.01 | 0.14 |
| 1N | 182 | -1207 | 2201 | 168 | 0 | -153 | 2062 | 2 | 0.06 | 0.01 | 0.12 |
| 1O | 182 | -1207 | 1981 | -150 | 0 | 137 | 2284 | 2 | 0.05 | 0.01 | 0.14 |
| 1P | 182 | -1207 | 2201 | -150 | 0 | 137 | 2062 | 2 | 0.06 | 0.01 | 0.12 |
| 2 | 182 | -2506 | 2091 | -1 | 0 | 1 | 2163 | 2 | 0.05 | 0.02 | 0.13 |
| 7 | 182 | -2464 | 2089 | 9 | 0 | -8 | 2165 | 2 | 0.05 | 0.02 | 0.13 |
| 8 | 182 | -2452 | 2094 | -1 | 0 | 1 | 2171 | 2 | 0.05 | 0.02 | 0.13 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -3069 | 294 | -3021 | 2 | 0.8199 | 0.9777 | 0.9959 | -- | -- | 0.03 | -- | 0.29 | Snell. 'zx'= 54 |
| 1B | -3069 | 294 | -3353 | 2 | 0.8199 | 0.9777 | 0.9960 | -- | -- | 0.03 | -- | 0.31 | Snell. 'zx'= 54 |
| 1C | -3069 | -278 | -3021 | 2 | 0.8199 | 0.9777 | 0.9959 | -- | -- | 0.03 | -- | 0.29 | Snell. 'zx'= 54 |
| 1D | -3069 | -278 | -3353 | 2 | 0.8199 | 0.9777 | 0.9960 | -- | -- | 0.03 | -- | 0.31 | Snell. 'zx'= 54 |
| 1E | -1751 | 294 | -3021 | 2 | 0.8199 | 0.9873 | 0.9977 | -- | -- | 0.01 | -- | 0.28 | Snell. 'zx'= 54 |
| 1F | -1751 | 294 | -3353 | 2 | 0.8199 | 0.9873 | 0.9977 | -- | -- | 0.01 | -- | 0.30 | Snell. 'zx'= 54 |
| 1G | -1751 | -278 | -3021 | 2 | 0.8199 | 0.9873 | 0.9977 | -- | -- | 0.01 | -- | 0.28 | Snell. 'zx'= 54 |
| 1H | -1751 | -278 | -3353 | 2 | 0.8199 | 0.9873 | 0.9977 | -- | -- | 0.01 | -- | 0.30 | Snell. 'zx'= 54 |
| 1I | -3613 | 153 | -2985 | 2 | 0.8199 | 0.9737 | 0.9948 | -- | -- | 0.03 | -- | 0.25 | Snell. 'zx'= 54 |
| 1J | -3613 | 153 | -3389 | 2 | 0.8199 | 0.9737 | 0.9956 | -- | -- | 0.03 | -- | 0.28 | Snell. 'zx'= 54 |
| 1K | -3613 | -137 | -2985 | 2 | 0.8199 | 0.9737 | 0.9948 | -- | -- | 0.03 | -- | 0.25 | Snell. 'zx'= 54 |
| 1L | -3613 | -137 | -3389 | 2 | 0.8199 | 0.9737 | 0.9956 | -- | -- | 0.03 | -- | 0.27 | Snell. 'zx'= 54 |
| 1M | -1207 | 153 | -2985 | 2 | 0.8199 | 0.9912 | 0.9983 | -- | -- | 0.01 | -- | 0.23 | Snell. 'zx'= 54 |
| 1N | -1207 | 153 | -3389 | 2 | 0.8199 | 0.9912 | 0.9985 | -- | -- | 0.01 | -- | 0.26 | Snell. 'zx'= 54 |
| 1O | -1207 | -137 | -2985 | 2 | 0.8199 | 0.9912 | 0.9983 | -- | -- | 0.01 | -- | 0.23 | Snell. 'zx'= 54 |
| 1P | -1207 | -137 | -3389 | 2 | 0.8199 | 0.9912 | 0.9985 | -- | -- | 0.01 | -- | 0.25 | Snell. 'zx'= 54 |
| 2 | -2506 | -1 | -3196 | 2 | 0.8199 | 0.9818 | 0.9967 | -- | -- | 0.02 | -- | 0.21 | Snell. 'zx'= 54 |
| 7 | -2464 | 8 | -3190 | 2 | 0.8199 | 0.9821 | 0.9968 | -- | -- | 0.02 | -- | 0.21 | Snell. 'zx'= 54 |
| 8 | -2452 | -1 | -3193 | 2 | 0.8199 | 0.9822 | 0.9968 | -- | -- | 0.02 | -- | 0.21 | Snell. 'zx'= 54 |

**ASTA NUM. 79** NI 71 NF 68 Lungh. 182.5 cm SEZ. 2 Ps IPE 300

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.4223 4.0527 2.2997 6.7748 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | 11996 | 1960 | 266 | 0 | 243 | 8 | 1 | 0.05 | 0.08 | 0.07 | |
| 1B | 0 | 11996 | 2130 | 266 | 0 | 243 | -128 | 1 | 0.05 | 0.08 | 0.07 | |
| 1C | 0 | 11996 | 1960 | -261 | 0 | -238 | 8 | 1 | 0.05 | 0.08 | 0.07 | |
| 1D | 0 | 11996 | 2130 | -261 | 0 | -238 | -128 | 1 | 0.05 | 0.08 | 0.07 | |
| 1E | 0 | 12964 | 1960 | 266 | 0 | 243 | 8 | 1 | 0.05 | 0.09 | 0.07 | |
| 1F | 0 | 12964 | 2130 | 266 | 0 | 243 | -128 | 1 | 0.05 | 0.09 | 0.07 | |
| 1G | 0 | 12964 | 1960 | -261 | 0 | -238 | 8 | 1 | 0.05 | 0.09 | 0.07 | |
| 1H | 0 | 12964 | 2130 | -261 | 0 | -238 | -128 | 1 | 0.05 | 0.09 | 0.07 | |
| 1I | 0 | 11895 | 1941 | 136 | 0 | 124 | 62 | 1 | 0.05 | 0.08 | 0.04 | |
| 1J | 0 | 11895 | 2149 | 136 | 0 | 124 | -182 | 1 | 0.05 | 0.08 | 0.04 | |
| 1K | 0 | 11895 | 1941 | -130 | 0 | -119 | 62 | 1 | 0.05 | 0.08 | 0.04 | |
| 1L | 0 | 11895 | 2149 | -130 | 0 | -119 | -182 | 1 | 0.05 | 0.08 | 0.04 | |
| 1M | 0 | 13065 | 1941 | 136 | 0 | 124 | 62 | 1 | 0.05 | 0.09 | 0.04 | |
| 1N | 0 | 13065 | 2149 | 136 | 0 | 124 | -182 | 1 | 0.05 | 0.09 | 0.04 | |
| 1O | 0 | 13065 | 1941 | -130 | 0 | -119 | 62 | 1 | 0.05 | 0.09 | 0.04 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1P | 0 | 13065 | 2149 | -130 | 0 | -119 | -182 | 1 | 0.05 | 0.09 | 0.04 |
| 2 | 0 | 12380 | 2045 | -1 | 0 | -0 | -70 | 1 | 0.05 | 0.09 | 0.00 |
| 7 | 0 | 12400 | 2043 | 3 | 0 | 3 | -65 | 1 | 0.05 | 0.09 | 0.00 |
| 8 | 0 | 12450 | 2048 | -1 | 0 | -1 | -65 | 1 | 0.05 | 0.09 | 0.00 |
| 1A | 91 | 11996 | 1114 | 266 | 0 | 0 | 1401 | 1 | 0.03 | 0.08 | 0.08 |
| 1B | 91 | 11996 | 1285 | 266 | 0 | 0 | 1440 | 1 | 0.03 | 0.08 | 0.09 |
| 1C | 91 | 11996 | 1114 | -261 | 0 | 0 | 1401 | 1 | 0.03 | 0.08 | 0.08 |
| 1D | 91 | 11996 | 1285 | -261 | 0 | 0 | 1440 | 1 | 0.03 | 0.08 | 0.09 |
| 1E | 91 | 12964 | 1114 | 266 | 0 | 0 | 1401 | 1 | 0.03 | 0.09 | 0.08 |
| 1F | 91 | 12964 | 1285 | 266 | 0 | 0 | 1440 | 1 | 0.03 | 0.09 | 0.09 |
| 1G | 91 | 12964 | 1114 | -261 | 0 | 0 | 1401 | 1 | 0.03 | 0.09 | 0.08 |
| 1H | 91 | 12964 | 1285 | -261 | 0 | 0 | 1440 | 1 | 0.03 | 0.09 | 0.09 |
| 1I | 91 | 11895 | 1096 | 136 | 0 | 0 | 1433 | 1 | 0.03 | 0.08 | 0.09 |
| 1J | 91 | 11895 | 1304 | 136 | 0 | 0 | 1409 | 1 | 0.03 | 0.08 | 0.08 |
| 1K | 91 | 11895 | 1096 | -130 | 0 | 0 | 1433 | 1 | 0.03 | 0.08 | 0.09 |
| 1L | 91 | 11895 | 1304 | -130 | 0 | 0 | 1409 | 1 | 0.03 | 0.08 | 0.08 |
| 1M | 91 | 13065 | 1096 | 136 | 0 | 0 | 1433 | 1 | 0.03 | 0.09 | 0.09 |
| 1N | 91 | 13065 | 1304 | 136 | 0 | 0 | 1409 | 1 | 0.03 | 0.09 | 0.08 |
| 1O | 91 | 13065 | 1096 | -130 | 0 | 0 | 1433 | 1 | 0.03 | 0.09 | 0.09 |
| 1P | 91 | 13065 | 1304 | -130 | 0 | 0 | 1409 | 1 | 0.03 | 0.09 | 0.08 |
| 2 | 91 | 12380 | 1199 | -1 | 0 | 0 | 1410 | 1 | 0.03 | 0.09 | 0.08 |
| 7 | 91 | 12400 | 1197 | 3 | 0 | 0 | 1413 | 1 | 0.03 | 0.09 | 0.08 |
| 8 | 91 | 12450 | 1202 | -1 | 0 | 0 | 1418 | 1 | 0.03 | 0.09 | 0.08 |
| 1A | 182 | 11996 | 269 | 266 | 0 | -243 | 2023 | 1 | 0.01 | 0.08 | 0.12 |
| 1B | 182 | 11996 | 440 | 266 | 0 | -243 | 2237 | 1 | 0.01 | 0.08 | 0.13 |
| 1C | 182 | 11996 | 269 | -261 | 0 | 238 | 2023 | 1 | 0.01 | 0.08 | 0.12 |
| 1D | 182 | 11996 | 440 | -261 | 0 | 238 | 2237 | 1 | 0.01 | 0.08 | 0.13 |
| 1E | 182 | 12964 | 269 | 266 | 0 | -243 | 2023 | 1 | 0.01 | 0.09 | 0.12 |
| 1F | 182 | 12964 | 440 | 266 | 0 | -243 | 2237 | 1 | 0.01 | 0.09 | 0.13 |
| 1G | 182 | 12964 | 269 | -261 | 0 | 238 | 2023 | 1 | 0.01 | 0.09 | 0.12 |
| 1H | 182 | 12964 | 440 | -261 | 0 | 238 | 2237 | 1 | 0.01 | 0.09 | 0.13 |
| 1I | 182 | 11895 | 250 | 136 | 0 | -124 | 2032 | 1 | 0.01 | 0.08 | 0.12 |
| 1J | 182 | 11895 | 458 | 136 | 0 | -124 | 2228 | 1 | 0.01 | 0.08 | 0.13 |
| 1K | 182 | 11895 | 250 | -130 | 0 | 119 | 2032 | 1 | 0.01 | 0.08 | 0.12 |
| 1L | 182 | 11895 | 458 | -130 | 0 | 119 | 2228 | 1 | 0.01 | 0.08 | 0.13 |
| 1M | 182 | 13065 | 250 | 136 | 0 | -124 | 2032 | 1 | 0.01 | 0.09 | 0.12 |
| 1N | 182 | 13065 | 458 | 136 | 0 | -124 | 2228 | 1 | 0.01 | 0.09 | 0.13 |
| 1O | 182 | 13065 | 250 | -130 | 0 | 119 | 2032 | 1 | 0.01 | 0.09 | 0.12 |
| 1P | 182 | 13065 | 458 | -130 | 0 | 119 | 2228 | 1 | 0.01 | 0.09 | 0.13 |
| 2 | 182 | 12380 | 354 | -1 | 0 | 0 | 2119 | 1 | 0.01 | 0.09 | 0.13 |
| 7 | 182 | 12400 | 351 | 3 | 0 | -3 | 2119 | 1 | 0.01 | 0.09 | 0.13 |
| 8 | 182 | 12450 | 357 | -1 | 0 | 1 | 2129 | 1 | 0.01 | 0.09 | 0.13 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |

**ASTA NUM. 80** NI 68 NF 69 Lungh. 182.5 cm SEZ. 2 Ps IPE 300

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.4223 4.0527 2.2997 6.7748 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | 14157 | 261 | 279 | 0 | 255 | 1848 | 1 | 0.01 | 0.10 | 0.11 | |
| 1B | 0 | 14157 | 355 | 279 | 0 | 255 | 1696 | 1 | 0.01 | 0.10 | 0.10 | |
| 1C | 0 | 14157 | 261 | -290 | 0 | -264 | 1848 | 1 | 0.01 | 0.10 | 0.11 | |
| 1D | 0 | 14157 | 355 | -290 | 0 | -264 | 1696 | 1 | 0.01 | 0.10 | 0.10 | |
| 1E | 0 | 15563 | 261 | 279 | 0 | 255 | 1848 | 1 | 0.01 | 0.11 | 0.11 | |
| 1F | 0 | 15563 | 355 | 279 | 0 | 255 | 1696 | 1 | 0.01 | 0.11 | 0.10 | |
| 1G | 0 | 15563 | 261 | -290 | 0 | -264 | 1848 | 1 | 0.01 | 0.11 | 0.11 | |
| 1H | 0 | 15563 | 355 | -290 | 0 | -264 | 1696 | 1 | 0.01 | 0.11 | 0.10 | |
| 1I | 0 | 14054 | 209 | 178 | 0 | 162 | 1847 | 1 | 0.01 | 0.10 | 0.11 | |
| 1J | 0 | 14054 | 408 | 178 | 0 | 162 | 1697 | 1 | 0.01 | 0.10 | 0.10 | |
| 1K | 0 | 14054 | 209 | -189 | 0 | -172 | 1847 | 1 | 0.01 | 0.10 | 0.11 | |
| 1L | 0 | 14054 | 408 | -189 | 0 | -172 | 1697 | 1 | 0.01 | 0.10 | 0.10 | |
| 1M | 0 | 15666 | 209 | 178 | 0 | 162 | 1847 | 1 | 0.01 | 0.11 | 0.11 | |
| 1N | 0 | 15666 | 408 | 178 | 0 | 162 | 1697 | 1 | 0.01 | 0.11 | 0.10 | |
| 1O | 0 | 15666 | 209 | -189 | 0 | -172 | 1847 | 1 | 0.01 | 0.11 | 0.11 | |
| 1P | 0 | 15666 | 408 | -189 | 0 | -172 | 1697 | 1 | 0.01 | 0.11 | 0.10 | |
| 2 | 0 | 14760 | 308 | 0 | 0 | 0 | 1762 | 1 | 0.01 | 0.10 | 0.11 | |
| 7 | 0 | 14770 | 305 | -5 | 0 | -5 | 1765 | 1 | 0.01 | 0.10 | 0.11 | |
| 8 | 0 | 14860 | 311 | 0 | 0 | 0 | 1769 | 1 | 0.01 | 0.10 | 0.11 | |
| 1A | 91 | 14157 | -585 | 279 | 0 | 0 | 1752 | 1 | 0.01 | 0.10 | 0.10 | |
| 1B | 91 | 14157 | -490 | 279 | 0 | 0 | 1583 | 1 | 0.01 | 0.10 | 0.09 | |
| 1C | 91 | 14157 | -585 | -290 | 0 | -0 | 1752 | 1 | 0.01 | 0.10 | 0.10 | |
| 1D | 91 | 14157 | -490 | -290 | 0 | -0 | 1583 | 1 | 0.01 | 0.10 | 0.09 | |
| 1E | 91 | 15563 | -585 | 279 | 0 | 0 | 1752 | 1 | 0.01 | 0.11 | 0.10 | |
| 1F | 91 | 15563 | -490 | 279 | 0 | 0 | 1583 | 1 | 0.01 | 0.11 | 0.09 | |
| 1G | 91 | 15563 | -585 | -290 | 0 | -0 | 1752 | 1 | 0.01 | 0.11 | 0.10 | |
| 1H | 91 | 15563 | -490 | -290 | 0 | -0 | 1583 | 1 | 0.01 | 0.11 | 0.09 | |
| 1I | 91 | 14054 | -637 | 178 | 0 | 0 | 1627 | 1 | 0.02 | 0.10 | 0.10 | |
| 1J | 91 | 14054 | -438 | 178 | 0 | 0 | 1707 | 1 | 0.01 | 0.10 | 0.10 | |
| 1K | 91 | 14054 | -637 | -189 | 0 | 0 | 1627 | 1 | 0.02 | 0.10 | 0.10 | |
| 1L | 91 | 14054 | -438 | -189 | 0 | 0 | 1707 | 1 | 0.01 | 0.10 | 0.10 | |
| 1M | 91 | 15666 | -637 | 178 | 0 | 0 | 1627 | 1 | 0.02 | 0.11 | 0.10 | |
| 1N | 91 | 15666 | -438 | 178 | 0 | 0 | 1707 | 1 | 0.01 | 0.11 | 0.10 | |
| 1O | 91 | 15666 | -637 | -189 | 0 | 0 | 1627 | 1 | 0.02 | 0.11 | 0.10 | |
| 1P | 91 | 15666 | -438 | -189 | 0 | 0 | 1707 | 1 | 0.01 | 0.11 | 0.10 | |
| 2 | 91 | 14760 | -538 | 0 | 0 | 0 | 1657 | 1 | 0.01 | 0.10 | 0.10 | |
| 7 | 91 | 14770 | -540 | -5 | 0 | 0 | 1658 | 1 | 0.01 | 0.10 | 0.10 | |
| 8 | 91 | 14860 | -535 | 0 | 0 | 0 | 1667 | 1 | 0.01 | 0.10 | 0.10 | |
| 1A | 182 | 14157 | -1430 | 279 | 0 | -255 | 884 | 1 | 0.04 | 0.10 | 0.08 | |
| 1B | 182 | 14157 | -1336 | 279 | 0 | -255 | 698 | 1 | 0.03 | 0.10 | 0.08 | |
| 1C | 182 | 14157 | -1430 | -290 | 0 | 264 | 884 | 1 | 0.04 | 0.10 | 0.08 | |
| 1D | 182 | 14157 | -1336 | -290 | 0 | 264 | 698 | 1 | 0.03 | 0.10 | 0.08 | |
| 1E | 182 | 15563 | -1430 | 279 | 0 | -255 | 884 | 1 | 0.04 | 0.11 | 0.08 | |
| 1F | 182 | 15563 | -1336 | 279 | 0 | -255 | 698 | 1 | 0.03 | 0.11 | 0.08 | |
| 1G | 182 | 15563 | -1430 | -290 | 0 | 264 | 884 | 1 | 0.04 | 0.11 | 0.08 | |
| 1H | 182 | 15563 | -1336 | -290 | 0 | 264 | 698 | 1 | 0.03 | 0.11 | 0.08 | |
| 1I | 182 | 14054 | -1482 | 178 | 0 | -162 | 637 | 1 | 0.04 | 0.10 | 0.05 | |
| 1J | 182 | 14054 | -1284 | 178 | 0 | -162 | 946 | 1 | 0.03 | 0.10 | 0.06 | |
| 1K | 182 | 14054 | -1482 | -189 | 0 | 172 | 637 | 1 | 0.04 | 0.10 | 0.05 | |
| 1L | 182 | 14054 | -1284 | -189 | 0 | 172 | 946 | 1 | 0.03 | 0.10 | 0.06 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1M | 182 | 15666 | -1482 | 178 | 0 | -162 | 637 | 1 | 0.04 | 0.11 | 0.05 |
| 1N | 182 | 15666 | -1284 | 178 | 0 | -162 | 946 | 1 | 0.03 | 0.11 | 0.06 |
| 1O | 182 | 15666 | -1482 | -189 | 0 | 172 | 637 | 1 | 0.04 | 0.11 | 0.05 |
| 1P | 182 | 15666 | -1284 | -189 | 0 | 172 | 946 | 1 | 0.03 | 0.11 | 0.06 |
| 2 | 182 | 14760 | -1383 | 0 | 0 | -0 | 781 | 1 | 0.03 | 0.10 | 0.05 |
| 7 | 182 | 14770 | -1386 | -5 | 0 | 5 | 779 | 1 | 0.04 | 0.10 | 0.05 |
| 8 | 182 | 14860 | -1381 | 0 | 0 | -0 | 793 | 1 | 0.03 | 0.10 | 0.05 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | -- | -- | | | | | | | | | | |
| | kg | kg*m | | | | | | | | | | | |

**ASTA NUM. 81** NI 69 NF 67 Lungh. 182.5 cm SEZ. 2 Ps IPE 300

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.4223 4.0527 2.2997 6.7748 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | -- | -- | -- | -- | -- | -- | | -- | -- | | |
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | 4063 | -1532 | 341 | 0 | 311 | 2429 | 1 | 0.04 | 0.03 | 0.14 | |
| 1B | 0 | 4063 | -1326 | 341 | 0 | 311 | 2189 | 1 | 0.03 | 0.03 | 0.13 | |
| 1C | 0 | 4063 | -1532 | -361 | 0 | -329 | 2429 | 1 | 0.04 | 0.03 | 0.14 | |
| 1D | 0 | 4063 | -1326 | -361 | 0 | -329 | 2189 | 1 | 0.03 | 0.03 | 0.13 | |
| 1E | 0 | 5421 | -1532 | 341 | 0 | 311 | 2429 | 1 | 0.04 | 0.04 | 0.14 | |
| 1F | 0 | 5421 | -1326 | 341 | 0 | 311 | 2189 | 1 | 0.03 | 0.04 | 0.13 | |
| 1G | 0 | 5421 | -1532 | -361 | 0 | -329 | 2429 | 1 | 0.04 | 0.04 | 0.14 | |
| 1H | 0 | 5421 | -1326 | -361 | 0 | -329 | 2189 | 1 | 0.03 | 0.04 | 0.13 | |
| 1I | 0 | 3224 | -1552 | 212 | 0 | 194 | 2436 | 1 | 0.04 | 0.02 | 0.15 | |
| 1J | 0 | 3224 | -1306 | 212 | 0 | 194 | 2182 | 1 | 0.03 | 0.02 | 0.13 | |
| 1K | 0 | 3224 | -1552 | -232 | 0 | -212 | 2436 | 1 | 0.04 | 0.02 | 0.15 | |
| 1L | 0 | 3224 | -1306 | -232 | 0 | -212 | 2182 | 1 | 0.03 | 0.02 | 0.13 | |
| 1M | 0 | 6260 | -1552 | 212 | 0 | 194 | 2436 | 1 | 0.04 | 0.04 | 0.15 | |
| 1N | 0 | 6260 | -1306 | 212 | 0 | 194 | 2182 | 1 | 0.03 | 0.04 | 0.13 | |
| 1O | 0 | 6260 | -1552 | -232 | 0 | -212 | 2436 | 1 | 0.04 | 0.04 | 0.15 | |
| 1P | 0 | 6260 | -1306 | -232 | 0 | -212 | 2182 | 1 | 0.03 | 0.04 | 0.13 | |
| 2 | 0 | 4639 | -1429 | 1 | 0 | 1 | 2299 | 1 | 0.04 | 0.03 | 0.14 | |
| 7 | 0 | 4628 | -1432 | -10 | 0 | -9 | 2300 | 1 | 0.04 | 0.03 | 0.14 | |
| 8 | 0 | 4754 | -1427 | 1 | 0 | 1 | 2308 | 1 | 0.04 | 0.03 | 0.14 | |
| 1A | 91 | 4063 | -2377 | 341 | 0 | 0 | 623 | 1 | 0.06 | 0.03 | 0.04 | |
| 1B | 91 | 4063 | -2172 | 341 | 0 | 0 | 615 | 1 | 0.05 | 0.03 | 0.04 | |
| 1C | 91 | 4063 | -2377 | -361 | 0 | 0 | 623 | 1 | 0.06 | 0.03 | 0.04 | |
| 1D | 91 | 4063 | -2172 | -361 | 0 | 0 | 615 | 1 | 0.05 | 0.03 | 0.04 | |
| 1E | 91 | 5421 | -2377 | 341 | 0 | 0 | 623 | 1 | 0.06 | 0.04 | 0.04 | |
| 1F | 91 | 5421 | -2172 | 341 | 0 | 0 | 615 | 1 | 0.05 | 0.04 | 0.04 | |
| 1G | 91 | 5421 | -2377 | -361 | 0 | 0 | 623 | 1 | 0.06 | 0.04 | 0.04 | |
| 1H | 91 | 5421 | -2172 | -361 | 0 | 0 | 615 | 1 | 0.05 | 0.04 | 0.04 | |
| 1I | 91 | 3224 | -2398 | 212 | 0 | 0 | 803 | 1 | 0.06 | 0.02 | 0.05 | |
| 1J | 91 | 3224 | -2151 | 212 | 0 | 0 | 435 | 1 | 0.05 | 0.02 | 0.03 | |
| 1K | 91 | 3224 | -2398 | -232 | 0 | 0 | 803 | 1 | 0.06 | 0.02 | 0.05 | |
| 1L | 91 | 3224 | -2151 | -232 | 0 | 0 | 435 | 1 | 0.05 | 0.02 | 0.03 | |
| 1M | 91 | 6260 | -2398 | 212 | 0 | 0 | 803 | 1 | 0.06 | 0.04 | 0.05 | |
| 1N | 91 | 6260 | -2151 | 212 | 0 | 0 | 435 | 1 | 0.05 | 0.04 | 0.03 | |
| 1O | 91 | 6260 | -2398 | -232 | 0 | 0 | 803 | 1 | 0.06 | 0.04 | 0.05 | |
| 1P | 91 | 6260 | -2151 | -232 | 0 | 0 | 435 | 1 | 0.05 | 0.04 | 0.03 | |
| 2 | 91 | 4639 | -2275 | 1 | 0 | 0 | 609 | 1 | 0.06 | 0.03 | 0.04 | |
| 7 | 91 | 4628 | -2278 | -10 | 0 | 0 | 608 | 1 | 0.06 | 0.03 | 0.04 | |
| 8 | 91 | 4754 | -2272 | 1 | 0 | 0 | 621 | 1 | 0.06 | 0.03 | 0.04 | |
| 1A | 182 | 4063 | -3223 | 341 | 0 | -311 | -1954 | 1 | 0.08 | 0.03 | 0.12 | |
| 1B | 182 | 4063 | -3017 | 341 | 0 | -311 | -1730 | 1 | 0.08 | 0.03 | 0.10 | |
| 1C | 182 | 4063 | -3223 | -361 | 0 | 329 | -1954 | 1 | 0.08 | 0.03 | 0.12 | |
| 1D | 182 | 4063 | -3017 | -361 | 0 | 329 | -1730 | 1 | 0.08 | 0.03 | 0.11 | |
| 1E | 182 | 5421 | -3223 | 341 | 0 | -311 | -1954 | 1 | 0.08 | 0.04 | 0.12 | |
| 1F | 182 | 5421 | -3017 | 341 | 0 | -311 | -1730 | 1 | 0.08 | 0.04 | 0.10 | |
| 1G | 182 | 5421 | -3223 | -361 | 0 | 329 | -1954 | 1 | 0.08 | 0.04 | 0.12 | |
| 1H | 182 | 5421 | -3017 | -361 | 0 | 329 | -1730 | 1 | 0.08 | 0.04 | 0.11 | |
| 1I | 182 | 3224 | -3243 | 212 | 0 | -194 | -1601 | 1 | 0.08 | 0.02 | 0.10 | |
| 1J | 182 | 3224 | -2997 | 212 | 0 | -194 | -2083 | 1 | 0.08 | 0.02 | 0.12 | |
| 1K | 182 | 3224 | -3243 | -232 | 0 | 212 | -1601 | 1 | 0.08 | 0.02 | 0.10 | |
| 1L | 182 | 3224 | -2997 | -232 | 0 | 212 | -2083 | 1 | 0.08 | 0.02 | 0.12 | |
| 1M | 182 | 6260 | -3243 | 212 | 0 | -194 | -1601 | 1 | 0.08 | 0.04 | 0.10 | |
| 1N | 182 | 6260 | -2997 | 212 | 0 | -194 | -2083 | 1 | 0.08 | 0.04 | 0.12 | |
| 1O | 182 | 6260 | -3243 | -232 | 0 | 212 | -1601 | 1 | 0.08 | 0.04 | 0.10 | |
| 1P | 182 | 6260 | -2997 | -232 | 0 | 212 | -2083 | 1 | 0.08 | 0.04 | 0.12 | |
| 2 | 182 | 4639 | -3121 | 1 | 0 | -1 | -1853 | 1 | 0.08 | 0.03 | 0.11 | |
| 7 | 182 | 4628 | -3123 | -10 | 0 | 9 | -1856 | 1 | 0.08 | 0.03 | 0.11 | |
| 8 | 182 | 4754 | -3118 | 1 | 0 | -1 | -1838 | 1 | 0.08 | 0.03 | 0.11 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | -- | -- | | | | | | | | | | |
| | kg | kg*m | | | | | | | | | | | |

**ASTA NUM. 82** NI 19 NF 26 Lungh. 182.5 cm SEZ. 2 Ps IPE 300

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.4223 4.4290 2.5132 7.3645 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | -- | -- | -- | -- | -- | -- | | -- | -- | | |
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | 4165 | 3276 | 346 | 0 | 315 | -1905 | 1 | 0.08 | 0.03 | 0.11 | |
| 1B | 0 | 4165 | 3536 | 346 | 0 | 315 | -2217 | 1 | 0.09 | 0.03 | 0.13 | |
| 1C | 0 | 4165 | 3276 | -327 | 0 | -299 | -1905 | 1 | 0.08 | 0.03 | 0.11 | |
| 1D | 0 | 4165 | 3536 | -327 | 0 | -299 | -2217 | 1 | 0.09 | 0.03 | 0.13 | |
| 1E | 0 | 5253 | 3276 | 346 | 0 | 315 | -1905 | 1 | 0.08 | 0.04 | 0.11 | |
| 1F | 0 | 5253 | 3536 | 346 | 0 | 315 | -2217 | 1 | 0.09 | 0.04 | 0.13 | |
| 1G | 0 | 5253 | 3276 | -327 | 0 | -299 | -1905 | 1 | 0.08 | 0.04 | 0.11 | |
| 1H | 0 | 5253 | 3536 | -327 | 0 | -299 | -2217 | 1 | 0.09 | 0.04 | 0.13 | |



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| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1I | 0 | 3292 | 3198 | 229 | 0 | 209 | -1758 | 1 | 0.08 | 0.02 | 0.10 |
| 1J | 0 | 3292 | 3614 | 229 | 0 | 209 | -2364 | 1 | 0.09 | 0.02 | 0.14 |
| 1K | 0 | 3292 | 3198 | -211 | 0 | -192 | -1758 | 1 | 0.08 | 0.02 | 0.10 |
| 1L | 0 | 3292 | 3614 | -211 | 0 | -192 | -2364 | 1 | 0.09 | 0.02 | 0.14 |
| 1M | 0 | 6126 | 3198 | 229 | 0 | 209 | -1758 | 1 | 0.08 | 0.04 | 0.10 |
| 1N | 0 | 6126 | 3614 | 229 | 0 | 209 | -2364 | 1 | 0.09 | 0.04 | 0.14 |
| 1O | 0 | 6126 | 3198 | -211 | 0 | -192 | -1758 | 1 | 0.08 | 0.04 | 0.10 |
| 1P | 0 | 6126 | 3614 | -211 | 0 | -192 | -2364 | 1 | 0.09 | 0.04 | 0.14 |
| 2 | 0 | 5083 | 3389 | 1 | 0 | 1 | -2007 | 1 | 0.09 | 0.04 | 0.12 |
| 7 | 0 | 5094 | 3390 | 9 | 0 | 8 | -2007 | 1 | 0.09 | 0.04 | 0.12 |
| 8 | 0 | 4698 | 3405 | 1 | 0 | 1 | -2061 | 1 | 0.09 | 0.03 | 0.12 |
| 1A | 91 | 4165 | 2357 | 346 | 0 | 0 | 654 | 1 | 0.06 | 0.03 | 0.04 |
| 1B | 91 | 4165 | 2616 | 346 | 0 | 0 | 601 | 1 | 0.07 | 0.03 | 0.04 |
| 1C | 91 | 4165 | 2357 | -327 | 0 | 0 | 654 | 1 | 0.06 | 0.03 | 0.04 |
| 1D | 91 | 4165 | 2616 | -327 | 0 | 0 | 601 | 1 | 0.07 | 0.03 | 0.04 |
| 1E | 91 | 5253 | 2357 | 346 | 0 | 0 | 654 | 1 | 0.06 | 0.04 | 0.04 |
| 1F | 91 | 5253 | 2616 | 346 | 0 | 0 | 601 | 1 | 0.07 | 0.04 | 0.04 |
| 1G | 91 | 5253 | 2357 | -327 | 0 | 0 | 654 | 1 | 0.06 | 0.04 | 0.04 |
| 1H | 91 | 5253 | 2616 | -327 | 0 | 0 | 601 | 1 | 0.07 | 0.04 | 0.04 |
| 1I | 91 | 3292 | 2278 | 229 | 0 | 0 | 707 | 1 | 0.06 | 0.02 | 0.04 |
| 1J | 91 | 3292 | 2695 | 229 | 0 | 0 | 548 | 1 | 0.07 | 0.02 | 0.03 |
| 1K | 91 | 3292 | 2278 | -211 | 0 | 0 | 707 | 1 | 0.06 | 0.02 | 0.04 |
| 1L | 91 | 3292 | 2695 | -211 | 0 | 0 | 548 | 1 | 0.07 | 0.02 | 0.03 |
| 1M | 91 | 6126 | 2278 | 229 | 0 | 0 | 707 | 1 | 0.06 | 0.04 | 0.04 |
| 1N | 91 | 6126 | 2695 | 229 | 0 | 0 | 548 | 1 | 0.07 | 0.04 | 0.03 |
| 1O | 91 | 6126 | 2278 | -211 | 0 | 0 | 707 | 1 | 0.06 | 0.04 | 0.04 |
| 1P | 91 | 6126 | 2695 | -211 | 0 | 0 | 548 | 1 | 0.07 | 0.04 | 0.03 |
| 2 | 91 | 5083 | 2470 | 1 | 0 | 0 | 666 | 1 | 0.06 | 0.04 | 0.04 |
| 7 | 91 | 5094 | 2470 | 9 | 0 | 0 | 667 | 1 | 0.06 | 0.04 | 0.04 |
| 8 | 91 | 4698 | 2486 | 1 | 0 | 0 | 627 | 1 | 0.06 | 0.03 | 0.04 |
| 1A | 182 | 4165 | 1437 | 346 | 0 | -315 | 2375 | 1 | 0.04 | 0.03 | 0.14 |
| 1B | 182 | 4165 | 1697 | 346 | 0 | -315 | 2579 | 1 | 0.04 | 0.03 | 0.15 |
| 1C | 182 | 4165 | 1437 | -327 | 0 | 299 | 2375 | 1 | 0.04 | 0.03 | 0.14 |
| 1D | 182 | 4165 | 1697 | -327 | 0 | 299 | 2579 | 1 | 0.04 | 0.03 | 0.15 |
| 1E | 182 | 5253 | 1437 | 346 | 0 | -315 | 2375 | 1 | 0.04 | 0.04 | 0.14 |
| 1F | 182 | 5253 | 1697 | 346 | 0 | -315 | 2579 | 1 | 0.04 | 0.04 | 0.15 |
| 1G | 182 | 5253 | 1437 | -327 | 0 | 299 | 2375 | 1 | 0.04 | 0.04 | 0.14 |
| 1H | 182 | 5253 | 1697 | -327 | 0 | 299 | 2579 | 1 | 0.04 | 0.04 | 0.15 |
| 1I | 182 | 3292 | 1359 | 229 | 0 | -209 | 2333 | 1 | 0.03 | 0.02 | 0.14 |
| 1J | 182 | 3292 | 1775 | 229 | 0 | -209 | 2621 | 1 | 0.04 | 0.02 | 0.16 |
| 1K | 182 | 3292 | 1359 | -211 | 0 | 192 | 2333 | 1 | 0.03 | 0.02 | 0.14 |
| 1L | 182 | 3292 | 1775 | -211 | 0 | 192 | 2621 | 1 | 0.04 | 0.02 | 0.16 |
| 1M | 182 | 6126 | 1359 | 229 | 0 | -209 | 2333 | 1 | 0.03 | 0.04 | 0.14 |
| 1N | 182 | 6126 | 1775 | 229 | 0 | -209 | 2621 | 1 | 0.04 | 0.04 | 0.16 |
| 1O | 182 | 6126 | 1359 | -211 | 0 | 192 | 2333 | 1 | 0.03 | 0.04 | 0.14 |
| 1P | 182 | 6126 | 1775 | -211 | 0 | 192 | 2621 | 1 | 0.04 | 0.04 | 0.16 |
| 2 | 182 | 5083 | 1550 | 1 | 0 | -1 | 2500 | 1 | 0.04 | 0.04 | 0.15 |
| 7 | 182 | 5094 | 1551 | 9 | 0 | -8 | 2502 | 1 | 0.04 | 0.04 | 0.15 |
| 8 | 182 | 4698 | 1566 | 1 | 0 | -1 | 2475 | 1 | 0.04 | 0.03 | 0.15 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |

**ASTA NUM. 83** NI 26 NF 61 Lungh. 182.5 cm SEZ. 2 Ps IPE 300

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.4223 4.4290 2.5132 7.3645 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | 15253 | 1460 | 308 | 0 | 281 | 880 | 1 | 0.04 | 0.11 | 0.09 | |
| 1B | 0 | 15253 | 1574 | 308 | 0 | 281 | 744 | 1 | 0.04 | 0.11 | 0.09 | |
| 1C | 0 | 15253 | 1460 | -294 | 0 | -268 | 880 | 1 | 0.04 | 0.11 | 0.08 | |
| 1D | 0 | 15253 | 1574 | -294 | 0 | -268 | 744 | 1 | 0.04 | 0.11 | 0.08 | |
| 1E | 0 | 16347 | 1460 | 308 | 0 | 281 | 880 | 1 | 0.04 | 0.11 | 0.09 | |
| 1F | 0 | 16347 | 1574 | 308 | 0 | 281 | 744 | 1 | 0.04 | 0.11 | 0.09 | |
| 1G | 0 | 16347 | 1460 | -294 | 0 | -268 | 880 | 1 | 0.04 | 0.11 | 0.08 | |
| 1H | 0 | 16347 | 1574 | -294 | 0 | -268 | 744 | 1 | 0.04 | 0.11 | 0.08 | |
| 1I | 0 | 14958 | 1386 | 199 | 0 | 182 | 948 | 1 | 0.04 | 0.10 | 0.06 | |
| 1J | 0 | 14958 | 1648 | 199 | 0 | 182 | 676 | 1 | 0.04 | 0.10 | 0.06 | |
| 1K | 0 | 14958 | 1386 | -186 | 0 | -170 | 948 | 1 | 0.04 | 0.10 | 0.06 | |
| 1L | 0 | 14958 | 1648 | -186 | 0 | -170 | 676 | 1 | 0.04 | 0.10 | 0.05 | |
| 1M | 0 | 16642 | 1386 | 199 | 0 | 182 | 948 | 1 | 0.04 | 0.12 | 0.06 | |
| 1N | 0 | 16642 | 1648 | 199 | 0 | 182 | 676 | 1 | 0.04 | 0.12 | 0.06 | |
| 1O | 0 | 16642 | 1386 | -186 | 0 | -170 | 948 | 1 | 0.04 | 0.12 | 0.06 | |
| 1P | 0 | 16642 | 1648 | -186 | 0 | -170 | 676 | 1 | 0.04 | 0.12 | 0.05 | |
| 2 | 0 | 16060 | 1500 | 1 | 0 | 1 | 853 | 1 | 0.04 | 0.11 | 0.05 | |
| 7 | 0 | 16080 | 1501 | 7 | 0 | 6 | 854 | 1 | 0.04 | 0.11 | 0.05 | |
| 8 | 0 | 15790 | 1516 | 1 | 0 | 1 | 811 | 1 | 0.04 | 0.11 | 0.05 | |
| 1A | 91 | 15253 | 540 | 308 | 0 | 0 | 1762 | 1 | 0.01 | 0.11 | 0.11 | |
| 1B | 91 | 15253 | 654 | 308 | 0 | 0 | 1791 | 1 | 0.02 | 0.11 | 0.11 | |
| 1C | 91 | 15253 | 540 | -294 | 0 | 0 | 1762 | 1 | 0.01 | 0.11 | 0.11 | |
| 1D | 91 | 15253 | 654 | -294 | 0 | 0 | 1791 | 1 | 0.02 | 0.11 | 0.11 | |
| 1E | 91 | 16347 | 540 | 308 | 0 | 0 | 1762 | 1 | 0.01 | 0.11 | 0.11 | |
| 1F | 91 | 16347 | 654 | 308 | 0 | 0 | 1791 | 1 | 0.02 | 0.11 | 0.11 | |
| 1G | 91 | 16347 | 540 | -294 | 0 | 0 | 1762 | 1 | 0.01 | 0.11 | 0.11 | |
| 1H | 91 | 16347 | 654 | -294 | 0 | 0 | 1791 | 1 | 0.02 | 0.11 | 0.11 | |
| 1I | 91 | 14958 | 466 | 199 | 0 | 0 | 1760 | 1 | 0.01 | 0.10 | 0.10 | |
| 1J | 91 | 14958 | 729 | 199 | 0 | 0 | 1793 | 1 | 0.02 | 0.10 | 0.11 | |
| 1K | 91 | 14958 | 466 | -186 | 0 | 0 | 1760 | 1 | 0.01 | 0.10 | 0.10 | |
| 1L | 91 | 14958 | 729 | -186 | 0 | 0 | 1793 | 1 | 0.02 | 0.10 | 0.11 | |
| 1M | 91 | 16642 | 466 | 199 | 0 | 0 | 1760 | 1 | 0.01 | 0.12 | 0.10 | |
| 1N | 91 | 16642 | 729 | 199 | 0 | 0 | 1793 | 1 | 0.02 | 0.12 | 0.11 | |
| 1O | 91 | 16642 | 466 | -186 | 0 | 0 | 1760 | 1 | 0.01 | 0.12 | 0.10 | |
| 1P | 91 | 16642 | 729 | -186 | 0 | 0 | 1793 | 1 | 0.02 | 0.12 | 0.11 | |
| 2 | 91 | 16060 | 581 | 1 | 0 | 0 | 1803 | 1 | 0.01 | 0.11 | 0.11 | |
| 7 | 91 | 16080 | 582 | 7 | 0 | 0 | 1805 | 1 | 0.01 | 0.11 | 0.11 | |
| 8 | 91 | 15790 | 596 | 1 | 0 | 0 | 1774 | 1 | 0.02 | 0.11 | 0.11 | |
| 1A | 182 | 15253 | -380 | 308 | 0 | -281 | 1805 | 1 | 0.01 | 0.11 | 0.11 | |
| 1B | 182 | 15253 | -265 | 308 | 0 | -281 | 1999 | 1 | 0.01 | 0.11 | 0.12 | |
| 1C | 182 | 15253 | -380 | -294 | 0 | 268 | 1805 | 1 | 0.01 | 0.11 | 0.11 | |
| 1D | 182 | 15253 | -265 | -294 | 0 | 268 | 1999 | 1 | 0.01 | 0.11 | 0.12 | |
| 1E | 182 | 16347 | -380 | 308 | 0 | -281 | 1805 | 1 | 0.01 | 0.11 | 0.11 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | 182 | 16347 | -265 | 308 | 0 | -281 | 1999 | 1 | 0.01 | 0.11 | 0.12 |
| 1G | 182 | 16347 | -380 | -294 | 0 | 268 | 1805 | 1 | 0.01 | 0.11 | 0.11 |
| 1H | 182 | 16347 | -265 | -294 | 0 | 268 | 1999 | 1 | 0.01 | 0.11 | 0.12 |
| 1I | 182 | 14958 | -454 | 199 | 0 | -182 | 1733 | 1 | 0.01 | 0.10 | 0.10 |
| 1J | 182 | 14958 | -191 | 199 | 0 | -182 | 2071 | 1 | 0.00 | 0.10 | 0.12 |
| 1K | 182 | 14958 | -454 | -186 | 0 | 170 | 1733 | 1 | 0.01 | 0.10 | 0.10 |
| 1L | 182 | 14958 | -191 | -186 | 0 | 170 | 2071 | 1 | 0.00 | 0.10 | 0.12 |
| 1M | 182 | 16642 | -454 | 199 | 0 | -182 | 1733 | 1 | 0.01 | 0.12 | 0.10 |
| 1N | 182 | 16642 | -191 | 199 | 0 | -182 | 2071 | 1 | 0.00 | 0.12 | 0.12 |
| 1O | 182 | 16642 | -454 | -186 | 0 | 170 | 1733 | 1 | 0.01 | 0.12 | 0.10 |
| 1P | 182 | 16642 | -191 | -186 | 0 | 170 | 2071 | 1 | 0.00 | 0.12 | 0.12 |
| 2 | 182 | 16060 | -339 | 1 | 0 | -1 | 1913 | 1 | 0.01 | 0.11 | 0.11 |
| 7 | 182 | 16080 | -338 | 7 | 0 | -6 | 1916 | 1 | 0.01 | 0.11 | 0.11 |
| 8 | 182 | 15790 | -323 | 1 | 0 | -1 | 1899 | 1 | 0.01 | 0.11 | 0.11 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | | | | | | | | | | | | |
| | kg | kg*m | | | | | | | | | | | |

**ASTA NUM. 84** NI 61 NF 55 Lungh. 182.5 cm SEZ. 2 Ps IPE 300

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.4223 4.4290 2.5132 7.3645 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | | | | | | | | | | | |
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | 12683 | -437 | 253 | 0 | 231 | 2375 | 1 | 0.01 | 0.09 | 0.14 | |
| 1B | 0 | 12683 | -309 | 253 | 0 | 231 | 2179 | 1 | 0.01 | 0.09 | 0.13 | |
| 1C | 0 | 12683 | -437 | -266 | 0 | -242 | 2375 | 1 | 0.01 | 0.09 | 0.14 | |
| 1D | 0 | 12683 | -309 | -266 | 0 | -242 | 2179 | 1 | 0.01 | 0.09 | 0.13 | |
| 1E | 0 | 13917 | -437 | 253 | 0 | 231 | 2375 | 1 | 0.01 | 0.10 | 0.14 | |
| 1F | 0 | 13917 | -309 | 253 | 0 | 231 | 2179 | 1 | 0.01 | 0.10 | 0.13 | |
| 1G | 0 | 13917 | -437 | -266 | 0 | -242 | 2375 | 1 | 0.01 | 0.10 | 0.14 | |
| 1H | 0 | 13917 | -309 | -266 | 0 | -242 | 2179 | 1 | 0.01 | 0.10 | 0.13 | |
| 1I | 0 | 12127 | -470 | 127 | 0 | 115 | 2428 | 1 | 0.01 | 0.08 | 0.14 | |
| 1J | 0 | 12127 | -275 | 127 | 0 | 115 | 2126 | 1 | 0.01 | 0.08 | 0.13 | |
| 1K | 0 | 12127 | -470 | -139 | 0 | -127 | 2428 | 1 | 0.01 | 0.08 | 0.14 | |
| 1L | 0 | 12127 | -275 | -139 | 0 | -127 | 2126 | 1 | 0.01 | 0.08 | 0.13 | |
| 1M | 0 | 14473 | -470 | 127 | 0 | 115 | 2428 | 1 | 0.01 | 0.10 | 0.14 | |
| 1N | 0 | 14473 | -275 | 127 | 0 | 115 | 2126 | 1 | 0.01 | 0.10 | 0.13 | |
| 1O | 0 | 14473 | -470 | -139 | 0 | -127 | 2428 | 1 | 0.01 | 0.10 | 0.14 | |
| 1P | 0 | 14473 | -275 | -139 | 0 | -127 | 2126 | 1 | 0.01 | 0.10 | 0.13 | |
| 2 | 0 | 13440 | -389 | 0 | 0 | 0 | 2306 | 1 | 0.01 | 0.09 | 0.14 | |
| 7 | 0 | 13460 | -388 | -6 | 0 | -6 | 2308 | 1 | 0.01 | 0.09 | 0.14 | |
| 8 | 0 | 13280 | -373 | 0 | 0 | 0 | 2275 | 1 | 0.01 | 0.09 | 0.14 | |
| 1A | 91 | 12683 | -1357 | 253 | 0 | 0 | 1532 | 1 | 0.03 | 0.09 | 0.09 | |
| 1B | 91 | 12683 | -1228 | 253 | 0 | 0 | 1503 | 1 | 0.03 | 0.09 | 0.09 | |
| 1C | 91 | 12683 | -1357 | -266 | 0 | 0 | 1532 | 1 | 0.03 | 0.09 | 0.09 | |
| 1D | 91 | 12683 | -1228 | -266 | 0 | 0 | 1503 | 1 | 0.03 | 0.09 | 0.09 | |
| 1E | 91 | 13917 | -1357 | 253 | 0 | 0 | 1532 | 1 | 0.03 | 0.10 | 0.09 | |
| 1F | 91 | 13917 | -1228 | 253 | 0 | 0 | 1503 | 1 | 0.03 | 0.10 | 0.09 | |
| 1G | 91 | 13917 | -1357 | -266 | 0 | 0 | 1532 | 1 | 0.03 | 0.10 | 0.09 | |
| 1H | 91 | 13917 | -1228 | -266 | 0 | 0 | 1503 | 1 | 0.03 | 0.10 | 0.09 | |
| 1I | 91 | 12127 | -1390 | 127 | 0 | 0 | 1517 | 1 | 0.04 | 0.08 | 0.09 | |
| 1J | 91 | 12127 | -1195 | 127 | 0 | 0 | 1517 | 1 | 0.03 | 0.08 | 0.09 | |
| 1K | 91 | 12127 | -1390 | -139 | 0 | 0 | 1517 | 1 | 0.04 | 0.08 | 0.09 | |
| 1L | 91 | 12127 | -1195 | -139 | 0 | 0 | 1517 | 1 | 0.03 | 0.08 | 0.09 | |
| 1M | 91 | 14473 | -1390 | 127 | 0 | 0 | 1517 | 1 | 0.04 | 0.10 | 0.09 | |
| 1N | 91 | 14473 | -1195 | 127 | 0 | 0 | 1517 | 1 | 0.03 | 0.10 | 0.09 | |
| 1O | 91 | 14473 | -1390 | -139 | 0 | 0 | 1517 | 1 | 0.04 | 0.10 | 0.09 | |
| 1P | 91 | 14473 | -1195 | -139 | 0 | 0 | 1517 | 1 | 0.03 | 0.10 | 0.09 | |
| 2 | 91 | 13440 | -1308 | 0 | 0 | 0 | 1532 | 1 | 0.03 | 0.09 | 0.09 | |
| 7 | 91 | 13460 | -1308 | -6 | 0 | 0 | 1534 | 1 | 0.03 | 0.09 | 0.09 | |
| 8 | 91 | 13280 | -1293 | 0 | 0 | 0 | 1515 | 1 | 0.03 | 0.09 | 0.09 | |
| 1A | 182 | 12683 | -2276 | 253 | 0 | -231 | -150 | 1 | 0.06 | 0.09 | 0.07 | |
| 1B | 182 | 12683 | -2148 | 253 | 0 | -231 | -12 | 1 | 0.05 | 0.09 | 0.07 | |
| 1C | 182 | 12683 | -2276 | -266 | 0 | 242 | -150 | 1 | 0.06 | 0.09 | 0.07 | |
| 1D | 182 | 12683 | -2148 | -266 | 0 | 242 | -12 | 1 | 0.05 | 0.09 | 0.07 | |
| 1E | 182 | 13917 | -2276 | 253 | 0 | -231 | -150 | 1 | 0.06 | 0.10 | 0.07 | |
| 1F | 182 | 13917 | -2148 | 253 | 0 | -231 | -12 | 1 | 0.05 | 0.10 | 0.07 | |
| 1G | 182 | 13917 | -2276 | -266 | 0 | 242 | -150 | 1 | 0.06 | 0.10 | 0.07 | |
| 1H | 182 | 13917 | -2148 | -266 | 0 | 242 | -12 | 1 | 0.05 | 0.10 | 0.07 | |
| 1I | 182 | 12127 | -2309 | 127 | 0 | -115 | -232 | 1 | 0.06 | 0.08 | 0.03 | |
| 1J | 182 | 12127 | -2115 | 127 | 0 | -115 | 69 | 1 | 0.05 | 0.08 | 0.03 | |
| 1K | 182 | 12127 | -2309 | -139 | 0 | 127 | -232 | 1 | 0.06 | 0.08 | 0.04 | |
| 1L | 182 | 12127 | -2115 | -139 | 0 | 127 | 69 | 1 | 0.05 | 0.08 | 0.04 | |
| 1M | 182 | 14473 | -2309 | 127 | 0 | -115 | -232 | 1 | 0.06 | 0.10 | 0.03 | |
| 1N | 182 | 14473 | -2115 | 127 | 0 | -115 | 69 | 1 | 0.05 | 0.10 | 0.03 | |
| 1O | 182 | 14473 | -2309 | -139 | 0 | 127 | -232 | 1 | 0.06 | 0.10 | 0.04 | |
| 1P | 182 | 14473 | -2115 | -139 | 0 | 127 | 69 | 1 | 0.05 | 0.10 | 0.04 | |
| 2 | 182 | 13440 | -2228 | 0 | 0 | -0 | -82 | 1 | 0.06 | 0.09 | 0.00 | |
| 7 | 182 | 13460 | -2227 | -6 | 0 | 6 | -79 | 1 | 0.06 | 0.09 | 0.00 | |
| 8 | 182 | 13280 | -2212 | 0 | 0 | -0 | -84 | 1 | 0.06 | 0.09 | 0.01 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | | | | | | | | | | | | |
| | kg | kg*m | | | | | | | | | | | |

**ASTA NUM. 85** NI 55 NF 31 Lungh. 182.5 cm SEZ. 2 Ps IPE 300

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.4223 4.4290 2.5132 7.3645 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | | | | | | | | | | | |
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -3434 | -2368 | 306 | 0 | 279 | 2446 | 2 | 0.06 | 0.02 | 0.15 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1B | 0 | -3434 | -2156 | 306 | 0 | 279 | 2222 | 2 | 0.05 | 0.02 | 0.13 |
| 1C | 0 | -3434 | -2368 | -327 | 0 | -298 | 2446 | 2 | 0.06 | 0.02 | 0.15 |
| 1D | 0 | -3434 | -2156 | -327 | 0 | -298 | 2222 | 2 | 0.05 | 0.02 | 0.13 |
| 1E | 0 | -2158 | -2368 | 306 | 0 | 279 | 2446 | 2 | 0.06 | 0.02 | 0.15 |
| 1F | 0 | -2158 | -2156 | 306 | 0 | 279 | 2222 | 2 | 0.05 | 0.02 | 0.13 |
| 1G | 0 | -2158 | -2368 | -327 | 0 | -298 | 2446 | 2 | 0.06 | 0.02 | 0.15 |
| 1H | 0 | -2158 | -2156 | -327 | 0 | -298 | 2222 | 2 | 0.05 | 0.02 | 0.13 |
| 1I | 0 | -4162 | -2419 | 151 | 0 | 138 | 2545 | 2 | 0.06 | 0.03 | 0.15 |
| 1J | 0 | -4162 | -2105 | 151 | 0 | 138 | 2123 | 2 | 0.05 | 0.03 | 0.13 |
| 1K | 0 | -4162 | -2419 | -173 | 0 | -157 | 2545 | 2 | 0.06 | 0.03 | 0.15 |
| 1L | 0 | -4162 | -2105 | -173 | 0 | -157 | 2123 | 2 | 0.05 | 0.03 | 0.13 |
| 1M | 0 | -1430 | -2419 | 151 | 0 | 138 | 2545 | 2 | 0.06 | 0.01 | 0.15 |
| 1N | 0 | -1430 | -2105 | 151 | 0 | 138 | 2123 | 2 | 0.05 | 0.01 | 0.13 |
| 1O | 0 | -1430 | -2419 | -173 | 0 | -157 | 2545 | 2 | 0.06 | 0.01 | 0.15 |
| 1P | 0 | -1430 | -2105 | -173 | 0 | -157 | 2123 | 2 | 0.05 | 0.01 | 0.13 |
| 2 | 0 | -2774 | -2278 | -1 | 0 | -1 | 2351 | 2 | 0.06 | 0.02 | 0.14 |
| 7 | 0 | -2746 | -2277 | -11 | 0 | -10 | 2353 | 2 | 0.06 | 0.02 | 0.14 |
| 8 | 0 | -2824 | -2263 | -1 | 0 | -1 | 2332 | 2 | 0.06 | 0.02 | 0.14 |
| | | | | | | | | | | | |
| 1A | 91 | -3434 | -3288 | 306 | 0 | 0 | -158 | 2 | 0.08 | 0.02 | 0.01 |
| 1B | 91 | -3434 | -3075 | 306 | 0 | 0 | -141 | 2 | 0.08 | 0.02 | 0.01 |
| 1C | 91 | -3434 | -3288 | -327 | 0 | 0 | -158 | 2 | 0.08 | 0.02 | 0.01 |
| 1D | 91 | -3434 | -3075 | -327 | 0 | 0 | -141 | 2 | 0.08 | 0.02 | 0.01 |
| 1E | 91 | -2158 | -3288 | 306 | 0 | 0 | -158 | 2 | 0.08 | 0.02 | 0.01 |
| 1F | 91 | -2158 | -3075 | 306 | 0 | 0 | -141 | 2 | 0.08 | 0.02 | 0.01 |
| 1G | 91 | -2158 | -3288 | -327 | 0 | 0 | -158 | 2 | 0.08 | 0.02 | 0.01 |
| 1H | 91 | -2158 | -3075 | -327 | 0 | 0 | -141 | 2 | 0.08 | 0.02 | 0.01 |
| 1I | 91 | -4162 | -3339 | 151 | 0 | 0 | -139 | 2 | 0.08 | 0.03 | 0.01 |
| 1J | 91 | -4162 | -3024 | 151 | 0 | 0 | -160 | 2 | 0.08 | 0.03 | 0.01 |
| 1K | 91 | -4162 | -3339 | -173 | 0 | 0 | -139 | 2 | 0.08 | 0.03 | 0.01 |
| 1L | 91 | -4162 | -3024 | -173 | 0 | 0 | -160 | 2 | 0.08 | 0.03 | 0.01 |
| 1M | 91 | -1430 | -3339 | 151 | 0 | 0 | -139 | 2 | 0.08 | 0.01 | 0.01 |
| 1N | 91 | -1430 | -3024 | 151 | 0 | 0 | -160 | 2 | 0.08 | 0.01 | 0.01 |
| 1O | 91 | -1430 | -3339 | -173 | 0 | 0 | -139 | 2 | 0.08 | 0.01 | 0.01 |
| 1P | 91 | -1430 | -3024 | -173 | 0 | 0 | -160 | 2 | 0.08 | 0.01 | 0.01 |
| 2 | 91 | -2774 | -3198 | -1 | 0 | 0 | -147 | 2 | 0.08 | 0.02 | 0.01 |
| 7 | 91 | -2746 | -3196 | -11 | 0 | 0 | -144 | 2 | 0.08 | 0.02 | 0.01 |
| 8 | 91 | -2824 | -3182 | -1 | 0 | -0 | -152 | 2 | 0.08 | 0.02 | 0.01 |
| | | | | | | | | | | | |
| 1A | 182 | -3434 | -4207 | 306 | 0 | -279 | -3601 | 2 | 0.11 | 0.02 | 0.21 |
| 1B | 182 | -3434 | -3995 | 306 | 0 | -279 | -3343 | 2 | 0.10 | 0.02 | 0.20 |
| 1C | 182 | -3434 | -4207 | -327 | 0 | 298 | -3601 | 2 | 0.11 | 0.02 | 0.21 |
| 1D | 182 | -3434 | -3995 | -327 | 0 | 298 | -3343 | 2 | 0.10 | 0.02 | 0.20 |
| 1E | 182 | -2158 | -4207 | 306 | 0 | -279 | -3601 | 2 | 0.11 | 0.02 | 0.21 |
| 1F | 182 | -2158 | -3995 | 306 | 0 | -279 | -3343 | 2 | 0.10 | 0.02 | 0.20 |
| 1G | 182 | -2158 | -4207 | -327 | 0 | 298 | -3601 | 2 | 0.11 | 0.02 | 0.21 |
| 1H | 182 | -2158 | -3995 | -327 | 0 | 298 | -3343 | 2 | 0.10 | 0.02 | 0.20 |
| 1I | 182 | -4162 | -4258 | 151 | 0 | -138 | -3663 | 2 | 0.11 | 0.03 | 0.22 |
| 1J | 182 | -4162 | -3944 | 151 | 0 | -138 | -3281 | 2 | 0.10 | 0.03 | 0.20 |
| 1K | 182 | -4162 | -4258 | -173 | 0 | 157 | -3663 | 2 | 0.11 | 0.03 | 0.22 |
| 1L | 182 | -4162 | -3944 | -173 | 0 | 157 | -3281 | 2 | 0.10 | 0.03 | 0.20 |
| 1M | 182 | -1430 | -4258 | 151 | 0 | -138 | -3663 | 2 | 0.11 | 0.01 | 0.22 |
| 1N | 182 | -1430 | -3944 | 151 | 0 | -138 | -3281 | 2 | 0.10 | 0.01 | 0.20 |
| 1O | 182 | -1430 | -4258 | -173 | 0 | 157 | -3663 | 2 | 0.11 | 0.01 | 0.22 |
| 1P | 182 | -1430 | -3944 | -173 | 0 | 157 | -3281 | 2 | 0.10 | 0.01 | 0.20 |
| 2 | 182 | -2774 | -4117 | -1 | 0 | 1 | -3485 | 2 | 0.10 | 0.02 | 0.21 |
| 7 | 182 | -2746 | -4116 | -11 | 0 | 10 | -3481 | 2 | 0.10 | 0.02 | 0.21 |
| 8 | 182 | -2824 | -4102 | -1 | 0 | 1 | -3476 | 2 | 0.10 | 0.02 | 0.21 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -3434 | 279 | -3601 | 2 | 0.8199 | 0.9750 | 0.9955 | -- | -- | 0.03 | -- | 0.32 | Snell. 'zx'= 54 |
| 1B | -3434 | 279 | -3343 | 2 | 0.8199 | 0.9750 | 0.9956 | -- | -- | 0.03 | -- | 0.31 | Snell. 'zx'= 54 |
| 1C | -3434 | -298 | -3601 | 2 | 0.8199 | 0.9750 | 0.9955 | -- | -- | 0.03 | -- | 0.33 | Snell. 'zx'= 54 |
| 1D | -3434 | -298 | -3343 | 2 | 0.8199 | 0.9750 | 0.9956 | -- | -- | 0.03 | -- | 0.31 | Snell. 'zx'= 54 |
| 1E | -2158 | 279 | -3601 | 2 | 0.8199 | 0.9843 | 0.9972 | -- | -- | 0.02 | -- | 0.31 | Snell. 'zx'= 54 |
| 1F | -2158 | 279 | -3343 | 2 | 0.8199 | 0.9843 | 0.9972 | -- | -- | 0.02 | -- | 0.30 | Snell. 'zx'= 54 |
| 1G | -2158 | -298 | -3601 | 2 | 0.8199 | 0.9843 | 0.9972 | -- | -- | 0.02 | -- | 0.32 | Snell. 'zx'= 54 |
| 1H | -2158 | -298 | -3343 | 2 | 0.8199 | 0.9843 | 0.9972 | -- | -- | 0.02 | -- | 0.30 | Snell. 'zx'= 54 |
| 1I | -4162 | 138 | -3663 | 2 | 0.8199 | 0.9697 | 0.9944 | -- | -- | 0.04 | -- | 0.29 | Snell. 'zx'= 54 |
| 1J | -4162 | 138 | -3281 | 2 | 0.8199 | 0.9697 | 0.9948 | -- | -- | 0.04 | -- | 0.27 | Snell. 'zx'= 54 |
| 1K | -4162 | -157 | -3663 | 2 | 0.8199 | 0.9697 | 0.9944 | -- | -- | 0.04 | -- | 0.30 | Snell. 'zx'= 54 |
| 1L | -4162 | -157 | -3281 | 2 | 0.8199 | 0.9697 | 0.9948 | -- | -- | 0.04 | -- | 0.28 | Snell. 'zx'= 54 |
| 1M | -1430 | 138 | -3663 | 2 | 0.8199 | 0.9896 | 0.9981 | -- | -- | 0.01 | -- | 0.27 | Snell. 'zx'= 54 |
| 1N | -1430 | 138 | -3281 | 2 | 0.8199 | 0.9896 | 0.9982 | -- | -- | 0.01 | -- | 0.25 | Snell. 'zx'= 54 |
| 1O | -1430 | -157 | -3663 | 2 | 0.8199 | 0.9896 | 0.9981 | -- | -- | 0.01 | -- | 0.28 | Snell. 'zx'= 54 |
| 1P | -1430 | -157 | -3281 | 2 | 0.8199 | 0.9896 | 0.9982 | -- | -- | 0.01 | -- | 0.25 | Snell. 'zx'= 54 |
| 2 | -2774 | -1 | -3485 | 2 | 0.8199 | 0.9798 | 0.9964 | -- | -- | 0.02 | -- | 0.23 | Snell. 'zx'= 54 |
| 7 | -2746 | -10 | -3481 | 2 | 0.8199 | 0.9800 | 0.9964 | -- | -- | 0.02 | -- | 0.23 | Snell. 'zx'= 54 |
| 8 | -2824 | -1 | -3476 | 2 | 0.8199 | 0.9794 | 0.9963 | -- | -- | 0.02 | -- | 0.23 | Snell. 'zx'= 54 |

**ASTA NUM. 86** NI 31 NF 90 Lungh. 205.0 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 4.2490 2.5132 7.2491 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -6430 | 2540 | 9 | 0 | 9 | -2369 | 2 | 0.09 | 0.06 | 0.24 | |
| 1B | 0 | -6430 | 2590 | 9 | 0 | 9 | -2481 | 2 | 0.09 | 0.06 | 0.25 | |
| 1C | 0 | -6430 | 2540 | -4 | 0 | -4 | -2369 | 2 | 0.09 | 0.06 | 0.24 | |
| 1D | 0 | -6430 | 2590 | -4 | 0 | -4 | -2481 | 2 | 0.09 | 0.06 | 0.25 | |
| 1E | 0 | -5414 | 2540 | 9 | 0 | 9 | -2369 | 2 | 0.09 | 0.05 | 0.24 | |
| 1F | 0 | -5414 | 2590 | 9 | 0 | 9 | -2481 | 2 | 0.09 | 0.05 | 0.25 | |
| 1G | 0 | -5414 | 2540 | -4 | 0 | -4 | -2369 | 2 | 0.09 | 0.05 | 0.24 | |
| 1H | 0 | -5414 | 2590 | -4 | 0 | -4 | -2481 | 2 | 0.09 | 0.05 | 0.25 | |
| 1I | 0 | -6605 | 2518 | 5 | 0 | 5 | -2325 | 2 | 0.09 | 0.06 | 0.24 | |
| 1J | 0 | -6605 | 2612 | 5 | 0 | 5 | -2525 | 2 | 0.09 | 0.06 | 0.26 | |
| 1K | 0 | -6605 | 2518 | 0 | 0 | 0 | -2325 | 2 | 0.09 | 0.06 | 0.24 | |
| 1L | 0 | -6605 | 2612 | 0 | 0 | 0 | -2525 | 2 | 0.09 | 0.06 | 0.26 | |
| 1M | 0 | -5239 | 2518 | 5 | 0 | 5 | -2325 | 2 | 0.09 | 0.05 | 0.24 | |
| 1N | 0 | -5239 | 2612 | 5 | 0 | 5 | -2525 | 2 | 0.09 | 0.05 | 0.26 | |
| 1O | 0 | -5239 | 2518 | 0 | 0 | 0 | -2325 | 2 | 0.09 | 0.05 | 0.24 | |
| 1P | 0 | -5239 | 2612 | 0 | 0 | 0 | -2525 | 2 | 0.09 | 0.05 | 0.26 | |
| 2 | 0 | -6055 | 2577 | -0 | 0 | -0 | -2448 | 2 | 0.09 | 0.06 | 0.25 | |
| 7 | 0 | -6030 | 2577 | 3 | 0 | 3 | -2446 | 2 | 0.09 | 0.06 | 0.25 | |
| 8 | 0 | -5947 | 2565 | -0 | 0 | -0 | -2428 | 2 | 0.09 | 0.06 | 0.25 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 102 | -6430 | 1522 | 9 | 0 | -0 | -270 | 2 | 0.05 | 0.06 | 0.03 |
| 1B | 102 | -6430 | 1573 | 9 | 0 | -0 | -364 | 2 | 0.05 | 0.06 | 0.04 |
| 1C | 102 | -6430 | 1522 | -4 | 0 | -0 | -270 | 2 | 0.05 | 0.06 | 0.03 |
| 1D | 102 | -6430 | 1573 | -4 | 0 | -0 | -364 | 2 | 0.05 | 0.06 | 0.04 |
| 1E | 102 | -5414 | 1522 | 9 | 0 | -0 | -270 | 2 | 0.05 | 0.05 | 0.03 |
| 1F | 102 | -5414 | 1573 | 9 | 0 | -0 | -364 | 2 | 0.05 | 0.05 | 0.04 |
| 1G | 102 | -5414 | 1522 | -4 | 0 | -0 | -270 | 2 | 0.05 | 0.05 | 0.03 |
| 1H | 102 | -5414 | 1573 | -4 | 0 | -0 | -364 | 2 | 0.05 | 0.05 | 0.04 |
| 1I | 102 | -6605 | 1501 | 5 | 0 | -0 | -253 | 2 | 0.05 | 0.06 | 0.03 |
| 1J | 102 | -6605 | 1595 | 5 | 0 | -0 | -381 | 2 | 0.05 | 0.06 | 0.04 |
| 1K | 102 | -6605 | 1501 | 0 | 0 | -0 | -253 | 2 | 0.05 | 0.06 | 0.03 |
| 1L | 102 | -6605 | 1595 | 0 | 0 | -0 | -381 | 2 | 0.05 | 0.06 | 0.04 |
| 1M | 102 | -5239 | 1501 | 5 | 0 | -0 | -253 | 2 | 0.05 | 0.05 | 0.03 |
| 1N | 102 | -5239 | 1595 | 5 | 0 | -0 | -381 | 2 | 0.05 | 0.05 | 0.04 |
| 1O | 102 | -5239 | 1501 | 0 | 0 | -0 | -253 | 2 | 0.05 | 0.05 | 0.03 |
| 1P | 102 | -5239 | 1595 | 0 | 0 | -0 | -381 | 2 | 0.05 | 0.05 | 0.04 |
| 2 | 102 | -6055 | 1559 | -0 | 0 | -0 | -328 | 2 | 0.05 | 0.06 | 0.03 |
| 7 | 102 | -6030 | 1559 | 3 | 0 | 0 | -326 | 2 | 0.05 | 0.06 | 0.03 |
| 8 | 102 | -5947 | 1548 | -0 | 0 | -0 | -320 | 2 | 0.05 | 0.06 | 0.03 |
| 1A | 205 | -6430 | 505 | 9 | 0 | -9 | 786 | 2 | 0.02 | 0.06 | 0.08 |
| 1B | 205 | -6430 | 556 | 9 | 0 | -9 | 710 | 2 | 0.02 | 0.06 | 0.07 |
| 1C | 205 | -6430 | 505 | -4 | 0 | 4 | 786 | 2 | 0.02 | 0.06 | 0.08 |
| 1D | 205 | -6430 | 556 | -4 | 0 | 4 | 710 | 2 | 0.02 | 0.06 | 0.07 |
| 1E | 205 | -5414 | 505 | 9 | 0 | -9 | 786 | 2 | 0.02 | 0.05 | 0.08 |
| 1F | 205 | -5414 | 556 | 9 | 0 | -9 | 710 | 2 | 0.02 | 0.05 | 0.07 |
| 1G | 205 | -5414 | 505 | -4 | 0 | 4 | 786 | 2 | 0.02 | 0.05 | 0.08 |
| 1H | 205 | -5414 | 556 | -4 | 0 | 4 | 710 | 2 | 0.02 | 0.05 | 0.07 |
| 1I | 205 | -6605 | 483 | 5 | 0 | -5 | 777 | 2 | 0.02 | 0.06 | 0.08 |
| 1J | 205 | -6605 | 578 | 5 | 0 | -5 | 719 | 2 | 0.02 | 0.06 | 0.07 |
| 1K | 205 | -6605 | 483 | 0 | 0 | -0 | 777 | 2 | 0.02 | 0.06 | 0.08 |
| 1L | 205 | -6605 | 578 | 0 | 0 | -0 | 719 | 2 | 0.02 | 0.06 | 0.07 |
| 1M | 205 | -5239 | 483 | 5 | 0 | -5 | 777 | 2 | 0.02 | 0.05 | 0.08 |
| 1N | 205 | -5239 | 578 | 5 | 0 | -5 | 719 | 2 | 0.02 | 0.05 | 0.07 |
| 1O | 205 | -5239 | 483 | 0 | 0 | -0 | 777 | 2 | 0.02 | 0.05 | 0.08 |
| 1P | 205 | -5239 | 578 | 0 | 0 | -0 | 719 | 2 | 0.02 | 0.05 | 0.07 |
| 2 | 205 | -6055 | 542 | -0 | 0 | 0 | 748 | 2 | 0.02 | 0.06 | 0.08 |
| 7 | 205 | -6030 | 542 | 3 | 0 | -3 | 750 | 2 | 0.02 | 0.06 | 0.08 |
| 8 | 205 | -5947 | 531 | -0 | 0 | 0 | 746 | 2 | 0.02 | 0.06 | 0.08 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | -- | | | | | | | | | | | |
| | kg | kg*m | | | | | | | | | | | |
| 1A | -6430 | -9 | -2369 | 2 | 0.6711 | 0.9213 | 0.9947 | -- | -- | 0.09 | -- | 0.34 | Snell. 'zx'= 76 |
| 1B | -6430 | -9 | -2481 | 2 | 0.6711 | 0.9213 | 0.9955 | -- | -- | 0.09 | -- | 0.35 | Snell. 'zx'= 76 |
| 1C | -6430 | -4 | -2369 | 2 | 0.6711 | 0.9213 | 0.9947 | -- | -- | 0.09 | -- | 0.33 | Snell. 'zx'= 76 |
| 1D | -6430 | -4 | -2481 | 2 | 0.6711 | 0.9213 | 0.9955 | -- | -- | 0.09 | -- | 0.35 | Snell. 'zx'= 76 |
| 1E | -5414 | -9 | -2369 | 2 | 0.6711 | 0.9338 | 0.9956 | -- | -- | 0.08 | -- | 0.32 | Snell. 'zx'= 76 |
| 1F | -5414 | -9 | -2481 | 2 | 0.6711 | 0.9338 | 0.9962 | -- | -- | 0.08 | -- | 0.33 | Snell. 'zx'= 76 |
| 1G | -5414 | -4 | -2369 | 2 | 0.6711 | 0.9338 | 0.9956 | -- | -- | 0.08 | -- | 0.32 | Snell. 'zx'= 76 |
| 1H | -5414 | -4 | -2481 | 2 | 0.6711 | 0.9338 | 0.9962 | -- | -- | 0.08 | -- | 0.33 | Snell. 'zx'= 76 |
| 1I | -6605 | -5 | -2325 | 2 | 0.6711 | 0.9192 | 0.9946 | -- | -- | 0.09 | -- | 0.33 | Snell. 'zx'= 76 |
| 1J | -6605 | -5 | -2525 | 2 | 0.6711 | 0.9192 | 0.9953 | -- | -- | 0.09 | -- | 0.35 | Snell. 'zx'= 76 |
| 1K | -6605 | -0 | -2325 | 2 | 0.6711 | 0.9192 | 0.9946 | -- | -- | 0.09 | -- | 0.33 | Snell. 'zx'= 76 |
| 1L | -6605 | -0 | -2525 | 2 | 0.6711 | 0.9192 | 0.9953 | -- | -- | 0.09 | -- | 0.35 | Snell. 'zx'= 76 |
| 1M | -5239 | -5 | -2325 | 2 | 0.6711 | 0.9359 | 0.9957 | -- | -- | 0.07 | -- | 0.31 | Snell. 'zx'= 76 |
| 1N | -5239 | -5 | -2525 | 2 | 0.6711 | 0.9359 | 0.9963 | -- | -- | 0.07 | -- | 0.33 | Snell. 'zx'= 76 |
| 1O | -5239 | -0 | -2325 | 2 | 0.6711 | 0.9359 | 0.9957 | -- | -- | 0.07 | -- | 0.31 | Snell. 'zx'= 76 |
| 1P | -5239 | -0 | -2525 | 2 | 0.6711 | 0.9359 | 0.9963 | -- | -- | 0.07 | -- | 0.33 | Snell. 'zx'= 76 |
| 2 | -6055 | -0 | -2448 | 2 | 0.6711 | 0.9259 | 0.9954 | -- | -- | 0.09 | -- | 0.34 | Snell. 'zx'= 76 |
| 7 | -6030 | 3 | -2446 | 2 | 0.6711 | 0.9262 | 0.9954 | -- | -- | 0.09 | -- | 0.34 | Snell. 'zx'= 76 |
| 8 | -5947 | -0 | -2428 | 2 | 0.6711 | 0.9272 | 0.9955 | -- | -- | 0.08 | -- | 0.33 | Snell. 'zx'= 76 |

**ASTA NUM. 87** NI 90 NF 66 Lungh. 135.0 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 4.4290 2.5132 7.2491 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | -- | -- | | -- | -- | | | -- | | | |
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -55 | 462 | 201 | 0 | 136 | 40 | 2 | 0.02 | 0.00 | 0.07 | |
| 1B | 0 | -55 | 498 | 201 | 0 | 136 | -37 | 2 | 0.02 | 0.00 | 0.07 | |
| 1C | 0 | -55 | 462 | -199 | 0 | -134 | 40 | 2 | 0.02 | 0.00 | 0.07 | |
| 1D | 0 | -55 | 498 | -199 | 0 | -134 | -37 | 2 | 0.02 | 0.00 | 0.07 | |
| 1E | 0 | 643 | 462 | 201 | 0 | 136 | 40 | 1 | 0.02 | 0.01 | 0.07 | |
| 1F | 0 | 643 | 498 | 201 | 0 | 136 | -37 | 1 | 0.02 | 0.01 | 0.07 | |
| 1G | 0 | 643 | 462 | -199 | 0 | -134 | 40 | 1 | 0.02 | 0.01 | 0.07 | |
| 1H | 0 | 643 | 498 | -199 | 0 | -134 | -37 | 1 | 0.02 | 0.01 | 0.07 | |
| 1I | 0 | 138 | 435 | 68 | 0 | 46 | 42 | 1 | 0.01 | 0.00 | 0.02 | |
| 1J | 0 | 138 | 525 | 68 | 0 | 46 | -38 | 1 | 0.02 | 0.00 | 0.02 | |
| 1K | 0 | 138 | 435 | -66 | 0 | -44 | 42 | 1 | 0.01 | 0.00 | 0.02 | |
| 1L | 0 | 138 | 525 | -66 | 0 | -44 | -38 | 1 | 0.02 | 0.00 | 0.02 | |
| 1M | 0 | 451 | 435 | 68 | 0 | 46 | 42 | 1 | 0.01 | 0.00 | 0.02 | |
| 1N | 0 | 451 | 525 | 68 | 0 | 46 | -38 | 1 | 0.02 | 0.00 | 0.02 | |
| 1O | 0 | 451 | 435 | -66 | 0 | -44 | 42 | 1 | 0.01 | 0.00 | 0.02 | |
| 1P | 0 | 451 | 525 | -66 | 0 | -44 | -38 | 1 | 0.02 | 0.00 | 0.02 | |
| 2 | 0 | 257 | 492 | 1 | 0 | 1 | -9 | 1 | 0.02 | 0.00 | 0.00 | |
| 7 | 0 | 281 | 492 | 1 | 0 | 1 | -7 | 1 | 0.02 | 0.00 | 0.00 | |
| 8 | 0 | 270 | 480 | 1 | 0 | 1 | -0 | 1 | 0.02 | 0.00 | 0.00 | |
| 1A | 68 | -55 | -208 | 201 | 0 | 0 | 138 | 1 | 0.01 | 0.00 | 0.01 | |
| 1B | 68 | -55 | -172 | 201 | 0 | 0 | 62 | 1 | 0.01 | 0.00 | 0.01 | |
| 1C | 68 | -55 | -208 | -199 | 0 | 0 | 138 | 1 | 0.01 | 0.00 | 0.01 | |
| 1D | 68 | -55 | -172 | -199 | 0 | 0 | 62 | 1 | 0.01 | 0.00 | 0.01 | |
| 1E | 68 | 643 | -208 | 201 | 0 | 0 | 138 | 1 | 0.01 | 0.01 | 0.01 | |
| 1F | 68 | 643 | -172 | 201 | 0 | 0 | 62 | 1 | 0.01 | 0.01 | 0.01 | |
| 1G | 68 | 643 | -208 | -199 | 0 | 0 | 138 | 1 | 0.01 | 0.01 | 0.01 | |
| 1H | 68 | 643 | -172 | -199 | 0 | 0 | 62 | 1 | 0.01 | 0.01 | 0.01 | |
| 1I | 68 | 138 | -235 | 68 | 0 | 0 | 101 | 1 | 0.01 | 0.00 | 0.01 | |
| 1J | 68 | 138 | -145 | 68 | 0 | 0 | 98 | 1 | 0.00 | 0.00 | 0.01 | |
| 1K | 68 | 138 | -235 | -66 | 0 | 0 | 101 | 1 | 0.01 | 0.00 | 0.01 | |
| 1L | 68 | 138 | -145 | -66 | 0 | 0 | 98 | 1 | 0.00 | 0.00 | 0.01 | |
| 1M | 68 | 451 | -235 | 68 | 0 | 0 | 101 | 1 | 0.01 | 0.00 | 0.01 | |
| 1N | 68 | 451 | -145 | 68 | 0 | 0 | 98 | 1 | 0.00 | 0.00 | 0.01 | |
| 1O | 68 | 451 | -235 | -66 | 0 | 0 | 101 | 1 | 0.01 | 0.00 | 0.01 | |
| 1P | 68 | 451 | -145 | -66 | 0 | 0 | 98 | 1 | 0.00 | 0.00 | 0.01 | |
| 2 | 68 | 257 | -178 | 1 | 0 | 0 | 97 | 1 | 0.01 | 0.00 | 0.01 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 68 | 281 | -179 | 1 | 0 | 0 | 99 | 1 | 0.01 | 0.00 | 0.01 |
| 8 | 68 | 270 | -190 | 1 | 0 | 0 | 98 | 1 | 0.01 | 0.00 | 0.01 |
| 1A | 135 | -55 | -878 | 201 | 0 | -136 | -217 | 2 | 0.03 | 0.00 | 0.07 |
| 1B | 135 | -55 | -842 | 201 | 0 | -136 | -292 | 2 | 0.03 | 0.00 | 0.07 |
| 1C | 135 | -55 | -878 | -199 | 0 | 134 | -217 | 2 | 0.03 | 0.00 | 0.07 |
| 1D | 135 | -55 | -842 | -199 | 0 | 134 | -292 | 2 | 0.03 | 0.00 | 0.07 |
| 1E | 135 | 643 | -878 | 201 | 0 | -136 | -217 | 1 | 0.03 | 0.01 | 0.07 |
| 1F | 135 | 643 | -842 | 201 | 0 | -136 | -292 | 1 | 0.03 | 0.01 | 0.07 |
| 1G | 135 | 643 | -878 | -199 | 0 | 134 | -217 | 1 | 0.03 | 0.01 | 0.07 |
| 1H | 135 | 643 | -842 | -199 | 0 | 134 | -292 | 1 | 0.03 | 0.01 | 0.07 |
| 1I | 135 | 138 | -905 | 68 | 0 | -46 | -291 | 1 | 0.03 | 0.00 | 0.03 |
| 1J | 135 | 138 | -815 | 68 | 0 | -46 | -218 | 1 | 0.03 | 0.00 | 0.02 |
| 1K | 135 | 138 | -905 | -66 | 0 | 44 | -291 | 1 | 0.03 | 0.00 | 0.03 |
| 1L | 135 | 138 | -815 | -66 | 0 | 44 | -218 | 1 | 0.03 | 0.00 | 0.02 |
| 1M | 135 | 451 | -905 | 68 | 0 | -46 | -291 | 1 | 0.03 | 0.00 | 0.03 |
| 1N | 135 | 451 | -815 | 68 | 0 | -46 | -218 | 1 | 0.03 | 0.00 | 0.02 |
| 1O | 135 | 451 | -905 | -66 | 0 | 44 | -291 | 1 | 0.03 | 0.00 | 0.03 |
| 1P | 135 | 451 | -815 | -66 | 0 | 44 | -218 | 1 | 0.03 | 0.00 | 0.02 |
| 2 | 135 | 257 | -848 | 1 | 0 | -1 | -250 | 1 | 0.03 | 0.00 | 0.03 |
| 7 | 135 | 281 | -849 | 1 | 0 | -1 | -248 | 1 | 0.03 | 0.00 | 0.03 |
| 8 | 135 | 270 | -860 | 1 | 0 | -1 | -256 | 1 | 0.03 | 0.00 | 0.03 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -55 | 136 | -217 | 2 | 0.8457 | 0.9995 | 1.0000 | -- | -- | 0.00 | -- | 0.09 | Snell. 'zx'= 50 |
| 1B | -55 | 136 | -292 | 2 | 0.8457 | 0.9995 | 1.0000 | -- | -- | 0.00 | -- | 0.10 | Snell. 'zx'= 50 |
| 1C | -55 | -134 | -217 | 2 | 0.8457 | 0.9995 | 1.0000 | -- | -- | 0.00 | -- | 0.09 | Snell. 'zx'= 50 |
| 1D | -55 | -134 | -292 | 2 | 0.8457 | 0.9995 | 1.0000 | -- | -- | 0.00 | -- | 0.10 | Snell. 'zx'= 50 |

**ASTA NUM. 88** NI 66 NF 22 Lungh. 170.0 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 4.4290 2.5132 7.2491 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -7740 | -937 | 107 | 0 | 91 | 685 | 2 | 0.03 | 0.07 | 0.07 | |
| 1B | 0 | -7740 | -884 | 107 | 0 | 91 | 616 | 2 | 0.03 | 0.07 | 0.06 | |
| 1C | 0 | -7740 | -937 | -116 | 0 | -99 | 685 | 2 | 0.03 | 0.07 | 0.07 | |
| 1D | 0 | -7740 | -884 | -116 | 0 | -99 | 616 | 2 | 0.03 | 0.07 | 0.06 | |
| 1E | 0 | -6756 | -937 | 107 | 0 | 91 | 685 | 2 | 0.03 | 0.06 | 0.07 | |
| 1F | 0 | -6756 | -884 | 107 | 0 | 91 | 616 | 2 | 0.03 | 0.06 | 0.06 | |
| 1G | 0 | -6756 | -937 | -116 | 0 | -99 | 685 | 2 | 0.03 | 0.06 | 0.07 | |
| 1H | 0 | -6756 | -884 | -116 | 0 | -99 | 616 | 2 | 0.03 | 0.06 | 0.06 | |
| 1I | 0 | -7856 | -962 | 34 | 0 | 29 | 675 | 2 | 0.03 | 0.08 | 0.07 | |
| 1J | 0 | -7856 | -858 | 34 | 0 | 29 | 626 | 2 | 0.03 | 0.08 | 0.06 | |
| 1K | 0 | -7856 | -962 | -43 | 0 | -36 | 675 | 2 | 0.03 | 0.08 | 0.07 | |
| 1L | 0 | -7856 | -858 | -43 | 0 | -36 | 626 | 2 | 0.03 | 0.08 | 0.06 | |
| 1M | 0 | -6640 | -962 | 34 | 0 | 29 | 675 | 2 | 0.03 | 0.06 | 0.07 | |
| 1N | 0 | -6640 | -858 | 34 | 0 | 29 | 626 | 2 | 0.03 | 0.06 | 0.06 | |
| 1O | 0 | -6640 | -962 | -43 | 0 | -36 | 675 | 2 | 0.03 | 0.06 | 0.07 | |
| 1P | 0 | -6640 | -858 | -43 | 0 | -36 | 626 | 2 | 0.03 | 0.06 | 0.06 | |
| 2 | 0 | -7200 | -899 | -0 | 0 | -0 | 645 | 2 | 0.03 | 0.07 | 0.07 | |
| 7 | 0 | -7176 | -899 | -5 | 0 | -4 | 647 | 2 | 0.03 | 0.07 | 0.07 | |
| 8 | 0 | -7272 | -910 | -0 | 0 | -0 | 648 | 2 | 0.03 | 0.07 | 0.07 | |
| 1A | 85 | -7740 | -1781 | 107 | 0 | 0 | -437 | 2 | 0.06 | 0.07 | 0.04 | |
| 1B | 85 | -7740 | -1728 | 107 | 0 | 0 | -526 | 2 | 0.06 | 0.07 | 0.05 | |
| 1C | 85 | -7740 | -1781 | -116 | 0 | 0 | -437 | 2 | 0.06 | 0.07 | 0.04 | |
| 1D | 85 | -7740 | -1728 | -116 | 0 | 0 | -526 | 2 | 0.06 | 0.07 | 0.05 | |
| 1E | 85 | -6756 | -1781 | 107 | 0 | 0 | -437 | 2 | 0.06 | 0.06 | 0.04 | |
| 1F | 85 | -6756 | -1728 | 107 | 0 | 0 | -526 | 2 | 0.06 | 0.06 | 0.05 | |
| 1G | 85 | -6756 | -1781 | -116 | 0 | 0 | -437 | 2 | 0.06 | 0.06 | 0.04 | |
| 1H | 85 | -6756 | -1728 | -116 | 0 | 0 | -526 | 2 | 0.06 | 0.06 | 0.05 | |
| 1I | 85 | -7856 | -1806 | 34 | 0 | 0 | -424 | 2 | 0.06 | 0.08 | 0.04 | |
| 1J | 85 | -7856 | -1702 | 34 | 0 | 0 | -539 | 2 | 0.06 | 0.08 | 0.06 | |
| 1K | 85 | -7856 | -1806 | -43 | 0 | 0 | -424 | 2 | 0.06 | 0.08 | 0.04 | |
| 1L | 85 | -7856 | -1702 | -43 | 0 | 0 | -539 | 2 | 0.06 | 0.08 | 0.06 | |
| 1M | 85 | -6640 | -1806 | 34 | 0 | 0 | -424 | 2 | 0.06 | 0.06 | 0.04 | |
| 1N | 85 | -6640 | -1702 | 34 | 0 | 0 | -539 | 2 | 0.06 | 0.06 | 0.06 | |
| 1O | 85 | -6640 | -1806 | -43 | 0 | 0 | -424 | 2 | 0.06 | 0.06 | 0.04 | |
| 1P | 85 | -6640 | -1702 | -43 | 0 | 0 | -539 | 2 | 0.06 | 0.06 | 0.06 | |
| 2 | 85 | -7200 | -1742 | -0 | 0 | 0 | -478 | 2 | 0.06 | 0.07 | 0.05 | |
| 7 | 85 | -7176 | -1742 | -5 | 0 | 0 | -475 | 2 | 0.06 | 0.07 | 0.05 | |
| 8 | 85 | -7272 | -1754 | -0 | 0 | 0 | -484 | 2 | 0.06 | 0.07 | 0.05 | |
| 1A | 170 | -7740 | -2624 | 107 | 0 | -91 | -2277 | 2 | 0.09 | 0.07 | 0.23 | |
| 1B | 170 | -7740 | -2572 | 107 | 0 | -91 | -2385 | 2 | 0.09 | 0.07 | 0.24 | |
| 1C | 170 | -7740 | -2624 | -116 | 0 | 99 | -2277 | 2 | 0.09 | 0.07 | 0.23 | |
| 1D | 170 | -7740 | -2572 | -116 | 0 | 99 | -2385 | 2 | 0.09 | 0.07 | 0.24 | |
| 1E | 170 | -6756 | -2624 | 107 | 0 | -91 | -2277 | 2 | 0.09 | 0.06 | 0.23 | |
| 1F | 170 | -6756 | -2572 | 107 | 0 | -91 | -2385 | 2 | 0.09 | 0.06 | 0.24 | |
| 1G | 170 | -6756 | -2624 | -116 | 0 | 99 | -2277 | 2 | 0.09 | 0.06 | 0.23 | |
| 1H | 170 | -6756 | -2572 | -116 | 0 | 99 | -2385 | 2 | 0.09 | 0.06 | 0.24 | |
| 1I | 170 | -7856 | -2650 | 34 | 0 | -29 | -2241 | 2 | 0.09 | 0.08 | 0.23 | |
| 1J | 170 | -7856 | -2546 | 34 | 0 | -29 | -2421 | 2 | 0.09 | 0.08 | 0.25 | |
| 1K | 170 | -7856 | -2650 | -43 | 0 | 36 | -2241 | 2 | 0.09 | 0.08 | 0.23 | |
| 1L | 170 | -7856 | -2546 | -43 | 0 | 36 | -2421 | 2 | 0.09 | 0.08 | 0.25 | |
| 1M | 170 | -6640 | -2650 | 34 | 0 | -29 | -2241 | 2 | 0.09 | 0.06 | 0.23 | |
| 1N | 170 | -6640 | -2546 | 34 | 0 | -29 | -2421 | 2 | 0.09 | 0.06 | 0.25 | |
| 1O | 170 | -6640 | -2650 | -43 | 0 | 36 | -2241 | 2 | 0.09 | 0.06 | 0.23 | |
| 1P | 170 | -6640 | -2546 | -43 | 0 | 36 | -2421 | 2 | 0.09 | 0.06 | 0.25 | |
| 2 | 170 | -7200 | -2586 | -0 | 0 | 0 | -2317 | 2 | 0.09 | 0.07 | 0.24 | |
| 7 | 170 | -7176 | -2586 | -5 | 0 | 4 | -2315 | 2 | 0.09 | 0.07 | 0.24 | |
| 8 | 170 | -7272 | -2598 | -0 | 0 | 0 | -2333 | 2 | 0.09 | 0.07 | 0.24 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -7740 | 91 | -2277 | 2 | 0.7644 | 0.9169 | 0.9928 | -- | -- | 0.10 | -- | 0.37 | Snell. 'zx'= 63 |



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| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1B | -7740 | 91 | -2385 | 2 | 0.7644 | 0.9169 | 0.9935 | -- | -- | 0.10 | -- | 0.38 Snell. 'zx'= | 63 |
| 1C | -7740 | -99 | -2277 | 2 | 0.7644 | 0.9169 | 0.9928 | -- | -- | 0.10 | -- | 0.37 Snell. 'zx'= | 63 |
| 1D | -7740 | -99 | -2385 | 2 | 0.7644 | 0.9169 | 0.9935 | -- | -- | 0.10 | -- | 0.38 Snell. 'zx'= | 63 |
| 1E | -6756 | 91 | -2277 | 2 | 0.7644 | 0.9274 | 0.9937 | -- | -- | 0.08 | -- | 0.36 Snell. 'zx'= | 63 |
| 1F | -6756 | 91 | -2385 | 2 | 0.7644 | 0.9274 | 0.9944 | -- | -- | 0.08 | -- | 0.37 Snell. 'zx'= | 63 |
| 1G | -6756 | -99 | -2277 | 2 | 0.7644 | 0.9274 | 0.9937 | -- | -- | 0.08 | -- | 0.36 Snell. 'zx'= | 63 |
| 1H | -6756 | -99 | -2385 | 2 | 0.7644 | 0.9274 | 0.9944 | -- | -- | 0.08 | -- | 0.37 Snell. 'zx'= | 63 |
| 1I | -7856 | 29 | -2241 | 2 | 0.7644 | 0.9156 | 0.9928 | -- | -- | 0.10 | -- | 0.34 Snell. 'zx'= | 63 |
| 1J | -7856 | 29 | -2421 | 2 | 0.7644 | 0.9156 | 0.9934 | -- | -- | 0.10 | -- | 0.36 Snell. 'zx'= | 63 |
| 1K | -7856 | -36 | -2241 | 2 | 0.7644 | 0.9156 | 0.9928 | -- | -- | 0.10 | -- | 0.34 Snell. 'zx'= | 63 |
| 1L | -7856 | -36 | -2421 | 2 | 0.7644 | 0.9156 | 0.9934 | -- | -- | 0.10 | -- | 0.36 Snell. 'zx'= | 63 |
| 1M | -6640 | 29 | -2241 | 2 | 0.7644 | 0.9287 | 0.9939 | -- | -- | 0.08 | -- | 0.32 Snell. 'zx'= | 63 |
| 1N | -6640 | 29 | -2421 | 2 | 0.7644 | 0.9287 | 0.9944 | -- | -- | 0.08 | -- | 0.34 Snell. 'zx'= | 63 |
| 1O | -6640 | -36 | -2241 | 2 | 0.7644 | 0.9287 | 0.9939 | -- | -- | 0.08 | -- | 0.33 Snell. 'zx'= | 63 |
| 1P | -6640 | -36 | -2421 | 2 | 0.7644 | 0.9287 | 0.9944 | -- | -- | 0.08 | -- | 0.35 Snell. 'zx'= | 63 |
| 2 | -7200 | -0 | -2317 | 2 | 0.7644 | 0.9227 | 0.9937 | -- | -- | 0.09 | -- | 0.33 Snell. 'zx'= | 63 |
| 7 | -7176 | -4 | -2315 | 2 | 0.7644 | 0.9229 | 0.9937 | -- | -- | 0.09 | -- | 0.33 Snell. 'zx'= | 63 |
| 8 | -7272 | -0 | -2333 | 2 | 0.7644 | 0.9219 | 0.9936 | -- | -- | 0.09 | -- | 0.33 Snell. 'zx'= | 63 |

**ASTA NUM. 89** NI 22 NF 72 Lungh. 182.5 cm SEZ. 2 Ps IPE 300

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.4223 4.4290 2.5132 7.3645 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -3269 | 4013 | 327 | 0 | 298 | -3339 | 2 | 0.10 | 0.02 | 0.20 | |
| 1B | 0 | -3269 | 4219 | 327 | 0 | 298 | -3605 | 2 | 0.11 | 0.02 | 0.21 | |
| 1C | 0 | -3269 | 4013 | -305 | 0 | -279 | -3339 | 2 | 0.10 | 0.02 | 0.20 | |
| 1D | 0 | -3269 | 4219 | -305 | 0 | -279 | -3605 | 2 | 0.11 | 0.02 | 0.21 | |
| 1E | 0 | -2055 | 4013 | 327 | 0 | 298 | -3339 | 2 | 0.10 | 0.01 | 0.20 | |
| 1F | 0 | -2055 | 4219 | 327 | 0 | 298 | -3605 | 2 | 0.11 | 0.01 | 0.21 | |
| 1G | 0 | -2055 | 4013 | -305 | 0 | -279 | -3339 | 2 | 0.10 | 0.01 | 0.20 | |
| 1H | 0 | -2055 | 4219 | -305 | 0 | -279 | -3605 | 2 | 0.11 | 0.01 | 0.21 | |
| 1I | 0 | -3912 | 3988 | 171 | 0 | 156 | -3286 | 2 | 0.10 | 0.03 | 0.20 | |
| 1J | 0 | -3912 | 4244 | 171 | 0 | 156 | -3658 | 2 | 0.11 | 0.03 | 0.22 | |
| 1K | 0 | -3912 | 3988 | -149 | 0 | -136 | -3286 | 2 | 0.10 | 0.03 | 0.20 | |
| 1L | 0 | -3912 | 4244 | -149 | 0 | -136 | -3658 | 2 | 0.11 | 0.03 | 0.22 | |
| 1M | 0 | -1412 | 3988 | 171 | 0 | 156 | -3286 | 2 | 0.10 | 0.01 | 0.20 | |
| 1N | 0 | -1412 | 4244 | 171 | 0 | 156 | -3658 | 2 | 0.11 | 0.01 | 0.22 | |
| 1O | 0 | -1412 | 3988 | -149 | 0 | -136 | -3286 | 2 | 0.10 | 0.01 | 0.20 | |
| 1P | 0 | -1412 | 4244 | -149 | 0 | -136 | -3658 | 2 | 0.11 | 0.01 | 0.22 | |
| 2 | 0 | -2748 | 4113 | 1 | 0 | 1 | -3478 | 2 | 0.10 | 0.02 | 0.21 | |
| 7 | 0 | -2719 | 4112 | 11 | 0 | 10 | -3474 | 2 | 0.10 | 0.02 | 0.21 | |
| 8 | 0 | -2692 | 4117 | 1 | 0 | 1 | -3476 | 2 | 0.10 | 0.02 | 0.21 | |
| 1A | 91 | -3269 | 3093 | 327 | 0 | 0 | -121 | 2 | 0.08 | 0.02 | 0.01 | |
| 1B | 91 | -3269 | 3300 | 327 | 0 | 0 | -151 | 2 | 0.08 | 0.02 | 0.01 | |
| 1C | 91 | -3269 | 3093 | -305 | 0 | 0 | -121 | 2 | 0.08 | 0.02 | 0.01 | |
| 1D | 91 | -3269 | 3300 | -305 | 0 | 0 | -151 | 2 | 0.08 | 0.02 | 0.01 | |
| 1E | 91 | -2055 | 3093 | 327 | 0 | 0 | -121 | 2 | 0.08 | 0.01 | 0.01 | |
| 1F | 91 | -2055 | 3300 | 327 | 0 | 0 | -151 | 2 | 0.08 | 0.01 | 0.01 | |
| 1G | 91 | -2055 | 3093 | -305 | 0 | 0 | -121 | 2 | 0.08 | 0.01 | 0.01 | |
| 1H | 91 | -2055 | 3300 | -305 | 0 | 0 | -151 | 2 | 0.08 | 0.01 | 0.01 | |
| 1I | 91 | -3912 | 3068 | 171 | 0 | 0 | -127 | 2 | 0.08 | 0.03 | 0.01 | |
| 1J | 91 | -3912 | 3325 | 171 | 0 | 0 | -145 | 2 | 0.08 | 0.03 | 0.01 | |
| 1K | 91 | -3912 | 3068 | -149 | 0 | 0 | -127 | 2 | 0.08 | 0.03 | 0.01 | |
| 1L | 91 | -3912 | 3325 | -149 | 0 | 0 | -145 | 2 | 0.08 | 0.03 | 0.01 | |
| 1M | 91 | -1412 | 3068 | 171 | 0 | 0 | -127 | 2 | 0.08 | 0.01 | 0.01 | |
| 1N | 91 | -1412 | 3325 | 171 | 0 | 0 | -145 | 2 | 0.08 | 0.01 | 0.01 | |
| 1O | 91 | -1412 | 3068 | -149 | 0 | 0 | -127 | 2 | 0.08 | 0.01 | 0.01 | |
| 1P | 91 | -1412 | 3325 | -149 | 0 | 0 | -145 | 2 | 0.08 | 0.01 | 0.01 | |
| 2 | 91 | -2748 | 3194 | 1 | 0 | 0 | -144 | 2 | 0.08 | 0.02 | 0.01 | |
| 7 | 91 | -2719 | 3192 | 11 | 0 | 0 | -141 | 2 | 0.08 | 0.02 | 0.01 | |
| 8 | 91 | -2692 | 3198 | 1 | 0 | 0 | -139 | 2 | 0.08 | 0.02 | 0.01 | |
| 1A | 182 | -3269 | 2174 | 327 | 0 | -298 | 2259 | 2 | 0.05 | 0.02 | 0.13 | |
| 1B | 182 | -3269 | 2380 | 327 | 0 | -298 | 2463 | 2 | 0.06 | 0.02 | 0.15 | |
| 1C | 182 | -3269 | 2174 | -305 | 0 | 279 | 2259 | 2 | 0.05 | 0.02 | 0.13 | |
| 1D | 182 | -3269 | 2380 | -305 | 0 | 279 | 2463 | 2 | 0.06 | 0.02 | 0.15 | |
| 1E | 182 | -2055 | 2174 | 327 | 0 | -298 | 2259 | 2 | 0.05 | 0.01 | 0.13 | |
| 1F | 182 | -2055 | 2380 | 327 | 0 | -298 | 2463 | 2 | 0.06 | 0.01 | 0.15 | |
| 1G | 182 | -2055 | 2174 | -305 | 0 | 279 | 2259 | 2 | 0.05 | 0.01 | 0.13 | |
| 1H | 182 | -2055 | 2380 | -305 | 0 | 279 | 2463 | 2 | 0.06 | 0.01 | 0.15 | |
| 1I | 182 | -3912 | 2149 | 171 | 0 | -156 | 2193 | 2 | 0.05 | 0.03 | 0.13 | |
| 1J | 182 | -3912 | 2405 | 171 | 0 | -156 | 2529 | 2 | 0.06 | 0.03 | 0.15 | |
| 1K | 182 | -3912 | 2149 | -149 | 0 | 136 | 2193 | 2 | 0.05 | 0.03 | 0.13 | |
| 1L | 182 | -3912 | 2405 | -149 | 0 | 136 | 2529 | 2 | 0.06 | 0.03 | 0.15 | |
| 1M | 182 | -1412 | 2149 | 171 | 0 | -156 | 2193 | 2 | 0.05 | 0.01 | 0.13 | |
| 1N | 182 | -1412 | 2405 | 171 | 0 | -156 | 2529 | 2 | 0.06 | 0.01 | 0.15 | |
| 1O | 182 | -1412 | 2149 | -149 | 0 | 136 | 2193 | 2 | 0.05 | 0.01 | 0.13 | |
| 1P | 182 | -1412 | 2405 | -149 | 0 | 136 | 2529 | 2 | 0.06 | 0.01 | 0.15 | |
| 2 | 182 | -2748 | 2274 | 1 | 0 | -1 | 2350 | 2 | 0.06 | 0.02 | 0.14 | |
| 7 | 182 | -2719 | 2273 | 11 | 0 | -10 | 2352 | 2 | 0.06 | 0.02 | 0.14 | |
| 8 | 182 | -2692 | 2278 | 1 | 0 | -1 | 2359 | 2 | 0.06 | 0.02 | 0.14 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -3269 | 298 | -3339 | 2 | 0.8199 | 0.9762 | 0.9957 | -- | -- | 0.03 | -- | 0.31 Snell. 'zx'= | 54 |
| 1B | -3269 | 298 | -3605 | 2 | 0.8199 | 0.9762 | 0.9957 | -- | -- | 0.03 | -- | 0.33 Snell. 'zx'= | 54 |
| 1C | -3269 | -279 | -3339 | 2 | 0.8199 | 0.9762 | 0.9957 | -- | -- | 0.03 | -- | 0.31 Snell. 'zx'= | 54 |
| 1D | -3269 | -279 | -3605 | 2 | 0.8199 | 0.9762 | 0.9957 | -- | -- | 0.03 | -- | 0.32 Snell. 'zx'= | 54 |
| 1E | -2055 | 298 | -3339 | 2 | 0.8199 | 0.9850 | 0.9973 | -- | -- | 0.02 | -- | 0.30 Snell. 'zx'= | 54 |
| 1F | -2055 | 298 | -3605 | 2 | 0.8199 | 0.9850 | 0.9973 | -- | -- | 0.02 | -- | 0.32 Snell. 'zx'= | 54 |
| 1G | -2055 | -279 | -3339 | 2 | 0.8199 | 0.9850 | 0.9973 | -- | -- | 0.02 | -- | 0.30 Snell. 'zx'= | 54 |
| 1H | -2055 | -279 | -3605 | 2 | 0.8199 | 0.9850 | 0.9973 | -- | -- | 0.02 | -- | 0.31 Snell. 'zx'= | 54 |
| 1I | -3912 | 156 | -3286 | 2 | 0.8199 | 0.9715 | 0.9950 | -- | -- | 0.03 | -- | 0.27 Snell. 'zx'= | 54 |
| 1J | -3912 | 156 | -3658 | 2 | 0.8199 | 0.9715 | 0.9948 | -- | -- | 0.03 | -- | 0.30 Snell. 'zx'= | 54 |
| 1K | -3912 | -136 | -3286 | 2 | 0.8199 | 0.9715 | 0.9950 | -- | -- | 0.03 | -- | 0.27 Snell. 'zx'= | 54 |
| 1L | -3912 | -136 | -3658 | 2 | 0.8199 | 0.9715 | 0.9948 | -- | -- | 0.03 | -- | 0.29 Snell. 'zx'= | 54 |
| 1M | -1412 | 156 | -3286 | 2 | 0.8199 | 0.9897 | 0.9982 | -- | -- | 0.01 | -- | 0.25 Snell. 'zx'= | 54 |
| 1N | -1412 | 156 | -3658 | 2 | 0.8199 | 0.9897 | 0.9981 | -- | -- | 0.01 | -- | 0.28 Snell. 'zx'= | 54 |
| 1O | -1412 | -136 | -3286 | 2 | 0.8199 | 0.9897 | 0.9982 | -- | -- | 0.01 | -- | 0.25 Snell. 'zx'= | 54 |
| 1P | -1412 | -136 | -3658 | 2 | 0.8199 | 0.9897 | 0.9981 | -- | -- | 0.01 | -- | 0.27 Snell. 'zx'= | 54 |
| 2 | -2748 | 1 | -3478 | 2 | 0.8199 | 0.9800 | 0.9964 | -- | -- | 0.02 | -- | 0.23 Snell. 'zx'= | 54 |
| 7 | -2719 | 10 | -3474 | 2 | 0.8199 | 0.9802 | 0.9964 | -- | -- | 0.02 | -- | 0.23 Snell. 'zx'= | 54 |
| 8 | -2692 | 1 | -3476 | 2 | 0.8199 | 0.9804 | 0.9965 | -- | -- | 0.02 | -- | 0.23 Snell. 'zx'= | 54 |



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**ASTA NUM. 90** NI 72 NF 35 Lungh. 182.5 cm SEZ. 2 Ps IPE 300

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.4223 4.4290 2.5132 7.3645 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | 12989 | 2159 | 268 | 0 | 244 | -6 | 1 | 0.05 | 0.09 | 0.07 | |
| 1B | 0 | 12989 | 2293 | 268 | 0 | 244 | -133 | 1 | 0.06 | 0.09 | 0.07 | |
| 1C | 0 | 12989 | 2159 | -258 | 0 | -235 | -6 | 1 | 0.05 | 0.09 | 0.07 | |
| 1D | 0 | 12989 | 2293 | -258 | 0 | -235 | -133 | 1 | 0.06 | 0.09 | 0.07 | |
| 1E | 0 | 14091 | 2159 | 268 | 0 | 244 | -6 | 1 | 0.05 | 0.10 | 0.07 | |
| 1F | 0 | 14091 | 2293 | 268 | 0 | 244 | -133 | 1 | 0.06 | 0.10 | 0.07 | |
| 1G | 0 | 14091 | 2159 | -258 | 0 | -235 | -6 | 1 | 0.05 | 0.10 | 0.07 | |
| 1H | 0 | 14091 | 2293 | -258 | 0 | -235 | -133 | 1 | 0.06 | 0.10 | 0.07 | |
| 1I | 0 | 12640 | 2130 | 138 | 0 | 126 | 62 | 1 | 0.05 | 0.09 | 0.04 | |
| 1J | 0 | 12640 | 2322 | 138 | 0 | 126 | -202 | 1 | 0.06 | 0.09 | 0.04 | |
| 1K | 0 | 12640 | 2130 | -128 | 0 | -116 | 62 | 1 | 0.05 | 0.09 | 0.03 | |
| 1L | 0 | 12640 | 2322 | -128 | 0 | -116 | -202 | 1 | 0.06 | 0.09 | 0.03 | |
| 1M | 0 | 14440 | 2130 | 138 | 0 | 126 | 62 | 1 | 0.05 | 0.10 | 0.04 | |
| 1N | 0 | 14440 | 2322 | 138 | 0 | 126 | -202 | 1 | 0.06 | 0.10 | 0.04 | |
| 1O | 0 | 14440 | 2130 | -128 | 0 | -116 | 62 | 1 | 0.05 | 0.10 | 0.03 | |
| 1P | 0 | 14440 | 2322 | -128 | 0 | -116 | -202 | 1 | 0.06 | 0.10 | 0.03 | |
| 2 | 0 | 13440 | 2224 | -0 | 0 | -0 | -78 | 1 | 0.06 | 0.09 | 0.00 | |
| 7 | 0 | 13460 | 2223 | 5 | 0 | 5 | -75 | 1 | 0.06 | 0.09 | 0.00 | |
| 8 | 0 | 13520 | 2227 | -0 | 0 | -0 | -73 | 1 | 0.06 | 0.09 | 0.00 | |
| 1A | 91 | 12989 | 1240 | 268 | 0 | 0 | 1527 | 1 | 0.03 | 0.09 | 0.09 | |
| 1B | 91 | 12989 | 1373 | 268 | 0 | 0 | 1557 | 1 | 0.03 | 0.09 | 0.09 | |
| 1C | 91 | 12989 | 1240 | -258 | 0 | 0 | 1527 | 1 | 0.03 | 0.09 | 0.09 | |
| 1D | 91 | 12989 | 1373 | -258 | 0 | 0 | 1557 | 1 | 0.03 | 0.09 | 0.09 | |
| 1E | 91 | 14091 | 1240 | 268 | 0 | 0 | 1527 | 1 | 0.03 | 0.10 | 0.09 | |
| 1F | 91 | 14091 | 1373 | 268 | 0 | 0 | 1557 | 1 | 0.03 | 0.10 | 0.09 | |
| 1G | 91 | 14091 | 1240 | -258 | 0 | 0 | 1527 | 1 | 0.03 | 0.10 | 0.09 | |
| 1H | 91 | 14091 | 1373 | -258 | 0 | 0 | 1557 | 1 | 0.03 | 0.10 | 0.09 | |
| 1I | 91 | 12640 | 1211 | 138 | 0 | 0 | 1549 | 1 | 0.03 | 0.09 | 0.09 | |
| 1J | 91 | 12640 | 1403 | 138 | 0 | 0 | 1535 | 1 | 0.04 | 0.09 | 0.09 | |
| 1K | 91 | 12640 | 1211 | -128 | 0 | 0 | 1549 | 1 | 0.03 | 0.09 | 0.09 | |
| 1L | 91 | 12640 | 1403 | -128 | 0 | 0 | 1535 | 1 | 0.04 | 0.09 | 0.09 | |
| 1M | 91 | 14440 | 1211 | 138 | 0 | 0 | 1549 | 1 | 0.03 | 0.10 | 0.09 | |
| 1N | 91 | 14440 | 1403 | 138 | 0 | 0 | 1535 | 1 | 0.04 | 0.10 | 0.09 | |
| 1O | 91 | 14440 | 1211 | -128 | 0 | 0 | 1549 | 1 | 0.03 | 0.10 | 0.09 | |
| 1P | 91 | 14440 | 1403 | -128 | 0 | 0 | 1535 | 1 | 0.04 | 0.10 | 0.09 | |
| 2 | 91 | 13440 | 1304 | -0 | 0 | 0 | 1531 | 1 | 0.03 | 0.09 | 0.09 | |
| 7 | 91 | 13460 | 1303 | 5 | 0 | 0 | 1534 | 1 | 0.03 | 0.09 | 0.09 | |
| 8 | 91 | 13520 | 1308 | -0 | 0 | 0 | 1540 | 1 | 0.03 | 0.09 | 0.09 | |
| 1A | 182 | 12989 | 321 | 268 | 0 | -244 | 2222 | 1 | 0.01 | 0.09 | 0.13 | |
| 1B | 182 | 12989 | 454 | 268 | 0 | -244 | 2408 | 1 | 0.01 | 0.09 | 0.14 | |
| 1C | 182 | 12989 | 321 | -258 | 0 | 235 | 2222 | 1 | 0.01 | 0.09 | 0.13 | |
| 1D | 182 | 12989 | 454 | -258 | 0 | 235 | 2408 | 1 | 0.01 | 0.09 | 0.14 | |
| 1E | 182 | 14091 | 321 | 268 | 0 | -244 | 2222 | 1 | 0.01 | 0.10 | 0.13 | |
| 1F | 182 | 14091 | 454 | 268 | 0 | -244 | 2408 | 1 | 0.01 | 0.10 | 0.14 | |
| 1G | 182 | 14091 | 321 | -258 | 0 | 235 | 2222 | 1 | 0.01 | 0.10 | 0.13 | |
| 1H | 182 | 14091 | 454 | -258 | 0 | 235 | 2408 | 1 | 0.01 | 0.10 | 0.14 | |
| 1I | 182 | 12640 | 292 | 138 | 0 | -126 | 2196 | 1 | 0.01 | 0.09 | 0.13 | |
| 1J | 182 | 12640 | 483 | 138 | 0 | -126 | 2434 | 1 | 0.01 | 0.09 | 0.15 | |
| 1K | 182 | 12640 | 292 | -128 | 0 | 116 | 2196 | 1 | 0.01 | 0.09 | 0.13 | |
| 1L | 182 | 12640 | 483 | -128 | 0 | 116 | 2434 | 1 | 0.01 | 0.09 | 0.15 | |
| 1M | 182 | 14440 | 292 | 138 | 0 | -126 | 2196 | 1 | 0.01 | 0.10 | 0.13 | |
| 1N | 182 | 14440 | 483 | 138 | 0 | -126 | 2434 | 1 | 0.01 | 0.10 | 0.15 | |
| 1O | 182 | 14440 | 292 | -128 | 0 | 116 | 2196 | 1 | 0.01 | 0.10 | 0.13 | |
| 1P | 182 | 14440 | 483 | -128 | 0 | 116 | 2434 | 1 | 0.01 | 0.10 | 0.15 | |
| 2 | 182 | 13440 | 385 | -0 | 0 | 0 | 2302 | 1 | 0.01 | 0.09 | 0.14 | |
| 7 | 182 | 13460 | 384 | 5 | 0 | -5 | 2304 | 1 | 0.01 | 0.09 | 0.14 | |
| 8 | 182 | 13520 | 388 | -0 | 0 | 0 | 2314 | 1 | 0.01 | 0.09 | 0.14 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |

**ASTA NUM. 91** NI 35 NF 25 Lungh. 182.5 cm SEZ. 2 Ps IPE 300

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.4223 4.4290 2.5132 7.3645 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | 15600 | 285 | 277 | 0 | 252 | 2012 | 1 | 0.01 | 0.11 | 0.12 | |
| 1B | 0 | 15600 | 389 | 277 | 0 | 252 | 1836 | 1 | 0.01 | 0.11 | 0.11 | |
| 1C | 0 | 15600 | 285 | -292 | 0 | -266 | 2012 | 1 | 0.01 | 0.11 | 0.12 | |
| 1D | 0 | 15600 | 389 | -292 | 0 | -266 | 1836 | 1 | 0.01 | 0.11 | 0.11 | |
| 1E | 0 | 16700 | 285 | 277 | 0 | 252 | 2012 | 1 | 0.01 | 0.12 | 0.12 | |
| 1F | 0 | 16700 | 389 | 277 | 0 | 252 | 1836 | 1 | 0.01 | 0.12 | 0.11 | |
| 1G | 0 | 16700 | 285 | -292 | 0 | -266 | 2012 | 1 | 0.01 | 0.12 | 0.12 | |
| 1H | 0 | 16700 | 389 | -292 | 0 | -266 | 1836 | 1 | 0.01 | 0.12 | 0.11 | |
| 1I | 0 | 15404 | 223 | 176 | 0 | 161 | 2051 | 1 | 0.01 | 0.11 | 0.12 | |
| 1J | 0 | 15404 | 451 | 176 | 0 | 161 | 1797 | 1 | 0.01 | 0.11 | 0.11 | |
| 1K | 0 | 15404 | 223 | -191 | 0 | -174 | 2051 | 1 | 0.01 | 0.11 | 0.12 | |
| 1L | 0 | 15404 | 451 | -191 | 0 | -174 | 1797 | 1 | 0.01 | 0.11 | 0.11 | |
| 1M | 0 | 16896 | 223 | 176 | 0 | 161 | 2051 | 1 | 0.01 | 0.12 | 0.12 | |
| 1N | 0 | 16896 | 451 | 176 | 0 | 161 | 1797 | 1 | 0.01 | 0.12 | 0.11 | |
| 1O | 0 | 16896 | 223 | -191 | 0 | -174 | 2051 | 1 | 0.01 | 0.12 | 0.12 | |
| 1P | 0 | 16896 | 451 | -191 | 0 | -174 | 1797 | 1 | 0.01 | 0.12 | 0.11 | |
| 2 | 0 | 16030 | 335 | 0 | 0 | 0 | 1914 | 1 | 0.01 | 0.11 | 0.11 | |
| 7 | 0 | 16040 | 334 | -8 | 0 | -7 | 1916 | 1 | 0.01 | 0.11 | 0.11 | |
| 8 | 0 | 16140 | 338 | 0 | 0 | 0 | 1922 | 1 | 0.01 | 0.11 | 0.11 | |
| 1A | 91 | 15600 | -634 | 277 | 0 | 0 | 1820 | 1 | 0.02 | 0.11 | 0.11 | |
| 1B | 91 | 15600 | -530 | 277 | 0 | 0 | 1805 | 1 | 0.01 | 0.11 | 0.11 | |
| 1C | 91 | 15600 | -634 | -292 | 0 | 0 | 1820 | 1 | 0.02 | 0.11 | 0.11 | |
| 1D | 91 | 15600 | -530 | -292 | 0 | 0 | 1805 | 1 | 0.01 | 0.11 | 0.11 | |
| 1E | 91 | 16700 | -634 | 277 | 0 | 0 | 1820 | 1 | 0.02 | 0.12 | 0.11 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | 91 | 16700 | -530 | 277 | 0 | 0 | 1805 | 1 | 0.01 | 0.12 | 0.11 |
| 1G | 91 | 16700 | -634 | -292 | 0 | 0 | 1820 | 1 | 0.02 | 0.12 | 0.11 |
| 1H | 91 | 16700 | -530 | -292 | 0 | 0 | 1805 | 1 | 0.01 | 0.12 | 0.11 |
| 1I | 91 | 15404 | -696 | 176 | 0 | 0 | 1804 | 1 | 0.02 | 0.11 | 0.11 |
| 1J | 91 | 15404 | -468 | 176 | 0 | 0 | 1820 | 1 | 0.01 | 0.11 | 0.11 |
| 1K | 91 | 15404 | -696 | -191 | 0 | 0 | 1804 | 1 | 0.02 | 0.11 | 0.11 |
| 1L | 91 | 15404 | -468 | -191 | 0 | 0 | 1820 | 1 | 0.01 | 0.11 | 0.11 |
| 1M | 91 | 16896 | -696 | 176 | 0 | 0 | 1804 | 1 | 0.02 | 0.12 | 0.11 |
| 1N | 91 | 16896 | -468 | 176 | 0 | 0 | 1820 | 1 | 0.01 | 0.12 | 0.11 |
| 1O | 91 | 16896 | -696 | -191 | 0 | 0 | 1804 | 1 | 0.02 | 0.12 | 0.11 |
| 1P | 91 | 16896 | -468 | -191 | 0 | 0 | 1820 | 1 | 0.01 | 0.12 | 0.11 |
| 2 | 91 | 16030 | -585 | 0 | 0 | 0 | 1800 | 1 | 0.01 | 0.11 | 0.11 |
| 7 | 91 | 16040 | -586 | -8 | 0 | 0 | 1801 | 1 | 0.01 | 0.11 | 0.11 |
| 8 | 91 | 16140 | -581 | 0 | 0 | 0 | 1811 | 1 | 0.01 | 0.11 | 0.11 |
| 1A | 182 | 15600 | -1554 | 277 | 0 | -252 | 789 | 1 | 0.04 | 0.11 | 0.08 |
| 1B | 182 | 15600 | -1450 | 277 | 0 | -252 | 934 | 1 | 0.04 | 0.11 | 0.08 |
| 1C | 182 | 15600 | -1554 | -292 | 0 | 266 | 789 | 1 | 0.04 | 0.11 | 0.08 |
| 1D | 182 | 15600 | -1450 | -292 | 0 | 266 | 934 | 1 | 0.04 | 0.11 | 0.08 |
| 1E | 182 | 16700 | -1554 | 277 | 0 | -252 | 789 | 1 | 0.04 | 0.12 | 0.08 |
| 1F | 182 | 16700 | -1450 | 277 | 0 | -252 | 934 | 1 | 0.04 | 0.12 | 0.08 |
| 1G | 182 | 16700 | -1554 | -292 | 0 | 266 | 789 | 1 | 0.04 | 0.12 | 0.08 |
| 1H | 182 | 16700 | -1450 | -292 | 0 | 266 | 934 | 1 | 0.04 | 0.12 | 0.08 |
| 1I | 182 | 15404 | -1616 | 176 | 0 | -161 | 718 | 1 | 0.04 | 0.11 | 0.05 |
| 1J | 182 | 15404 | -1388 | 176 | 0 | -161 | 1005 | 1 | 0.04 | 0.11 | 0.06 |
| 1K | 182 | 15404 | -1616 | -191 | 0 | 174 | 718 | 1 | 0.04 | 0.11 | 0.05 |
| 1L | 182 | 15404 | -1388 | -191 | 0 | 174 | 1005 | 1 | 0.04 | 0.11 | 0.06 |
| 1M | 182 | 16896 | -1616 | 176 | 0 | -161 | 718 | 1 | 0.04 | 0.12 | 0.05 |
| 1N | 182 | 16896 | -1388 | 176 | 0 | -161 | 1005 | 1 | 0.04 | 0.12 | 0.06 |
| 1O | 182 | 16896 | -1616 | -191 | 0 | 174 | 718 | 1 | 0.04 | 0.12 | 0.05 |
| 1P | 182 | 16896 | -1388 | -191 | 0 | 174 | 1005 | 1 | 0.04 | 0.12 | 0.06 |
| 2 | 182 | 16030 | -1504 | 0 | 0 | -0 | 846 | 1 | 0.04 | 0.11 | 0.05 |
| 7 | 182 | 16040 | -1505 | -8 | 0 | 7 | 847 | 1 | 0.04 | 0.11 | 0.05 |
| 8 | 182 | 16140 | -1501 | 0 | 0 | -0 | 861 | 1 | 0.04 | 0.11 | 0.05 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | | kg*m | | | | | | | | | | |

**ASTA NUM. 92** NI 25 NF 42 Lungh. 182.5 cm SEZ. 2 Ps IPE 300

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.4223 4.4290 2.5132 7.3645 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | 4585 | -1675 | 337 | 0 | 307 | 2611 | 1 | 0.04 | 0.03 | 0.16 | |
| 1B | 0 | 4585 | -1429 | 337 | 0 | 307 | 2409 | 1 | 0.04 | 0.03 | 0.14 | |
| 1C | 0 | 4585 | -1675 | -356 | 0 | -325 | 2611 | 1 | 0.04 | 0.03 | 0.16 | |
| 1D | 0 | 4585 | -1429 | -356 | 0 | -325 | 2409 | 1 | 0.04 | 0.03 | 0.14 | |
| 1E | 0 | 5741 | -1675 | 337 | 0 | 307 | 2611 | 1 | 0.04 | 0.04 | 0.16 | |
| 1F | 0 | 5741 | -1429 | 337 | 0 | 307 | 2409 | 1 | 0.04 | 0.04 | 0.14 | |
| 1G | 0 | 5741 | -1675 | -356 | 0 | -325 | 2611 | 1 | 0.04 | 0.04 | 0.16 | |
| 1H | 0 | 5741 | -1429 | -356 | 0 | -325 | 2409 | 1 | 0.04 | 0.04 | 0.14 | |
| 1I | 0 | 3688 | -1724 | 212 | 0 | 193 | 2634 | 1 | 0.04 | 0.03 | 0.16 | |
| 1J | 0 | 3688 | -1380 | 212 | 0 | 193 | 2386 | 1 | 0.03 | 0.03 | 0.14 | |
| 1K | 0 | 3688 | -1724 | -231 | 0 | -210 | 2634 | 1 | 0.04 | 0.03 | 0.16 | |
| 1L | 0 | 3688 | -1380 | -231 | 0 | -210 | 2386 | 1 | 0.03 | 0.03 | 0.14 | |
| 1M | 0 | 6638 | -1724 | 212 | 0 | 193 | 2634 | 1 | 0.04 | 0.05 | 0.16 | |
| 1N | 0 | 6638 | -1380 | 212 | 0 | 193 | 2386 | 1 | 0.03 | 0.05 | 0.14 | |
| 1O | 0 | 6638 | -1724 | -231 | 0 | -210 | 2634 | 1 | 0.04 | 0.05 | 0.16 | |
| 1P | 0 | 6638 | -1380 | -231 | 0 | -210 | 2386 | 1 | 0.03 | 0.05 | 0.14 | |
| 2 | 0 | 5021 | -1555 | -0 | 0 | -0 | 2498 | 1 | 0.04 | 0.03 | 0.15 | |
| 7 | 0 | 5030 | -1556 | -10 | 0 | -9 | 2500 | 1 | 0.04 | 0.04 | 0.15 | |
| 8 | 0 | 5154 | -1551 | -0 | 0 | -0 | 2508 | 1 | 0.04 | 0.04 | 0.15 | |
| 1A | 91 | 4585 | -2594 | 337 | 0 | 0 | 650 | 1 | 0.07 | 0.03 | 0.04 | |
| 1B | 91 | 4585 | -2349 | 337 | 0 | 0 | 699 | 1 | 0.06 | 0.03 | 0.04 | |
| 1C | 91 | 4585 | -2594 | -356 | 0 | 0 | 650 | 1 | 0.07 | 0.03 | 0.04 | |
| 1D | 91 | 4585 | -2349 | -356 | 0 | 0 | 699 | 1 | 0.06 | 0.03 | 0.04 | |
| 1E | 91 | 5741 | -2594 | 337 | 0 | 0 | 650 | 1 | 0.07 | 0.04 | 0.04 | |
| 1F | 91 | 5741 | -2349 | 337 | 0 | 0 | 699 | 1 | 0.06 | 0.04 | 0.04 | |
| 1G | 91 | 5741 | -2594 | -356 | 0 | 0 | 650 | 1 | 0.07 | 0.04 | 0.04 | |
| 1H | 91 | 5741 | -2349 | -356 | 0 | 0 | 699 | 1 | 0.06 | 0.04 | 0.04 | |
| 1I | 91 | 3688 | -2644 | 212 | 0 | 0 | 598 | 1 | 0.07 | 0.03 | 0.04 | |
| 1J | 91 | 3688 | -2299 | 212 | 0 | 0 | 751 | 1 | 0.06 | 0.03 | 0.04 | |
| 1K | 91 | 3688 | -2644 | -231 | 0 | 0 | 598 | 1 | 0.07 | 0.03 | 0.04 | |
| 1L | 91 | 3688 | -2299 | -231 | 0 | 0 | 751 | 1 | 0.06 | 0.03 | 0.04 | |
| 1M | 91 | 6638 | -2644 | 212 | 0 | 0 | 598 | 1 | 0.07 | 0.05 | 0.04 | |
| 1N | 91 | 6638 | -2299 | 212 | 0 | 0 | 751 | 1 | 0.06 | 0.05 | 0.04 | |
| 1O | 91 | 6638 | -2644 | -231 | 0 | 0 | 598 | 1 | 0.07 | 0.05 | 0.04 | |
| 1P | 91 | 6638 | -2299 | -231 | 0 | 0 | 751 | 1 | 0.06 | 0.05 | 0.04 | |
| 2 | 91 | 5021 | -2474 | -0 | 0 | 0 | 660 | 1 | 0.06 | 0.03 | 0.04 | |
| 7 | 91 | 5030 | -2475 | -10 | 0 | 0 | 661 | 1 | 0.06 | 0.04 | 0.04 | |
| 8 | 91 | 5154 | -2470 | -0 | 0 | 0 | 674 | 1 | 0.06 | 0.04 | 0.04 | |
| 1A | 182 | 4585 | -3514 | 337 | 0 | -307 | -2150 | 1 | 0.09 | 0.03 | 0.13 | |
| 1B | 182 | 4585 | -3268 | 337 | 0 | -307 | -1850 | 1 | 0.08 | 0.03 | 0.11 | |
| 1C | 182 | 4585 | -3514 | -356 | 0 | 325 | -2150 | 1 | 0.09 | 0.03 | 0.13 | |
| 1D | 182 | 4585 | -3268 | -356 | 0 | 325 | -1850 | 1 | 0.08 | 0.03 | 0.11 | |
| 1E | 182 | 5741 | -3514 | 337 | 0 | -307 | -2150 | 1 | 0.09 | 0.04 | 0.13 | |
| 1F | 182 | 5741 | -3268 | 337 | 0 | -307 | -1850 | 1 | 0.08 | 0.04 | 0.11 | |
| 1G | 182 | 5741 | -3514 | -356 | 0 | 325 | -2150 | 1 | 0.09 | 0.04 | 0.13 | |
| 1H | 182 | 5741 | -3268 | -356 | 0 | 325 | -1850 | 1 | 0.08 | 0.04 | 0.11 | |
| 1I | 182 | 3688 | -3563 | 212 | 0 | -193 | -2278 | 1 | 0.09 | 0.03 | 0.14 | |
| 1J | 182 | 3688 | -3219 | 212 | 0 | -193 | -1722 | 1 | 0.08 | 0.03 | 0.10 | |
| 1K | 182 | 3688 | -3563 | -231 | 0 | 210 | -2278 | 1 | 0.09 | 0.03 | 0.14 | |
| 1L | 182 | 3688 | -3219 | -231 | 0 | 210 | -1722 | 1 | 0.08 | 0.03 | 0.10 | |
| 1M | 182 | 6638 | -3563 | 212 | 0 | -193 | -2278 | 1 | 0.09 | 0.05 | 0.14 | |
| 1N | 182 | 6638 | -3219 | 212 | 0 | -193 | -1722 | 1 | 0.08 | 0.05 | 0.10 | |
| 1O | 182 | 6638 | -3563 | -231 | 0 | 210 | -2278 | 1 | 0.09 | 0.05 | 0.14 | |
| 1P | 182 | 6638 | -3219 | -231 | 0 | 210 | -1722 | 1 | 0.08 | 0.05 | 0.10 | |
| 2 | 182 | 5021 | -3394 | -0 | 0 | 0 | -2017 | 1 | 0.09 | 0.03 | 0.12 | |
| 7 | 182 | 5030 | -3394 | -10 | 0 | 9 | -2017 | 1 | 0.09 | 0.04 | 0.12 | |
| 8 | 182 | 5154 | -3390 | -0 | 0 | 0 | -2000 | 1 | 0.09 | 0.04 | 0.12 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**



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| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1I | -77 | 80 | 344 | 2 | 0.7321 | 0.9991 | 1.0001 | -- | -- | 0.00 | -- | 0.08 | Snell. 'zx'= 68 |
| 1J | -77 | 80 | -629 | 2 | 0.7321 | 0.9991 | 0.9999 | -- | -- | 0.00 | -- | 0.11 | Snell. 'zx'= 68 |
| 1K | -77 | -77 | 344 | 2 | 0.7321 | 0.9991 | 1.0001 | -- | -- | 0.00 | -- | 0.08 | Snell. 'zx'= 68 |
| 1L | -77 | -77 | -629 | 2 | 0.7321 | 0.9991 | 0.9999 | -- | -- | 0.00 | -- | 0.10 | Snell. 'zx'= 68 |

**ASTA NUM. 93** NI 15 NF 14 Lungh. 182.5 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 2.3112 1.3115 3.9297 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | 200 | 516 | 135 | 0 | 123 | 73 | 1 | 0.02 | 0.00 | 0.06 | |
| 1B | 0 | 200 | 1026 | 135 | 0 | 123 | -621 | 1 | 0.03 | 0.00 | 0.07 | |
| 1C | 0 | 200 | 516 | -131 | 0 | -120 | 73 | 1 | 0.02 | 0.00 | 0.06 | |
| 1D | 0 | 200 | 1026 | -131 | 0 | -120 | -621 | 1 | 0.03 | 0.00 | 0.06 | |
| 1E | 0 | 2966 | 516 | 135 | 0 | 123 | 73 | 1 | 0.02 | 0.03 | 0.06 | |
| 1F | 0 | 2966 | 1026 | 135 | 0 | 123 | -621 | 1 | 0.03 | 0.03 | 0.07 | |
| 1G | 0 | 2966 | 516 | -131 | 0 | -120 | 73 | 1 | 0.02 | 0.03 | 0.06 | |
| 1H | 0 | 2966 | 1026 | -131 | 0 | -120 | -621 | 1 | 0.03 | 0.03 | 0.06 | |
| 1I | 0 | -77 | 532 | 88 | 0 | 80 | 81 | 2 | 0.02 | 0.00 | 0.04 | |
| 1J | 0 | -77 | 1009 | 88 | 0 | 80 | -629 | 2 | 0.03 | 0.00 | 0.06 | |
| 1K | 0 | -77 | 532 | -84 | 0 | -77 | 81 | 2 | 0.02 | 0.00 | 0.04 | |
| 1L | 0 | -77 | 1009 | -84 | 0 | -77 | -629 | 2 | 0.03 | 0.00 | 0.06 | |
| 1M | 0 | 3243 | 532 | 88 | 0 | 80 | 81 | 1 | 0.02 | 0.03 | 0.04 | |
| 1N | 0 | 3243 | 1009 | 88 | 0 | 80 | -629 | 1 | 0.03 | 0.03 | 0.06 | |
| 1O | 0 | 3243 | 532 | -84 | 0 | -77 | 81 | 1 | 0.02 | 0.03 | 0.04 | |
| 1P | 0 | 3243 | 1009 | -84 | 0 | -77 | -629 | 1 | 0.03 | 0.03 | 0.06 | |
| 2 | 0 | 1638 | 788 | 0 | 0 | 0 | -285 | 1 | 0.03 | 0.02 | 0.03 | |
| 7 | 0 | 1735 | 760 | 2 | 0 | 1 | -251 | 1 | 0.03 | 0.02 | 0.03 | |
| 8 | 0 | 1486 | 799 | 0 | 0 | 0 | -307 | 1 | 0.03 | 0.01 | 0.03 | |
| 1A | 91 | 200 | 26 | 135 | 0 | 0 | 320 | 1 | 0.00 | 0.00 | 0.03 | |
| 1B | 91 | 200 | 535 | 135 | 0 | 0 | 91 | 1 | 0.02 | 0.00 | 0.01 | |
| 1C | 91 | 200 | 26 | -131 | 0 | 0 | 320 | 1 | 0.00 | 0.00 | 0.03 | |
| 1D | 91 | 200 | 535 | -131 | 0 | 0 | 91 | 1 | 0.02 | 0.00 | 0.01 | |
| 1E | 91 | 2966 | 26 | 135 | 0 | 0 | 320 | 1 | 0.00 | 0.03 | 0.03 | |
| 1F | 91 | 2966 | 535 | 135 | 0 | 0 | 91 | 1 | 0.02 | 0.03 | 0.01 | |
| 1G | 91 | 2966 | 26 | -131 | 0 | 0 | 320 | 1 | 0.00 | 0.03 | 0.03 | |
| 1H | 91 | 2966 | 535 | -131 | 0 | 0 | 91 | 1 | 0.02 | 0.03 | 0.01 | |
| 1I | 91 | -77 | 42 | 88 | 0 | 0 | 344 | 1 | 0.00 | 0.00 | 0.04 | |
| 1J | 91 | -77 | 519 | 88 | 0 | 0 | 68 | 1 | 0.02 | 0.00 | 0.01 | |
| 1K | 91 | -77 | 42 | -84 | 0 | 0 | 344 | 1 | 0.00 | 0.00 | 0.04 | |
| 1L | 91 | -77 | 519 | -84 | 0 | 0 | 68 | 1 | 0.02 | 0.00 | 0.01 | |
| 1M | 91 | 3243 | 42 | 88 | 0 | 0 | 344 | 1 | 0.00 | 0.03 | 0.04 | |
| 1N | 91 | 3243 | 519 | 88 | 0 | 0 | 68 | 1 | 0.02 | 0.03 | 0.01 | |
| 1O | 91 | 3243 | 42 | -84 | 0 | 0 | 344 | 1 | 0.00 | 0.03 | 0.04 | |
| 1P | 91 | 3243 | 519 | -84 | 0 | 0 | 68 | 1 | 0.02 | 0.03 | 0.01 | |
| 2 | 91 | 1638 | 298 | 0 | 0 | 0 | 210 | 1 | 0.01 | 0.02 | 0.02 | |
| 7 | 91 | 1735 | 270 | 2 | 0 | 0 | 219 | 1 | 0.01 | 0.02 | 0.02 | |
| 8 | 91 | 1486 | 309 | 0 | 0 | 0 | 198 | 1 | 0.01 | 0.01 | 0.02 | |
| 1A | 182 | 200 | -464 | 135 | 0 | -123 | 120 | 1 | 0.02 | 0.00 | 0.06 | |
| 1B | 182 | 200 | 45 | 135 | 0 | -123 | 356 | 1 | 0.00 | 0.00 | 0.06 | |
| 1C | 182 | 200 | -464 | -131 | 0 | 120 | 120 | 1 | 0.02 | 0.00 | 0.06 | |
| 1D | 182 | 200 | 45 | -131 | 0 | 120 | 356 | 1 | 0.00 | 0.00 | 0.06 | |
| 1E | 182 | 2966 | -464 | 135 | 0 | -123 | 120 | 1 | 0.02 | 0.03 | 0.06 | |
| 1F | 182 | 2966 | 45 | 135 | 0 | -123 | 356 | 1 | 0.00 | 0.03 | 0.06 | |
| 1G | 182 | 2966 | -464 | -131 | 0 | 120 | 120 | 1 | 0.02 | 0.03 | 0.06 | |
| 1H | 182 | 2966 | 45 | -131 | 0 | 120 | 356 | 1 | 0.00 | 0.03 | 0.06 | |
| 1I | 182 | -77 | -448 | 88 | 0 | -80 | 158 | 2 | 0.02 | 0.00 | 0.04 | |
| 1J | 182 | -77 | 29 | 88 | 0 | -80 | 318 | 2 | 0.00 | 0.00 | 0.04 | |
| 1K | 182 | -77 | -448 | -84 | 0 | 77 | 158 | 2 | 0.02 | 0.00 | 0.04 | |
| 1L | 182 | -77 | 29 | -84 | 0 | 77 | 318 | 2 | 0.00 | 0.00 | 0.04 | |
| 1M | 182 | 3243 | -448 | 88 | 0 | -80 | 158 | 1 | 0.02 | 0.03 | 0.04 | |
| 1N | 182 | 3243 | 29 | 88 | 0 | -80 | 318 | 1 | 0.00 | 0.03 | 0.04 | |
| 1O | 182 | 3243 | -448 | -84 | 0 | 77 | 158 | 1 | 0.02 | 0.03 | 0.04 | |
| 1P | 182 | 3243 | 29 | -84 | 0 | 77 | 318 | 1 | 0.00 | 0.03 | 0.04 | |
| 2 | 182 | 1638 | -192 | 0 | 0 | -0 | 258 | 1 | 0.01 | 0.02 | 0.03 | |
| 7 | 182 | 1735 | -220 | 2 | 0 | -1 | 241 | 1 | 0.01 | 0.02 | 0.02 | |
| 8 | 182 | 1486 | -181 | 0 | 0 | -0 | 256 | 1 | 0.01 | 0.01 | 0.03 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1I | -77 | 80 | 344 | 2 | 0.7321 | 0.9991 | 1.0001 | -- | -- | 0.00 | -- | 0.08 | Snell. 'zx'= 68 |
| 1J | -77 | 80 | -629 | 2 | 0.7321 | 0.9991 | 0.9999 | -- | -- | 0.00 | -- | 0.11 | Snell. 'zx'= 68 |
| 1K | -77 | -77 | 344 | 2 | 0.7321 | 0.9991 | 1.0001 | -- | -- | 0.00 | -- | 0.08 | Snell. 'zx'= 68 |
| 1L | -77 | -77 | -629 | 2 | 0.7321 | 0.9991 | 0.9999 | -- | -- | 0.00 | -- | 0.10 | Snell. 'zx'= 68 |

**ASTA NUM. 94** NI 14 NF 77 Lungh. 182.5 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 2.3112 1.3115 3.9297 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -1676 | -556 | 131 | 0 | 120 | 666 | 2 | 0.02 | 0.02 | 0.07 | |
| 1B | 0 | -1676 | 84 | 131 | 0 | 120 | 291 | 2 | 0.00 | 0.02 | 0.06 | |
| 1C | 0 | -1676 | -556 | -124 | 0 | -113 | 666 | 2 | 0.02 | 0.02 | 0.07 | |
| 1D | 0 | -1676 | 84 | -124 | 0 | -113 | 291 | 2 | 0.00 | 0.02 | 0.06 | |
| 1E | 0 | 841 | -556 | 131 | 0 | 120 | 666 | 1 | 0.02 | 0.01 | 0.07 | |
| 1F | 0 | 841 | 84 | 131 | 0 | 120 | 291 | 1 | 0.00 | 0.01 | 0.06 | |
| 1G | 0 | 841 | -556 | -124 | 0 | -113 | 666 | 1 | 0.02 | 0.01 | 0.07 | |
| 1H | 0 | 841 | 84 | -124 | 0 | -113 | 291 | 1 | 0.00 | 0.01 | 0.06 | |
| 1I | 0 | -1188 | -501 | 84 | 0 | 77 | 657 | 2 | 0.02 | 0.01 | 0.07 | |
| 1J | 0 | -1188 | 30 | 84 | 0 | 77 | 300 | 2 | 0.00 | 0.01 | 0.04 | |
| 1K | 0 | -1188 | -501 | -77 | 0 | -70 | 657 | 2 | 0.02 | 0.01 | 0.07 | |
| 1L | 0 | -1188 | 30 | -77 | 0 | -70 | 300 | 2 | 0.00 | 0.01 | 0.04 | |
| 1M | 0 | 353 | -501 | 84 | 0 | 77 | 657 | 1 | 0.02 | 0.00 | 0.07 | |
| 1N | 0 | 353 | 30 | 84 | 0 | 77 | 300 | 1 | 0.00 | 0.00 | 0.04 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1O | 0 | 353 | -501 | -77 | 0 | -70 | 657 | 1 | 0.02 | 0.00 | 0.07 |
| 1P | 0 | 353 | 30 | -77 | 0 | -70 | 300 | 1 | 0.00 | 0.00 | 0.04 |
| 2 | 0 | -209 | -219 | 1 | 0 | 0 | 480 | 2 | 0.01 | 0.00 | 0.05 |
| 7 | 0 | -364 | -247 | 4 | 0 | 3 | 493 | 2 | 0.01 | 0.00 | 0.05 |
| 8 | 0 | -263 | -208 | 0 | 0 | 0 | 466 | 2 | 0.01 | 0.00 | 0.05 |
| 1A | 91 | -1676 | -1046 | 131 | 0 | 0 | -64 | 2 | 0.04 | 0.02 | 0.01 |
| 1B | 91 | -1676 | -406 | 131 | 0 | 0 | 144 | 2 | 0.01 | 0.02 | 0.01 |
| 1C | 91 | -1676 | -1046 | -124 | 0 | 0 | -64 | 2 | 0.04 | 0.02 | 0.01 |
| 1D | 91 | -1676 | -406 | -124 | 0 | 0 | 144 | 2 | 0.01 | 0.02 | 0.01 |
| 1E | 91 | 841 | -1046 | 131 | 0 | 0 | -64 | 1 | 0.04 | 0.01 | 0.01 |
| 1F | 91 | 841 | -406 | 131 | 0 | 0 | 144 | 1 | 0.01 | 0.01 | 0.01 |
| 1G | 91 | 841 | -1046 | -124 | 0 | 0 | -64 | 1 | 0.04 | 0.01 | 0.01 |
| 1H | 91 | 841 | -406 | -124 | 0 | 0 | 144 | 1 | 0.01 | 0.01 | 0.01 |
| 1I | 91 | -1188 | -992 | 84 | 0 | 0 | -24 | 2 | 0.03 | 0.01 | 0.00 |
| 1J | 91 | -1188 | -460 | 84 | 0 | 0 | 104 | 2 | 0.02 | 0.01 | 0.01 |
| 1K | 91 | -1188 | -992 | -77 | 0 | 0 | -24 | 2 | 0.03 | 0.01 | 0.00 |
| 1L | 91 | -1188 | -460 | -77 | 0 | 0 | 104 | 2 | 0.02 | 0.01 | 0.01 |
| 1M | 91 | 353 | -992 | 84 | 0 | 0 | -24 | 1 | 0.03 | 0.00 | 0.00 |
| 1N | 91 | 353 | -460 | 84 | 0 | 0 | 104 | 1 | 0.02 | 0.00 | 0.01 |
| 1O | 91 | 353 | -992 | -77 | 0 | 0 | -24 | 1 | 0.03 | 0.00 | 0.00 |
| 1P | 91 | 353 | -460 | -77 | 0 | 0 | 104 | 1 | 0.02 | 0.00 | 0.01 |
| 2 | 91 | -209 | -709 | 1 | 0 | 0 | 57 | 1 | 0.02 | 0.00 | 0.01 |
| 7 | 91 | -364 | -737 | 4 | 0 | 0 | 44 | 2 | 0.02 | 0.00 | 0.00 |
| 8 | 91 | -263 | -698 | 0 | 0 | 0 | 53 | 2 | 0.02 | 0.00 | 0.01 |
| 1A | 182 | -1676 | -1536 | 131 | 0 | -120 | -1242 | 2 | 0.05 | 0.02 | 0.13 |
| 1B | 182 | -1676 | -896 | 131 | 0 | -120 | -450 | 2 | 0.03 | 0.02 | 0.06 |
| 1C | 182 | -1676 | -1536 | -124 | 0 | 113 | -1242 | 2 | 0.05 | 0.02 | 0.13 |
| 1D | 182 | -1676 | -896 | -124 | 0 | 113 | -450 | 2 | 0.03 | 0.02 | 0.06 |
| 1E | 182 | 841 | -1536 | 131 | 0 | -120 | -1242 | 1 | 0.05 | 0.01 | 0.13 |
| 1F | 182 | 841 | -896 | 131 | 0 | -120 | -450 | 1 | 0.03 | 0.01 | 0.06 |
| 1G | 182 | 841 | -1536 | -124 | 0 | 113 | -1242 | 1 | 0.05 | 0.01 | 0.13 |
| 1H | 182 | 841 | -896 | -124 | 0 | 113 | -450 | 1 | 0.03 | 0.01 | 0.06 |
| 1I | 182 | -1188 | -1482 | 84 | 0 | -77 | -1152 | 2 | 0.05 | 0.01 | 0.12 |
| 1J | 182 | -1188 | -950 | 84 | 0 | -77 | -540 | 2 | 0.03 | 0.01 | 0.06 |
| 1K | 182 | -1188 | -1482 | -77 | 0 | 70 | -1152 | 2 | 0.05 | 0.01 | 0.12 |
| 1L | 182 | -1188 | -950 | -77 | 0 | 70 | -540 | 2 | 0.03 | 0.01 | 0.06 |
| 1M | 182 | 353 | -1482 | 84 | 0 | -77 | -1152 | 1 | 0.05 | 0.00 | 0.12 |
| 1N | 182 | 353 | -950 | 84 | 0 | -77 | -540 | 1 | 0.03 | 0.00 | 0.06 |
| 1O | 182 | 353 | -1482 | -77 | 0 | 70 | -1152 | 1 | 0.05 | 0.00 | 0.12 |
| 1P | 182 | 353 | -950 | -77 | 0 | 70 | -540 | 1 | 0.03 | 0.00 | 0.06 |
| 2 | 182 | -209 | -1199 | 1 | 0 | -0 | -813 | 2 | 0.04 | 0.00 | 0.08 |
| 7 | 182 | -364 | -1227 | 4 | 0 | -3 | -852 | 2 | 0.04 | 0.00 | 0.09 |
| 8 | 182 | -263 | -1188 | 0 | 0 | -0 | -808 | 2 | 0.04 | 0.00 | 0.08 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -1676 | 120 | -1242 | 2 | 0.7321 | 0.9812 | 0.9975 | -- | -- | 0.02 | -- | 0.21 | Snell. 'zx'= 68 |
| 1B | -1676 | 120 | -450 | 2 | 0.7321 | 0.9812 | 0.9982 | -- | -- | 0.02 | -- | 0.13 | Snell. 'zx'= 68 |
| 1C | -1676 | -113 | -1242 | 2 | 0.7321 | 0.9812 | 0.9975 | -- | -- | 0.02 | -- | 0.20 | Snell. 'zx'= 68 |
| 1D | -1676 | -113 | -450 | 2 | 0.7321 | 0.9812 | 0.9982 | -- | -- | 0.02 | -- | 0.12 | Snell. 'zx'= 68 |
| 1I | -1188 | 77 | -1152 | 2 | 0.7321 | 0.9867 | 0.9982 | -- | -- | 0.02 | -- | 0.17 | Snell. 'zx'= 68 |
| 1J | -1188 | 77 | -540 | 2 | 0.7321 | 0.9867 | 0.9988 | -- | -- | 0.02 | -- | 0.11 | Snell. 'zx'= 68 |
| 1K | -1188 | -70 | -1152 | 2 | 0.7321 | 0.9867 | 0.9982 | -- | -- | 0.02 | -- | 0.17 | Snell. 'zx'= 68 |
| 1L | -1188 | -70 | -540 | 2 | 0.7321 | 0.9867 | 0.9988 | -- | -- | 0.02 | -- | 0.11 | Snell. 'zx'= 68 |
| 2 | -209 | 0 | -813 | 2 | 0.7321 | 0.9977 | 0.9997 | -- | -- | 0.00 | -- | 0.09 | Snell. 'zx'= 68 |
| 7 | -364 | 3 | -851 | 2 | 0.7321 | 0.9959 | 0.9995 | -- | -- | 0.00 | -- | 0.09 | Snell. 'zx'= 68 |
| 8 | -263 | 0 | -808 | 2 | 0.7321 | 0.9970 | 0.9996 | -- | -- | 0.00 | -- | 0.09 | Snell. 'zx'= 68 |

**ASTA NUM. 95** NI 77 NF 78 Lungh. 182.5 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 2.3112 1.3115 3.9297 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -1477 | 987 | 108 | 0 | 99 | -561 | 2 | 0.03 | 0.01 | 0.06 | |
| 1B | 0 | -1477 | 1211 | 108 | 0 | 99 | -930 | 2 | 0.04 | 0.01 | 0.09 | |
| 1C | 0 | -1477 | 987 | -115 | 0 | -105 | -561 | 2 | 0.03 | 0.01 | 0.06 | |
| 1D | 0 | -1477 | 1211 | -115 | 0 | -105 | -930 | 2 | 0.04 | 0.01 | 0.09 | |
| 1E | 0 | 506 | 987 | 108 | 0 | 99 | -561 | 1 | 0.03 | 0.00 | 0.06 | |
| 1F | 0 | 506 | 1211 | 108 | 0 | 99 | -930 | 1 | 0.04 | 0.00 | 0.09 | |
| 1G | 0 | 506 | 987 | -115 | 0 | -105 | -561 | 1 | 0.03 | 0.00 | 0.06 | |
| 1H | 0 | 506 | 1211 | -115 | 0 | -105 | -930 | 1 | 0.04 | 0.00 | 0.09 | |
| 1I | 0 | -1492 | 906 | 54 | 0 | 50 | -486 | 2 | 0.03 | 0.01 | 0.05 | |
| 1J | 0 | -1492 | 1292 | 54 | 0 | 50 | -1004 | 2 | 0.04 | 0.01 | 0.10 | |
| 1K | 0 | -1492 | 906 | -61 | 0 | -56 | -486 | 2 | 0.03 | 0.01 | 0.05 | |
| 1L | 0 | -1492 | 1292 | -61 | 0 | -56 | -1004 | 2 | 0.04 | 0.01 | 0.10 | |
| 1M | 0 | 520 | 906 | 54 | 0 | 50 | -486 | 1 | 0.03 | 0.00 | 0.05 | |
| 1N | 0 | 520 | 1292 | 54 | 0 | 50 | -1004 | 1 | 0.04 | 0.00 | 0.10 | |
| 1O | 0 | 520 | 906 | -61 | 0 | -56 | -486 | 1 | 0.03 | 0.00 | 0.05 | |
| 1P | 0 | 520 | 1292 | -61 | 0 | -56 | -1004 | 1 | 0.04 | 0.00 | 0.10 | |
| 2 | 0 | -490 | 1113 | 0 | 0 | 0 | -758 | 2 | 0.04 | 0.00 | 0.08 | |
| 7 | 0 | -598 | 1118 | -3 | 0 | -3 | -772 | 2 | 0.04 | 0.01 | 0.08 | |
| 8 | 0 | -377 | 1094 | 0 | 0 | 0 | -731 | 2 | 0.04 | 0.00 | 0.07 | |
| 1A | 91 | -1477 | 497 | 108 | 0 | 0 | 92 | 2 | 0.02 | 0.01 | 0.01 | |
| 1B | 91 | -1477 | 721 | 108 | 0 | 0 | -23 | 2 | 0.02 | 0.01 | 0.00 | |
| 1C | 91 | -1477 | 497 | -115 | 0 | 0 | 92 | 2 | 0.02 | 0.01 | 0.01 | |
| 1D | 91 | -1477 | 721 | -115 | 0 | 0 | -23 | 2 | 0.02 | 0.01 | 0.00 | |
| 1E | 91 | 506 | 497 | 108 | 0 | 0 | 92 | 1 | 0.02 | 0.00 | 0.01 | |
| 1F | 91 | 506 | 721 | 108 | 0 | 0 | -23 | 1 | 0.02 | 0.00 | 0.00 | |
| 1G | 91 | 506 | 497 | -115 | 0 | 0 | 92 | 1 | 0.02 | 0.00 | 0.01 | |
| 1H | 91 | 506 | 721 | -115 | 0 | 0 | -23 | 1 | 0.02 | 0.00 | 0.00 | |
| 1I | 91 | -1492 | 416 | 54 | 0 | 0 | 110 | 2 | 0.01 | 0.01 | 0.01 | |
| 1J | 91 | -1492 | 802 | 54 | 0 | 0 | -41 | 2 | 0.03 | 0.01 | 0.00 | |
| 1K | 91 | -1492 | 416 | -61 | 0 | 0 | 110 | 2 | 0.01 | 0.01 | 0.01 | |
| 1L | 91 | -1492 | 802 | -61 | 0 | 0 | -41 | 2 | 0.03 | 0.01 | 0.00 | |
| 1M | 91 | 520 | 416 | 54 | 0 | 0 | 110 | 1 | 0.01 | 0.00 | 0.01 | |
| 1N | 91 | 520 | 802 | 54 | 0 | 0 | -41 | 1 | 0.03 | 0.00 | 0.00 | |
| 1O | 91 | 520 | 416 | -61 | 0 | 0 | 110 | 1 | 0.01 | 0.00 | 0.01 | |
| 1P | 91 | 520 | 802 | -61 | 0 | 0 | -41 | 1 | 0.03 | 0.00 | 0.00 | |
| 2 | 91 | -490 | 623 | 0 | 0 | 0 | 34 | 2 | 0.02 | 0.00 | 0.00 | |
| 7 | 91 | -598 | 628 | -3 | 0 | 0 | 25 | 2 | 0.02 | 0.01 | 0.00 | |
| 8 | 91 | -377 | 604 | 0 | 0 | 0 | 43 | 2 | 0.02 | 0.00 | 0.00 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 182 | -1477 | 7 | 108 | 0 | -99 | 297 | 2 | 0.00 | 0.01 | 0.05 |
| 1B | 182 | -1477 | 231 | 108 | 0 | -99 | 436 | 2 | 0.01 | 0.01 | 0.05 |
| 1C | 182 | -1477 | 7 | -115 | 0 | 105 | 297 | 2 | 0.00 | 0.01 | 0.05 |
| 1D | 182 | -1477 | 231 | -115 | 0 | 105 | 436 | 2 | 0.01 | 0.01 | 0.06 |
| 1E | 182 | 506 | 7 | 108 | 0 | -99 | 297 | 1 | 0.00 | 0.00 | 0.05 |
| 1F | 182 | 506 | 231 | 108 | 0 | -99 | 436 | 1 | 0.01 | 0.00 | 0.05 |
| 1G | 182 | 506 | 7 | -115 | 0 | 105 | 297 | 1 | 0.00 | 0.00 | 0.05 |
| 1H | 182 | 506 | 231 | -115 | 0 | 105 | 436 | 1 | 0.01 | 0.00 | 0.06 |
| 1I | 182 | -1492 | -74 | 54 | 0 | -50 | 259 | 2 | 0.00 | 0.01 | 0.03 |
| 1J | 182 | -1492 | 312 | 54 | 0 | -50 | 474 | 2 | 0.01 | 0.01 | 0.05 |
| 1K | 182 | -1492 | -74 | -61 | 0 | 56 | 259 | 2 | 0.00 | 0.01 | 0.03 |
| 1L | 182 | -1492 | 312 | -61 | 0 | 56 | 474 | 2 | 0.01 | 0.01 | 0.05 |
| 1M | 182 | 520 | -74 | 54 | 0 | -50 | 259 | 1 | 0.00 | 0.00 | 0.03 |
| 1N | 182 | 520 | 312 | 54 | 0 | -50 | 474 | 1 | 0.01 | 0.00 | 0.05 |
| 1O | 182 | 520 | -74 | -61 | 0 | 56 | 259 | 1 | 0.00 | 0.00 | 0.03 |
| 1P | 182 | 520 | 312 | -61 | 0 | 56 | 474 | 1 | 0.01 | 0.00 | 0.05 |
| 2 | 182 | -490 | 132 | 0 | 0 | -0 | 378 | 2 | 0.00 | 0.00 | 0.04 |
| 7 | 182 | -598 | 138 | -3 | 0 | 3 | 374 | 2 | 0.00 | 0.01 | 0.04 |
| 8 | 182 | -377 | 113 | 0 | 0 | -0 | 370 | 2 | 0.00 | 0.00 | 0.04 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -1477 | 99 | -561 | 2 | 0.7321 | 0.9834 | 0.9985 | -- | -- | 0.02 | -- | 0.13 Snell. 'zx'= | 68 |
| 1B | -1477 | 99 | -930 | 2 | 0.7321 | 0.9834 | 0.9983 | -- | -- | 0.02 | -- | 0.16 Snell. 'zx'= | 68 |
| 1C | -1477 | -105 | -561 | 2 | 0.7321 | 0.9834 | 0.9985 | -- | -- | 0.02 | -- | 0.13 Snell. 'zx'= | 68 |
| 1D | -1477 | -105 | -930 | 2 | 0.7321 | 0.9834 | 0.9983 | -- | -- | 0.02 | -- | 0.17 Snell. 'zx'= | 68 |
| 1I | -1492 | 50 | -486 | 2 | 0.7321 | 0.9833 | 0.9987 | -- | -- | 0.02 | -- | 0.09 Snell. 'zx'= | 68 |
| 1J | -1492 | 50 | -1004 | 2 | 0.7321 | 0.9833 | 0.9982 | -- | -- | 0.02 | -- | 0.15 Snell. 'zx'= | 68 |
| 1K | -1492 | -56 | -486 | 2 | 0.7321 | 0.9833 | 0.9987 | -- | -- | 0.02 | -- | 0.10 Snell. 'zx'= | 68 |
| 1L | -1492 | -56 | -1004 | 2 | 0.7321 | 0.9833 | 0.9982 | -- | -- | 0.02 | -- | 0.15 Snell. 'zx'= | 68 |
| 2 | -490 | -0 | -758 | 2 | 0.7321 | 0.9945 | 0.9994 | -- | -- | 0.01 | -- | 0.08 Snell. 'zx'= | 68 |
| 7 | -598 | -3 | -772 | 2 | 0.7321 | 0.9933 | 0.9993 | -- | -- | 0.01 | -- | 0.09 Snell. 'zx'= | 68 |
| 8 | -377 | 0 | -731 | 2 | 0.7321 | 0.9958 | 0.9996 | -- | -- | 0.00 | -- | 0.08 Snell. 'zx'= | 68 |

**ASTA NUM. 96** NI 78 NF 11 Lungh. 182.5 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 2.3112 1.3115 3.9297 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -353 | -3 | 120 | 0 | 110 | 339 | 2 | 0.00 | 0.00 | 0.06 | |
| 1B | 0 | -353 | 188 | 120 | 0 | 110 | 165 | 2 | 0.01 | 0.00 | 0.06 | |
| 1C | 0 | -353 | -3 | -124 | 0 | -113 | 339 | 2 | 0.00 | 0.00 | 0.06 | |
| 1D | 0 | -353 | 188 | -124 | 0 | -113 | 165 | 2 | 0.01 | 0.00 | 0.06 | |
| 1E | 0 | 1284 | -3 | 120 | 0 | 110 | 339 | 1 | 0.00 | 0.01 | 0.06 | |
| 1F | 0 | 1284 | 188 | 120 | 0 | 110 | 165 | 1 | 0.01 | 0.01 | 0.06 | |
| 1G | 0 | 1284 | -3 | -124 | 0 | -113 | 339 | 1 | 0.00 | 0.01 | 0.06 | |
| 1H | 0 | 1284 | 188 | -124 | 0 | -113 | 165 | 1 | 0.01 | 0.01 | 0.06 | |
| 1I | 0 | -549 | -67 | 61 | 0 | 55 | 336 | 2 | 0.00 | 0.01 | 0.03 | |
| 1J | 0 | -549 | 253 | 61 | 0 | 55 | 168 | 2 | 0.01 | 0.01 | 0.03 | |
| 1K | 0 | -549 | -67 | -64 | 0 | -58 | 336 | 2 | 0.00 | 0.01 | 0.03 | |
| 1L | 0 | -549 | 253 | -64 | 0 | -58 | 168 | 2 | 0.01 | 0.01 | 0.03 | |
| 1M | 0 | 1480 | -67 | 61 | 0 | 55 | 336 | 1 | 0.00 | 0.01 | 0.03 | |
| 1N | 0 | 1480 | 253 | 61 | 0 | 55 | 168 | 1 | 0.01 | 0.01 | 0.03 | |
| 1O | 0 | 1480 | -67 | -64 | 0 | -58 | 336 | 1 | 0.00 | 0.01 | 0.03 | |
| 1P | 0 | 1480 | 253 | -64 | 0 | -58 | 168 | 1 | 0.01 | 0.01 | 0.03 | |
| 2 | 0 | 581 | 106 | -1 | 0 | -1 | 250 | 1 | 0.00 | 0.01 | 0.03 | |
| 7 | 0 | 523 | 112 | -2 | 0 | -1 | 240 | 1 | 0.00 | 0.01 | 0.02 | |
| 8 | 0 | 524 | 87 | -1 | 0 | -1 | 262 | 1 | 0.00 | 0.01 | 0.03 | |
| 1A | 91 | -353 | -493 | 120 | 0 | 0 | 110 | 1 | 0.02 | 0.00 | 0.01 | |
| 1B | 91 | -353 | -302 | 120 | 0 | 0 | 116 | 1 | 0.01 | 0.00 | 0.01 | |
| 1C | 91 | -353 | -493 | -124 | 0 | 0 | 110 | 1 | 0.02 | 0.00 | 0.01 | |
| 1D | 91 | -353 | -302 | -124 | 0 | 0 | 116 | 1 | 0.01 | 0.00 | 0.01 | |
| 1E | 91 | 1284 | -493 | 120 | 0 | 0 | 110 | 1 | 0.02 | 0.01 | 0.01 | |
| 1F | 91 | 1284 | -302 | 120 | 0 | 0 | 116 | 1 | 0.01 | 0.01 | 0.01 | |
| 1G | 91 | 1284 | -493 | -124 | 0 | 0 | 110 | 1 | 0.02 | 0.01 | 0.01 | |
| 1H | 91 | 1284 | -302 | -124 | 0 | 0 | 116 | 1 | 0.01 | 0.01 | 0.01 | |
| 1I | 91 | -549 | -558 | 61 | 0 | 0 | 50 | 2 | 0.02 | 0.01 | 0.01 | |
| 1J | 91 | -549 | -237 | 61 | 0 | 0 | 176 | 1 | 0.01 | 0.01 | 0.02 | |
| 1K | 91 | -549 | -558 | -64 | 0 | 0 | 50 | 2 | 0.02 | 0.01 | 0.01 | |
| 1L | 91 | -549 | -237 | -64 | 0 | 0 | 176 | 1 | 0.01 | 0.01 | 0.02 | |
| 1M | 91 | 1480 | -558 | 61 | 0 | 0 | 50 | 1 | 0.02 | 0.01 | 0.01 | |
| 1N | 91 | 1480 | -237 | 61 | 0 | 0 | 176 | 1 | 0.01 | 0.01 | 0.02 | |
| 1O | 91 | 1480 | -558 | -64 | 0 | 0 | 50 | 1 | 0.02 | 0.01 | 0.01 | |
| 1P | 91 | 1480 | -237 | -64 | 0 | 0 | 176 | 1 | 0.01 | 0.01 | 0.02 | |
| 2 | 91 | 581 | -384 | -1 | 0 | 0 | 123 | 1 | 0.01 | 0.01 | 0.01 | |
| 7 | 91 | 523 | -378 | -2 | 0 | 0 | 118 | 1 | 0.01 | 0.01 | 0.01 | |
| 8 | 91 | 524 | -403 | -1 | 0 | 0 | 118 | 1 | 0.01 | 0.01 | 0.01 | |
| 1A | 182 | -353 | -983 | 120 | 0 | -110 | -566 | 2 | 0.03 | 0.00 | 0.06 | |
| 1B | 182 | -353 | -792 | 120 | 0 | -110 | -380 | 2 | 0.03 | 0.00 | 0.06 | |
| 1C | 182 | -353 | -983 | -124 | 0 | 113 | -566 | 2 | 0.03 | 0.00 | 0.06 | |
| 1D | 182 | -353 | -792 | -124 | 0 | 113 | -380 | 2 | 0.03 | 0.00 | 0.06 | |
| 1E | 182 | 1284 | -983 | 120 | 0 | -110 | -566 | 1 | 0.03 | 0.01 | 0.06 | |
| 1F | 182 | 1284 | -792 | 120 | 0 | -110 | -380 | 1 | 0.03 | 0.01 | 0.06 | |
| 1G | 182 | 1284 | -983 | -124 | 0 | 113 | -566 | 1 | 0.03 | 0.01 | 0.06 | |
| 1H | 182 | 1284 | -792 | -124 | 0 | 113 | -380 | 1 | 0.03 | 0.01 | 0.06 | |
| 1I | 182 | -549 | -1048 | 61 | 0 | -55 | -683 | 2 | 0.04 | 0.01 | 0.07 | |
| 1J | 182 | -549 | -727 | 61 | 0 | -55 | -263 | 2 | 0.02 | 0.01 | 0.03 | |
| 1K | 182 | -549 | -1048 | -64 | 0 | 58 | -683 | 2 | 0.04 | 0.01 | 0.07 | |
| 1L | 182 | -549 | -727 | -64 | 0 | 58 | -263 | 2 | 0.02 | 0.01 | 0.03 | |
| 1M | 182 | 1480 | -1048 | 61 | 0 | -55 | -683 | 1 | 0.04 | 0.01 | 0.07 | |
| 1N | 182 | 1480 | -727 | 61 | 0 | -55 | -263 | 1 | 0.02 | 0.01 | 0.03 | |
| 1O | 182 | 1480 | -1048 | -64 | 0 | 58 | -683 | 1 | 0.04 | 0.01 | 0.07 | |
| 1P | 182 | 1480 | -727 | -64 | 0 | 58 | -263 | 1 | 0.02 | 0.01 | 0.03 | |
| 2 | 182 | 581 | -874 | -1 | 0 | 1 | -451 | 1 | 0.03 | 0.01 | 0.05 | |
| 7 | 182 | 523 | -868 | -2 | 0 | 1 | -451 | 1 | 0.03 | 0.01 | 0.05 | |
| 8 | 182 | 524 | -893 | -1 | 0 | 1 | -473 | 1 | 0.03 | 0.01 | 0.05 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|



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| | kg | | kg*m | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | -353 | 110 | -566 | 2 | 0.7321 | 0.9960 | 0.9996 | -- | -- | 0.00 | -- | 0.12 Snell. 'zx'= 68 |
| 1B | -353 | 110 | -380 | 2 | 0.7321 | 0.9960 | 0.9999 | -- | -- | 0.00 | -- | 0.10 Snell. 'zx'= 68 |
| 1C | -353 | -113 | -566 | 2 | 0.7321 | 0.9960 | 0.9996 | -- | -- | 0.00 | -- | 0.12 Snell. 'zx'= 68 |
| 1D | -353 | -113 | -380 | 2 | 0.7321 | 0.9960 | 0.9999 | -- | -- | 0.00 | -- | 0.10 Snell. 'zx'= 68 |
| 1I | -549 | 55 | -683 | 2 | 0.7321 | 0.9938 | 0.9994 | -- | -- | 0.01 | -- | 0.10 Snell. 'zx'= 68 |
| 1J | -549 | 55 | -263 | 2 | 0.7321 | 0.9938 | 0.9998 | -- | -- | 0.01 | -- | 0.06 Snell. 'zx'= 68 |
| 1K | -549 | -58 | -683 | 2 | 0.7321 | 0.9938 | 0.9994 | -- | -- | 0.01 | -- | 0.11 Snell. 'zx'= 68 |
| 1L | -549 | -58 | -263 | 2 | 0.7321 | 0.9938 | 0.9998 | -- | -- | 0.01 | -- | 0.06 Snell. 'zx'= 68 |

**ASTA NUM. 97** NI 11 NF 93 Lungh. 205.0 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 2.3112 1.3115 3.9297 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -1163 | 403 | 4 | 0 | 5 | -115 | 2 | 0.01 | 0.01 | 0.01 | |
| 1B | 0 | -1163 | 743 | 4 | 0 | 5 | -425 | 2 | 0.03 | 0.01 | 0.04 | |
| 1C | 0 | -1163 | 403 | -3 | 0 | -3 | -115 | 2 | 0.01 | 0.01 | 0.01 | |
| 1D | 0 | -1163 | 743 | -3 | 0 | -3 | -425 | 2 | 0.03 | 0.01 | 0.04 | |
| 1E | 0 | -259 | 403 | 4 | 0 | 5 | -115 | 2 | 0.01 | 0.00 | 0.01 | |
| 1F | 0 | -259 | 743 | 4 | 0 | 5 | -425 | 2 | 0.03 | 0.00 | 0.04 | |
| 1G | 0 | -259 | 403 | -3 | 0 | -3 | -115 | 2 | 0.01 | 0.00 | 0.01 | |
| 1H | 0 | -259 | 743 | -3 | 0 | -3 | -425 | 2 | 0.03 | 0.00 | 0.04 | |
| 1I | 0 | -1529 | 174 | 3 | 0 | 3 | 77 | 2 | 0.01 | 0.01 | 0.01 | |
| 1J | 0 | -1529 | 972 | 3 | 0 | 3 | -616 | 2 | 0.03 | 0.01 | 0.06 | |
| 1K | 0 | -1529 | 174 | -1 | 0 | -1 | 77 | 2 | 0.01 | 0.01 | 0.01 | |
| 1L | 0 | -1529 | 972 | -1 | 0 | -1 | -616 | 2 | 0.03 | 0.01 | 0.06 | |
| 1M | 0 | 108 | 174 | 3 | 0 | 3 | 77 | 1 | 0.01 | 0.00 | 0.01 | |
| 1N | 0 | 108 | 972 | 3 | 0 | 3 | -616 | 1 | 0.03 | 0.00 | 0.06 | |
| 1O | 0 | 108 | 174 | -1 | 0 | -1 | 77 | 1 | 0.01 | 0.00 | 0.01 | |
| 1P | 0 | 108 | 972 | -1 | 0 | -1 | -616 | 1 | 0.03 | 0.00 | 0.06 | |
| 2 | 0 | -627 | 604 | -0 | 0 | -0 | -296 | 2 | 0.02 | 0.01 | 0.03 | |
| 7 | 0 | -643 | 604 | 1 | 0 | 1 | -296 | 2 | 0.02 | 0.01 | 0.03 | |
| 8 | 0 | -695 | 573 | -0 | 0 | -0 | -269 | 2 | 0.02 | 0.01 | 0.03 | |
| 1A | 102 | -1163 | -148 | 4 | 0 | 0 | 9 | 2 | 0.01 | 0.01 | 0.00 | |
| 1B | 102 | -1163 | 192 | 4 | 0 | 0 | 61 | 2 | 0.01 | 0.01 | 0.01 | |
| 1C | 102 | -1163 | -148 | -3 | 0 | 0 | 9 | 2 | 0.01 | 0.01 | 0.00 | |
| 1D | 102 | -1163 | 192 | -3 | 0 | 0 | 61 | 2 | 0.01 | 0.01 | 0.01 | |
| 1E | 102 | -259 | -148 | 4 | 0 | 0 | 9 | 2 | 0.01 | 0.00 | 0.00 | |
| 1F | 102 | -259 | 192 | 4 | 0 | 0 | 61 | 2 | 0.01 | 0.00 | 0.01 | |
| 1G | 102 | -259 | -148 | -3 | 0 | 0 | 9 | 2 | 0.01 | 0.00 | 0.00 | |
| 1H | 102 | -259 | 192 | -3 | 0 | 0 | 61 | 2 | 0.01 | 0.00 | 0.01 | |
| 1I | 102 | -1529 | -377 | 3 | 0 | 0 | -29 | 2 | 0.01 | 0.01 | 0.00 | |
| 1J | 102 | -1529 | 421 | 3 | 0 | 0 | 99 | 2 | 0.01 | 0.01 | 0.01 | |
| 1K | 102 | -1529 | -377 | -1 | 0 | 0 | -29 | 2 | 0.01 | 0.01 | 0.00 | |
| 1L | 102 | -1529 | 421 | -1 | 0 | 0 | 99 | 2 | 0.01 | 0.01 | 0.01 | |
| 1M | 102 | 108 | -377 | 3 | 0 | 0 | -29 | 1 | 0.01 | 0.00 | 0.00 | |
| 1N | 102 | 108 | 421 | 3 | 0 | 0 | 99 | 1 | 0.01 | 0.00 | 0.01 | |
| 1O | 102 | 108 | -377 | -1 | 0 | 0 | -29 | 1 | 0.01 | 0.00 | 0.00 | |
| 1P | 102 | 108 | 421 | -1 | 0 | 0 | 99 | 1 | 0.01 | 0.00 | 0.01 | |
| 2 | 102 | -627 | 54 | -0 | 0 | 0 | 42 | 2 | 0.00 | 0.01 | 0.00 | |
| 7 | 102 | -643 | 53 | 1 | 0 | 0 | 41 | 2 | 0.00 | 0.01 | 0.00 | |
| 8 | 102 | -695 | 23 | -0 | 0 | 0 | 36 | 2 | 0.00 | 0.01 | 0.00 | |
| 1A | 205 | -1163 | -698 | 4 | 0 | -5 | -431 | 2 | 0.02 | 0.01 | 0.04 | |
| 1B | 205 | -1163 | -358 | 4 | 0 | -5 | -18 | 2 | 0.01 | 0.01 | 0.00 | |
| 1C | 205 | -1163 | -698 | -3 | 0 | 3 | -431 | 2 | 0.02 | 0.01 | 0.04 | |
| 1D | 205 | -1163 | -358 | -3 | 0 | 3 | -18 | 2 | 0.01 | 0.01 | 0.00 | |
| 1E | 205 | -259 | -698 | 4 | 0 | -5 | -431 | 2 | 0.02 | 0.00 | 0.04 | |
| 1F | 205 | -259 | -358 | 4 | 0 | -5 | -18 | 2 | 0.01 | 0.00 | 0.00 | |
| 1G | 205 | -259 | -698 | -3 | 0 | 3 | -431 | 2 | 0.02 | 0.00 | 0.04 | |
| 1H | 205 | -259 | -358 | -3 | 0 | 3 | -18 | 2 | 0.01 | 0.00 | 0.00 | |
| 1I | 205 | -1529 | -927 | 3 | 0 | -3 | -700 | 2 | 0.03 | 0.01 | 0.07 | |
| 1J | 205 | -1529 | -129 | 3 | 0 | -3 | 251 | 2 | 0.00 | 0.01 | 0.03 | |
| 1K | 205 | -1529 | -927 | -1 | 0 | 1 | -700 | 2 | 0.03 | 0.01 | 0.07 | |
| 1L | 205 | -1529 | -129 | -1 | 0 | 1 | 251 | 2 | 0.00 | 0.01 | 0.03 | |
| 1M | 205 | 108 | -927 | 3 | 0 | -3 | -700 | 1 | 0.03 | 0.00 | 0.07 | |
| 1N | 205 | 108 | -129 | 3 | 0 | -3 | 251 | 1 | 0.00 | 0.00 | 0.03 | |
| 1O | 205 | 108 | -927 | -1 | 0 | 1 | -700 | 1 | 0.03 | 0.00 | 0.07 | |
| 1P | 205 | 108 | -129 | -1 | 0 | 1 | 251 | 1 | 0.00 | 0.00 | 0.03 | |
| 2 | 205 | -627 | -496 | -0 | 0 | 0 | -185 | 2 | 0.02 | 0.01 | 0.02 | |
| 7 | 205 | -643 | -497 | 1 | 0 | -1 | -187 | 2 | 0.02 | 0.01 | 0.02 | |
| 8 | 205 | -695 | -528 | -0 | 0 | 0 | -223 | 2 | 0.02 | 0.01 | 0.02 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -1163 | 5 | -431 | 2 | 0.6711 | 0.9858 | 1.0016 | -- | -- | 0.02 | -- | 0.06 Snell. 'zx'= 76 | |
| 1B | -1163 | 5 | -425 | 2 | 0.6711 | 0.9858 | 1.0012 | -- | -- | 0.02 | -- | 0.06 Snell. 'zx'= 76 | |
| 1C | -1163 | -3 | -431 | 2 | 0.6711 | 0.9858 | 1.0016 | -- | -- | 0.02 | -- | 0.06 Snell. 'zx'= 76 | |
| 1D | -1163 | -3 | -425 | 2 | 0.6711 | 0.9858 | 1.0012 | -- | -- | 0.02 | -- | 0.06 Snell. 'zx'= 76 | |
| 1E | -259 | 5 | -431 | 2 | 0.6711 | 0.9968 | 1.0004 | -- | -- | 0.00 | -- | 0.05 Snell. 'zx'= 76 | |
| 1F | -259 | 5 | -425 | 2 | 0.6711 | 0.9968 | 1.0003 | -- | -- | 0.00 | -- | 0.05 Snell. 'zx'= 76 | |
| 1G | -259 | -3 | -431 | 2 | 0.6711 | 0.9968 | 1.0004 | -- | -- | 0.00 | -- | 0.05 Snell. 'zx'= 76 | |
| 1H | -259 | -3 | -425 | 2 | 0.6711 | 0.9968 | 1.0003 | -- | -- | 0.00 | -- | 0.05 Snell. 'zx'= 76 | |
| 1I | -1529 | 3 | -700 | 2 | 0.6711 | 0.9813 | 1.0004 | -- | -- | 0.02 | -- | 0.09 Snell. 'zx'= 76 | |
| 1J | -1529 | 3 | -616 | 2 | 0.6711 | 0.9813 | 0.9993 | -- | -- | 0.02 | -- | 0.09 Snell. 'zx'= 76 | |
| 1K | -1529 | -1 | -700 | 2 | 0.6711 | 0.9813 | 1.0004 | -- | -- | 0.02 | -- | 0.09 Snell. 'zx'= 76 | |
| 1L | -1529 | -1 | -616 | 2 | 0.6711 | 0.9813 | 0.9993 | -- | -- | 0.02 | -- | 0.09 Snell. 'zx'= 76 | |
| 2 | -627 | -0 | -295 | 2 | 0.6711 | 0.9923 | 1.0011 | -- | -- | 0.01 | -- | 0.04 Snell. 'zx'= 76 | |
| 7 | -643 | 1 | -296 | 2 | 0.6711 | 0.9921 | 1.0012 | -- | -- | 0.01 | -- | 0.04 Snell. 'zx'= 76 | |
| 8 | -695 | -0 | -269 | 2 | 0.6711 | 0.9915 | 1.0013 | -- | -- | 0.01 | -- | 0.04 Snell. 'zx'= 76 | |

**ASTA NUM. 98** NI 93 NF 75 Lungh. 135.0 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 2.3112 1.3115 3.9297 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 0 | -24 | 751 | 212 | 0 | 143 | -310 | 2 | 0.03 | 0.00 | 0.07 |
| 1B | 0 | -24 | 847 | 212 | 0 | 143 | -402 | 2 | 0.03 | 0.00 | 0.07 |
| 1C | 0 | -24 | 751 | -211 | 0 | -142 | -310 | 2 | 0.03 | 0.00 | 0.07 |
| 1D | 0 | -24 | 847 | -211 | 0 | -142 | -402 | 2 | 0.03 | 0.00 | 0.07 |
| 1E | 0 | 509 | 751 | 212 | 0 | 143 | -310 | 1 | 0.03 | 0.00 | 0.07 |
| 1F | 0 | 509 | 847 | 212 | 0 | 143 | -402 | 1 | 0.03 | 0.00 | 0.07 |
| 1G | 0 | 509 | 751 | -211 | 0 | -142 | -310 | 1 | 0.03 | 0.00 | 0.07 |
| 1H | 0 | 509 | 847 | -211 | 0 | -142 | -402 | 1 | 0.03 | 0.00 | 0.07 |
| 1I | 0 | -204 | 699 | 71 | 0 | 48 | -254 | 2 | 0.02 | 0.00 | 0.03 |
| 1J | 0 | -204 | 898 | 71 | 0 | 48 | -458 | 2 | 0.03 | 0.00 | 0.05 |
| 1K | 0 | -204 | 699 | -70 | 0 | -47 | -254 | 2 | 0.02 | 0.00 | 0.03 |
| 1L | 0 | -204 | 898 | -70 | 0 | -47 | -458 | 2 | 0.03 | 0.00 | 0.05 |
| 1M | 0 | 689 | 699 | 71 | 0 | 48 | -254 | 1 | 0.02 | 0.01 | 0.03 |
| 1N | 0 | 689 | 898 | 71 | 0 | 48 | -458 | 1 | 0.03 | 0.01 | 0.05 |
| 1O | 0 | 689 | 699 | -70 | 0 | -47 | -254 | 1 | 0.02 | 0.01 | 0.03 |
| 1P | 0 | 689 | 898 | -70 | 0 | -47 | -458 | 1 | 0.03 | 0.01 | 0.05 |
| 2 | 0 | 287 | 792 | 2 | 0 | 1 | -348 | 1 | 0.03 | 0.00 | 0.04 |
| 7 | 0 | 273 | 792 | 1 | 0 | 1 | -349 | 1 | 0.03 | 0.00 | 0.04 |
| 8 | 0 | 257 | 799 | 2 | 0 | 1 | -355 | 1 | 0.03 | 0.00 | 0.04 |
| 1A | 68 | -24 | 388 | 212 | 0 | 0 | 71 | 1 | 0.01 | 0.00 | 0.01 |
| 1B | 68 | -24 | 484 | 212 | 0 | 0 | 51 | 1 | 0.02 | 0.00 | 0.01 |
| 1C | 68 | -24 | 388 | -211 | 0 | 0 | 71 | 1 | 0.01 | 0.00 | 0.01 |
| 1D | 68 | -24 | 484 | -211 | 0 | 0 | 51 | 1 | 0.02 | 0.00 | 0.01 |
| 1E | 68 | 509 | 388 | 212 | 0 | 0 | 71 | 1 | 0.01 | 0.00 | 0.01 |
| 1F | 68 | 509 | 484 | 212 | 0 | 0 | 51 | 1 | 0.02 | 0.00 | 0.01 |
| 1G | 68 | 509 | 388 | -211 | 0 | 0 | 71 | 1 | 0.01 | 0.00 | 0.01 |
| 1H | 68 | 509 | 484 | -211 | 0 | 0 | 51 | 1 | 0.02 | 0.00 | 0.01 |
| 1I | 68 | -204 | 337 | 71 | 0 | 0 | 94 | 1 | 0.01 | 0.00 | 0.01 |
| 1J | 68 | -204 | 536 | 71 | 0 | 0 | 28 | 2 | 0.02 | 0.00 | 0.00 |
| 1K | 68 | -204 | 337 | -70 | 0 | 0 | 94 | 1 | 0.01 | 0.00 | 0.01 |
| 1L | 68 | -204 | 536 | -70 | 0 | 0 | 28 | 2 | 0.02 | 0.00 | 0.00 |
| 1M | 68 | 689 | 337 | 71 | 0 | 0 | 94 | 1 | 0.01 | 0.01 | 0.01 |
| 1N | 68 | 689 | 536 | 71 | 0 | 0 | 28 | 1 | 0.02 | 0.01 | 0.00 |
| 1O | 68 | 689 | 337 | -70 | 0 | 0 | 94 | 1 | 0.01 | 0.01 | 0.01 |
| 1P | 68 | 689 | 536 | -70 | 0 | 0 | 28 | 1 | 0.02 | 0.01 | 0.00 |
| 2 | 68 | 287 | 430 | 2 | 0 | 0 | 65 | 1 | 0.01 | 0.00 | 0.01 |
| 7 | 68 | 273 | 429 | 1 | 0 | 0 | 63 | 1 | 0.01 | 0.00 | 0.01 |
| 8 | 68 | 257 | 437 | 2 | 0 | 0 | 62 | 1 | 0.01 | 0.00 | 0.01 |
| 1A | 135 | -24 | 26 | 212 | 0 | -143 | 207 | 2 | 0.01 | 0.00 | 0.07 |
| 1B | 135 | -24 | 122 | 212 | 0 | -143 | 259 | 2 | 0.01 | 0.00 | 0.07 |
| 1C | 135 | -24 | 26 | -211 | 0 | 142 | 207 | 2 | 0.01 | 0.00 | 0.07 |
| 1D | 135 | -24 | 122 | -211 | 0 | 142 | 259 | 2 | 0.01 | 0.00 | 0.07 |
| 1E | 135 | 509 | 26 | 212 | 0 | -143 | 207 | 1 | 0.01 | 0.00 | 0.07 |
| 1F | 135 | 509 | 122 | 212 | 0 | -143 | 259 | 1 | 0.01 | 0.00 | 0.07 |
| 1G | 135 | 509 | 26 | -211 | 0 | 142 | 207 | 1 | 0.01 | 0.00 | 0.07 |
| 1H | 135 | 509 | 122 | -211 | 0 | 142 | 259 | 1 | 0.01 | 0.00 | 0.07 |
| 1I | 135 | -204 | -26 | 71 | 0 | -48 | 198 | 2 | 0.00 | 0.00 | 0.02 |
| 1J | 135 | -204 | 173 | 71 | 0 | -48 | 268 | 2 | 0.01 | 0.00 | 0.03 |
| 1K | 135 | -204 | -26 | -70 | 0 | 47 | 198 | 2 | 0.00 | 0.00 | 0.02 |
| 1L | 135 | -204 | 173 | -70 | 0 | 47 | 268 | 2 | 0.01 | 0.00 | 0.03 |
| 1M | 135 | 689 | -26 | 71 | 0 | -48 | 198 | 1 | 0.00 | 0.01 | 0.02 |
| 1N | 135 | 689 | 173 | 71 | 0 | -48 | 268 | 1 | 0.01 | 0.01 | 0.03 |
| 1O | 135 | 689 | -26 | -70 | 0 | 47 | 198 | 1 | 0.00 | 0.01 | 0.02 |
| 1P | 135 | 689 | 173 | -70 | 0 | 47 | 268 | 1 | 0.01 | 0.01 | 0.03 |
| 2 | 135 | 287 | 67 | 2 | 0 | -1 | 232 | 1 | 0.00 | 0.00 | 0.02 |
| 7 | 135 | 273 | 67 | 1 | 0 | -1 | 231 | 1 | 0.00 | 0.00 | 0.02 |
| 8 | 135 | 257 | 74 | 2 | 0 | -1 | 235 | 1 | 0.00 | 0.00 | 0.02 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -24 | 143 | -310 | 2 | 0.8457 | 0.9998 | 1.0000 | -- | -- | 0.00 | -- | 0.10 | Snell. 'zx'= 50 |
| 1B | -24 | 143 | -402 | 2 | 0.8457 | 0.9998 | 1.0000 | -- | -- | 0.00 | -- | 0.11 | Snell. 'zx'= 50 |
| 1C | -24 | -142 | -310 | 2 | 0.8457 | 0.9998 | 1.0000 | -- | -- | 0.00 | -- | 0.10 | Snell. 'zx'= 50 |
| 1D | -24 | -142 | -402 | 2 | 0.8457 | 0.9998 | 1.0000 | -- | -- | 0.00 | -- | 0.11 | Snell. 'zx'= 50 |
| 1I | -204 | 48 | -254 | 2 | 0.8457 | 0.9980 | 0.9997 | -- | -- | 0.00 | -- | 0.05 | Snell. 'zx'= 50 |
| 1J | -204 | 48 | -458 | 2 | 0.8457 | 0.9980 | 0.9997 | -- | -- | 0.00 | -- | 0.07 | Snell. 'zx'= 50 |
| 1K | -204 | -47 | -254 | 2 | 0.8457 | 0.9980 | 0.9997 | -- | -- | 0.00 | -- | 0.05 | Snell. 'zx'= 50 |
| 1L | -204 | -47 | -458 | 2 | 0.8457 | 0.9980 | 0.9997 | -- | -- | 0.00 | -- | 0.07 | Snell. 'zx'= 50 |

**ASTA NUM. 99** NI 75 NF 10 Lungh. 170.0 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 2.3112 1.3115 3.9297 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -35 | -4 | 111 | 0 | 94 | 272 | 2 | 0.00 | 0.00 | 0.05 | |
| 1B | 0 | -35 | 99 | 111 | 0 | 94 | 200 | 2 | 0.00 | 0.00 | 0.05 | |
| 1C | 0 | -35 | -4 | -113 | 0 | -96 | 272 | 2 | 0.00 | 0.00 | 0.05 | |
| 1D | 0 | -35 | 99 | -113 | 0 | -96 | 200 | 2 | 0.00 | 0.00 | 0.05 | |
| 1E | 0 | 466 | -4 | 111 | 0 | 94 | 272 | 1 | 0.00 | 0.00 | 0.05 | |
| 1F | 0 | 466 | 99 | 111 | 0 | 94 | 200 | 1 | 0.00 | 0.00 | 0.05 | |
| 1G | 0 | 466 | -4 | -113 | 0 | -96 | 272 | 1 | 0.00 | 0.00 | 0.05 | |
| 1H | 0 | 466 | 99 | -113 | 0 | -96 | 200 | 1 | 0.00 | 0.00 | 0.05 | |
| 1I | 0 | -53 | -62 | 38 | 0 | 32 | 311 | 2 | 0.00 | 0.00 | 0.03 | |
| 1J | 0 | -53 | 157 | 38 | 0 | 32 | 161 | 2 | 0.01 | 0.00 | 0.02 | |
| 1K | 0 | -53 | -62 | -39 | 0 | -33 | 311 | 2 | 0.00 | 0.00 | 0.03 | |
| 1L | 0 | -53 | 157 | -39 | 0 | -33 | 161 | 2 | 0.01 | 0.00 | 0.02 | |
| 1M | 0 | 484 | -62 | 38 | 0 | 32 | 311 | 1 | 0.00 | 0.00 | 0.03 | |
| 1N | 0 | 484 | 157 | 38 | 0 | 32 | 161 | 1 | 0.01 | 0.00 | 0.02 | |
| 1O | 0 | 484 | -62 | -39 | 0 | -33 | 311 | 1 | 0.00 | 0.00 | 0.03 | |
| 1P | 0 | 484 | 157 | -39 | 0 | -33 | 161 | 1 | 0.01 | 0.00 | 0.02 | |
| 2 | 0 | 210 | 41 | -1 | 0 | -1 | 241 | 1 | 0.00 | 0.00 | 0.02 | |
| 7 | 0 | 192 | 40 | -1 | 0 | -1 | 240 | 1 | 0.00 | 0.00 | 0.02 | |
| 8 | 0 | 233 | 48 | -1 | 0 | -1 | 237 | 1 | 0.00 | 0.00 | 0.02 | |
| 1A | 85 | -35 | -460 | 111 | 0 | 0 | 69 | 1 | 0.02 | 0.00 | 0.01 | |
| 1B | 85 | -35 | -358 | 111 | 0 | 0 | 97 | 1 | 0.01 | 0.00 | 0.01 | |
| 1C | 85 | -35 | -460 | -113 | 0 | 0 | 69 | 1 | 0.02 | 0.00 | 0.01 | |
| 1D | 85 | -35 | -358 | -113 | 0 | 0 | 97 | 1 | 0.01 | 0.00 | 0.01 | |
| 1E | 85 | 466 | -460 | 111 | 0 | 0 | 69 | 1 | 0.02 | 0.00 | 0.01 | |
| 1F | 85 | 466 | -358 | 111 | 0 | 0 | 97 | 1 | 0.01 | 0.00 | 0.01 | |
| 1G | 85 | 466 | -460 | -113 | 0 | 0 | 69 | 1 | 0.02 | 0.00 | 0.01 | |
| 1H | 85 | 466 | -358 | -113 | 0 | 0 | 97 | 1 | 0.01 | 0.00 | 0.01 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1I | 85 | -53 | -518 | 38 | 0 | 0 | 63 | 1 | 0.02 | 0.00 | 0.01 |
| 1J | 85 | -53 | -300 | 38 | 0 | 0 | 102 | 1 | 0.01 | 0.00 | 0.01 |
| 1K | 85 | -53 | -518 | -39 | 0 | 0 | 63 | 1 | 0.02 | 0.00 | 0.01 |
| 1L | 85 | -53 | -300 | -39 | 0 | 0 | 102 | 1 | 0.01 | 0.00 | 0.01 |
| 1M | 85 | 484 | -518 | 38 | 0 | 0 | 63 | 1 | 0.02 | 0.00 | 0.01 |
| 1N | 85 | 484 | -300 | 38 | 0 | 0 | 102 | 1 | 0.01 | 0.00 | 0.01 |
| 1O | 85 | 484 | -518 | -39 | 0 | 0 | 63 | 1 | 0.02 | 0.00 | 0.01 |
| 1P | 85 | 484 | -300 | -39 | 0 | 0 | 102 | 1 | 0.01 | 0.00 | 0.01 |
| 2 | 85 | 210 | -416 | -1 | 0 | 0 | 82 | 1 | 0.01 | 0.00 | 0.01 |
| 7 | 85 | 192 | -416 | -1 | 0 | 0 | 81 | 1 | 0.01 | 0.00 | 0.01 |
| 8 | 85 | 233 | -409 | -1 | 0 | 0 | 84 | 1 | 0.01 | 0.00 | 0.01 |
| 1A | 170 | -35 | -917 | 111 | 0 | -94 | -523 | 2 | 0.03 | 0.00 | 0.05 |
| 1B | 170 | -35 | -815 | 111 | 0 | -94 | -395 | 2 | 0.03 | 0.00 | 0.05 |
| 1C | 170 | -35 | -917 | -113 | 0 | 96 | -523 | 2 | 0.03 | 0.00 | 0.05 |
| 1D | 170 | -35 | -815 | -113 | 0 | 96 | -395 | 2 | 0.03 | 0.00 | 0.05 |
| 1E | 170 | 466 | -917 | 111 | 0 | -94 | -523 | 1 | 0.03 | 0.00 | 0.05 |
| 1F | 170 | 466 | -815 | 111 | 0 | -94 | -395 | 1 | 0.03 | 0.00 | 0.05 |
| 1G | 170 | 466 | -917 | -113 | 0 | 96 | -523 | 1 | 0.03 | 0.00 | 0.05 |
| 1H | 170 | 466 | -815 | -113 | 0 | 96 | -395 | 1 | 0.03 | 0.00 | 0.05 |
| 1I | 170 | -53 | -975 | 38 | 0 | -32 | -574 | 2 | 0.03 | 0.00 | 0.06 |
| 1J | 170 | -53 | -756 | 38 | 0 | -32 | -345 | 2 | 0.03 | 0.00 | 0.04 |
| 1K | 170 | -53 | -975 | -39 | 0 | 33 | -574 | 2 | 0.03 | 0.00 | 0.06 |
| 1L | 170 | -53 | -756 | -39 | 0 | 33 | -345 | 2 | 0.03 | 0.00 | 0.04 |
| 1M | 170 | 484 | -975 | 38 | 0 | -32 | -574 | 1 | 0.03 | 0.00 | 0.06 |
| 1N | 170 | 484 | -756 | 38 | 0 | -32 | -345 | 1 | 0.03 | 0.00 | 0.04 |
| 1O | 170 | 484 | -975 | -39 | 0 | 33 | -574 | 1 | 0.03 | 0.00 | 0.06 |
| 1P | 170 | 484 | -756 | -39 | 0 | 33 | -345 | 1 | 0.03 | 0.00 | 0.04 |
| 2 | 170 | 210 | -872 | -1 | 0 | 1 | -465 | 1 | 0.03 | 0.00 | 0.05 |
| 7 | 170 | 192 | -873 | -1 | 0 | 1 | -467 | 1 | 0.03 | 0.00 | 0.05 |
| 8 | 170 | 233 | -865 | -1 | 0 | 1 | -457 | 1 | 0.03 | 0.00 | 0.05 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | | kg*m | | | | | | | | | | |
| 1A | -35 | 94 | -523 | 2 | 0.7644 | 0.9996 | 1.0000 | -- | -- | 0.00 | -- | 0.10 | Snell. 'zx'= 63 |
| 1B | -35 | 94 | -395 | 2 | 0.7644 | 0.9996 | 1.0000 | -- | -- | 0.00 | -- | 0.09 | Snell. 'zx'= 63 |
| 1C | -35 | -96 | -523 | 2 | 0.7644 | 0.9996 | 1.0000 | -- | -- | 0.00 | -- | 0.10 | Snell. 'zx'= 63 |
| 1D | -35 | -96 | -395 | 2 | 0.7644 | 0.9996 | 1.0000 | -- | -- | 0.00 | -- | 0.09 | Snell. 'zx'= 63 |
| 1I | -53 | 32 | -574 | 2 | 0.7644 | 0.9994 | 0.9999 | -- | -- | 0.00 | -- | 0.08 | Snell. 'zx'= 63 |
| 1J | -53 | 32 | -345 | 2 | 0.7644 | 0.9994 | 1.0000 | -- | -- | 0.00 | -- | 0.05 | Snell. 'zx'= 63 |
| 1K | -53 | -33 | -574 | 2 | 0.7644 | 0.9994 | 0.9999 | -- | -- | 0.00 | -- | 0.08 | Snell. 'zx'= 63 |
| 1L | -53 | -33 | -345 | 2 | 0.7644 | 0.9994 | 1.0000 | -- | -- | 0.00 | -- | 0.05 | Snell. 'zx'= 63 |

**ASTA NUM. 100** NI 10 NF 74 Lungh. 182.5 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 2.3112 1.3115 3.9297 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -731 | 744 | 123 | 0 | 112 | -293 | 2 | 0.03 | 0.01 | 0.06 | |
| 1B | 0 | -731 | 972 | 123 | 0 | 112 | -595 | 2 | 0.03 | 0.01 | 0.06 | |
| 1C | 0 | -731 | 744 | -121 | 0 | -110 | -293 | 2 | 0.03 | 0.01 | 0.06 | |
| 1D | 0 | -731 | 972 | -121 | 0 | -110 | -595 | 2 | 0.03 | 0.01 | 0.06 | |
| 1E | 0 | 1714 | 744 | 123 | 0 | 112 | -293 | 1 | 0.03 | 0.02 | 0.06 | |
| 1F | 0 | 1714 | 972 | 123 | 0 | 112 | -595 | 1 | 0.03 | 0.02 | 0.06 | |
| 1G | 0 | 1714 | 744 | -121 | 0 | -110 | -293 | 1 | 0.03 | 0.02 | 0.06 | |
| 1H | 0 | 1714 | 972 | -121 | 0 | -110 | -595 | 1 | 0.03 | 0.02 | 0.06 | |
| 1I | 0 | -1384 | 648 | 63 | 0 | 57 | -114 | 2 | 0.02 | 0.01 | 0.03 | |
| 1J | 0 | -1384 | 1067 | 63 | 0 | 57 | -774 | 2 | 0.04 | 0.01 | 0.08 | |
| 1K | 0 | -1384 | 648 | -60 | 0 | -55 | -114 | 2 | 0.02 | 0.01 | 0.03 | |
| 1L | 0 | -1384 | 1067 | -60 | 0 | -55 | -774 | 2 | 0.04 | 0.01 | 0.08 | |
| 1M | 0 | 2367 | 648 | 63 | 0 | 57 | -114 | 1 | 0.02 | 0.02 | 0.03 | |
| 1N | 0 | 2367 | 1067 | 63 | 0 | 57 | -774 | 1 | 0.04 | 0.02 | 0.08 | |
| 1O | 0 | 2367 | 648 | -60 | 0 | -55 | -114 | 1 | 0.02 | 0.02 | 0.03 | |
| 1P | 0 | 2367 | 1067 | -60 | 0 | -55 | -774 | 1 | 0.04 | 0.02 | 0.08 | |
| 2 | 0 | 428 | 885 | 1 | 0 | 1 | -474 | 1 | 0.03 | 0.00 | 0.05 | |
| 7 | 0 | 366 | 879 | 1 | 0 | 1 | -474 | 1 | 0.03 | 0.00 | 0.05 | |
| 8 | 0 | 553 | 863 | 1 | 0 | 1 | -444 | 1 | 0.03 | 0.01 | 0.05 | |
| 1A | 91 | -731 | 253 | 123 | 0 | 0 | 152 | 2 | 0.01 | 0.01 | 0.02 | |
| 1B | 91 | -731 | 482 | 123 | 0 | 0 | 79 | 2 | 0.02 | 0.01 | 0.01 | |
| 1C | 91 | -731 | 253 | -121 | 0 | 0 | 152 | 2 | 0.01 | 0.01 | 0.02 | |
| 1D | 91 | -731 | 482 | -121 | 0 | 0 | 79 | 2 | 0.02 | 0.01 | 0.01 | |
| 1E | 91 | 1714 | 253 | 123 | 0 | 0 | 152 | 1 | 0.01 | 0.02 | 0.02 | |
| 1F | 91 | 1714 | 482 | 123 | 0 | 0 | 79 | 1 | 0.02 | 0.02 | 0.01 | |
| 1G | 91 | 1714 | 253 | -121 | 0 | 0 | 152 | 1 | 0.01 | 0.02 | 0.02 | |
| 1H | 91 | 1714 | 482 | -121 | 0 | 0 | 79 | 1 | 0.02 | 0.02 | 0.01 | |
| 1I | 91 | -1384 | 158 | 63 | 0 | 0 | 250 | 2 | 0.01 | 0.01 | 0.03 | |
| 1J | 91 | -1384 | 577 | 63 | 0 | 0 | -20 | 2 | 0.02 | 0.01 | 0.00 | |
| 1K | 91 | -1384 | 158 | -60 | 0 | 0 | 250 | 2 | 0.01 | 0.01 | 0.03 | |
| 1L | 91 | -1384 | 577 | -60 | 0 | 0 | -20 | 2 | 0.02 | 0.01 | 0.00 | |
| 1M | 91 | 2367 | 158 | 63 | 0 | 0 | 250 | 1 | 0.01 | 0.02 | 0.03 | |
| 1N | 91 | 2367 | 577 | 63 | 0 | 0 | -20 | 1 | 0.02 | 0.02 | 0.00 | |
| 1O | 91 | 2367 | 158 | -60 | 0 | 0 | 250 | 1 | 0.01 | 0.02 | 0.03 | |
| 1P | 91 | 2367 | 577 | -60 | 0 | 0 | -20 | 1 | 0.02 | 0.02 | 0.00 | |
| 2 | 91 | 428 | 395 | 1 | 0 | 0 | 110 | 1 | 0.01 | 0.00 | 0.01 | |
| 7 | 91 | 366 | 389 | 1 | 0 | 0 | 105 | 1 | 0.01 | 0.00 | 0.01 | |
| 8 | 91 | 553 | 373 | 1 | 0 | 0 | 120 | 1 | 0.01 | 0.01 | 0.01 | |
| 1A | 182 | -731 | -237 | 123 | 0 | -112 | 149 | 2 | 0.01 | 0.01 | 0.06 | |
| 1B | 182 | -731 | -8 | 123 | 0 | -112 | 305 | 2 | 0.00 | 0.01 | 0.06 | |
| 1C | 182 | -731 | -237 | -121 | 0 | 110 | 149 | 2 | 0.01 | 0.01 | 0.06 | |
| 1D | 182 | -731 | -8 | -121 | 0 | 110 | 305 | 2 | 0.00 | 0.01 | 0.06 | |
| 1E | 182 | 1714 | -237 | 123 | 0 | -112 | 149 | 1 | 0.01 | 0.02 | 0.06 | |
| 1F | 182 | 1714 | -8 | 123 | 0 | -112 | 305 | 1 | 0.00 | 0.02 | 0.06 | |
| 1G | 182 | 1714 | -237 | -121 | 0 | 110 | 149 | 1 | 0.01 | 0.02 | 0.06 | |
| 1H | 182 | 1714 | -8 | -121 | 0 | 110 | 305 | 1 | 0.00 | 0.02 | 0.06 | |
| 1I | 182 | -1384 | -332 | 63 | 0 | -57 | 168 | 2 | 0.01 | 0.01 | 0.03 | |
| 1J | 182 | -1384 | 87 | 63 | 0 | -57 | 286 | 2 | 0.00 | 0.01 | 0.03 | |
| 1K | 182 | -1384 | -332 | -60 | 0 | 55 | 168 | 2 | 0.01 | 0.01 | 0.03 | |
| 1L | 182 | -1384 | 87 | -60 | 0 | 55 | 286 | 2 | 0.00 | 0.01 | 0.03 | |
| 1M | 182 | 2367 | -332 | 63 | 0 | -57 | 168 | 1 | 0.01 | 0.02 | 0.03 | |
| 1N | 182 | 2367 | 87 | 63 | 0 | -57 | 286 | 1 | 0.00 | 0.02 | 0.03 | |
| 1O | 182 | 2367 | -332 | -60 | 0 | 55 | 168 | 1 | 0.01 | 0.02 | 0.03 | |
| 1P | 182 | 2367 | 87 | -60 | 0 | 55 | 286 | 1 | 0.00 | 0.02 | 0.03 | |
| 2 | 182 | 428 | -96 | 1 | 0 | -1 | 246 | 1 | 0.00 | 0.00 | 0.03 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 182 | 366 | -101 | 1 | 0 | -1 | 237 | 1 | 0.00 | 0.00 | 0.02 |
| 8 | 182 | 553 | -117 | 1 | 0 | -1 | 237 | 1 | 0.00 | 0.01 | 0.02 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -731 | 112 | -293 | 2 | 0.7321 | 0.9918 | 0.9999 | -- | -- | 0.01 | -- | 0.10 | Snell. 'zx'= 68 |
| 1B | -731 | 112 | -595 | 2 | 0.7321 | 0.9918 | 0.9993 | -- | -- | 0.01 | -- | 0.13 | Snell. 'zx'= 68 |
| 1C | -731 | -110 | -293 | 2 | 0.7321 | 0.9918 | 0.9999 | -- | -- | 0.01 | -- | 0.09 | Snell. 'zx'= 68 |
| 1D | -731 | -110 | -595 | 2 | 0.7321 | 0.9918 | 0.9993 | -- | -- | 0.01 | -- | 0.13 | Snell. 'zx'= 68 |
| 1I | -1384 | 57 | 250 | 2 | 0.7321 | 0.9845 | 1.0001 | -- | -- | 0.02 | -- | 0.07 | Snell. 'zx'= 68 |
| 1J | -1384 | 57 | -774 | 2 | 0.7321 | 0.9845 | 0.9989 | -- | -- | 0.02 | -- | 0.13 | Snell. 'zx'= 68 |
| 1K | -1384 | -55 | 250 | 2 | 0.7321 | 0.9845 | 1.0001 | -- | -- | 0.02 | -- | 0.07 | Snell. 'zx'= 68 |
| 1L | -1384 | -55 | -774 | 2 | 0.7321 | 0.9845 | 0.9989 | -- | -- | 0.02 | -- | 0.12 | Snell. 'zx'= 68 |

**ASTA NUM. 101** NI 74 NF 37 Lungh. 182.5 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 2.3112 1.3115 3.9297 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -1640 | -287 | 116 | 0 | 106 | 486 | 2 | 0.01 | 0.02 | 0.06 | |
| 1B | 0 | -1640 | -10 | 116 | 0 | 106 | 261 | 2 | 0.00 | 0.02 | 0.05 | |
| 1C | 0 | -1640 | -287 | -110 | 0 | -100 | 486 | 2 | 0.01 | 0.02 | 0.05 | |
| 1D | 0 | -1640 | -10 | -110 | 0 | -100 | 261 | 2 | 0.00 | 0.02 | 0.05 | |
| 1E | 0 | 189 | -287 | 116 | 0 | 106 | 486 | 1 | 0.01 | 0.00 | 0.06 | |
| 1F | 0 | 189 | -10 | 116 | 0 | 106 | 261 | 1 | 0.00 | 0.00 | 0.05 | |
| 1G | 0 | 189 | -287 | -110 | 0 | -100 | 486 | 1 | 0.01 | 0.00 | 0.05 | |
| 1H | 0 | 189 | -10 | -110 | 0 | -100 | 261 | 1 | 0.00 | 0.00 | 0.05 | |
| 1I | 0 | -1454 | -415 | 61 | 0 | 55 | 575 | 2 | 0.01 | 0.01 | 0.06 | |
| 1J | 0 | -1454 | 118 | 61 | 0 | 55 | 172 | 2 | 0.00 | 0.01 | 0.03 | |
| 1K | 0 | -1454 | -415 | -55 | 0 | -50 | 575 | 2 | 0.01 | 0.01 | 0.06 | |
| 1L | 0 | -1454 | 118 | -55 | 0 | -50 | 172 | 2 | 0.00 | 0.01 | 0.03 | |
| 1M | 0 | 3 | -415 | 61 | 0 | 55 | 575 | 1 | 0.01 | 0.00 | 0.06 | |
| 1N | 0 | 3 | 118 | 61 | 0 | 55 | 172 | 1 | 0.00 | 0.00 | 0.03 | |
| 1O | 0 | 3 | -415 | -55 | 0 | -50 | 575 | 1 | 0.01 | 0.00 | 0.06 | |
| 1P | 0 | 3 | 118 | -55 | 0 | -50 | 172 | 1 | 0.00 | 0.00 | 0.03 | |
| 2 | 0 | -548 | -122 | -0 | 0 | -0 | 364 | 2 | 0.00 | 0.01 | 0.04 | |
| 7 | 0 | -656 | -127 | 3 | 0 | 3 | 360 | 2 | 0.00 | 0.01 | 0.04 | |
| 8 | 0 | -617 | -143 | -0 | 0 | -0 | 378 | 2 | 0.00 | 0.01 | 0.04 | |
| 1A | 91 | -1640 | -777 | 116 | 0 | 0 | -29 | 2 | 0.03 | 0.02 | 0.00 | |
| 1B | 91 | -1640 | -500 | 116 | 0 | 0 | 58 | 2 | 0.02 | 0.02 | 0.01 | |
| 1C | 91 | -1640 | -777 | -110 | 0 | 0 | -29 | 2 | 0.03 | 0.02 | 0.00 | |
| 1D | 91 | -1640 | -500 | -110 | 0 | 0 | 58 | 2 | 0.02 | 0.02 | 0.01 | |
| 1E | 91 | 189 | -777 | 116 | 0 | 0 | -29 | 1 | 0.03 | 0.00 | 0.00 | |
| 1F | 91 | 189 | -500 | 116 | 0 | 0 | 58 | 1 | 0.02 | 0.00 | 0.01 | |
| 1G | 91 | 189 | -777 | -110 | 0 | 0 | -29 | 1 | 0.03 | 0.00 | 0.00 | |
| 1H | 91 | 189 | -500 | -110 | 0 | 0 | 58 | 1 | 0.02 | 0.00 | 0.01 | |
| 1I | 91 | -1454 | -906 | 61 | 0 | 0 | -36 | 2 | 0.03 | 0.01 | 0.00 | |
| 1J | 91 | -1454 | -372 | 61 | 0 | 0 | 65 | 2 | 0.01 | 0.01 | 0.01 | |
| 1K | 91 | -1454 | -906 | -55 | 0 | 0 | -36 | 2 | 0.03 | 0.01 | 0.00 | |
| 1L | 91 | -1454 | -372 | -55 | 0 | 0 | 65 | 2 | 0.01 | 0.01 | 0.01 | |
| 1M | 91 | 3 | -906 | 61 | 0 | 0 | -36 | 1 | 0.03 | 0.00 | 0.00 | |
| 1N | 91 | 3 | -372 | 61 | 0 | 0 | 65 | 1 | 0.01 | 0.00 | 0.01 | |
| 1O | 91 | 3 | -906 | -55 | 0 | 0 | -36 | 1 | 0.03 | 0.00 | 0.00 | |
| 1P | 91 | 3 | -372 | -55 | 0 | 0 | 65 | 1 | 0.01 | 0.00 | 0.01 | |
| 2 | 91 | -548 | -612 | -0 | 0 | 0 | 29 | 2 | 0.02 | 0.01 | 0.00 | |
| 7 | 91 | -656 | -617 | 3 | 0 | 0 | 20 | 2 | 0.02 | 0.01 | 0.00 | |
| 8 | 91 | -617 | -634 | -0 | 0 | 0 | 23 | 2 | 0.02 | 0.01 | 0.00 | |
| 1A | 182 | -1640 | -1268 | 116 | 0 | -106 | -991 | 2 | 0.04 | 0.02 | 0.10 | |
| 1B | 182 | -1640 | -990 | 116 | 0 | -106 | -593 | 2 | 0.03 | 0.02 | 0.06 | |
| 1C | 182 | -1640 | -1268 | -110 | 0 | 100 | -991 | 2 | 0.04 | 0.02 | 0.10 | |
| 1D | 182 | -1640 | -990 | -110 | 0 | 100 | -593 | 2 | 0.03 | 0.02 | 0.06 | |
| 1E | 182 | 189 | -1268 | 116 | 0 | -106 | -991 | 1 | 0.04 | 0.00 | 0.10 | |
| 1F | 182 | 189 | -990 | 116 | 0 | -106 | -593 | 1 | 0.03 | 0.00 | 0.06 | |
| 1G | 182 | 189 | -1268 | -110 | 0 | 100 | -991 | 1 | 0.04 | 0.00 | 0.10 | |
| 1H | 182 | 189 | -990 | -110 | 0 | 100 | -593 | 1 | 0.03 | 0.00 | 0.06 | |
| 1I | 182 | -1454 | -1396 | 61 | 0 | -55 | -1095 | 2 | 0.05 | 0.01 | 0.11 | |
| 1J | 182 | -1454 | -862 | 61 | 0 | -55 | -489 | 2 | 0.03 | 0.01 | 0.05 | |
| 1K | 182 | -1454 | -1396 | -55 | 0 | 50 | -1095 | 2 | 0.05 | 0.01 | 0.11 | |
| 1L | 182 | -1454 | -862 | -55 | 0 | 50 | -489 | 2 | 0.03 | 0.01 | 0.05 | |
| 1M | 182 | 3 | -1396 | 61 | 0 | -55 | -1095 | 1 | 0.05 | 0.00 | 0.11 | |
| 1N | 182 | 3 | -862 | 61 | 0 | -55 | -489 | 1 | 0.03 | 0.00 | 0.05 | |
| 1O | 182 | 3 | -1396 | -55 | 0 | 50 | -1095 | 1 | 0.05 | 0.00 | 0.11 | |
| 1P | 182 | 3 | -862 | -55 | 0 | 50 | -489 | 1 | 0.03 | 0.00 | 0.05 | |
| 2 | 182 | -548 | -1102 | -0 | 0 | 0 | -753 | 2 | 0.04 | 0.01 | 0.08 | |
| 7 | 182 | -656 | -1107 | 3 | 0 | -3 | -767 | 2 | 0.04 | 0.01 | 0.08 | |
| 8 | 182 | -617 | -1124 | -0 | 0 | 0 | -778 | 2 | 0.04 | 0.01 | 0.08 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -1640 | 106 | -991 | 2 | 0.7321 | 0.9816 | 0.9979 | -- | -- | 0.02 | -- | 0.18 | Snell. 'zx'= 68 |
| 1B | -1640 | 106 | -593 | 2 | 0.7321 | 0.9816 | 0.9987 | -- | -- | 0.02 | -- | 0.13 | Snell. 'zx'= 68 |
| 1C | -1640 | -100 | -991 | 2 | 0.7321 | 0.9816 | 0.9979 | -- | -- | 0.02 | -- | 0.17 | Snell. 'zx'= 68 |
| 1D | -1640 | -100 | -593 | 2 | 0.7321 | 0.9816 | 0.9987 | -- | -- | 0.02 | -- | 0.13 | Snell. 'zx'= 68 |
| 1I | -1454 | 55 | -1095 | 2 | 0.7321 | 0.9837 | 0.9980 | -- | -- | 0.02 | -- | 0.16 | Snell. 'zx'= 68 |
| 1J | -1454 | 55 | -489 | 2 | 0.7321 | 0.9837 | 0.9994 | -- | -- | 0.02 | -- | 0.10 | Snell. 'zx'= 68 |
| 1K | -1454 | -50 | -1095 | 2 | 0.7321 | 0.9837 | 0.9980 | -- | -- | 0.02 | -- | 0.16 | Snell. 'zx'= 68 |
| 1L | -1454 | -50 | -489 | 2 | 0.7321 | 0.9837 | 0.9994 | -- | -- | 0.02 | -- | 0.09 | Snell. 'zx'= 68 |
| 2 | -548 | -0 | -753 | 2 | 0.7321 | 0.9939 | 0.9994 | -- | -- | 0.01 | -- | 0.08 | Snell. 'zx'= 68 |
| 7 | -656 | 3 | -767 | 2 | 0.7321 | 0.9926 | 0.9993 | -- | -- | 0.01 | -- | 0.09 | Snell. 'zx'= 68 |
| 8 | -617 | -0 | -778 | 2 | 0.7321 | 0.9931 | 0.9993 | -- | -- | 0.01 | -- | 0.09 | Snell. 'zx'= 68 |

**ASTA NUM. 102** NI 37 NF 79 Lungh. 182.5 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 2.3112 1.3115 3.9297 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO



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| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -1572 | 889 | 117 | 0 | 107 | -430 | 2 | 0.03 | 0.02 | 0.06 | |
| 1B | 0 | -1572 | 1545 | 117 | 0 | 107 | -1242 | 2 | 0.05 | 0.02 | 0.13 | |
| 1C | 0 | -1572 | 889 | -125 | 0 | -114 | -430 | 2 | 0.03 | 0.02 | 0.06 | |
| 1D | 0 | -1572 | 1545 | -125 | 0 | -114 | -1242 | 2 | 0.05 | 0.02 | 0.13 | |
| 1E | 0 | 1004 | 889 | 117 | 0 | 107 | -430 | 1 | 0.03 | 0.01 | 0.06 | |
| 1F | 0 | 1004 | 1545 | 117 | 0 | 107 | -1242 | 1 | 0.05 | 0.01 | 0.13 | |
| 1G | 0 | 1004 | 889 | -125 | 0 | -114 | -430 | 1 | 0.03 | 0.01 | 0.06 | |
| 1H | 0 | 1004 | 1545 | -125 | 0 | -114 | -1242 | 1 | 0.05 | 0.01 | 0.13 | |
| 1I | 0 | -1094 | 944 | 73 | 0 | 67 | -520 | 2 | 0.03 | 0.01 | 0.05 | |
| 1J | 0 | -1094 | 1490 | 73 | 0 | 67 | -1152 | 2 | 0.05 | 0.01 | 0.12 | |
| 1K | 0 | -1094 | 944 | -81 | 0 | -74 | -520 | 2 | 0.03 | 0.01 | 0.05 | |
| 1L | 0 | -1094 | 1490 | -81 | 0 | -74 | -1152 | 2 | 0.05 | 0.01 | 0.12 | |
| 1M | 0 | 526 | 944 | 73 | 0 | 67 | -520 | 1 | 0.03 | 0.01 | 0.05 | |
| 1N | 0 | 526 | 1490 | 73 | 0 | 67 | -1152 | 1 | 0.05 | 0.01 | 0.12 | |
| 1O | 0 | 526 | 944 | -81 | 0 | -74 | -520 | 1 | 0.03 | 0.01 | 0.05 | |
| 1P | 0 | 526 | 1490 | -81 | 0 | -74 | -1152 | 1 | 0.05 | 0.01 | 0.12 | |
| 2 | 0 | -174 | 1192 | 0 | 0 | 0 | -804 | 1 | 0.04 | 0.00 | 0.08 | |
| 7 | 0 | -328 | 1220 | -4 | 0 | -4 | -842 | 2 | 0.04 | 0.00 | 0.09 | |
| 8 | 0 | -130 | 1189 | -0 | 0 | -0 | -798 | 2 | 0.04 | 0.00 | 0.08 | |
| 1A | 91 | -1572 | 399 | 117 | 0 | 0 | 158 | 2 | 0.01 | 0.02 | 0.02 | |
| 1B | 91 | -1572 | 1055 | 117 | 0 | 0 | -56 | 2 | 0.04 | 0.02 | 0.01 | |
| 1C | 91 | -1572 | 399 | -125 | 0 | 0 | 158 | 2 | 0.01 | 0.02 | 0.02 | |
| 1D | 91 | -1572 | 1055 | -125 | 0 | 0 | -56 | 2 | 0.04 | 0.02 | 0.01 | |
| 1E | 91 | 1004 | 399 | 117 | 0 | 0 | 158 | 1 | 0.01 | 0.01 | 0.02 | |
| 1F | 91 | 1004 | 1055 | 117 | 0 | 0 | -56 | 1 | 0.04 | 0.01 | 0.01 | |
| 1G | 91 | 1004 | 399 | -125 | 0 | 0 | 158 | 1 | 0.01 | 0.01 | 0.02 | |
| 1H | 91 | 1004 | 1055 | -125 | 0 | 0 | -56 | 1 | 0.04 | 0.01 | 0.01 | |
| 1I | 91 | -1094 | 454 | 73 | 0 | 0 | 118 | 2 | 0.02 | 0.01 | 0.01 | |
| 1J | 91 | -1094 | 1000 | 73 | 0 | 0 | -16 | 2 | 0.03 | 0.01 | 0.00 | |
| 1K | 91 | -1094 | 454 | -81 | 0 | 0 | 118 | 2 | 0.02 | 0.01 | 0.01 | |
| 1L | 91 | -1094 | 1000 | -81 | 0 | 0 | -16 | 2 | 0.03 | 0.01 | 0.00 | |
| 1M | 91 | 526 | 454 | 73 | 0 | 0 | 118 | 1 | 0.02 | 0.01 | 0.01 | |
| 1N | 91 | 526 | 1000 | 73 | 0 | 0 | -16 | 1 | 0.03 | 0.01 | 0.00 | |
| 1O | 91 | 526 | 454 | -81 | 0 | 0 | 118 | 1 | 0.02 | 0.01 | 0.01 | |
| 1P | 91 | 526 | 1000 | -81 | 0 | 0 | -16 | 1 | 0.03 | 0.01 | 0.00 | |
| 2 | 91 | -174 | 702 | 0 | 0 | 0 | 60 | 1 | 0.02 | 0.00 | 0.01 | |
| 7 | 91 | -328 | 730 | -4 | 0 | 0 | 47 | 2 | 0.02 | 0.00 | 0.00 | |
| 8 | 91 | -130 | 699 | -0 | 0 | 0 | 64 | 1 | 0.02 | 0.00 | 0.01 | |
| 1A | 182 | -1572 | -91 | 117 | 0 | -107 | 298 | 2 | 0.00 | 0.02 | 0.06 | |
| 1B | 182 | -1572 | 565 | 117 | 0 | -107 | 683 | 2 | 0.02 | 0.02 | 0.07 | |
| 1C | 182 | -1572 | -91 | -125 | 0 | 114 | 298 | 2 | 0.00 | 0.02 | 0.06 | |
| 1D | 182 | -1572 | 565 | -125 | 0 | 114 | 683 | 2 | 0.02 | 0.02 | 0.07 | |
| 1E | 182 | 1004 | -91 | 117 | 0 | -107 | 298 | 1 | 0.00 | 0.01 | 0.06 | |
| 1F | 182 | 1004 | 565 | 117 | 0 | -107 | 683 | 1 | 0.02 | 0.01 | 0.07 | |
| 1G | 182 | 1004 | -91 | -125 | 0 | 114 | 298 | 1 | 0.00 | 0.01 | 0.06 | |
| 1H | 182 | 1004 | 565 | -125 | 0 | 114 | 683 | 1 | 0.02 | 0.01 | 0.07 | |
| 1I | 182 | -1094 | -36 | 73 | 0 | -67 | 309 | 2 | 0.00 | 0.01 | 0.03 | |
| 1J | 182 | -1094 | 510 | 73 | 0 | -67 | 672 | 2 | 0.02 | 0.01 | 0.07 | |
| 1K | 182 | -1094 | -36 | -81 | 0 | 74 | 309 | 2 | 0.00 | 0.01 | 0.04 | |
| 1L | 182 | -1094 | 510 | -81 | 0 | 74 | 672 | 2 | 0.02 | 0.01 | 0.07 | |
| 1M | 182 | 526 | -36 | 73 | 0 | -67 | 309 | 1 | 0.00 | 0.01 | 0.03 | |
| 1N | 182 | 526 | 510 | 73 | 0 | -67 | 672 | 1 | 0.02 | 0.01 | 0.07 | |
| 1O | 182 | 526 | -36 | -81 | 0 | 74 | 309 | 1 | 0.00 | 0.01 | 0.04 | |
| 1P | 182 | 526 | 510 | -81 | 0 | 74 | 672 | 1 | 0.02 | 0.01 | 0.07 | |
| 2 | 182 | -174 | 212 | 0 | 0 | -0 | 477 | 1 | 0.01 | 0.00 | 0.05 | |
| 7 | 182 | -328 | 239 | -4 | 0 | 4 | 490 | 2 | 0.01 | 0.00 | 0.05 | |
| 8 | 182 | -130 | 209 | -0 | 0 | 0 | 478 | 2 | 0.01 | 0.00 | 0.05 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -1572 | 107 | -430 | 2 | 0.7321 | 0.9824 | 0.9982 | -- | -- | 0.02 | -- | 0.12 | Snell. 'zx'= 68 |
| 1B | -1572 | 107 | -1242 | 2 | 0.7321 | 0.9824 | 0.9976 | -- | -- | 0.02 | -- | 0.20 | Snell. 'zx'= 68 |
| 1C | -1572 | -114 | -430 | 2 | 0.7321 | 0.9824 | 0.9982 | -- | -- | 0.02 | -- | 0.12 | Snell. 'zx'= 68 |
| 1D | -1572 | -114 | -1242 | 2 | 0.7321 | 0.9824 | 0.9976 | -- | -- | 0.02 | -- | 0.20 | Snell. 'zx'= 68 |
| 1I | -1094 | 67 | -520 | 2 | 0.7321 | 0.9877 | 0.9988 | -- | -- | 0.01 | -- | 0.10 | Snell. 'zx'= 68 |
| 1J | -1094 | 67 | -1152 | 2 | 0.7321 | 0.9877 | 0.9983 | -- | -- | 0.01 | -- | 0.17 | Snell. 'zx'= 68 |
| 1K | -1094 | -74 | -520 | 2 | 0.7321 | 0.9877 | 0.9988 | -- | -- | 0.01 | -- | 0.10 | Snell. 'zx'= 68 |
| 1L | -1094 | -74 | -1152 | 2 | 0.7321 | 0.9877 | 0.9983 | -- | -- | 0.01 | -- | 0.17 | Snell. 'zx'= 68 |
| 2 | -174 | -0 | -804 | 1 | 0.7321 | 1.0056 | 0.9998 | -- | -- | 0.00 | -- | 0.08 | Snell. 'zx'= 68 |
| 7 | -328 | -4 | -842 | 2 | 0.7321 | 0.9963 | 0.9995 | -- | -- | 0.00 | -- | 0.09 | Snell. 'zx'= 68 |
| 8 | -130 | -0 | -798 | 2 | 0.7321 | 0.9985 | 0.9998 | -- | -- | 0.00 | -- | 0.08 | Snell. 'zx'= 68 |

**ASTA NUM. 103** NI 79 NF 44 Lungh. 182.5 cm SEZ. 3 Ps IPE 240

categoria: p.p. y Permanente Neve qy tot.
qy medio: 0.3069 2.3112 1.3115 3.9297 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | 285 | -55 | 130 | 0 | 118 | 372 | 1 | 0.00 | 0.00 | 0.06 | |
| 1B | 0 | 285 | 476 | 130 | 0 | 118 | 126 | 1 | 0.02 | 0.00 | 0.06 | |
| 1C | 0 | 285 | -55 | -133 | 0 | -121 | 372 | 1 | 0.00 | 0.00 | 0.06 | |
| 1D | 0 | 285 | 476 | -133 | 0 | -121 | 126 | 1 | 0.02 | 0.00 | 0.06 | |
| 1E | 0 | 3165 | -55 | 130 | 0 | 118 | 372 | 1 | 0.00 | 0.03 | 0.06 | |
| 1F | 0 | 3165 | 476 | 130 | 0 | 118 | 126 | 1 | 0.02 | 0.03 | 0.06 | |
| 1G | 0 | 3165 | -55 | -133 | 0 | -121 | 372 | 1 | 0.00 | 0.03 | 0.06 | |
| 1H | 0 | 3165 | 476 | -133 | 0 | -121 | 126 | 1 | 0.02 | 0.03 | 0.06 | |
| 1I | 0 | -1 | -44 | 83 | 0 | 75 | 339 | 2 | 0.00 | 0.00 | 0.04 | |
| 1J | 0 | -1 | 465 | 83 | 0 | 75 | 160 | 2 | 0.02 | 0.00 | 0.04 | |
| 1K | 0 | -1 | -44 | -86 | 0 | -78 | 339 | 2 | 0.00 | 0.00 | 0.04 | |
| 1L | 0 | -1 | 465 | -86 | 0 | -78 | 160 | 2 | 0.02 | 0.00 | 0.04 | |
| 1M | 0 | 3451 | -44 | 83 | 0 | 75 | 339 | 1 | 0.00 | 0.03 | 0.04 | |
| 1N | 0 | 3451 | 465 | 83 | 0 | 75 | 160 | 1 | 0.02 | 0.03 | 0.04 | |
| 1O | 0 | 3451 | -44 | -86 | 0 | -78 | 339 | 1 | 0.00 | 0.03 | 0.04 | |
| 1P | 0 | 3451 | 465 | -86 | 0 | -78 | 160 | 1 | 0.02 | 0.03 | 0.04 | |
| 2 | 0 | 1609 | 185 | -0 | 0 | -0 | 262 | 1 | 0.01 | 0.02 | 0.03 | |
| 7 | 0 | 1706 | 213 | -2 | 0 | -1 | 245 | 1 | 0.01 | 0.02 | 0.03 | |
| 8 | 0 | 1628 | 183 | -0 | 0 | -0 | 267 | 1 | 0.01 | 0.02 | 0.03 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 91 | 285 | -545 | 130 | 0 | 0 | 98 | 1 | 0.02 | 0.00 | 0.01 |
| 1B | 91 | 285 | -14 | 130 | 0 | 0 | 337 | 1 | 0.00 | 0.00 | 0.03 |
| 1C | 91 | 285 | -545 | -133 | 0 | 0 | 98 | 1 | 0.02 | 0.00 | 0.01 |
| 1D | 91 | 285 | -14 | -133 | 0 | 0 | 337 | 1 | 0.00 | 0.00 | 0.03 |
| 1E | 91 | 3165 | -545 | 130 | 0 | 0 | 98 | 1 | 0.02 | 0.03 | 0.01 |
| 1F | 91 | 3165 | -14 | 130 | 0 | 0 | 337 | 1 | 0.00 | 0.03 | 0.03 |
| 1G | 91 | 3165 | -545 | -133 | 0 | 0 | 98 | 1 | 0.02 | 0.03 | 0.01 |
| 1H | 91 | 3165 | -14 | -133 | 0 | 0 | 337 | 1 | 0.00 | 0.03 | 0.03 |
| 1I | 91 | -1 | -534 | 83 | 0 | 0 | 75 | 1 | 0.02 | 0.00 | 0.01 |
| 1J | 91 | -1 | -25 | 83 | 0 | 0 | 361 | 1 | 0.00 | 0.00 | 0.04 |
| 1K | 91 | -1 | -534 | -86 | 0 | 0 | 75 | 1 | 0.02 | 0.00 | 0.01 |
| 1L | 91 | -1 | -25 | -86 | 0 | 0 | 361 | 1 | 0.00 | 0.00 | 0.04 |
| 1M | 91 | 3451 | -534 | 83 | 0 | 0 | 75 | 1 | 0.02 | 0.03 | 0.01 |
| 1N | 91 | 3451 | -25 | 83 | 0 | 0 | 361 | 1 | 0.00 | 0.03 | 0.04 |
| 1O | 91 | 3451 | -534 | -86 | 0 | 0 | 75 | 1 | 0.02 | 0.03 | 0.01 |
| 1P | 91 | 3451 | -25 | -86 | 0 | 0 | 361 | 1 | 0.00 | 0.03 | 0.04 |
| 2 | 91 | 1609 | -305 | -0 | 0 | 0 | 208 | 1 | 0.01 | 0.02 | 0.02 |
| 7 | 91 | 1706 | -277 | -2 | 0 | 0 | 216 | 1 | 0.01 | 0.02 | 0.02 |
| 8 | 91 | 1628 | -308 | -0 | 0 | 0 | 210 | 1 | 0.01 | 0.02 | 0.02 |
| 1A | 182 | 285 | -1036 | 130 | 0 | -118 | -623 | 1 | 0.04 | 0.00 | 0.06 |
| 1B | 182 | 285 | -504 | 130 | 0 | -118 | 101 | 1 | 0.02 | 0.00 | 0.06 |
| 1C | 182 | 285 | -1036 | -133 | 0 | 121 | -623 | 1 | 0.04 | 0.00 | 0.07 |
| 1D | 182 | 285 | -504 | -133 | 0 | 121 | 101 | 1 | 0.02 | 0.00 | 0.06 |
| 1E | 182 | 3165 | -1036 | 130 | 0 | -118 | -623 | 1 | 0.04 | 0.03 | 0.06 |
| 1F | 182 | 3165 | -504 | 130 | 0 | -118 | 101 | 1 | 0.02 | 0.03 | 0.06 |
| 1G | 182 | 3165 | -1036 | -133 | 0 | 121 | -623 | 1 | 0.04 | 0.03 | 0.07 |
| 1H | 182 | 3165 | -504 | -133 | 0 | 121 | 101 | 1 | 0.02 | 0.03 | 0.06 |
| 1I | 182 | -1 | -1025 | 83 | 0 | -75 | -637 | 2 | 0.03 | 0.00 | 0.07 |
| 1J | 182 | -1 | -515 | 83 | 0 | -75 | 115 | 2 | 0.02 | 0.00 | 0.04 |
| 1K | 182 | -1 | -1025 | -86 | 0 | 78 | -637 | 2 | 0.03 | 0.00 | 0.07 |
| 1L | 182 | -1 | -515 | -86 | 0 | 78 | 115 | 2 | 0.02 | 0.00 | 0.04 |
| 1M | 182 | 3451 | -1025 | 83 | 0 | -75 | -637 | 1 | 0.03 | 0.03 | 0.07 |
| 1N | 182 | 3451 | -515 | 83 | 0 | -75 | 115 | 1 | 0.02 | 0.03 | 0.04 |
| 1O | 182 | 3451 | -1025 | -86 | 0 | 78 | -637 | 1 | 0.03 | 0.03 | 0.07 |
| 1P | 182 | 3451 | -515 | -86 | 0 | 78 | 115 | 1 | 0.02 | 0.03 | 0.04 |
| 2 | 182 | 1609 | -795 | -0 | 0 | 0 | -294 | 1 | 0.03 | 0.02 | 0.03 |
| 7 | 182 | 1706 | -767 | -2 | 0 | 1 | -260 | 1 | 0.03 | 0.02 | 0.03 |
| 8 | 182 | 1628 | -798 | -0 | 0 | 0 | -295 | 1 | 0.03 | 0.02 | 0.03 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | ---------- | | | | | | | | | | | |
| | kg | kg*m | | | | | | | | | | | |
| 1I | -1 | 75 | -637 | 2 | 0.7321 | 1.0000 | 1.0000 | -- | -- | 0.00 | -- | 0.10 | Snell. 'zx'= 68 |
| 1J | -1 | 75 | 361 | 2 | 0.7321 | 1.0000 | 1.0000 | -- | -- | 0.00 | -- | 0.08 | Snell. 'zx'= 68 |
| 1K | -1 | -78 | -637 | 2 | 0.7321 | 1.0000 | 1.0000 | -- | -- | 0.00 | -- | 0.10 | Snell. 'zx'= 68 |
| 1L | -1 | -78 | 361 | 2 | 0.7321 | 1.0000 | 1.0000 | -- | -- | 0.00 | -- | 0.08 | Snell. 'zx'= 68 |



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**AMV s.r.l.**
**Via San Lorenzo, 106** **Tel. 0481/779903**
**34077 Ronchi dei Legionari (GO)**

Lavoro: **VITROPLANT - BLOCCO SPOGLIATOIO vers4** Intestazione lavoro: **VITROPLANT - BLOCCO SERVIZI CT**
Elemento: **TRAVE** Metodo di verifica: **Eurocodice 3 - NTC 2018**
Gruppo: **3** Descrizione: **DIAGONALI DI PARETE**
Tabella: **tabella diagonali** Struttura: **Nuova**
Tipo acciaio: **S 235**
Tipologia sismica: **Senza prescrizioni aggiuntive**
γM0: **1.050** γM1': **1.050** γM1'': **1.050** γM2: **1.250** γrv: **0.000** γM0 Pf: **1.000** γM1 Pf: **1.000**
Tipo collegamento: **saldato** Connessione su un solo lato Connessione sul lato corto (solo 'L')

**ASTA NUM. 1** NI 54 NF 9 Lungh. 453.0 cm SEZ. 8 Ps UNP 80
Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -2146 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.09 | 0.09 | |
| 1B | 0 | -2146 | 0 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.09 | 0.09 | |
| 1C | 0 | -2146 | -0 | -0 | 0 | -0 | 0 | 1 | 0.00 | 0.09 | 0.09 | |
| 1D | 0 | -2146 | 0 | -0 | 0 | -0 | -0 | 1 | 0.00 | 0.09 | 0.09 | |
| 1E | 0 | 2530 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.10 | 0.00 | |
| 1F | 0 | 2530 | 0 | 0 | 0 | 0 | -0 | -- | 0.00 | 0.10 | 0.00 | |
| 1G | 0 | 2530 | -0 | -0 | 0 | -0 | 0 | -- | 0.00 | 0.10 | 0.00 | |
| 1H | 0 | 2530 | 0 | -0 | 0 | -0 | -0 | -- | 0.00 | 0.10 | 0.00 | |
| 1I | 0 | -5176 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.21 | 0.21 | |
| 1J | 0 | -5176 | 0 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.21 | 0.21 | |
| 1K | 0 | -5176 | -0 | -0 | 0 | -0 | 0 | 1 | 0.00 | 0.21 | 0.21 | |
| 1L | 0 | -5176 | 0 | -0 | 0 | -0 | -0 | 1 | 0.00 | 0.21 | 0.21 | |
| 1M | 0 | 5560 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.22 | 0.00 | |
| 1N | 0 | 5560 | 0 | 0 | 0 | 0 | -0 | -- | 0.00 | 0.22 | 0.00 | |
| 1O | 0 | 5560 | -0 | -0 | 0 | -0 | 0 | -- | 0.00 | 0.22 | 0.00 | |
| 1P | 0 | 5560 | 0 | -0 | 0 | -0 | -0 | -- | 0.00 | 0.22 | 0.00 | |
| 2 | 0 | -241 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 | |
| 7 | 0 | -234 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 | |
| 8 | 0 | 185 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1A | 227 | -2146 | -0 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.09 | 0.09 | |
| 1B | 227 | -2146 | 0 | 0 | 0 | -0 | -0 | 1 | 0.00 | 0.09 | 0.09 | |
| 1C | 227 | -2146 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.09 | 0.09 | |
| 1D | 227 | -2146 | 0 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.09 | 0.09 | |
| 1E | 227 | 2530 | -0 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.10 | 0.00 | |
| 1F | 227 | 2530 | 0 | 0 | 0 | -0 | -0 | -- | 0.00 | 0.10 | 0.00 | |
| 1G | 227 | 2530 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.10 | 0.00 | |
| 1H | 227 | 2530 | 0 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.10 | 0.00 | |
| 1I | 227 | -5176 | -0 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.21 | 0.21 | |
| 1J | 227 | -5176 | 0 | 0 | 0 | -0 | -0 | 1 | 0.00 | 0.21 | 0.21 | |
| 1K | 227 | -5176 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.21 | 0.21 | |
| 1L | 227 | -5176 | 0 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.21 | 0.21 | |
| 1M | 227 | 5560 | -0 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.22 | 0.00 | |
| 1N | 227 | 5560 | 0 | 0 | 0 | -0 | -0 | -- | 0.00 | 0.22 | 0.00 | |
| 1O | 227 | 5560 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.22 | 0.00 | |
| 1P | 227 | 5560 | 0 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.22 | 0.00 | |
| 2 | 227 | -241 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 | |
| 7 | 227 | -234 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 | |
| 8 | 227 | 185 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1A | 453 | -2146 | -0 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.09 | 0.09 | |
| 1B | 453 | -2146 | 0 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.09 | 0.09 | |
| 1C | 453 | -2146 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.09 | 0.09 | |
| 1D | 453 | -2146 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.09 | 0.09 | |
| 1E | 453 | 2530 | -0 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.10 | 0.00 | |
| 1F | 453 | 2530 | 0 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.10 | 0.00 | |
| 1G | 453 | 2530 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.10 | 0.00 | |
| 1H | 453 | 2530 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.10 | 0.00 | |
| 1I | 453 | -5176 | -0 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.21 | 0.21 | |
| 1J | 453 | -5176 | 0 | 0 | 0 | -0 | -0 | 1 | 0.00 | 0.21 | 0.21 | |
| 1K | 453 | -5176 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.21 | 0.21 | |
| 1L | 453 | -5176 | 0 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.21 | 0.21 | |
| 1M | 453 | 5560 | -0 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.22 | 0.00 | |
| 1N | 453 | 5560 | 0 | 0 | 0 | -0 | -0 | -- | 0.00 | 0.22 | 0.00 | |
| 1O | 453 | 5560 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.22 | 0.00 | |
| 1P | 453 | 5560 | 0 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.22 | 0.00 | |
| 2 | 453 | -241 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 | |
| 7 | 453 | -234 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 | |
| 8 | 453 | 185 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |

**ASTA NUM. 2** NI 8 NF 92 Lungh. 453.0 cm SEZ. 8 Ps UNP 80
Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -2874 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.11 | 0.11 | |
| 1B | 0 | -2874 | 0 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.11 | 0.11 | |
| 1C | 0 | -2874 | -0 | -0 | 0 | -0 | 0 | 1 | 0.00 | 0.11 | 0.11 | |
| 1D | 0 | -2874 | 0 | -0 | 0 | -0 | -0 | 1 | 0.00 | 0.11 | 0.11 | |
| 1E | 0 | 1822 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.07 | 0.00 | |
| 1F | 0 | 1822 | 0 | 0 | 0 | 0 | -0 | -- | 0.00 | 0.07 | 0.00 | |
| 1G | 0 | 1822 | -0 | -0 | 0 | -0 | 0 | -- | 0.00 | 0.07 | 0.00 | |
| 1H | 0 | 1822 | 0 | -0 | 0 | -0 | -0 | -- | 0.00 | 0.07 | 0.00 | |
| 1I | 0 | -5916 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.24 | 0.24 | |
| 1J | 0 | -5916 | 0 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.24 | 0.24 | |
| 1K | 0 | -5916 | -0 | -0 | 0 | -0 | 0 | 1 | 0.00 | 0.24 | 0.24 | |
| 1L | 0 | -5916 | 0 | -0 | 0 | -0 | -0 | 1 | 0.00 | 0.24 | 0.24 | |
| 1M | 0 | 4863 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.19 | 0.00 | |
| 1N | 0 | 4863 | 0 | 0 | 0 | 0 | -0 | -- | 0.00 | 0.19 | 0.00 | |
| 1O | 0 | 4863 | -0 | -0 | 0 | -0 | 0 | -- | 0.00 | 0.19 | 0.00 | |
| 1P | 0 | 4863 | 0 | -0 | 0 | -0 | -0 | -- | 0.00 | 0.19 | 0.00 | |
| 2 | 0 | -93 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 0 | -100 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 0 | -520 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.02 | |
| 1A | 227 | -2874 | -0 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.11 | 0.11 | |
| 1B | 227 | -2874 | 0 | 0 | 0 | -0 | -0 | 1 | 0.00 | 0.11 | 0.11 | |
| 1C | 227 | -2874 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.11 | 0.11 | |
| 1D | 227 | -2874 | 0 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.11 | 0.11 | |
| 1E | 227 | 1822 | -0 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.07 | 0.00 | |
| 1F | 227 | 1822 | 0 | 0 | 0 | -0 | -0 | -- | 0.00 | 0.07 | 0.00 | |
| 1G | 227 | 1822 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.07 | 0.00 | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1H | 227 | 1822 | 0 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.07 | 0.00 | |
| 1I | 227 | -5916 | -0 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.24 | 0.24 | |
| 1J | 227 | -5916 | 0 | 0 | 0 | -0 | -0 | 1 | 0.00 | 0.24 | 0.24 | |
| 1K | 227 | -5916 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.24 | 0.24 | |
| 1L | 227 | -5916 | 0 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.24 | 0.24 | |
| 1M | 227 | 4863 | -0 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.19 | 0.00 | |
| 1N | 227 | 4863 | 0 | 0 | 0 | -0 | -0 | -- | 0.00 | 0.19 | 0.00 | |
| 1O | 227 | 4863 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.19 | 0.00 | |
| 1P | 227 | 4863 | 0 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.19 | 0.00 | |
| 2 | 227 | -93 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 227 | -100 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 227 | -520 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.02 | |
| 1A | 453 | -2874 | -0 | 0 | 0 | -0 | -0 | 1 | 0.00 | 0.11 | 0.11 | |
| 1B | 453 | -2874 | 0 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.11 | 0.11 | |
| 1C | 453 | -2874 | -0 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.11 | 0.11 | |
| 1D | 453 | -2874 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.11 | 0.11 | |
| 1E | 453 | 1822 | -0 | 0 | 0 | -0 | -0 | -- | 0.00 | 0.07 | 0.00 | |
| 1F | 453 | 1822 | 0 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.07 | 0.00 | |
| 1G | 453 | 1822 | -0 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.07 | 0.00 | |
| 1H | 453 | 1822 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.07 | 0.00 | |
| 1I | 453 | -5916 | -0 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.24 | 0.24 | |
| 1J | 453 | -5916 | 0 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.24 | 0.24 | |
| 1K | 453 | -5916 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.24 | 0.24 | |
| 1L | 453 | -5916 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.24 | 0.24 | |
| 1M | 453 | 4863 | -0 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.19 | 0.00 | |
| 1N | 453 | 4863 | 0 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.19 | 0.00 | |
| 1O | 453 | 4863 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.19 | 0.00 | |
| 1P | 453 | 4863 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.19 | 0.00 | |
| 2 | 453 | -93 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 7 | 453 | -100 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.00 | 0.00 | |
| 8 | 453 | -520 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.02 | |

**ASTA NUM. 3** NI 53 NF 10 Lungh. 453.0 cm SEZ. 8 Ps UNP 80

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -2054 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.08 | 0.08 | |
| 1B | 0 | -2054 | 0 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.08 | 0.08 | |
| 1C | 0 | -2054 | -0 | -0 | 0 | -0 | 0 | 1 | 0.00 | 0.08 | 0.08 | |
| 1D | 0 | -2054 | 0 | -0 | 0 | -0 | -0 | 1 | 0.00 | 0.08 | 0.08 | |
| 1E | 0 | 2503 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.10 | 0.00 | |
| 1F | 0 | 2503 | 0 | 0 | 0 | 0 | -0 | -- | 0.00 | 0.10 | 0.00 | |
| 1G | 0 | 2503 | -0 | -0 | 0 | -0 | 0 | -- | 0.00 | 0.10 | 0.00 | |
| 1H | 0 | 2503 | 0 | -0 | 0 | -0 | -0 | -- | 0.00 | 0.10 | 0.00 | |
| 1I | 0 | -4886 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.19 | 0.19 | |
| 1J | 0 | -4886 | 0 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.19 | 0.19 | |
| 1K | 0 | -4886 | -0 | -0 | 0 | -0 | 0 | 1 | 0.00 | 0.19 | 0.19 | |
| 1L | 0 | -4886 | 0 | -0 | 0 | -0 | -0 | 1 | 0.00 | 0.19 | 0.19 | |
| 1M | 0 | 5335 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.21 | 0.00 | |
| 1N | 0 | 5335 | 0 | 0 | 0 | 0 | -0 | -- | 0.00 | 0.21 | 0.00 | |
| 1O | 0 | 5335 | -0 | -0 | 0 | -0 | 0 | -- | 0.00 | 0.21 | 0.00 | |
| 1P | 0 | 5335 | 0 | -0 | 0 | -0 | -0 | -- | 0.00 | 0.21 | 0.00 | |
| 2 | 0 | -163 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 | |
| 7 | 0 | -177 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 | |
| 8 | 0 | 239 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1A | 227 | -2054 | -0 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.08 | 0.08 | |
| 1B | 227 | -2054 | 0 | 0 | 0 | -0 | -0 | 1 | 0.00 | 0.08 | 0.08 | |
| 1C | 227 | -2054 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.08 | 0.08 | |
| 1D | 227 | -2054 | 0 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.08 | 0.08 | |
| 1E | 227 | 2503 | -0 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.10 | 0.00 | |
| 1F | 227 | 2503 | 0 | 0 | 0 | -0 | -0 | -- | 0.00 | 0.10 | 0.00 | |
| 1G | 227 | 2503 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.10 | 0.00 | |
| 1H | 227 | 2503 | 0 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.10 | 0.00 | |
| 1I | 227 | -4886 | -0 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.19 | 0.19 | |
| 1J | 227 | -4886 | 0 | 0 | 0 | -0 | -0 | 1 | 0.00 | 0.19 | 0.19 | |
| 1K | 227 | -4886 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.19 | 0.19 | |
| 1L | 227 | -4886 | 0 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.19 | 0.19 | |
| 1M | 227 | 5335 | -0 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.21 | 0.00 | |
| 1N | 227 | 5335 | 0 | 0 | 0 | -0 | -0 | -- | 0.00 | 0.21 | 0.00 | |
| 1O | 227 | 5335 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.21 | 0.00 | |
| 1P | 227 | 5335 | 0 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.21 | 0.00 | |
| 2 | 227 | -163 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 | |
| 7 | 227 | -177 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 | |
| 8 | 227 | 239 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |
| 1A | 453 | -2054 | -0 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.08 | 0.08 | |
| 1B | 453 | -2054 | 0 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.08 | 0.08 | |
| 1C | 453 | -2054 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.08 | 0.08 | |
| 1D | 453 | -2054 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.08 | 0.08 | |
| 1E | 453 | 2503 | -0 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.10 | 0.00 | |
| 1F | 453 | 2503 | 0 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.10 | 0.00 | |
| 1G | 453 | 2503 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.10 | 0.00 | |
| 1H | 453 | 2503 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.10 | 0.00 | |
| 1I | 453 | -4886 | -0 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.19 | 0.19 | |
| 1J | 453 | -4886 | 0 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.19 | 0.19 | |
| 1K | 453 | -4886 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.19 | 0.19 | |
| 1L | 453 | -4886 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.19 | 0.19 | |
| 1M | 453 | 5335 | -0 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.21 | 0.00 | |
| 1N | 453 | 5335 | 0 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.21 | 0.00 | |
| 1O | 453 | 5335 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.21 | 0.00 | |
| 1P | 453 | 5335 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.21 | 0.00 | |
| 2 | 453 | -163 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 | |
| 7 | 453 | -177 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 | |
| 8 | 453 | 239 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.01 | 0.00 | |

**ASTA NUM. 4** NI 7 NF 93 Lungh. 453.0 cm SEZ. 8 Ps UNP 80

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -2910 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.12 | 0.12 | |
| 1B | 0 | -2910 | 0 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.12 | 0.12 | |
| 1C | 0 | -2910 | -0 | -0 | 0 | -0 | 0 | 1 | 0.00 | 0.12 | 0.12 | |
| 1D | 0 | -2910 | 0 | -0 | 0 | -0 | -0 | 1 | 0.00 | 0.12 | 0.12 | |
| 1E | 0 | 1673 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.07 | 0.00 | |
| 1F | 0 | 1673 | 0 | 0 | 0 | 0 | -0 | -- | 0.00 | 0.07 | 0.00 | |
| 1G | 0 | 1673 | -0 | -0 | 0 | -0 | 0 | -- | 0.00 | 0.07 | 0.00 | |
| 1H | 0 | 1673 | 0 | -0 | 0 | -0 | -0 | -- | 0.00 | 0.07 | 0.00 | |
| 1I | 0 | -5752 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.23 | 0.23 | |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1J | 0 | -5752 | 0 | 0 | 0 | 0 | -0 | 1 | 0.00 | 0.23 | 0.23 |
| 1K | 0 | -5752 | -0 | -0 | 0 | -0 | 0 | 1 | 0.00 | 0.23 | 0.23 |
| 1L | 0 | -5752 | 0 | -0 | 0 | -0 | -0 | 1 | 0.00 | 0.23 | 0.23 |
| 1M | 0 | 4515 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.18 | 0.00 |
| 1N | 0 | 4515 | 0 | 0 | 0 | 0 | -0 | -- | 0.00 | 0.18 | 0.00 |
| 1O | 0 | 4515 | -0 | -0 | 0 | -0 | 0 | -- | 0.00 | 0.18 | 0.00 |
| 1P | 0 | 4515 | 0 | -0 | 0 | -0 | -0 | -- | 0.00 | 0.18 | 0.00 |
| 2 | 0 | -230 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 |
| 7 | 0 | -216 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 |
| 8 | 0 | -633 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.03 |
| 1A | 227 | -2910 | -0 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.12 | 0.12 |
| 1B | 227 | -2910 | 0 | 0 | 0 | -0 | -0 | 1 | 0.00 | 0.12 | 0.12 |
| 1C | 227 | -2910 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.12 | 0.12 |
| 1D | 227 | -2910 | 0 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.12 | 0.12 |
| 1E | 227 | 1673 | -0 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.07 | 0.00 |
| 1F | 227 | 1673 | 0 | 0 | 0 | -0 | -0 | -- | 0.00 | 0.07 | 0.00 |
| 1G | 227 | 1673 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.07 | 0.00 |
| 1H | 227 | 1673 | 0 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.07 | 0.00 |
| 1I | 227 | -5752 | -0 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.23 | 0.23 |
| 1J | 227 | -5752 | 0 | 0 | 0 | -0 | -0 | 1 | 0.00 | 0.23 | 0.23 |
| 1K | 227 | -5752 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.23 | 0.23 |
| 1L | 227 | -5752 | 0 | -0 | 0 | 0 | -0 | 1 | 0.00 | 0.23 | 0.23 |
| 1M | 227 | 4515 | -0 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.18 | 0.00 |
| 1N | 227 | 4515 | 0 | 0 | 0 | -0 | -0 | -- | 0.00 | 0.18 | 0.00 |
| 1O | 227 | 4515 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.18 | 0.00 |
| 1P | 227 | 4515 | 0 | -0 | 0 | 0 | -0 | -- | 0.00 | 0.18 | 0.00 |
| 2 | 227 | -230 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 |
| 7 | 227 | -216 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 |
| 8 | 227 | -633 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.03 |
| 1A | 453 | -2910 | -0 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.12 | 0.12 |
| 1B | 453 | -2910 | 0 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.12 | 0.12 |
| 1C | 453 | -2910 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.12 | 0.12 |
| 1D | 453 | -2910 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.12 | 0.12 |
| 1E | 453 | 1673 | -0 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.07 | 0.00 |
| 1F | 453 | 1673 | 0 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.07 | 0.00 |
| 1G | 453 | 1673 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.07 | 0.00 |
| 1H | 453 | 1673 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.07 | 0.00 |
| 1I | 453 | -5752 | -0 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.23 | 0.23 |
| 1J | 453 | -5752 | 0 | 0 | 0 | -0 | 0 | 1 | 0.00 | 0.23 | 0.23 |
| 1K | 453 | -5752 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.23 | 0.23 |
| 1L | 453 | -5752 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.23 | 0.23 |
| 1M | 453 | 4515 | -0 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.18 | 0.00 |
| 1N | 453 | 4515 | 0 | 0 | 0 | -0 | 0 | -- | 0.00 | 0.18 | 0.00 |
| 1O | 453 | 4515 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.18 | 0.00 |
| 1P | 453 | 4515 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.18 | 0.00 |
| 2 | 453 | -230 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 |
| 7 | 453 | -216 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 |
| 8 | 453 | -633 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.03 | 0.03 |

**ASTA NUM. 5** NI 43 NF 44 Lungh. 398.1 cm SEZ. 8 Ps UNP 80

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -10170 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.41 | 0.41 | |
| 1B | 0 | -10170 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.41 | 0.41 | |
| 1C | 0 | -10170 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.41 | 0.41 | |
| 1D | 0 | -10170 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.41 | 0.41 | |
| 1E | 0 | 12600 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.50 | 0.00 | |
| 1F | 0 | 12600 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.50 | 0.00 | |
| 1G | 0 | 12600 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.50 | 0.00 | |
| 1H | 0 | 12600 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.50 | 0.00 | |
| 1I | 0 | -3581 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.14 | 0.14 | |
| 1J | 0 | -3581 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.14 | 0.14 | |
| 1K | 0 | -3581 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.14 | 0.14 | |
| 1L | 0 | -3581 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.14 | 0.14 | |
| 1M | 0 | 6011 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.24 | 0.00 | |
| 1N | 0 | 6011 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.24 | 0.00 | |
| 1O | 0 | 6011 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.24 | 0.00 | |
| 1P | 0 | 6011 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.24 | 0.00 | |
| 2 | 0 | -242 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 | |
| 7 | 0 | 1231 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.05 | 0.00 | |
| 8 | 0 | -258 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 | |
| 1A | 199 | -10170 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.41 | 0.41 | |
| 1B | 199 | -10170 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.41 | 0.41 | |
| 1C | 199 | -10170 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.41 | 0.41 | |
| 1D | 199 | -10170 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.41 | 0.41 | |
| 1E | 199 | 12600 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.50 | 0.00 | |
| 1F | 199 | 12600 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.50 | 0.00 | |
| 1G | 199 | 12600 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.50 | 0.00 | |
| 1H | 199 | 12600 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.50 | 0.00 | |
| 1I | 199 | -3581 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.14 | 0.14 | |
| 1J | 199 | -3581 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.14 | 0.14 | |
| 1K | 199 | -3581 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.14 | 0.14 | |
| 1L | 199 | -3581 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.14 | 0.14 | |
| 1M | 199 | 6011 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.24 | 0.00 | |
| 1N | 199 | 6011 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.24 | 0.00 | |
| 1O | 199 | 6011 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.24 | 0.00 | |
| 1P | 199 | 6011 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.24 | 0.00 | |
| 2 | 199 | -242 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 | |
| 7 | 199 | 1231 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.05 | 0.00 | |
| 8 | 199 | -258 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 | |
| 1A | 398 | -10170 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.41 | 0.41 | |
| 1B | 398 | -10170 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.41 | 0.41 | |
| 1C | 398 | -10170 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.41 | 0.41 | |
| 1D | 398 | -10170 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.41 | 0.41 | |
| 1E | 398 | 12600 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.50 | 0.00 | |
| 1F | 398 | 12600 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.50 | 0.00 | |
| 1G | 398 | 12600 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.50 | 0.00 | |
| 1H | 398 | 12600 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.50 | 0.00 | |
| 1I | 398 | -3581 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.14 | 0.14 | |
| 1J | 398 | -3581 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.14 | 0.14 | |
| 1K | 398 | -3581 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.14 | 0.14 | |
| 1L | 398 | -3581 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.14 | 0.14 | |
| 1M | 398 | 6011 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.24 | 0.00 | |
| 1N | 398 | 6011 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.24 | 0.00 | |
| 1O | 398 | 6011 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.24 | 0.00 | |
| 1P | 398 | 6011 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.24 | 0.00 | |
| 2 | 398 | -242 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 | |
| 7 | 398 | 1231 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.05 | 0.00 | |
| 8 | 398 | -258 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 | |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

**ASTA NUM. 6** NI 47 NF 42 Lungh. 398.1 cm SEZ. 8 Ps UNP 80

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -13211 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.53 | 0.53 | |
| 1B | 0 | -13211 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.53 | 0.53 | |
| 1C | 0 | -13211 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.53 | 0.53 | |
| 1D | 0 | -13211 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.53 | 0.53 | |
| 1E | 0 | 9461 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.38 | 0.00 | |
| 1F | 0 | 9461 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.38 | 0.00 | |
| 1G | 0 | 9461 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.38 | 0.00 | |
| 1H | 0 | 9461 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.38 | 0.00 | |
| 1I | 0 | -6629 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.26 | 0.26 | |
| 1J | 0 | -6629 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.26 | 0.26 | |
| 1K | 0 | -6629 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.26 | 0.26 | |
| 1L | 0 | -6629 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.26 | 0.26 | |
| 1M | 0 | 2879 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.11 | 0.00 | |
| 1N | 0 | 2879 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.11 | 0.00 | |
| 1O | 0 | 2879 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.11 | 0.00 | |
| 1P | 0 | 2879 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.11 | 0.00 | |
| 2 | 0 | -422 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.02 | |
| 7 | 0 | -1891 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.08 | 0.08 | |
| 8 | 0 | -406 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.02 | |
| 1A | 199 | -13211 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.53 | 0.53 | |
| 1B | 199 | -13211 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.53 | 0.53 | |
| 1C | 199 | -13211 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.53 | 0.53 | |
| 1D | 199 | -13211 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.53 | 0.53 | |
| 1E | 199 | 9461 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.38 | 0.00 | |
| 1F | 199 | 9461 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.38 | 0.00 | |
| 1G | 199 | 9461 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.38 | 0.00 | |
| 1H | 199 | 9461 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.38 | 0.00 | |
| 1I | 199 | -6629 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.26 | 0.26 | |
| 1J | 199 | -6629 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.26 | 0.26 | |
| 1K | 199 | -6629 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.26 | 0.26 | |
| 1L | 199 | -6629 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.26 | 0.26 | |
| 1M | 199 | 2879 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.11 | 0.00 | |
| 1N | 199 | 2879 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.11 | 0.00 | |
| 1O | 199 | 2879 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.11 | 0.00 | |
| 1P | 199 | 2879 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.11 | 0.00 | |
| 2 | 199 | -422 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.02 | |
| 7 | 199 | -1891 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.08 | 0.08 | |
| 8 | 199 | -406 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.02 | |
| 1A | 398 | -13211 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.53 | 0.53 | |
| 1B | 398 | -13211 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.53 | 0.53 | |
| 1C | 398 | -13211 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.53 | 0.53 | |
| 1D | 398 | -13211 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.53 | 0.53 | |
| 1E | 398 | 9461 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.38 | 0.00 | |
| 1F | 398 | 9461 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.38 | 0.00 | |
| 1G | 398 | 9461 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.38 | 0.00 | |
| 1H | 398 | 9461 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.38 | 0.00 | |
| 1I | 398 | -6629 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.26 | 0.26 | |
| 1J | 398 | -6629 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.26 | 0.26 | |
| 1K | 398 | -6629 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.26 | 0.26 | |
| 1L | 398 | -6629 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.26 | 0.26 | |
| 1M | 398 | 2879 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.11 | 0.00 | |
| 1N | 398 | 2879 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.11 | 0.00 | |
| 1O | 398 | 2879 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.11 | 0.00 | |
| 1P | 398 | 2879 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.11 | 0.00 | |
| 2 | 398 | -422 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.02 | |
| 7 | 398 | -1891 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.08 | 0.08 | |
| 8 | 398 | -406 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.02 | |

**ASTA NUM. 7** NI 2 NF 19 Lungh. 398.1 cm SEZ. 8 Ps UNP 80

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -12927 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.52 | 0.52 | |
| 1B | 0 | -12927 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.52 | 0.52 | |
| 1C | 0 | -12927 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.52 | 0.52 | |
| 1D | 0 | -12927 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.52 | 0.52 | |
| 1E | 0 | 9179 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.37 | 0.00 | |
| 1F | 0 | 9179 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.37 | 0.00 | |
| 1G | 0 | 9179 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.37 | 0.00 | |
| 1H | 0 | 9179 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.37 | 0.00 | |
| 1I | 0 | -6533 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.26 | 0.26 | |
| 1J | 0 | -6533 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.26 | 0.26 | |
| 1K | 0 | -6533 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.26 | 0.26 | |
| 1L | 0 | -6533 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.26 | 0.26 | |
| 1M | 0 | 2785 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.11 | 0.00 | |
| 1N | 0 | 2785 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.11 | 0.00 | |
| 1O | 0 | 2785 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.11 | 0.00 | |
| 1P | 0 | 2785 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.11 | 0.00 | |
| 2 | 0 | -400 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.02 | |
| 7 | 0 | -1854 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.07 | 0.07 | |
| 8 | 0 | -420 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.02 | |
| 1A | 199 | -12927 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.52 | 0.52 | |
| 1B | 199 | -12927 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.52 | 0.52 | |
| 1C | 199 | -12927 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.52 | 0.52 | |
| 1D | 199 | -12927 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.52 | 0.52 | |
| 1E | 199 | 9179 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.37 | 0.00 | |
| 1F | 199 | 9179 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.37 | 0.00 | |
| 1G | 199 | 9179 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.37 | 0.00 | |
| 1H | 199 | 9179 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.37 | 0.00 | |
| 1I | 199 | -6533 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.26 | 0.26 | |
| 1J | 199 | -6533 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.26 | 0.26 | |
| 1K | 199 | -6533 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.26 | 0.26 | |
| 1L | 199 | -6533 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.26 | 0.26 | |
| 1M | 199 | 2785 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.11 | 0.00 | |
| 1N | 199 | 2785 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.11 | 0.00 | |
| 1O | 199 | 2785 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.11 | 0.00 | |
| 1P | 199 | 2785 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.11 | 0.00 | |
| 2 | 199 | -400 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.02 | |
| 7 | 199 | -1854 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.07 | 0.07 | |
| 8 | 199 | -420 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.02 | |
| 1A | 398 | -12927 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.52 | 0.52 | |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1B | 398 | -12927 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.52 | 0.52 |
| 1C | 398 | -12927 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.52 | 0.52 |
| 1D | 398 | -12927 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.52 | 0.52 |
| 1E | 398 | 9179 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.37 | 0.00 |
| 1F | 398 | 9179 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.37 | 0.00 |
| 1G | 398 | 9179 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.37 | 0.00 |
| 1H | 398 | 9179 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.37 | 0.00 |
| 1I | 398 | -6533 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.26 | 0.26 |
| 1J | 398 | -6533 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.26 | 0.26 |
| 1K | 398 | -6533 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.26 | 0.26 |
| 1L | 398 | -6533 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.26 | 0.26 |
| 1M | 398 | 2785 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.11 | 0.00 |
| 1N | 398 | 2785 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.11 | 0.00 |
| 1O | 398 | 2785 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.11 | 0.00 |
| 1P | 398 | 2785 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.11 | 0.00 |
| 2 | 398 | -400 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.02 |
| 7 | 398 | -1854 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.07 | 0.07 |
| 8 | 398 | -420 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.02 | 0.02 |

**ASTA NUM. 8** NI 20 NF 15 Lungh. 398.1 cm SEZ. 8 Ps UNP 80

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -9851 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.39 | 0.39 | |
| 1B | 0 | -9851 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.39 | 0.39 | |
| 1C | 0 | -9851 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.39 | 0.39 | |
| 1D | 0 | -9851 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.39 | 0.39 | |
| 1E | 0 | 12271 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.49 | 0.00 | |
| 1F | 0 | 12271 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.49 | 0.00 | |
| 1G | 0 | 12271 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.49 | 0.00 | |
| 1H | 0 | 12271 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.49 | 0.00 | |
| 1I | 0 | -3476 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.14 | 0.14 | |
| 1J | 0 | -3476 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.14 | 0.14 | |
| 1K | 0 | -3476 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.14 | 0.14 | |
| 1L | 0 | -3476 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.14 | 0.14 | |
| 1M | 0 | 5896 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.23 | 0.00 | |
| 1N | 0 | 5896 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.23 | 0.00 | |
| 1O | 0 | 5896 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.23 | 0.00 | |
| 1P | 0 | 5896 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.23 | 0.00 | |
| 2 | 0 | -261 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 | |
| 7 | 0 | 1194 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.05 | 0.00 | |
| 8 | 0 | -245 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 | |
| 1A | 199 | -9851 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.39 | 0.39 | |
| 1B | 199 | -9851 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.39 | 0.39 | |
| 1C | 199 | -9851 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.39 | 0.39 | |
| 1D | 199 | -9851 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.39 | 0.39 | |
| 1E | 199 | 12271 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.49 | 0.00 | |
| 1F | 199 | 12271 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.49 | 0.00 | |
| 1G | 199 | 12271 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.49 | 0.00 | |
| 1H | 199 | 12271 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.49 | 0.00 | |
| 1I | 199 | -3476 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.14 | 0.14 | |
| 1J | 199 | -3476 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.14 | 0.14 | |
| 1K | 199 | -3476 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.14 | 0.14 | |
| 1L | 199 | -3476 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.14 | 0.14 | |
| 1M | 199 | 5896 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.23 | 0.00 | |
| 1N | 199 | 5896 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.23 | 0.00 | |
| 1O | 199 | 5896 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.23 | 0.00 | |
| 1P | 199 | 5896 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.23 | 0.00 | |
| 2 | 199 | -261 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 | |
| 7 | 199 | 1194 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.05 | 0.00 | |
| 8 | 199 | -245 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 | |
| 1A | 398 | -9851 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.39 | 0.39 | |
| 1B | 398 | -9851 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.39 | 0.39 | |
| 1C | 398 | -9851 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.39 | 0.39 | |
| 1D | 398 | -9851 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.39 | 0.39 | |
| 1E | 398 | 12271 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.49 | 0.00 | |
| 1F | 398 | 12271 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.49 | 0.00 | |
| 1G | 398 | 12271 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.49 | 0.00 | |
| 1H | 398 | 12271 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.49 | 0.00 | |
| 1I | 398 | -3476 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.14 | 0.14 | |
| 1J | 398 | -3476 | 0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.14 | 0.14 | |
| 1K | 398 | -3476 | -0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.14 | 0.14 | |
| 1L | 398 | -3476 | 0 | -0 | 0 | 0 | 0 | 1 | 0.00 | 0.14 | 0.14 | |
| 1M | 398 | 5896 | -0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.23 | 0.00 | |
| 1N | 398 | 5896 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.23 | 0.00 | |
| 1O | 398 | 5896 | -0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.23 | 0.00 | |
| 1P | 398 | 5896 | 0 | -0 | 0 | 0 | 0 | -- | 0.00 | 0.23 | 0.00 | |
| 2 | 398 | -261 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 | |
| 7 | 398 | 1194 | 0 | 0 | 0 | 0 | 0 | -- | 0.00 | 0.05 | 0.00 | |
| 8 | 398 | -245 | -0 | 0 | 0 | 0 | 0 | 1 | 0.00 | 0.01 | 0.01 | |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

**AMV s.r.l.**
**Via San Lorenzo, 106 Tel. 0481/779903**
**34077 Ronchi dei Legionari (GO)**

Lavoro: **VITROPLANT - BLOCCO SPOGLIATOIO vers4** Intestazione lavoro: **VITROPLANT - BLOCCO SERVIZI CT**
Elemento: **TRAVE** Metodo di verifica: **Eurocodice 3 - NTC 2018**
Gruppo: **1** Descrizione: **MONTANTI**
Tabella: **Tabella pilastri** Struttura: **Nuova**
Tipo acciaio: **S 275** Beta piano 'yx': **1.000** Beta piano 'zx': **1.000**
Tipologia sismica yx: **Senza prescrizioni aggiuntive**
Tipologia sismica zx: **Senza prescrizioni aggiuntive**
γM0: **1.050** γM1': **1.050** γM1'': **1.050** γM2: **1.250** γrv: **0.000** γM0 Pf: **1.000** γM1 Pf: **1.000**
Tipo collegamento: **saldato** Connessione su un solo lato Connessione sul lato corto (solo 'L')

**ASTA NUM. 1** NI 1 NF 16 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

categoria: p.p. y Vento qy tot.
qy medio: 0.0000 1.2675 1.2675 kg/cm
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -939 | 181 | -13 | 0 | 107 | 242 | 2 | 0.00 | 0.01 | 0.06 | |
| 1B | 0 | -939 | 578 | -13 | 0 | 107 | -775 | 2 | 0.01 | 0.01 | 0.19 | |
| 1C | 0 | -939 | 181 | -286 | 0 | -381 | 242 | 2 | 0.01 | 0.01 | 0.06 | |
| 1D | 0 | -939 | 578 | -286 | 0 | -381 | -775 | 2 | 0.01 | 0.01 | 0.19 | |
| 1E | 0 | -765 | 181 | -13 | 0 | 107 | 242 | 2 | 0.00 | 0.01 | 0.06 | |
| 1F | 0 | -765 | 578 | -13 | 0 | 107 | -775 | 2 | 0.01 | 0.01 | 0.19 | |
| 1G | 0 | -765 | 181 | -286 | 0 | -381 | 242 | 2 | 0.01 | 0.01 | 0.06 | |
| 1H | 0 | -765 | 578 | -286 | 0 | -381 | -775 | 2 | 0.01 | 0.01 | 0.19 | |
| 1I | 0 | -1042 | 291 | 144 | 0 | 386 | -46 | 2 | 0.01 | 0.01 | 0.04 | |
| 1J | 0 | -1042 | 469 | 144 | 0 | 386 | -488 | 2 | 0.01 | 0.01 | 0.12 | |
| 1K | 0 | -1042 | 291 | -443 | 0 | -660 | -46 | 2 | 0.02 | 0.01 | 0.08 | |
| 1L | 0 | -1042 | 469 | -443 | 0 | -660 | -488 | 2 | 0.02 | 0.01 | 0.12 | |
| 1M | 0 | -663 | 291 | 144 | 0 | 386 | -46 | 2 | 0.01 | 0.01 | 0.04 | |
| 1N | 0 | -663 | 469 | 144 | 0 | 386 | -488 | 2 | 0.01 | 0.01 | 0.12 | |
| 1O | 0 | -663 | 291 | -443 | 0 | -660 | -46 | 2 | 0.02 | 0.01 | 0.08 | |
| 1P | 0 | -663 | 469 | -443 | 0 | -660 | -488 | 2 | 0.02 | 0.01 | 0.12 | |
| 2 | 0 | -843 | -9 | 19 | 0 | -20 | 24 | 2 | 0.00 | 0.01 | 0.01 | |
| 7 | 0 | -846 | 380 | 21 | 0 | -16 | -268 | 2 | 0.01 | 0.01 | 0.06 | |
| 8 | 0 | -850 | -9 | -152 | 0 | -141 | 25 | 2 | 0.01 | 0.01 | 0.02 | |
| 1A | 168 | -861 | -138 | 130 | 0 | 9 | 278 | 2 | 0.01 | 0.01 | 0.07 | |
| 1B | 168 | -861 | 260 | 130 | 0 | 9 | -73 | 2 | 0.01 | 0.01 | 0.02 | |
| 1C | 168 | -861 | -138 | -143 | 0 | -22 | 278 | 2 | 0.01 | 0.01 | 0.07 | |
| 1D | 168 | -861 | 260 | -143 | 0 | -22 | -73 | 2 | 0.01 | 0.01 | 0.02 | |
| 1E | 168 | -688 | -138 | 130 | 0 | 9 | 278 | 2 | 0.01 | 0.01 | 0.07 | |
| 1F | 168 | -688 | 260 | 130 | 0 | 9 | -73 | 2 | 0.01 | 0.01 | 0.02 | |
| 1G | 168 | -688 | -138 | -143 | 0 | -22 | 278 | 2 | 0.01 | 0.01 | 0.07 | |
| 1H | 168 | -688 | 260 | -143 | 0 | -22 | -73 | 2 | 0.01 | 0.01 | 0.02 | |
| 1I | 168 | -964 | -28 | 287 | 0 | 25 | 174 | 2 | 0.01 | 0.01 | 0.04 | |
| 1J | 168 | -964 | 150 | 287 | 0 | 25 | 31 | 2 | 0.01 | 0.01 | 0.01 | |
| 1K | 168 | -964 | -28 | -300 | 0 | -38 | 174 | 2 | 0.01 | 0.01 | 0.04 | |
| 1L | 168 | -964 | 150 | -300 | 0 | -38 | 31 | 2 | 0.01 | 0.01 | 0.01 | |
| 1M | 168 | -585 | -28 | 287 | 0 | 25 | 174 | 2 | 0.01 | 0.00 | 0.04 | |
| 1N | 168 | -585 | 150 | 287 | 0 | 25 | 31 | 2 | 0.01 | 0.00 | 0.01 | |
| 1O | 168 | -585 | -28 | -300 | 0 | -38 | 174 | 2 | 0.01 | 0.00 | 0.04 | |
| 1P | 168 | -585 | 150 | -300 | 0 | -38 | 31 | 2 | 0.01 | 0.00 | 0.01 | |
| 2 | 168 | -766 | -9 | 19 | 0 | -52 | 9 | 2 | 0.00 | 0.01 | 0.01 | |
| 7 | 168 | -768 | 62 | 21 | 0 | -51 | 102 | 2 | 0.00 | 0.01 | 0.02 | |
| 8 | 168 | -772 | -9 | -9 | 0 | -7 | 10 | 2 | 0.00 | 0.01 | 0.00 | |
| 1A | 335 | -784 | -456 | 273 | 0 | -328 | -219 | 2 | 0.01 | 0.01 | 0.05 | |
| 1B | 335 | -784 | -59 | 273 | 0 | -328 | 96 | 2 | 0.01 | 0.01 | 0.04 | |
| 1C | 335 | -784 | -456 | 0 | 0 | 98 | -219 | 2 | 0.01 | 0.01 | 0.05 | |
| 1D | 335 | -784 | -59 | 0 | 0 | 98 | 96 | 2 | 0.00 | 0.01 | 0.02 | |
| 1E | 335 | -610 | -456 | 273 | 0 | -328 | -219 | 2 | 0.01 | 0.01 | 0.05 | |
| 1F | 335 | -610 | -59 | 273 | 0 | -328 | 96 | 2 | 0.01 | 0.01 | 0.04 | |
| 1G | 335 | -610 | -456 | 0 | 0 | 98 | -219 | 2 | 0.01 | 0.01 | 0.05 | |
| 1H | 335 | -610 | -59 | 0 | 0 | 98 | 96 | 2 | 0.00 | 0.01 | 0.02 | |
| 1I | 335 | -887 | -346 | 430 | 0 | -574 | -139 | 2 | 0.02 | 0.01 | 0.07 | |
| 1J | 335 | -887 | -168 | 430 | 0 | -574 | 16 | 2 | 0.02 | 0.01 | 0.07 | |
| 1K | 335 | -887 | -346 | -157 | 0 | 345 | -139 | 2 | 0.01 | 0.01 | 0.04 | |
| 1L | 335 | -887 | -168 | -157 | 0 | 345 | 16 | 2 | 0.01 | 0.01 | 0.04 | |
| 1M | 335 | -508 | -346 | 430 | 0 | -574 | -139 | 2 | 0.02 | 0.00 | 0.07 | |
| 1N | 335 | -508 | -168 | 430 | 0 | -574 | 16 | 2 | 0.02 | 0.00 | 0.07 | |
| 1O | 335 | -508 | -346 | -157 | 0 | 345 | -139 | 2 | 0.01 | 0.00 | 0.04 | |
| 1P | 335 | -508 | -168 | -157 | 0 | 345 | 16 | 2 | 0.01 | 0.00 | 0.04 | |
| 2 | 335 | -688 | -9 | 19 | 0 | -83 | -5 | 2 | 0.00 | 0.01 | 0.01 | |
| 7 | 335 | -691 | -257 | 21 | 0 | -87 | -62 | 2 | 0.00 | 0.01 | 0.01 | |
| 8 | 335 | -695 | -9 | 134 | 0 | -111 | -6 | 2 | 0.01 | 0.01 | 0.01 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -939 | -328 | 278 | 2 | 0.6232 | 1.0006 | 0.9974 | -- | -- | 0.01 | -- | 0.12 Snell. 'yx'= | 74 |
| 1B | -939 | -328 | -775 | 2 | 0.6232 | 1.0006 | 0.9998 | -- | -- | 0.01 | -- | 0.24 Snell. 'yx'= | 74 |
| 1C | -939 | -381 | 278 | 2 | 0.6232 | 1.0008 | 0.9974 | -- | -- | 0.01 | -- | 0.12 Snell. 'yx'= | 74 |
| 1D | -939 | -381 | -775 | 2 | 0.6232 | 1.0008 | 0.9998 | -- | -- | 0.01 | -- | 0.24 Snell. 'yx'= | 74 |
| 1E | -765 | -328 | 278 | 2 | 0.6232 | 1.0005 | 0.9979 | -- | -- | 0.01 | -- | 0.11 Snell. 'yx'= | 74 |
| 1F | -765 | -328 | -775 | 2 | 0.6232 | 1.0005 | 0.9999 | -- | -- | 0.01 | -- | 0.23 Snell. 'yx'= | 74 |
| 1G | -765 | -381 | 278 | 2 | 0.6232 | 1.0006 | 0.9979 | -- | -- | 0.01 | -- | 0.12 Snell. 'yx'= | 74 |
| 1H | -765 | -381 | -775 | 2 | 0.6232 | 1.0006 | 0.9999 | -- | -- | 0.01 | -- | 0.24 Snell. 'yx'= | 74 |
| 1I | -1042 | -574 | 174 | 2 | 0.6232 | 0.9975 | 1.0081 | -- | -- | 0.01 | -- | 0.12 Snell. 'yx'= | 74 |
| 1J | -1042 | -574 | -488 | 2 | 0.6232 | 0.9975 | 1.0033 | -- | -- | 0.01 | -- | 0.20 Snell. 'yx'= | 74 |
| 1K | -1042 | -660 | 174 | 2 | 0.6232 | 0.9984 | 1.0081 | -- | -- | 0.01 | -- | 0.13 Snell. 'yx'= | 74 |
| 1L | -1042 | -660 | -488 | 2 | 0.6232 | 0.9984 | 1.0033 | -- | -- | 0.01 | -- | 0.21 Snell. 'yx'= | 74 |
| 1M | -663 | -574 | 174 | 2 | 0.6232 | 0.9984 | 1.0052 | -- | -- | 0.01 | -- | 0.12 Snell. 'yx'= | 74 |
| 1N | -663 | -574 | -488 | 2 | 0.6232 | 0.9984 | 1.0021 | -- | -- | 0.01 | -- | 0.19 Snell. 'yx'= | 74 |
| 1O | -663 | -660 | 174 | 2 | 0.6232 | 0.9990 | 1.0052 | -- | -- | 0.01 | -- | 0.13 Snell. 'yx'= | 74 |
| 1P | -663 | -660 | -488 | 2 | 0.6232 | 0.9990 | 1.0021 | -- | -- | 0.01 | -- | 0.20 Snell. 'yx'= | 74 |
| 2 | -843 | -83 | 24 | 2 | 0.6232 | 1.0059 | 1.1064 | -- | -- | 0.01 | -- | 0.03 Snell. 'yx'= | 74 |
| 7 | -846 | -87 | -268 | 2 | 0.6232 | 1.0059 | 1.0056 | -- | -- | 0.01 | -- | 0.09 Snell. 'yx'= | 74 |
| 8 | -850 | -141 | 25 | 2 | 0.6232 | 1.0049 | 1.1022 | -- | -- | 0.01 | -- | 0.03 Snell. 'yx'= | 74 |

**ASTA NUM. 2** NI 20 NF 19 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -11282 | -166 | 309 | 0 | 575 | 349 | 2 | 0.01 | 0.09 | 0.09 | |
| 1B | 0 | -11282 | 214 | 309 | 0 | 575 | -441 | 2 | 0.01 | 0.09 | 0.11 | |
| 1C | 0 | -11282 | -166 | -29 | 0 | -92 | 349 | 2 | 0.00 | 0.09 | 0.08 | |
| 1D | 0 | -11282 | 214 | -29 | 0 | -92 | -441 | 2 | 0.00 | 0.09 | 0.11 | |
| 1E | 0 | 7190 | -166 | 309 | 0 | 575 | 349 | 2 | 0.01 | 0.06 | 0.09 | |
| 1F | 0 | 7190 | 214 | 309 | 0 | 575 | -441 | 2 | 0.01 | 0.06 | 0.11 | |
| 1G | 0 | 7190 | -166 | -29 | 0 | -92 | 349 | 2 | 0.00 | 0.06 | 0.08 | |
| 1H | 0 | 7190 | 214 | -29 | 0 | -92 | -441 | 2 | 0.00 | 0.06 | 0.11 | |
| 1I | 0 | -6047 | -63 | 470 | 0 | 805 | 128 | 2 | 0.02 | 0.05 | 0.09 | |
| 1J | 0 | -6047 | 111 | 470 | 0 | 805 | -219 | 2 | 0.02 | 0.05 | 0.09 | |
| 1K | 0 | -6047 | -63 | -190 | 0 | -322 | 128 | 2 | 0.01 | 0.05 | 0.04 | |
| 1L | 0 | -6047 | 111 | -190 | 0 | -322 | -219 | 2 | 0.01 | 0.05 | 0.05 | |
| 1M | 0 | 1955 | -63 | 470 | 0 | 805 | 128 | 2 | 0.02 | 0.02 | 0.09 | |
| 1N | 0 | 1955 | 111 | 470 | 0 | 805 | -219 | 2 | 0.02 | 0.02 | 0.09 | |
| 1O | 0 | 1955 | -63 | -190 | 0 | -322 | 128 | 2 | 0.01 | 0.02 | 0.04 | |
| 1P | 0 | 1955 | 111 | -190 | 0 | -322 | -219 | 2 | 0.01 | 0.02 | 0.05 | |
| 2 | 0 | -3248 | -7 | 518 | 0 | 490 | 13 | 2 | 0.02 | 0.03 | 0.06 | |
| 7 | 0 | -2048 | 24 | 511 | 0 | 471 | -45 | 2 | 0.02 | 0.02 | 0.05 | |
| 8 | 0 | -3247 | -7 | 146 | 0 | 260 | 13 | 2 | 0.01 | 0.03 | 0.03 | |
| 1A | 168 | -11204 | -166 | 646 | 0 | -225 | 71 | 2 | 0.03 | 0.09 | 0.03 | |
| 1B | 168 | -11204 | 214 | 646 | 0 | -225 | -82 | 2 | 0.03 | 0.09 | 0.03 | |
| 1C | 168 | -11204 | -166 | 307 | 0 | -324 | 71 | 2 | 0.01 | 0.09 | 0.04 | |
| 1D | 168 | -11204 | 214 | 307 | 0 | -324 | -82 | 2 | 0.01 | 0.09 | 0.04 | |
| 1E | 168 | 7267 | -166 | 646 | 0 | -225 | 71 | 2 | 0.03 | 0.06 | 0.03 | |
| 1F | 168 | 7267 | 214 | 646 | 0 | -225 | -82 | 2 | 0.03 | 0.06 | 0.03 | |
| 1G | 168 | 7267 | -166 | 307 | 0 | -324 | 71 | 2 | 0.01 | 0.06 | 0.04 | |
| 1H | 168 | 7267 | 214 | 307 | 0 | -324 | -82 | 2 | 0.01 | 0.06 | 0.04 | |
| 1I | 168 | -5970 | -63 | 806 | 0 | -264 | 23 | 2 | 0.04 | 0.05 | 0.03 | |
| 1J | 168 | -5970 | 111 | 806 | 0 | -264 | -34 | 2 | 0.04 | 0.05 | 0.03 | |
| 1K | 168 | -5970 | -63 | 146 | 0 | -285 | 23 | 2 | 0.01 | 0.05 | 0.03 | |
| 1L | 168 | -5970 | 111 | 146 | 0 | -285 | -34 | 2 | 0.01 | 0.05 | 0.03 | |
| 1M | 168 | 2032 | -63 | 806 | 0 | -264 | 23 | 2 | 0.04 | 0.02 | 0.03 | |
| 1N | 168 | 2032 | 111 | 806 | 0 | -264 | -34 | 2 | 0.04 | 0.02 | 0.03 | |
| 1O | 168 | 2032 | -63 | 146 | 0 | -285 | 23 | 2 | 0.01 | 0.02 | 0.03 | |
| 1P | 168 | 2032 | 111 | 146 | 0 | -285 | -34 | 2 | 0.01 | 0.02 | 0.03 | |
| 2 | 168 | -3170 | -7 | 518 | 0 | -377 | 2 | 2 | 0.02 | 0.03 | 0.04 | |
| 7 | 168 | -1970 | 24 | 511 | 0 | -385 | -5 | 2 | 0.02 | 0.02 | 0.04 | |
| 8 | 168 | -3170 | -7 | 483 | 0 | -266 | 2 | 2 | 0.02 | 0.03 | 0.03 | |
| 1A | 335 | -11127 | -166 | 982 | 0 | -1589 | -208 | 2 | 0.04 | 0.09 | 0.18 | |
| 1B | 335 | -11127 | 214 | 982 | 0 | -1589 | 277 | 2 | 0.04 | 0.09 | 0.18 | |
| 1C | 335 | -11127 | -166 | 643 | 0 | -1119 | -208 | 2 | 0.03 | 0.09 | 0.13 | |
| 1D | 335 | -11127 | 214 | 643 | 0 | -1119 | 277 | 2 | 0.03 | 0.09 | 0.13 | |
| 1E | 335 | 7345 | -166 | 982 | 0 | -1589 | -208 | 2 | 0.04 | 0.06 | 0.18 | |
| 1F | 335 | 7345 | 214 | 982 | 0 | -1589 | 277 | 2 | 0.04 | 0.06 | 0.18 | |
| 1G | 335 | 7345 | -166 | 643 | 0 | -1119 | -208 | 2 | 0.03 | 0.06 | 0.13 | |
| 1H | 335 | 7345 | 214 | 643 | 0 | -1119 | 277 | 2 | 0.03 | 0.06 | 0.13 | |
| 1I | 335 | -5892 | -63 | 1142 | 0 | -1896 | -82 | 2 | 0.05 | 0.05 | 0.22 | |
| 1J | 335 | -5892 | 111 | 1142 | 0 | -1896 | 151 | 2 | 0.05 | 0.05 | 0.22 | |
| 1K | 335 | -5892 | -63 | 483 | 0 | -812 | -82 | 2 | 0.02 | 0.05 | 0.09 | |
| 1L | 335 | -5892 | 111 | 483 | 0 | -812 | 151 | 2 | 0.02 | 0.05 | 0.09 | |
| 1M | 335 | 2110 | -63 | 1142 | 0 | -1896 | -82 | 2 | 0.05 | 0.02 | 0.22 | |
| 1N | 335 | 2110 | 111 | 1142 | 0 | -1896 | 151 | 2 | 0.05 | 0.02 | 0.22 | |
| 1O | 335 | 2110 | -63 | 483 | 0 | -812 | -82 | 2 | 0.02 | 0.02 | 0.09 | |
| 1P | 335 | 2110 | 111 | 483 | 0 | -812 | 151 | 2 | 0.02 | 0.02 | 0.09 | |
| 2 | 335 | -3093 | -7 | 518 | 0 | -1244 | -10 | 2 | 0.02 | 0.03 | 0.14 | |
| 7 | 335 | -1893 | 24 | 511 | 0 | -1242 | 35 | 2 | 0.02 | 0.02 | 0.14 | |
| 8 | 335 | -3092 | -7 | 819 | 0 | -1356 | -10 | 2 | 0.04 | 0.03 | 0.16 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -11282 | -1589 | 349 | 2 | 0.6232 | 0.9941 | 0.8727 | -- | -- | 0.15 | -- | 0.40 | Snell. 'yx'= 74 |
| 1B | -11282 | -1589 | -441 | 2 | 0.6232 | 0.9941 | 0.8717 | -- | -- | 0.15 | -- | 0.42 | Snell. 'yx'= 74 |
| 1C | -11282 | -1119 | 349 | 2 | 0.6232 | 1.0286 | 0.8727 | -- | -- | 0.15 | -- | 0.36 | Snell. 'yx'= 74 |
| 1D | -11282 | -1119 | -441 | 2 | 0.6232 | 1.0286 | 0.8717 | -- | -- | 0.15 | -- | 0.37 | Snell. 'yx'= 74 |
| 1I | -6047 | -1896 | 128 | 2 | 0.6232 | 0.9935 | 0.9312 | -- | -- | 0.08 | -- | 0.33 | Snell. 'yx'= 74 |
| 1J | -6047 | -1896 | -219 | 2 | 0.6232 | 0.9935 | 0.9312 | -- | -- | 0.08 | -- | 0.35 | Snell. 'yx'= 74 |
| 1K | -6047 | -812 | 128 | 2 | 0.6232 | 1.0259 | 0.9312 | -- | -- | 0.08 | -- | 0.20 | Snell. 'yx'= 74 |
| 1L | -6047 | -812 | -219 | 2 | 0.6232 | 1.0259 | 0.9312 | -- | -- | 0.08 | -- | 0.23 | Snell. 'yx'= 74 |
| 2 | -3248 | -1244 | 13 | 2 | 0.6232 | 0.9985 | 0.9631 | -- | -- | 0.04 | -- | 0.19 | Snell. 'yx'= 74 |
| 7 | -2048 | -1242 | -45 | 2 | 0.6232 | 0.9992 | 0.9767 | -- | -- | 0.03 | -- | 0.18 | Snell. 'yx'= 74 |
| 8 | -3247 | -1356 | 13 | 2 | 0.6232 | 1.0023 | 0.9631 | -- | -- | 0.04 | -- | 0.20 | Snell. 'yx'= 74 |

**ASTA NUM. 3** NI 2 NF 15 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

categoria: p.p. y Vento qy tot.
qy medio: 0.0000 0.6338 0.6338 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -11125 | 86 | 111 | 0 | 357 | 109 | 2 | 0.00 | 0.09 | 0.04 | |
| 1B | 0 | -11125 | 302 | 111 | 0 | 357 | -395 | 2 | 0.01 | 0.09 | 0.10 | |
| 1C | 0 | -11125 | 86 | -548 | 0 | -813 | 109 | 2 | 0.02 | 0.09 | 0.09 | |
| 1D | 0 | -11125 | 302 | -548 | 0 | -813 | -395 | 2 | 0.02 | 0.09 | 0.10 | |
| 1E | 0 | 7185 | 86 | 111 | 0 | 357 | 109 | 2 | 0.00 | 0.06 | 0.04 | |
| 1F | 0 | 7185 | 302 | 111 | 0 | 357 | -395 | 2 | 0.01 | 0.06 | 0.10 | |
| 1G | 0 | 7185 | 86 | -548 | 0 | -813 | 109 | 2 | 0.02 | 0.06 | 0.09 | |
| 1H | 0 | 7185 | 302 | -548 | 0 | -813 | -395 | 2 | 0.02 | 0.06 | 0.10 | |
| 1I | 0 | -5810 | 143 | 145 | 0 | 418 | -31 | 2 | 0.01 | 0.05 | 0.05 | |
| 1J | 0 | -5810 | 245 | 145 | 0 | 418 | -255 | 2 | 0.01 | 0.05 | 0.06 | |
| 1K | 0 | -5810 | 143 | -582 | 0 | -874 | -31 | 2 | 0.03 | 0.05 | 0.10 | |
| 1L | 0 | -5810 | 245 | -582 | 0 | -874 | -255 | 2 | 0.03 | 0.05 | 0.10 | |
| 1M | 0 | 1870 | 143 | 145 | 0 | 418 | -31 | 2 | 0.01 | 0.02 | 0.05 | |
| 1N | 0 | 1870 | 245 | 145 | 0 | 418 | -255 | 2 | 0.01 | 0.02 | 0.06 | |
| 1O | 0 | 1870 | 143 | -582 | 0 | -874 | -31 | 2 | 0.03 | 0.02 | 0.10 | |
| 1P | 0 | 1870 | 245 | -582 | 0 | -874 | -255 | 2 | 0.03 | 0.02 | 0.10 | |
| 2 | 0 | -749 | -2 | 15 | 0 | -37 | 4 | 2 | 0.00 | 0.01 | 0.00 | |
| 7 | 0 | -1945 | 194 | -13 | 0 | -87 | -143 | 2 | 0.00 | 0.02 | 0.03 | |
| 8 | 0 | -774 | -2 | -190 | 0 | -178 | 4 | 2 | 0.01 | 0.01 | 0.02 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 168 | -11048 | -73 | 286 | 0 | 24 | 119 | 2 | 0.01 | 0.09 | 0.03 |
| 1B | 168 | -11048 | 143 | 286 | 0 | 24 | -22 | 2 | 0.01 | 0.09 | 0.01 |
| 1C | 168 | -11048 | -73 | -372 | 0 | -42 | 119 | 2 | 0.02 | 0.09 | 0.03 |
| 1D | 168 | -11048 | 143 | -372 | 0 | -42 | -22 | 2 | 0.02 | 0.09 | 0.01 |
| 1E | 168 | 7263 | -73 | 286 | 0 | 24 | 119 | 2 | 0.01 | 0.06 | 0.03 |
| 1F | 168 | 7263 | 143 | 286 | 0 | 24 | -22 | 2 | 0.01 | 0.06 | 0.01 |
| 1G | 168 | 7263 | -73 | -372 | 0 | -42 | 119 | 2 | 0.02 | 0.06 | 0.03 |
| 1H | 168 | 7263 | 143 | -372 | 0 | -42 | -22 | 2 | 0.02 | 0.06 | 0.01 |
| 1I | 168 | -5732 | -16 | 320 | 0 | 28 | 76 | 2 | 0.01 | 0.05 | 0.02 |
| 1J | 168 | -5732 | 86 | 320 | 0 | 28 | 22 | 2 | 0.01 | 0.05 | 0.01 |
| 1K | 168 | -5732 | -16 | -406 | 0 | -47 | 76 | 2 | 0.02 | 0.05 | 0.02 |
| 1L | 168 | -5732 | 86 | -406 | 0 | -47 | 22 | 2 | 0.02 | 0.05 | 0.01 |
| 1M | 168 | 1947 | -16 | 320 | 0 | 28 | 76 | 2 | 0.01 | 0.02 | 0.02 |
| 1N | 168 | 1947 | 86 | 320 | 0 | 28 | 22 | 2 | 0.01 | 0.02 | 0.01 |
| 1O | 168 | 1947 | -16 | -406 | 0 | -47 | 76 | 2 | 0.02 | 0.02 | 0.02 |
| 1P | 168 | 1947 | 86 | -406 | 0 | -47 | 22 | 2 | 0.02 | 0.02 | 0.01 |
| 2 | 168 | -672 | -2 | 15 | 0 | -63 | 1 | 2 | 0.00 | 0.01 | 0.01 |
| 7 | 168 | -1868 | 35 | -13 | 0 | -65 | 49 | 2 | 0.00 | 0.02 | 0.01 |
| 8 | 168 | -696 | -2 | -14 | 0 | -7 | 1 | 2 | 0.00 | 0.01 | 0.00 |
| 1A | 335 | -10970 | -232 | 462 | 0 | -603 | -136 | 2 | 0.02 | 0.09 | 0.07 |
| 1B | 335 | -10970 | -16 | 462 | 0 | -603 | 84 | 2 | 0.02 | 0.09 | 0.07 |
| 1C | 335 | -10970 | -232 | -197 | 0 | 435 | -136 | 2 | 0.01 | 0.09 | 0.05 |
| 1D | 335 | -10970 | -16 | -197 | 0 | 435 | 84 | 2 | 0.01 | 0.09 | 0.05 |
| 1E | 335 | 7340 | -232 | 462 | 0 | -603 | -136 | 2 | 0.02 | 0.06 | 0.07 |
| 1F | 335 | 7340 | -16 | 462 | 0 | -603 | 84 | 2 | 0.02 | 0.06 | 0.07 |
| 1G | 335 | 7340 | -232 | -197 | 0 | 435 | -136 | 2 | 0.01 | 0.06 | 0.05 |
| 1H | 335 | 7340 | -16 | -197 | 0 | 435 | 84 | 2 | 0.01 | 0.06 | 0.05 |
| 1I | 335 | -5654 | -175 | 496 | 0 | -655 | -84 | 2 | 0.02 | 0.05 | 0.08 |
| 1J | 335 | -5654 | -74 | 496 | 0 | -655 | 32 | 2 | 0.02 | 0.05 | 0.08 |
| 1K | 335 | -5654 | -175 | -231 | 0 | 487 | -84 | 2 | 0.01 | 0.05 | 0.06 |
| 1L | 335 | -5654 | -74 | -231 | 0 | 487 | 32 | 2 | 0.01 | 0.05 | 0.06 |
| 1M | 335 | 2024 | -175 | 496 | 0 | -655 | -84 | 2 | 0.02 | 0.02 | 0.08 |
| 1N | 335 | 2024 | -74 | 496 | 0 | -655 | 32 | 2 | 0.02 | 0.02 | 0.08 |
| 1O | 335 | 2024 | -175 | -231 | 0 | 487 | -84 | 2 | 0.01 | 0.02 | 0.06 |
| 1P | 335 | 2024 | -74 | -231 | 0 | 487 | 32 | 2 | 0.01 | 0.02 | 0.06 |
| 2 | 335 | -594 | -2 | 15 | 0 | -88 | -3 | 2 | 0.00 | 0.00 | 0.01 |
| 7 | 335 | -1791 | -124 | -13 | 0 | -43 | -26 | 2 | 0.00 | 0.01 | 0.01 |
| 8 | 335 | -619 | -2 | 161 | 0 | -130 | -3 | 2 | 0.01 | 0.01 | 0.01 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -11125 | -603 | -136 | 2 | 0.6232 | 0.9817 | 0.9740 | -- | -- | 0.15 | -- | 0.25 | Snell. 'yx'= 74 |
| 1B | -11125 | -603 | -395 | 2 | 0.6232 | 0.9817 | 0.9831 | -- | -- | 0.15 | -- | 0.31 | Snell. 'yx'= 74 |
| 1C | -11125 | -813 | -136 | 2 | 0.6232 | 0.9820 | 0.9740 | -- | -- | 0.15 | -- | 0.27 | Snell. 'yx'= 74 |
| 1D | -11125 | -813 | -395 | 2 | 0.6232 | 0.9820 | 0.9831 | -- | -- | 0.15 | -- | 0.33 | Snell. 'yx'= 74 |
| 1I | -5810 | -655 | -84 | 2 | 0.6232 | 0.9881 | 1.0454 | -- | -- | 0.08 | -- | 0.17 | Snell. 'yx'= 74 |
| 1J | -5810 | -655 | -255 | 2 | 0.6232 | 0.9881 | 1.0107 | -- | -- | 0.08 | -- | 0.21 | Snell. 'yx'= 74 |
| 1K | -5810 | -874 | -84 | 2 | 0.6232 | 0.9894 | 1.0454 | -- | -- | 0.08 | -- | 0.20 | Snell. 'yx'= 74 |
| 1L | -5810 | -874 | -255 | 2 | 0.6232 | 0.9894 | 1.0107 | -- | -- | 0.08 | -- | 0.24 | Snell. 'yx'= 74 |
| 2 | -749 | -88 | 4 | 2 | 0.6232 | 1.0052 | 1.2941 | -- | -- | 0.01 | -- | 0.02 | Snell. 'yx'= 74 |
| 7 | -1945 | -87 | -143 | 2 | 0.6232 | 1.0129 | 1.0121 | -- | -- | 0.03 | -- | 0.07 | Snell. 'yx'= 74 |
| 8 | -774 | -178 | 4 | 2 | 0.6232 | 1.0044 | 1.3389 | -- | -- | 0.01 | -- | 0.03 | Snell. 'yx'= 74 |

**ASTA NUM. 4** NI 18 NF 17 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -1757 | -222 | -184 | 0 | -53 | 520 | 2 | 0.01 | 0.01 | 0.12 | |
| 1B | 0 | -1757 | 284 | -184 | 0 | -53 | -624 | 2 | 0.01 | 0.01 | 0.15 | |
| 1C | 0 | -1757 | -222 | -464 | 0 | -492 | 520 | 2 | 0.02 | 0.01 | 0.13 | |
| 1D | 0 | -1757 | 284 | -464 | 0 | -492 | -624 | 2 | 0.02 | 0.01 | 0.15 | |
| 1E | 0 | -1175 | -222 | -184 | 0 | -53 | 520 | 2 | 0.01 | 0.01 | 0.12 | |
| 1F | 0 | -1175 | 284 | -184 | 0 | -53 | -624 | 2 | 0.01 | 0.01 | 0.15 | |
| 1G | 0 | -1175 | -222 | -464 | 0 | -492 | 520 | 2 | 0.02 | 0.01 | 0.13 | |
| 1H | 0 | -1175 | 284 | -464 | 0 | -492 | -624 | 2 | 0.02 | 0.01 | 0.15 | |
| 1I | 0 | -1698 | -82 | -17 | 0 | 243 | 197 | 2 | 0.00 | 0.01 | 0.05 | |
| 1J | 0 | -1698 | 144 | -17 | 0 | 243 | -301 | 2 | 0.00 | 0.01 | 0.07 | |
| 1K | 0 | -1698 | -82 | -630 | 0 | -788 | 197 | 2 | 0.03 | 0.01 | 0.09 | |
| 1L | 0 | -1698 | 144 | -630 | 0 | -788 | -301 | 2 | 0.03 | 0.01 | 0.09 | |
| 1M | 0 | -1234 | -82 | -17 | 0 | 243 | 197 | 2 | 0.00 | 0.01 | 0.05 | |
| 1N | 0 | -1234 | 144 | -17 | 0 | 243 | -301 | 2 | 0.00 | 0.01 | 0.07 | |
| 1O | 0 | -1234 | -82 | -630 | 0 | -788 | 197 | 2 | 0.03 | 0.01 | 0.09 | |
| 1P | 0 | -1234 | 144 | -630 | 0 | -788 | -301 | 2 | 0.03 | 0.01 | 0.09 | |
| 2 | 0 | -1457 | -15 | -11 | 0 | -79 | 36 | 2 | 0.00 | 0.01 | 0.01 | |
| 7 | 0 | -1434 | 31 | -6 | 0 | -74 | -53 | 2 | 0.00 | 0.01 | 0.01 | |
| 8 | 0 | -1489 | -16 | -328 | 0 | -278 | 37 | 2 | 0.01 | 0.01 | 0.03 | |
| 1A | 168 | -1680 | -222 | 106 | 0 | 13 | 148 | 2 | 0.00 | 0.01 | 0.04 | |
| 1B | 168 | -1680 | 284 | 106 | 0 | 13 | -148 | 2 | 0.01 | 0.01 | 0.04 | |
| 1C | 168 | -1680 | -222 | -174 | 0 | 41 | 148 | 2 | 0.01 | 0.01 | 0.04 | |
| 1D | 168 | -1680 | 284 | -174 | 0 | 41 | -148 | 2 | 0.01 | 0.01 | 0.04 | |
| 1E | 168 | -1097 | -222 | 106 | 0 | 13 | 148 | 2 | 0.00 | 0.01 | 0.04 | |
| 1F | 168 | -1097 | 284 | 106 | 0 | 13 | -148 | 2 | 0.01 | 0.01 | 0.04 | |
| 1G | 168 | -1097 | -222 | -174 | 0 | 41 | 148 | 2 | 0.01 | 0.01 | 0.04 | |
| 1H | 168 | -1097 | 284 | -174 | 0 | 41 | -148 | 2 | 0.01 | 0.01 | 0.04 | |
| 1I | 168 | -1621 | -82 | 272 | 0 | 30 | 59 | 2 | 0.01 | 0.01 | 0.01 | |
| 1J | 168 | -1621 | 144 | 272 | 0 | 30 | -60 | 2 | 0.01 | 0.01 | 0.01 | |
| 1K | 168 | -1621 | -82 | -341 | 0 | 25 | 59 | 2 | 0.02 | 0.01 | 0.01 | |
| 1L | 168 | -1621 | 144 | -341 | 0 | 25 | -60 | 2 | 0.02 | 0.01 | 0.01 | |
| 1M | 168 | -1156 | -82 | 272 | 0 | 30 | 59 | 2 | 0.01 | 0.01 | 0.01 | |
| 1N | 168 | -1156 | 144 | 272 | 0 | 30 | -60 | 2 | 0.01 | 0.01 | 0.01 | |
| 1O | 168 | -1156 | -82 | -341 | 0 | 25 | 59 | 2 | 0.02 | 0.01 | 0.01 | |
| 1P | 168 | -1156 | 144 | -341 | 0 | 25 | -60 | 2 | 0.02 | 0.01 | 0.01 | |
| 2 | 168 | -1380 | -15 | -11 | 0 | -61 | 10 | 2 | 0.00 | 0.01 | 0.01 | |
| 7 | 168 | -1356 | 31 | -6 | 0 | -64 | -1 | 2 | 0.00 | 0.01 | 0.01 | |
| 8 | 168 | -1412 | -16 | -39 | 0 | 30 | 11 | 2 | 0.00 | 0.01 | 0.00 | |
| 1A | 335 | -1602 | -222 | 396 | 0 | -407 | -224 | 2 | 0.02 | 0.01 | 0.06 | |
| 1B | 335 | -1602 | 284 | 396 | 0 | -407 | 328 | 2 | 0.02 | 0.01 | 0.08 | |
| 1C | 335 | -1602 | -222 | 116 | 0 | 90 | -224 | 2 | 0.01 | 0.01 | 0.05 | |
| 1D | 335 | -1602 | 284 | 116 | 0 | 90 | 328 | 2 | 0.01 | 0.01 | 0.08 | |
| 1E | 335 | -1020 | -222 | 396 | 0 | -407 | -224 | 2 | 0.02 | 0.01 | 0.06 | |
| 1F | 335 | -1020 | 284 | 396 | 0 | -407 | 328 | 2 | 0.02 | 0.01 | 0.08 | |
| 1G | 335 | -1020 | -222 | 116 | 0 | 90 | -224 | 2 | 0.01 | 0.01 | 0.05 | |
| 1H | 335 | -1020 | 284 | 116 | 0 | 90 | 328 | 2 | 0.01 | 0.01 | 0.08 | |
| 1I | 335 | -1543 | -82 | 562 | 0 | -669 | -78 | 2 | 0.03 | 0.01 | 0.08 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1J | 335 | -1543 | 144 | 562 | 0 | -669 | 182 | 2 | 0.03 | 0.01 | 0.08 |
| 1K | 335 | -1543 | -82 | -51 | 0 | 352 | -78 | 2 | 0.00 | 0.01 | 0.04 |
| 1L | 335 | -1543 | 144 | -51 | 0 | 352 | 182 | 2 | 0.00 | 0.01 | 0.05 |
| 1M | 335 | -1079 | -82 | 562 | 0 | -669 | -78 | 2 | 0.03 | 0.01 | 0.08 |
| 1N | 335 | -1079 | 144 | 562 | 0 | -669 | 182 | 2 | 0.03 | 0.01 | 0.08 |
| 1O | 335 | -1079 | -82 | -51 | 0 | 352 | -78 | 2 | 0.00 | 0.01 | 0.04 |
| 1P | 335 | -1079 | 144 | -51 | 0 | 352 | 182 | 2 | 0.00 | 0.01 | 0.05 |
| 2 | 335 | -1302 | -15 | -11 | 0 | -44 | -16 | 2 | 0.00 | 0.01 | 0.01 |
| 7 | 335 | -1279 | 31 | -6 | 0 | -54 | 52 | 2 | 0.00 | 0.01 | 0.01 |
| 8 | 335 | -1334 | -16 | 251 | 0 | -148 | -16 | 2 | 0.01 | 0.01 | 0.02 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -1757 | -407 | 520 | 2 | 0.6232 | 1.0071 | 0.9846 | -- | -- | 0.02 | -- | 0.19 | Snell. 'yx'= 74 |
| 1B | -1757 | -407 | -624 | 2 | 0.6232 | 1.0071 | 0.9821 | -- | -- | 0.02 | -- | 0.22 | Snell. 'yx'= 74 |
| 1C | -1757 | -492 | 520 | 2 | 0.6232 | 1.0039 | 0.9846 | -- | -- | 0.02 | -- | 0.20 | Snell. 'yx'= 74 |
| 1D | -1757 | -492 | -624 | 2 | 0.6232 | 1.0039 | 0.9821 | -- | -- | 0.02 | -- | 0.23 | Snell. 'yx'= 74 |
| 1E | -1175 | -407 | 520 | 2 | 0.6232 | 1.0047 | 0.9897 | -- | -- | 0.02 | -- | 0.19 | Snell. 'yx'= 74 |
| 1F | -1175 | -407 | -624 | 2 | 0.6232 | 1.0047 | 0.9880 | -- | -- | 0.02 | -- | 0.21 | Snell. 'yx'= 74 |
| 1G | -1175 | -492 | 520 | 2 | 0.6232 | 1.0026 | 0.9897 | -- | -- | 0.02 | -- | 0.20 | Snell. 'yx'= 74 |
| 1H | -1175 | -492 | -624 | 2 | 0.6232 | 1.0026 | 0.9880 | -- | -- | 0.02 | -- | 0.22 | Snell. 'yx'= 74 |
| 1I | -1698 | -669 | 197 | 2 | 0.6232 | 1.0007 | 0.9860 | -- | -- | 0.02 | -- | 0.15 | Snell. 'yx'= 74 |
| 1J | -1698 | -669 | -301 | 2 | 0.6232 | 1.0007 | 0.9807 | -- | -- | 0.02 | -- | 0.17 | Snell. 'yx'= 74 |
| 1K | -1698 | -788 | 197 | 2 | 0.6232 | 0.9994 | 0.9860 | -- | -- | 0.02 | -- | 0.16 | Snell. 'yx'= 74 |
| 1L | -1698 | -788 | -301 | 2 | 0.6232 | 0.9994 | 0.9807 | -- | -- | 0.02 | -- | 0.18 | Snell. 'yx'= 74 |
| 1M | -1234 | -669 | 197 | 2 | 0.6232 | 1.0005 | 0.9898 | -- | -- | 0.02 | -- | 0.14 | Snell. 'yx'= 74 |
| 1N | -1234 | -669 | -301 | 2 | 0.6232 | 1.0005 | 0.9860 | -- | -- | 0.02 | -- | 0.16 | Snell. 'yx'= 74 |
| 1O | -1234 | -788 | 197 | 2 | 0.6232 | 0.9995 | 0.9898 | -- | -- | 0.02 | -- | 0.15 | Snell. 'yx'= 74 |
| 1P | -1234 | -788 | -301 | 2 | 0.6232 | 0.9995 | 0.9860 | -- | -- | 0.02 | -- | 0.18 | Snell. 'yx'= 74 |
| 2 | -1457 | -79 | 36 | 2 | 0.6232 | 1.0115 | 0.9872 | -- | -- | 0.02 | -- | 0.04 | Snell. 'yx'= 74 |
| 7 | -1434 | -74 | -53 | 2 | 0.6232 | 1.0078 | 0.9837 | -- | -- | 0.02 | -- | 0.04 | Snell. 'yx'= 74 |
| 8 | -1489 | -278 | 37 | 2 | 0.6232 | 1.0081 | 0.9870 | -- | -- | 0.02 | -- | 0.06 | Snell. 'yx'= 74 |

**ASTA NUM. 5** NI 6 NF 11 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

categoria: p.p. y Vento qy tot.
qy medio: 0.0000 0.8856 0.8856 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -1794 | 144 | 146 | 0 | 271 | 151 | 2 | 0.01 | 0.01 | 0.04 | |
| 1B | 0 | -1794 | 422 | 146 | 0 | 271 | -619 | 2 | 0.01 | 0.01 | 0.15 | |
| 1C | 0 | -1794 | 144 | -198 | 0 | -322 | 151 | 2 | 0.01 | 0.01 | 0.04 | |
| 1D | 0 | -1794 | 422 | -198 | 0 | -322 | -619 | 2 | 0.01 | 0.01 | 0.15 | |
| 1E | 0 | -1488 | 144 | 146 | 0 | 271 | 151 | 2 | 0.01 | 0.01 | 0.04 | |
| 1F | 0 | -1488 | 422 | 146 | 0 | 271 | -619 | 2 | 0.01 | 0.01 | 0.15 | |
| 1G | 0 | -1488 | 144 | -198 | 0 | -322 | 151 | 2 | 0.01 | 0.01 | 0.04 | |
| 1H | 0 | -1488 | 422 | -198 | 0 | -322 | -619 | 2 | 0.01 | 0.01 | 0.15 | |
| 1I | 0 | -1953 | 232 | 348 | 0 | 621 | -97 | 2 | 0.02 | 0.02 | 0.07 | |
| 1J | 0 | -1953 | 334 | 348 | 0 | 621 | -372 | 2 | 0.02 | 0.02 | 0.09 | |
| 1K | 0 | -1953 | 232 | -400 | 0 | -671 | -97 | 2 | 0.02 | 0.02 | 0.08 | |
| 1L | 0 | -1953 | 334 | -400 | 0 | -671 | -372 | 2 | 0.02 | 0.02 | 0.09 | |
| 1M | 0 | -1329 | 232 | 348 | 0 | 621 | -97 | 2 | 0.02 | 0.01 | 0.07 | |
| 1N | 0 | -1329 | 334 | 348 | 0 | 621 | -372 | 2 | 0.02 | 0.01 | 0.09 | |
| 1O | 0 | -1329 | 232 | -400 | 0 | -671 | -97 | 2 | 0.02 | 0.01 | 0.08 | |
| 1P | 0 | -1329 | 334 | -400 | 0 | -671 | -372 | 2 | 0.02 | 0.01 | 0.09 | |
| 2 | 0 | -1660 | 8 | 6 | 0 | 29 | -19 | 2 | 0.00 | 0.01 | 0.00 | |
| 7 | 0 | -1654 | 282 | 3 | 0 | 25 | -234 | 2 | 0.01 | 0.01 | 0.06 | |
| 8 | 0 | -1647 | 8 | -24 | 0 | -21 | -20 | 2 | 0.00 | 0.01 | 0.00 | |
| 1A | 168 | -1717 | -79 | 146 | 0 | 27 | 205 | 2 | 0.01 | 0.01 | 0.05 | |
| 1B | 168 | -1717 | 199 | 146 | 0 | 27 | -99 | 2 | 0.01 | 0.01 | 0.02 | |
| 1C | 168 | -1717 | -79 | -198 | 0 | 10 | 205 | 2 | 0.01 | 0.01 | 0.05 | |
| 1D | 168 | -1717 | 199 | -198 | 0 | 10 | -99 | 2 | 0.01 | 0.01 | 0.02 | |
| 1E | 168 | -1410 | -79 | 146 | 0 | 27 | 205 | 2 | 0.01 | 0.01 | 0.05 | |
| 1F | 168 | -1410 | 199 | 146 | 0 | 27 | -99 | 2 | 0.01 | 0.01 | 0.02 | |
| 1G | 168 | -1410 | -79 | -198 | 0 | 10 | 205 | 2 | 0.01 | 0.01 | 0.05 | |
| 1H | 168 | -1410 | 199 | -198 | 0 | 10 | -99 | 2 | 0.01 | 0.01 | 0.02 | |
| 1I | 168 | -1875 | 9 | 348 | 0 | 38 | 104 | 2 | 0.02 | 0.02 | 0.02 | |
| 1J | 168 | -1875 | 111 | 348 | 0 | 38 | 2 | 2 | 0.02 | 0.02 | 0.00 | |
| 1K | 168 | -1875 | 9 | -400 | 0 | -1 | 104 | 2 | 0.02 | 0.02 | 0.02 | |
| 1L | 168 | -1875 | 111 | -400 | 0 | -1 | 2 | 2 | 0.02 | 0.02 | 0.00 | |
| 1M | 168 | -1252 | 9 | 348 | 0 | 38 | 104 | 2 | 0.02 | 0.01 | 0.02 | |
| 1N | 168 | -1252 | 111 | 348 | 0 | 38 | 2 | 2 | 0.02 | 0.01 | 0.00 | |
| 1O | 168 | -1252 | 9 | -400 | 0 | -1 | 104 | 2 | 0.02 | 0.01 | 0.02 | |
| 1P | 168 | -1252 | 111 | -400 | 0 | -1 | 2 | 2 | 0.02 | 0.01 | 0.00 | |
| 2 | 168 | -1582 | 8 | 6 | 0 | 20 | -6 | 2 | 0.00 | 0.01 | 0.00 | |
| 7 | 168 | -1576 | 60 | 3 | 0 | 20 | 53 | 2 | 0.00 | 0.01 | 0.01 | |
| 8 | 168 | -1570 | 8 | -24 | 0 | 19 | -6 | 2 | 0.00 | 0.01 | 0.00 | |
| 1A | 335 | -1639 | -301 | 146 | 0 | -217 | -113 | 2 | 0.01 | 0.01 | 0.03 | |
| 1B | 335 | -1639 | -23 | 146 | 0 | -217 | 48 | 2 | 0.01 | 0.01 | 0.03 | |
| 1C | 335 | -1639 | -301 | -198 | 0 | 341 | -113 | 2 | 0.01 | 0.01 | 0.04 | |
| 1D | 335 | -1639 | -23 | -198 | 0 | 341 | 48 | 2 | 0.01 | 0.01 | 0.04 | |
| 1E | 335 | -1333 | -301 | 146 | 0 | -217 | -113 | 2 | 0.01 | 0.01 | 0.03 | |
| 1F | 335 | -1333 | -23 | 146 | 0 | -217 | 48 | 2 | 0.01 | 0.01 | 0.03 | |
| 1G | 335 | -1333 | -301 | -198 | 0 | 341 | -113 | 2 | 0.01 | 0.01 | 0.04 | |
| 1H | 335 | -1333 | -23 | -198 | 0 | 341 | 48 | 2 | 0.01 | 0.01 | 0.04 | |
| 1I | 335 | -1798 | -213 | 348 | 0 | -544 | -68 | 2 | 0.02 | 0.01 | 0.06 | |
| 1J | 335 | -1798 | -111 | 348 | 0 | -544 | 3 | 2 | 0.02 | 0.01 | 0.06 | |
| 1K | 335 | -1798 | -213 | -400 | 0 | 669 | -68 | 2 | 0.02 | 0.01 | 0.08 | |
| 1L | 335 | -1798 | -111 | -400 | 0 | 669 | 3 | 2 | 0.02 | 0.01 | 0.08 | |
| 1M | 335 | -1174 | -213 | 348 | 0 | -544 | -68 | 2 | 0.02 | 0.01 | 0.06 | |
| 1N | 335 | -1174 | -111 | 348 | 0 | -544 | 3 | 2 | 0.02 | 0.01 | 0.06 | |
| 1O | 335 | -1174 | -213 | -400 | 0 | 669 | -68 | 2 | 0.02 | 0.01 | 0.08 | |
| 1P | 335 | -1174 | -111 | -400 | 0 | 669 | 3 | 2 | 0.02 | 0.01 | 0.08 | |
| 2 | 335 | -1505 | 8 | 6 | 0 | 11 | 7 | 2 | 0.00 | 0.01 | 0.00 | |
| 7 | 335 | -1499 | -162 | 3 | 0 | 15 | -33 | 2 | 0.00 | 0.01 | 0.01 | |
| 8 | 335 | -1492 | 8 | -24 | 0 | 58 | 7 | 2 | 0.00 | 0.01 | 0.01 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |



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| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | -1794 | 271 | 205 | 2 | 0.6232 | 0.9922 | 0.9990 | -- | -- | 0.02 | -- | 0.10 Snell. 'yx'= 74 |
| 1B | -1794 | 271 | -619 | 2 | 0.6232 | 0.9922 | 1.0000 | -- | -- | 0.02 | -- | 0.20 Snell. 'yx'= 74 |
| 1C | -1794 | 341 | 205 | 2 | 0.6232 | 0.9905 | 0.9990 | -- | -- | 0.02 | -- | 0.11 Snell. 'yx'= 74 |
| 1D | -1794 | 341 | -619 | 2 | 0.6232 | 0.9905 | 1.0000 | -- | -- | 0.02 | -- | 0.21 Snell. 'yx'= 74 |
| 1E | -1488 | 271 | 205 | 2 | 0.6232 | 0.9935 | 0.9992 | -- | -- | 0.02 | -- | 0.10 Snell. 'yx'= 74 |
| 1F | -1488 | 271 | -619 | 2 | 0.6232 | 0.9935 | 1.0000 | -- | -- | 0.02 | -- | 0.20 Snell. 'yx'= 74 |
| 1G | -1488 | 341 | 205 | 2 | 0.6232 | 0.9921 | 0.9992 | -- | -- | 0.02 | -- | 0.11 Snell. 'yx'= 74 |
| 1H | -1488 | 341 | -619 | 2 | 0.6232 | 0.9921 | 1.0000 | -- | -- | 0.02 | -- | 0.21 Snell. 'yx'= 74 |
| 1I | -1953 | 621 | 104 | 2 | 0.6232 | 0.9905 | 1.0169 | -- | -- | 0.03 | -- | 0.12 Snell. 'yx'= 74 |
| 1J | -1953 | 621 | -372 | 2 | 0.6232 | 0.9905 | 1.0062 | -- | -- | 0.03 | -- | 0.19 Snell. 'yx'= 74 |
| 1K | -1953 | -671 | 104 | 2 | 0.6232 | 0.9890 | 1.0169 | -- | -- | 0.03 | -- | 0.13 Snell. 'yx'= 74 |
| 1L | -1953 | -671 | -372 | 2 | 0.6232 | 0.9890 | 1.0062 | -- | -- | 0.03 | -- | 0.19 Snell. 'yx'= 74 |
| 1M | -1329 | 621 | 104 | 2 | 0.6232 | 0.9936 | 1.0115 | -- | -- | 0.02 | -- | 0.11 Snell. 'yx'= 74 |
| 1N | -1329 | 621 | -372 | 2 | 0.6232 | 0.9936 | 1.0042 | -- | -- | 0.02 | -- | 0.18 Snell. 'yx'= 74 |
| 1O | -1329 | -671 | 104 | 2 | 0.6232 | 0.9925 | 1.0115 | -- | -- | 0.02 | -- | 0.12 Snell. 'yx'= 74 |
| 1P | -1329 | -671 | -372 | 2 | 0.6232 | 0.9925 | 1.0042 | -- | -- | 0.02 | -- | 0.18 Snell. 'yx'= 74 |
| 2 | -1660 | 29 | -19 | 2 | 0.6232 | 1.0056 | 1.1832 | -- | -- | 0.02 | -- | 0.03 Snell. 'yx'= 74 |
| 7 | -1654 | 25 | -234 | 2 | 0.6232 | 1.0080 | 1.0093 | -- | -- | 0.02 | -- | 0.08 Snell. 'yx'= 74 |
| 8 | -1647 | 58 | -20 | 2 | 0.6232 | 0.9976 | 1.1761 | -- | -- | 0.02 | -- | 0.03 Snell. 'yx'= 74 |

**ASTA NUM. 6** NI 5 NF 12 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

categoria: p.p. y Vento qy tot.
qy medio: 0.0000 1.7713 1.7713 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -1530 | 376 | 114 | 0 | 214 | 58 | 2 | 0.01 | 0.01 | 0.02 | |
| 1B | 0 | -1530 | 665 | 114 | 0 | 214 | -749 | 2 | 0.01 | 0.01 | 0.18 | |
| 1C | 0 | -1530 | 376 | -203 | 0 | -336 | 58 | 2 | 0.01 | 0.01 | 0.04 | |
| 1D | 0 | -1530 | 665 | -203 | 0 | -336 | -749 | 2 | 0.01 | 0.01 | 0.18 | |
| 1E | 0 | -1288 | 376 | 114 | 0 | 214 | 58 | 2 | 0.01 | 0.01 | 0.02 | |
| 1F | 0 | -1288 | 665 | 114 | 0 | 214 | -749 | 2 | 0.01 | 0.01 | 0.18 | |
| 1G | 0 | -1288 | 376 | -203 | 0 | -336 | 58 | 2 | 0.01 | 0.01 | 0.04 | |
| 1H | 0 | -1288 | 665 | -203 | 0 | -336 | -749 | 2 | 0.01 | 0.01 | 0.18 | |
| 1I | 0 | -1695 | 467 | 322 | 0 | 573 | -202 | 2 | 0.01 | 0.01 | 0.07 | |
| 1J | 0 | -1695 | 574 | 322 | 0 | 573 | -489 | 2 | 0.01 | 0.01 | 0.12 | |
| 1K | 0 | -1695 | 467 | -412 | 0 | -695 | -202 | 2 | 0.02 | 0.01 | 0.08 | |
| 1L | 0 | -1695 | 574 | -412 | 0 | -695 | -489 | 2 | 0.02 | 0.01 | 0.12 | |
| 1M | 0 | -1123 | 467 | 322 | 0 | 573 | -202 | 2 | 0.01 | 0.01 | 0.07 | |
| 1N | 0 | -1123 | 574 | 322 | 0 | 573 | -489 | 2 | 0.01 | 0.01 | 0.12 | |
| 1O | 0 | -1123 | 467 | -412 | 0 | -695 | -202 | 2 | 0.02 | 0.01 | 0.08 | |
| 1P | 0 | -1123 | 574 | -412 | 0 | -695 | -489 | 2 | 0.02 | 0.01 | 0.12 | |
| 2 | 0 | -1424 | -8 | -15 | 0 | -10 | 27 | 2 | 0.00 | 0.01 | 0.01 | |
| 7 | 0 | -1423 | 521 | -16 | 0 | -11 | -347 | 2 | 0.01 | 0.01 | 0.08 | |
| 8 | 0 | -1410 | -8 | -44 | 0 | -59 | 28 | 2 | 0.00 | 0.01 | 0.01 | |
| 1A | 168 | -1452 | -69 | 114 | 0 | 22 | 316 | 2 | 0.01 | 0.01 | 0.08 | |
| 1B | 168 | -1452 | 220 | 114 | 0 | 22 | -8 | 2 | 0.01 | 0.01 | 0.00 | |
| 1C | 168 | -1452 | -69 | -203 | 0 | 5 | 316 | 2 | 0.01 | 0.01 | 0.08 | |
| 1D | 168 | -1452 | 220 | -203 | 0 | 5 | -8 | 2 | 0.01 | 0.01 | 0.00 | |
| 1E | 168 | -1211 | -69 | 114 | 0 | 22 | 316 | 2 | 0.01 | 0.01 | 0.08 | |
| 1F | 168 | -1211 | 220 | 114 | 0 | 22 | -8 | 2 | 0.01 | 0.01 | 0.00 | |
| 1G | 168 | -1211 | -69 | -203 | 0 | 5 | 316 | 2 | 0.01 | 0.01 | 0.08 | |
| 1H | 168 | -1211 | 220 | -203 | 0 | 5 | -8 | 2 | 0.01 | 0.01 | 0.00 | |
| 1I | 168 | -1617 | 22 | 322 | 0 | 33 | 208 | 2 | 0.01 | 0.01 | 0.05 | |
| 1J | 168 | -1617 | 129 | 322 | 0 | 33 | 100 | 2 | 0.01 | 0.01 | 0.02 | |
| 1K | 168 | -1617 | 22 | -412 | 0 | -6 | 208 | 2 | 0.02 | 0.01 | 0.05 | |
| 1L | 168 | -1617 | 129 | -412 | 0 | -6 | 100 | 2 | 0.02 | 0.01 | 0.02 | |
| 1M | 168 | -1046 | 22 | 322 | 0 | 33 | 208 | 2 | 0.01 | 0.01 | 0.05 | |
| 1N | 168 | -1046 | 129 | 322 | 0 | 33 | 100 | 2 | 0.01 | 0.01 | 0.02 | |
| 1O | 168 | -1046 | 22 | -412 | 0 | -6 | 208 | 2 | 0.02 | 0.01 | 0.05 | |
| 1P | 168 | -1046 | 129 | -412 | 0 | -6 | 100 | 2 | 0.02 | 0.01 | 0.02 | |
| 2 | 168 | -1346 | -8 | -15 | 0 | 15 | 15 | 2 | 0.00 | 0.01 | 0.00 | |
| 7 | 168 | -1346 | 76 | -16 | 0 | 15 | 154 | 2 | 0.00 | 0.01 | 0.04 | |
| 8 | 168 | -1332 | -8 | -44 | 0 | 14 | 15 | 2 | 0.00 | 0.01 | 0.00 | |
| 1A | 335 | -1375 | -514 | 114 | 0 | -169 | -172 | 2 | 0.01 | 0.01 | 0.04 | |
| 1B | 335 | -1375 | -225 | 114 | 0 | -169 | -12 | 2 | 0.01 | 0.01 | 0.02 | |
| 1C | 335 | -1375 | -514 | -203 | 0 | 346 | -172 | 2 | 0.01 | 0.01 | 0.04 | |
| 1D | 335 | -1375 | -225 | -203 | 0 | 346 | -12 | 2 | 0.01 | 0.01 | 0.04 | |
| 1E | 335 | -1133 | -514 | 114 | 0 | -169 | -172 | 2 | 0.01 | 0.01 | 0.04 | |
| 1F | 335 | -1133 | -225 | 114 | 0 | -169 | -12 | 2 | 0.01 | 0.01 | 0.02 | |
| 1G | 335 | -1133 | -514 | -203 | 0 | 346 | -172 | 2 | 0.01 | 0.01 | 0.04 | |
| 1H | 335 | -1133 | -225 | -203 | 0 | 346 | -12 | 2 | 0.01 | 0.01 | 0.04 | |
| 1I | 335 | -1540 | -423 | 322 | 0 | -507 | -127 | 2 | 0.01 | 0.01 | 0.06 | |
| 1J | 335 | -1540 | -316 | 322 | 0 | -507 | -56 | 2 | 0.01 | 0.01 | 0.06 | |
| 1K | 335 | -1540 | -423 | -412 | 0 | 684 | -127 | 2 | 0.02 | 0.01 | 0.08 | |
| 1L | 335 | -1540 | -316 | -412 | 0 | 684 | -56 | 2 | 0.02 | 0.01 | 0.08 | |
| 1M | 335 | -968 | -423 | 322 | 0 | -507 | -127 | 2 | 0.01 | 0.01 | 0.06 | |
| 1N | 335 | -968 | -316 | 322 | 0 | -507 | -56 | 2 | 0.01 | 0.01 | 0.06 | |
| 1O | 335 | -968 | -423 | -412 | 0 | 684 | -127 | 2 | 0.02 | 0.01 | 0.08 | |
| 1P | 335 | -968 | -316 | -412 | 0 | 684 | -56 | 2 | 0.02 | 0.01 | 0.08 | |
| 2 | 335 | -1269 | -8 | -15 | 0 | 40 | 2 | 2 | 0.00 | 0.01 | 0.00 | |
| 7 | 335 | -1268 | -369 | -16 | 0 | 41 | -92 | 2 | 0.01 | 0.01 | 0.02 | |
| 8 | 335 | -1255 | -8 | -44 | 0 | 87 | 2 | 2 | 0.00 | 0.01 | 0.01 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -1530 | 214 | 316 | 2 | 0.6232 | 0.9934 | 1.0075 | -- | -- | 0.02 | -- | 0.12 Snell. 'yx'= 74 | |
| 1B | -1530 | 214 | -749 | 2 | 0.6232 | 0.9934 | 1.0051 | -- | -- | 0.02 | -- | 0.22 Snell. 'yx'= 74 | |
| 1C | -1530 | 346 | 316 | 2 | 0.6232 | 0.9916 | 1.0075 | -- | -- | 0.02 | -- | 0.14 Snell. 'yx'= 74 | |
| 1D | -1530 | 346 | -749 | 2 | 0.6232 | 0.9916 | 1.0051 | -- | -- | 0.02 | -- | 0.24 Snell. 'yx'= 74 | |
| 1E | -1288 | 214 | 316 | 2 | 0.6232 | 0.9945 | 1.0063 | -- | -- | 0.02 | -- | 0.12 Snell. 'yx'= 74 | |
| 1F | -1288 | 214 | -749 | 2 | 0.6232 | 0.9945 | 1.0043 | -- | -- | 0.02 | -- | 0.22 Snell. 'yx'= 74 | |
| 1G | -1288 | 346 | 316 | 2 | 0.6232 | 0.9929 | 1.0063 | -- | -- | 0.02 | -- | 0.13 Snell. 'yx'= 74 | |
| 1H | -1288 | 346 | -749 | 2 | 0.6232 | 0.9929 | 1.0043 | -- | -- | 0.02 | -- | 0.24 Snell. 'yx'= 74 | |
| 1I | -1695 | 573 | 208 | 2 | 0.6232 | 0.9917 | 1.0145 | -- | -- | 0.02 | -- | 0.14 Snell. 'yx'= 74 | |
| 1J | -1695 | 573 | -489 | 2 | 0.6232 | 0.9917 | 1.0090 | -- | -- | 0.02 | -- | 0.21 Snell. 'yx'= 74 | |
| 1K | -1695 | -695 | 208 | 2 | 0.6232 | 0.9906 | 1.0145 | -- | -- | 0.02 | -- | 0.15 Snell. 'yx'= 74 | |
| 1L | -1695 | -695 | -489 | 2 | 0.6232 | 0.9906 | 1.0090 | -- | -- | 0.02 | -- | 0.22 Snell. 'yx'= 74 | |
| 1M | -1123 | 573 | 208 | 2 | 0.6232 | 0.9945 | 1.0096 | -- | -- | 0.01 | -- | 0.13 Snell. 'yx'= 74 | |
| 1N | -1123 | 573 | -489 | 2 | 0.6232 | 0.9945 | 1.0060 | -- | -- | 0.01 | -- | 0.20 Snell. 'yx'= 74 | |
| 1O | -1123 | -695 | 208 | 2 | 0.6232 | 0.9938 | 1.0096 | -- | -- | 0.01 | -- | 0.14 Snell. 'yx'= 74 | |
| 1P | -1123 | -695 | -489 | 2 | 0.6232 | 0.9938 | 1.0060 | -- | -- | 0.01 | -- | 0.21 Snell. 'yx'= 74 | |



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| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | -1424 | 40 | 27 | 2 | 0.6232 | 0.9990 | 1.1901 | -- | -- | 0.02 | -- | 0.03 Snell. 'yx'= | 74 |
| 7 | -1423 | 41 | -347 | 2 | 0.6232 | 0.9987 | 1.0099 | -- | -- | 0.02 | -- | 0.11 Snell. 'yx'= | 74 |
| 8 | -1410 | 87 | 28 | 2 | 0.6232 | 0.9949 | 1.1832 | -- | -- | 0.02 | -- | 0.04 Snell. 'yx'= | 74 |

**ASTA NUM. 7** NI 29 NF 30 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -2409 | -130 | 96 | 0 | 188 | 384 | 2 | 0.00 | 0.02 | 0.09 | |
| 1B | 0 | -2409 | 185 | 96 | 0 | 188 | -455 | 2 | 0.00 | 0.02 | 0.11 | |
| 1C | 0 | -2409 | -130 | -164 | 0 | -259 | 384 | 2 | 0.01 | 0.02 | 0.09 | |
| 1D | 0 | -2409 | 185 | -164 | 0 | -259 | -455 | 2 | 0.01 | 0.02 | 0.11 | |
| 1E | 0 | -2261 | -130 | 96 | 0 | 188 | 384 | 2 | 0.00 | 0.02 | 0.09 | |
| 1F | 0 | -2261 | 185 | 96 | 0 | 188 | -455 | 2 | 0.00 | 0.02 | 0.11 | |
| 1G | 0 | -2261 | -130 | -164 | 0 | -259 | 384 | 2 | 0.01 | 0.02 | 0.09 | |
| 1H | 0 | -2261 | 185 | -164 | 0 | -259 | -455 | 2 | 0.01 | 0.02 | 0.11 | |
| 1I | 0 | -2394 | -31 | 315 | 0 | 560 | 115 | 2 | 0.01 | 0.02 | 0.06 | |
| 1J | 0 | -2394 | 87 | 315 | 0 | 560 | -186 | 2 | 0.01 | 0.02 | 0.06 | |
| 1K | 0 | -2394 | -31 | -383 | 0 | -631 | 115 | 2 | 0.02 | 0.02 | 0.07 | |
| 1L | 0 | -2394 | 87 | -383 | 0 | -631 | -186 | 2 | 0.02 | 0.02 | 0.07 | |
| 1M | 0 | -2276 | -31 | 315 | 0 | 560 | 115 | 2 | 0.01 | 0.02 | 0.06 | |
| 1N | 0 | -2276 | 87 | 315 | 0 | 560 | -186 | 2 | 0.01 | 0.02 | 0.06 | |
| 1O | 0 | -2276 | -31 | -383 | 0 | -631 | 115 | 2 | 0.02 | 0.02 | 0.07 | |
| 1P | 0 | -2276 | 87 | -383 | 0 | -631 | -186 | 2 | 0.02 | 0.02 | 0.07 | |
| 2 | 0 | -2308 | -16 | -6 | 0 | 11 | 47 | 2 | 0.00 | 0.02 | 0.01 | |
| 7 | 0 | -2325 | 28 | -6 | 0 | 12 | -36 | 2 | 0.00 | 0.02 | 0.01 | |
| 8 | 0 | -2317 | -16 | -34 | 0 | -37 | 48 | 2 | 0.00 | 0.02 | 0.01 | |
| 1A | 168 | -2331 | -130 | 96 | 0 | 26 | 167 | 2 | 0.00 | 0.02 | 0.04 | |
| 1B | 168 | -2331 | 185 | 96 | 0 | 26 | -144 | 2 | 0.00 | 0.02 | 0.03 | |
| 1C | 168 | -2331 | -130 | -164 | 0 | 16 | 167 | 2 | 0.01 | 0.02 | 0.04 | |
| 1D | 168 | -2331 | 185 | -164 | 0 | 16 | -144 | 2 | 0.01 | 0.02 | 0.03 | |
| 1E | 168 | -2184 | -130 | 96 | 0 | 26 | 167 | 2 | 0.00 | 0.02 | 0.04 | |
| 1F | 168 | -2184 | 185 | 96 | 0 | 26 | -144 | 2 | 0.00 | 0.02 | 0.03 | |
| 1G | 168 | -2184 | -130 | -164 | 0 | 16 | 167 | 2 | 0.01 | 0.02 | 0.04 | |
| 1H | 168 | -2184 | 185 | -164 | 0 | 16 | -144 | 2 | 0.01 | 0.02 | 0.03 | |
| 1I | 168 | -2317 | -31 | 315 | 0 | 32 | 62 | 2 | 0.01 | 0.02 | 0.01 | |
| 1J | 168 | -2317 | 87 | 315 | 0 | 32 | -40 | 2 | 0.01 | 0.02 | 0.01 | |
| 1K | 168 | -2317 | -31 | -383 | 0 | 10 | 62 | 2 | 0.02 | 0.02 | 0.01 | |
| 1L | 168 | -2317 | 87 | -383 | 0 | 10 | -40 | 2 | 0.02 | 0.02 | 0.01 | |
| 1M | 168 | -2198 | -31 | 315 | 0 | 32 | 62 | 2 | 0.01 | 0.02 | 0.01 | |
| 1N | 168 | -2198 | 87 | 315 | 0 | 32 | -40 | 2 | 0.01 | 0.02 | 0.01 | |
| 1O | 168 | -2198 | -31 | -383 | 0 | 10 | 62 | 2 | 0.02 | 0.02 | 0.01 | |
| 1P | 168 | -2198 | 87 | -383 | 0 | 10 | -40 | 2 | 0.02 | 0.02 | 0.01 | |
| 2 | 168 | -2230 | -16 | -6 | 0 | 22 | 20 | 2 | 0.00 | 0.02 | 0.00 | |
| 7 | 168 | -2248 | 28 | -6 | 0 | 22 | 11 | 2 | 0.00 | 0.02 | 0.00 | |
| 8 | 168 | -2240 | -16 | -34 | 0 | 21 | 21 | 2 | 0.00 | 0.02 | 0.00 | |
| 1A | 335 | -2254 | -130 | 96 | 0 | -135 | -51 | 2 | 0.00 | 0.02 | 0.02 | |
| 1B | 335 | -2254 | 185 | 96 | 0 | -135 | 166 | 2 | 0.00 | 0.02 | 0.04 | |
| 1C | 335 | -2254 | -130 | -164 | 0 | 290 | -51 | 2 | 0.01 | 0.02 | 0.03 | |
| 1D | 335 | -2254 | 185 | -164 | 0 | 290 | 166 | 2 | 0.01 | 0.02 | 0.04 | |
| 1E | 335 | -2106 | -130 | 96 | 0 | -135 | -51 | 2 | 0.00 | 0.02 | 0.02 | |
| 1F | 335 | -2106 | 185 | 96 | 0 | -135 | 166 | 2 | 0.00 | 0.02 | 0.04 | |
| 1G | 335 | -2106 | -130 | -164 | 0 | 290 | -51 | 2 | 0.01 | 0.02 | 0.03 | |
| 1H | 335 | -2106 | 185 | -164 | 0 | 290 | 166 | 2 | 0.01 | 0.02 | 0.04 | |
| 1I | 335 | -2239 | -31 | 315 | 0 | -496 | 10 | 2 | 0.01 | 0.02 | 0.06 | |
| 1J | 335 | -2239 | 87 | 315 | 0 | -496 | 106 | 2 | 0.01 | 0.02 | 0.06 | |
| 1K | 335 | -2239 | -31 | -383 | 0 | 650 | 10 | 2 | 0.02 | 0.02 | 0.07 | |
| 1L | 335 | -2239 | 87 | -383 | 0 | 650 | 106 | 2 | 0.02 | 0.02 | 0.07 | |
| 1M | 335 | -2121 | -31 | 315 | 0 | -496 | 10 | 2 | 0.01 | 0.02 | 0.06 | |
| 1N | 335 | -2121 | 87 | 315 | 0 | -496 | 106 | 2 | 0.01 | 0.02 | 0.06 | |
| 1O | 335 | -2121 | -31 | -383 | 0 | 650 | 10 | 2 | 0.02 | 0.02 | 0.07 | |
| 1P | 335 | -2121 | 87 | -383 | 0 | 650 | 106 | 2 | 0.02 | 0.02 | 0.07 | |
| 2 | 335 | -2153 | -16 | -6 | 0 | 33 | -6 | 2 | 0.00 | 0.02 | 0.00 | |
| 7 | 335 | -2171 | 28 | -6 | 0 | 31 | 58 | 2 | 0.00 | 0.02 | 0.01 | |
| 8 | 335 | -2163 | -16 | -34 | 0 | 79 | -7 | 2 | 0.00 | 0.02 | 0.01 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -2409 | 188 | 384 | 2 | 0.6232 | 0.9908 | 0.9898 | -- | -- | 0.03 | -- | 0.14 Snell. 'yx'= | 74 |
| 1B | -2409 | 188 | -455 | 2 | 0.6232 | 0.9908 | 0.9812 | -- | -- | 0.03 | -- | 0.16 Snell. 'yx'= | 74 |
| 1C | -2409 | 290 | 384 | 2 | 0.6232 | 0.9881 | 0.9898 | -- | -- | 0.03 | -- | 0.16 Snell. 'yx'= | 74 |
| 1D | -2409 | 290 | -455 | 2 | 0.6232 | 0.9881 | 0.9812 | -- | -- | 0.03 | -- | 0.17 Snell. 'yx'= | 74 |
| 1E | -2261 | 188 | 384 | 2 | 0.6232 | 0.9914 | 0.9905 | -- | -- | 0.03 | -- | 0.14 Snell. 'yx'= | 74 |
| 1F | -2261 | 188 | -455 | 2 | 0.6232 | 0.9914 | 0.9824 | -- | -- | 0.03 | -- | 0.16 Snell. 'yx'= | 74 |
| 1G | -2261 | 290 | 384 | 2 | 0.6232 | 0.9888 | 0.9905 | -- | -- | 0.03 | -- | 0.15 Snell. 'yx'= | 74 |
| 1H | -2261 | 290 | -455 | 2 | 0.6232 | 0.9888 | 0.9824 | -- | -- | 0.03 | -- | 0.17 Snell. 'yx'= | 74 |
| 1I | -2394 | 560 | 115 | 2 | 0.6232 | 0.9883 | 0.9978 | -- | -- | 0.03 | -- | 0.12 Snell. 'yx'= | 74 |
| 1J | -2394 | 560 | -186 | 2 | 0.6232 | 0.9883 | 0.9738 | -- | -- | 0.03 | -- | 0.14 Snell. 'yx'= | 74 |
| 1K | -2394 | 650 | 115 | 2 | 0.6232 | 0.9869 | 0.9978 | -- | -- | 0.03 | -- | 0.13 Snell. 'yx'= | 74 |
| 1L | -2394 | 650 | -186 | 2 | 0.6232 | 0.9869 | 0.9738 | -- | -- | 0.03 | -- | 0.15 Snell. 'yx'= | 74 |
| 1M | -2276 | 560 | 115 | 2 | 0.6232 | 0.9888 | 0.9979 | -- | -- | 0.03 | -- | 0.12 Snell. 'yx'= | 74 |
| 1N | -2276 | 560 | -186 | 2 | 0.6232 | 0.9888 | 0.9751 | -- | -- | 0.03 | -- | 0.14 Snell. 'yx'= | 74 |
| 1O | -2276 | 650 | 115 | 2 | 0.6232 | 0.9876 | 0.9979 | -- | -- | 0.03 | -- | 0.13 Snell. 'yx'= | 74 |
| 1P | -2276 | 650 | -186 | 2 | 0.6232 | 0.9876 | 0.9751 | -- | -- | 0.03 | -- | 0.15 Snell. 'yx'= | 74 |
| 2 | -2308 | 33 | 47 | 2 | 0.6232 | 1.0074 | 0.9901 | -- | -- | 0.03 | -- | 0.05 Snell. 'yx'= | 74 |
| 7 | -2325 | 31 | 58 | 2 | 0.6232 | 1.0082 | 0.9736 | -- | -- | 0.03 | -- | 0.05 Snell. 'yx'= | 74 |
| 8 | -2317 | 79 | 48 | 2 | 0.6232 | 0.9951 | 0.9900 | -- | -- | 0.03 | -- | 0.05 Snell. 'yx'= | 74 |

**ASTA NUM. 8** NI 23 NF 24 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -2908 | -133 | 82 | 0 | 129 | 394 | 2 | 0.00 | 0.02 | 0.09 | |
| 1B | 0 | -2908 | 196 | 82 | 0 | 129 | -464 | 2 | 0.00 | 0.02 | 0.11 | |
| 1C | 0 | -2908 | -133 | -156 | 0 | -265 | 394 | 2 | 0.01 | 0.02 | 0.10 | |
| 1D | 0 | -2908 | 196 | -156 | 0 | -265 | -464 | 2 | 0.01 | 0.02 | 0.11 | |
| 1E | 0 | -2750 | -133 | 82 | 0 | 129 | 394 | 2 | 0.00 | 0.02 | 0.09 | |
| 1F | 0 | -2750 | 196 | 82 | 0 | 129 | -464 | 2 | 0.00 | 0.02 | 0.11 | |
| 1G | 0 | -2750 | -133 | -156 | 0 | -265 | 394 | 2 | 0.01 | 0.02 | 0.10 | |
| 1H | 0 | -2750 | 196 | -156 | 0 | -265 | -464 | 2 | 0.01 | 0.02 | 0.11 | |
| 1I | 0 | -2923 | -29 | 271 | 0 | 443 | 117 | 2 | 0.01 | 0.02 | 0.05 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1J | 0 | -2923 | 92 | 271 | 0 | 443 | -187 | 2 | 0.01 | 0.02 | 0.05 |
| 1K | 0 | -2923 | -29 | -345 | 0 | -579 | 117 | 2 | 0.02 | 0.02 | 0.07 |
| 1L | 0 | -2923 | 92 | -345 | 0 | -579 | -187 | 2 | 0.02 | 0.02 | 0.07 |
| 1M | 0 | -2735 | -29 | 271 | 0 | 443 | 117 | 2 | 0.01 | 0.02 | 0.05 |
| 1N | 0 | -2735 | 92 | 271 | 0 | 443 | -187 | 2 | 0.01 | 0.02 | 0.05 |
| 1O | 0 | -2735 | -29 | -345 | 0 | -579 | 117 | 2 | 0.02 | 0.02 | 0.07 |
| 1P | 0 | -2735 | 92 | -345 | 0 | -579 | -187 | 2 | 0.02 | 0.02 | 0.07 |
| 2 | 0 | -2830 | -19 | -11 | 0 | -25 | 56 | 2 | 0.00 | 0.02 | 0.01 |
| 7 | 0 | -2844 | 31 | -12 | 0 | -27 | -34 | 2 | 0.00 | 0.02 | 0.01 |
| 8 | 0 | -2815 | -19 | -35 | 0 | -66 | 56 | 2 | 0.00 | 0.02 | 0.01 |
| 1A | 168 | -2830 | -133 | 82 | 0 | -9 | 172 | 2 | 0.00 | 0.02 | 0.04 |
| 1B | 168 | -2830 | 196 | 82 | 0 | -9 | -137 | 2 | 0.00 | 0.02 | 0.03 |
| 1C | 168 | -2830 | -133 | -156 | 0 | -4 | 172 | 2 | 0.01 | 0.02 | 0.04 |
| 1D | 168 | -2830 | 196 | -156 | 0 | -4 | -137 | 2 | 0.01 | 0.02 | 0.03 |
| 1E | 168 | -2673 | -133 | 82 | 0 | -9 | 172 | 2 | 0.00 | 0.02 | 0.04 |
| 1F | 168 | -2673 | 196 | 82 | 0 | -9 | -137 | 2 | 0.00 | 0.02 | 0.03 |
| 1G | 168 | -2673 | -133 | -156 | 0 | -4 | 172 | 2 | 0.01 | 0.02 | 0.04 |
| 1H | 168 | -2673 | 196 | -156 | 0 | -4 | -137 | 2 | 0.01 | 0.02 | 0.03 |
| 1I | 168 | -2846 | -29 | 271 | 0 | -11 | 68 | 2 | 0.01 | 0.02 | 0.02 |
| 1J | 168 | -2846 | 92 | 271 | 0 | -11 | -33 | 2 | 0.01 | 0.02 | 0.01 |
| 1K | 168 | -2846 | -29 | -345 | 0 | -1 | 68 | 2 | 0.02 | 0.02 | 0.02 |
| 1L | 168 | -2846 | 92 | -345 | 0 | -1 | -33 | 2 | 0.02 | 0.02 | 0.01 |
| 1M | 168 | -2657 | -29 | 271 | 0 | -11 | 68 | 2 | 0.01 | 0.02 | 0.02 |
| 1N | 168 | -2657 | 92 | 271 | 0 | -11 | -33 | 2 | 0.01 | 0.02 | 0.01 |
| 1O | 168 | -2657 | -29 | -345 | 0 | -1 | 68 | 2 | 0.02 | 0.02 | 0.02 |
| 1P | 168 | -2657 | 92 | -345 | 0 | -1 | -33 | 2 | 0.02 | 0.02 | 0.01 |
| 2 | 168 | -2752 | -19 | -11 | 0 | -7 | 24 | 2 | 0.00 | 0.02 | 0.01 |
| 7 | 168 | -2766 | 31 | -12 | 0 | -6 | 18 | 2 | 0.00 | 0.02 | 0.00 |
| 8 | 168 | -2738 | -19 | -35 | 0 | -6 | 24 | 2 | 0.00 | 0.02 | 0.01 |
| 1A | 335 | -2753 | -133 | 82 | 0 | -147 | -50 | 2 | 0.00 | 0.02 | 0.02 |
| 1B | 335 | -2753 | 196 | 82 | 0 | -147 | 191 | 2 | 0.00 | 0.02 | 0.05 |
| 1C | 335 | -2753 | -133 | -156 | 0 | 258 | -50 | 2 | 0.01 | 0.02 | 0.03 |
| 1D | 335 | -2753 | 196 | -156 | 0 | 258 | 191 | 2 | 0.01 | 0.02 | 0.05 |
| 1E | 335 | -2595 | -133 | 82 | 0 | -147 | -50 | 2 | 0.00 | 0.02 | 0.02 |
| 1F | 335 | -2595 | 196 | 82 | 0 | -147 | 191 | 2 | 0.00 | 0.02 | 0.05 |
| 1G | 335 | -2595 | -133 | -156 | 0 | 258 | -50 | 2 | 0.01 | 0.02 | 0.03 |
| 1H | 335 | -2595 | 196 | -156 | 0 | 258 | 191 | 2 | 0.01 | 0.02 | 0.05 |
| 1I | 335 | -2768 | -29 | 271 | 0 | -465 | 19 | 2 | 0.01 | 0.02 | 0.05 |
| 1J | 335 | -2768 | 92 | 271 | 0 | -465 | 122 | 2 | 0.01 | 0.02 | 0.05 |
| 1K | 335 | -2768 | -29 | -345 | 0 | 576 | 19 | 2 | 0.02 | 0.02 | 0.07 |
| 1L | 335 | -2768 | 92 | -345 | 0 | 576 | 122 | 2 | 0.02 | 0.02 | 0.07 |
| 1M | 335 | -2580 | -29 | 271 | 0 | -465 | 19 | 2 | 0.01 | 0.02 | 0.05 |
| 1N | 335 | -2580 | 92 | 271 | 0 | -465 | 122 | 2 | 0.01 | 0.02 | 0.05 |
| 1O | 335 | -2580 | -29 | -345 | 0 | 576 | 19 | 2 | 0.02 | 0.02 | 0.07 |
| 1P | 335 | -2580 | 92 | -345 | 0 | 576 | 122 | 2 | 0.02 | 0.02 | 0.07 |
| 2 | 335 | -2675 | -19 | -11 | 0 | 11 | -8 | 2 | 0.00 | 0.02 | 0.00 |
| 7 | 335 | -2689 | 31 | -12 | 0 | 14 | 70 | 2 | 0.00 | 0.02 | 0.02 |
| 8 | 335 | -2660 | -19 | -35 | 0 | 53 | -8 | 2 | 0.00 | 0.02 | 0.01 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -2908 | -147 | 394 | 2 | 0.6232 | 0.9858 | 0.9880 | -- | -- | 0.04 | -- | 0.15 | Snell. 'yx'= 74 |
| 1B | -2908 | -147 | -464 | 2 | 0.6232 | 0.9858 | 0.9753 | -- | -- | 0.04 | -- | 0.16 | Snell. 'yx'= 74 |
| 1C | -2908 | -265 | 394 | 2 | 0.6232 | 0.9841 | 0.9880 | -- | -- | 0.04 | -- | 0.16 | Snell. 'yx'= 74 |
| 1D | -2908 | -265 | -464 | 2 | 0.6232 | 0.9841 | 0.9753 | -- | -- | 0.04 | -- | 0.18 | Snell. 'yx'= 74 |
| 1E | -2750 | -147 | 394 | 2 | 0.6232 | 0.9866 | 0.9886 | -- | -- | 0.04 | -- | 0.15 | Snell. 'yx'= 74 |
| 1F | -2750 | -147 | -464 | 2 | 0.6232 | 0.9866 | 0.9767 | -- | -- | 0.04 | -- | 0.16 | Snell. 'yx'= 74 |
| 1G | -2750 | -265 | 394 | 2 | 0.6232 | 0.9849 | 0.9886 | -- | -- | 0.04 | -- | 0.16 | Snell. 'yx'= 74 |
| 1H | -2750 | -265 | -464 | 2 | 0.6232 | 0.9849 | 0.9767 | -- | -- | 0.04 | -- | 0.18 | Snell. 'yx'= 74 |
| 1I | -2923 | -465 | 117 | 2 | 0.6232 | 0.9844 | 1.0007 | -- | -- | 0.04 | -- | 0.12 | Snell. 'yx'= 74 |
| 1J | -2923 | -465 | -187 | 2 | 0.6232 | 0.9844 | 0.9668 | -- | -- | 0.04 | -- | 0.13 | Snell. 'yx'= 74 |
| 1K | -2923 | -579 | 117 | 2 | 0.6232 | 0.9835 | 1.0007 | -- | -- | 0.04 | -- | 0.13 | Snell. 'yx'= 74 |
| 1L | -2923 | -579 | -187 | 2 | 0.6232 | 0.9835 | 0.9668 | -- | -- | 0.04 | -- | 0.15 | Snell. 'yx'= 74 |
| 1M | -2735 | -465 | 117 | 2 | 0.6232 | 0.9854 | 1.0007 | -- | -- | 0.04 | -- | 0.12 | Snell. 'yx'= 74 |
| 1N | -2735 | -465 | -187 | 2 | 0.6232 | 0.9854 | 0.9689 | -- | -- | 0.04 | -- | 0.13 | Snell. 'yx'= 74 |
| 1O | -2735 | -579 | 117 | 2 | 0.6232 | 0.9846 | 1.0007 | -- | -- | 0.04 | -- | 0.13 | Snell. 'yx'= 74 |
| 1P | -2735 | -579 | -187 | 2 | 0.6232 | 0.9846 | 0.9689 | -- | -- | 0.04 | -- | 0.15 | Snell. 'yx'= 74 |
| 2 | -2830 | -25 | 56 | 2 | 0.6232 | 0.9942 | 0.9874 | -- | -- | 0.04 | -- | 0.05 | Snell. 'yx'= 74 |
| 7 | -2844 | -27 | 70 | 2 | 0.6232 | 0.9929 | 0.9725 | -- | -- | 0.04 | -- | 0.06 | Snell. 'yx'= 74 |
| 8 | -2815 | -66 | 56 | 2 | 0.6232 | 0.9877 | 0.9875 | -- | -- | 0.04 | -- | 0.06 | Snell. 'yx'= 74 |

**ASTA NUM. 9** NI 8 NF 9 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

categoria: p.p. y Vento qy tot.
qy medio: 0.0000 2.1775 2.1775 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -3390 | 485 | 104 | 0 | 175 | -0 | 2 | 0.01 | 0.03 | 0.02 | |
| 1B | 0 | -3390 | 788 | 104 | 0 | 175 | -828 | 2 | 0.01 | 0.03 | 0.20 | |
| 1C | 0 | -3390 | 485 | -143 | 0 | -256 | -0 | 2 | 0.01 | 0.03 | 0.03 | |
| 1D | 0 | -3390 | 788 | -143 | 0 | -256 | -828 | 2 | 0.01 | 0.03 | 0.20 | |
| 1E | 0 | -166 | 485 | 104 | 0 | 175 | -0 | 2 | 0.01 | 0.00 | 0.02 | |
| 1F | 0 | -166 | 788 | 104 | 0 | 175 | -828 | 2 | 0.01 | 0.00 | 0.20 | |
| 1G | 0 | -166 | 485 | -143 | 0 | -256 | -0 | 2 | 0.01 | 0.00 | 0.03 | |
| 1H | 0 | -166 | 788 | -143 | 0 | -256 | -828 | 2 | 0.01 | 0.00 | 0.20 | |
| 1I | 0 | -5491 | 582 | 261 | 0 | 447 | -269 | 2 | 0.01 | 0.05 | 0.07 | |
| 1J | 0 | -5491 | 691 | 261 | 0 | 447 | -559 | 2 | 0.01 | 0.05 | 0.14 | |
| 1K | 0 | -5491 | 582 | -299 | 0 | -528 | -269 | 2 | 0.01 | 0.05 | 0.07 | |
| 1L | 0 | -5491 | 691 | -299 | 0 | -528 | -559 | 2 | 0.01 | 0.05 | 0.14 | |
| 1M | 0 | 1935 | 582 | 261 | 0 | 447 | -269 | 2 | 0.01 | 0.02 | 0.07 | |
| 1N | 0 | 1935 | 691 | 261 | 0 | 447 | -559 | 2 | 0.01 | 0.02 | 0.14 | |
| 1O | 0 | 1935 | 582 | -299 | 0 | -528 | -269 | 2 | 0.01 | 0.02 | 0.07 | |
| 1P | 0 | 1935 | 691 | -299 | 0 | -528 | -559 | 2 | 0.01 | 0.02 | 0.14 | |
| 2 | 0 | -1486 | -10 | 3 | 0 | -1 | 35 | 2 | 0.00 | 0.01 | 0.01 | |
| 7 | 0 | -1490 | 636 | 3 | 0 | -2 | -413 | 2 | 0.01 | 0.01 | 0.10 | |
| 8 | 0 | -1773 | -10 | -19 | 0 | -40 | 34 | 2 | 0.00 | 0.01 | 0.01 | |
| 1A | 168 | -3313 | -62 | 104 | 0 | 0 | 354 | 2 | 0.00 | 0.03 | 0.08 | |
| 1B | 168 | -3313 | 241 | 104 | 0 | 0 | 34 | 2 | 0.00 | 0.03 | 0.01 | |
| 1C | 168 | -3313 | -62 | -143 | 0 | -17 | 354 | 2 | 0.01 | 0.03 | 0.08 | |
| 1D | 168 | -3313 | 241 | -143 | 0 | -17 | 34 | 2 | 0.01 | 0.03 | 0.01 | |
| 1E | 168 | -88 | -62 | 104 | 0 | 0 | 354 | 1 | 0.00 | 0.00 | 0.08 | |
| 1F | 168 | -88 | 241 | 104 | 0 | 0 | 34 | 1 | 0.00 | 0.00 | 0.01 | |
| 1G | 168 | -88 | -62 | -143 | 0 | -17 | 354 | 2 | 0.01 | 0.00 | 0.08 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1H | 168 | -88 | 241 | -143 | 0 | -17 | 34 | 2 | 0.01 | 0.00 | 0.01 |
| 1I | 168 | -5414 | 34 | 261 | 0 | 10 | 247 | 2 | 0.01 | 0.04 | 0.06 |
| 1J | 168 | -5414 | 144 | 261 | 0 | 10 | 141 | 2 | 0.01 | 0.04 | 0.03 |
| 1K | 168 | -5414 | 34 | -299 | 0 | -27 | 247 | 2 | 0.01 | 0.04 | 0.06 |
| 1L | 168 | -5414 | 144 | -299 | 0 | -27 | 141 | 2 | 0.01 | 0.04 | 0.03 |
| 1M | 168 | 2013 | 34 | 261 | 0 | 10 | 247 | 2 | 0.01 | 0.02 | 0.06 |
| 1N | 168 | 2013 | 144 | 261 | 0 | 10 | 141 | 2 | 0.01 | 0.02 | 0.03 |
| 1O | 168 | 2013 | 34 | -299 | 0 | -27 | 247 | 2 | 0.01 | 0.02 | 0.06 |
| 1P | 168 | 2013 | 144 | -299 | 0 | -27 | 141 | 2 | 0.01 | 0.02 | 0.03 |
| 2 | 168 | -1408 | -10 | 3 | 0 | -7 | 18 | 2 | 0.00 | 0.01 | 0.00 |
| 7 | 168 | -1413 | 89 | 3 | 0 | -7 | 194 | 2 | 0.00 | 0.01 | 0.05 |
| 8 | 168 | -1696 | -10 | -19 | 0 | -8 | 18 | 2 | 0.00 | 0.01 | 0.00 |
| 1A | 335 | -3235 | -609 | 104 | 0 | -175 | -208 | 2 | 0.01 | 0.03 | 0.05 |
| 1B | 335 | -3235 | -306 | 104 | 0 | -175 | -21 | 2 | 0.01 | 0.03 | 0.02 |
| 1C | 335 | -3235 | -609 | -143 | 0 | 223 | -208 | 2 | 0.01 | 0.03 | 0.05 |
| 1D | 335 | -3235 | -306 | -143 | 0 | 223 | -21 | 2 | 0.01 | 0.03 | 0.03 |
| 1E | 335 | -11 | -609 | 104 | 0 | -175 | -208 | 2 | 0.01 | 0.00 | 0.05 |
| 1F | 335 | -11 | -306 | 104 | 0 | -175 | -21 | 2 | 0.01 | 0.00 | 0.02 |
| 1G | 335 | -11 | -609 | -143 | 0 | 223 | -208 | 2 | 0.01 | 0.00 | 0.05 |
| 1H | 335 | -11 | -306 | -143 | 0 | 223 | -21 | 2 | 0.01 | 0.00 | 0.03 |
| 1I | 335 | -5336 | -513 | 261 | 0 | -426 | -154 | 2 | 0.01 | 0.04 | 0.05 |
| 1J | 335 | -5336 | -403 | 261 | 0 | -426 | -75 | 2 | 0.01 | 0.04 | 0.05 |
| 1K | 335 | -5336 | -513 | -299 | 0 | 474 | -154 | 2 | 0.01 | 0.04 | 0.05 |
| 1L | 335 | -5336 | -403 | -299 | 0 | 474 | -75 | 2 | 0.01 | 0.04 | 0.05 |
| 1M | 335 | 2090 | -513 | 261 | 0 | -426 | -154 | 2 | 0.01 | 0.02 | 0.05 |
| 1N | 335 | 2090 | -403 | 261 | 0 | -426 | -75 | 2 | 0.01 | 0.02 | 0.05 |
| 1O | 335 | 2090 | -513 | -299 | 0 | 474 | -154 | 2 | 0.01 | 0.02 | 0.05 |
| 1P | 335 | 2090 | -403 | -299 | 0 | 474 | -75 | 2 | 0.01 | 0.02 | 0.05 |
| 2 | 335 | -1331 | -10 | 3 | 0 | -12 | 1 | 2 | 0.00 | 0.01 | 0.00 |
| 7 | 335 | -1336 | -458 | 3 | 0 | -12 | -115 | 2 | 0.01 | 0.01 | 0.03 |
| 8 | 335 | -1619 | -10 | -19 | 0 | 23 | 1 | 2 | 0.00 | 0.01 | 0.00 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -3390 | 175 | 354 | 2 | 0.6232 | 0.9808 | 1.0227 | -- | -- | 0.04 | -- | 0.15 | Snell. 'yx'= 74 |
| 1B | -3390 | 175 | -828 | 2 | 0.6232 | 0.9808 | 1.0128 | -- | -- | 0.04 | -- | 0.27 | Snell. 'yx'= 74 |
| 1C | -3390 | -256 | 354 | 2 | 0.6232 | 0.9837 | 1.0227 | -- | -- | 0.04 | -- | 0.16 | Snell. 'yx'= 74 |
| 1D | -3390 | -256 | -828 | 2 | 0.6232 | 0.9837 | 1.0128 | -- | -- | 0.04 | -- | 0.27 | Snell. 'yx'= 74 |
| 1E | -166 | 175 | 354 | 2 | 0.6232 | 0.9991 | 1.0011 | -- | -- | 0.00 | -- | 0.11 | Snell. 'yx'= 74 |
| 1F | -166 | 175 | -828 | 2 | 0.6232 | 0.9991 | 1.0006 | -- | -- | 0.00 | -- | 0.22 | Snell. 'yx'= 74 |
| 1G | -166 | -256 | 354 | 2 | 0.6232 | 0.9992 | 1.0011 | -- | -- | 0.00 | -- | 0.12 | Snell. 'yx'= 74 |
| 1H | -166 | -256 | -828 | 2 | 0.6232 | 0.9992 | 1.0006 | -- | -- | 0.00 | -- | 0.23 | Snell. 'yx'= 74 |
| 1I | -5491 | 447 | -269 | 2 | 0.6232 | 0.9706 | 1.0464 | -- | -- | 0.07 | -- | 0.19 | Snell. 'yx'= 74 |
| 1J | -5491 | 447 | -559 | 2 | 0.6232 | 0.9706 | 1.0309 | -- | -- | 0.07 | -- | 0.26 | Snell. 'yx'= 74 |
| 1K | -5491 | -528 | -269 | 2 | 0.6232 | 0.9726 | 1.0464 | -- | -- | 0.07 | -- | 0.20 | Snell. 'yx'= 74 |
| 1L | -5491 | -528 | -559 | 2 | 0.6232 | 0.9726 | 1.0309 | -- | -- | 0.07 | -- | 0.27 | Snell. 'yx'= 74 |
| 2 | -1486 | -12 | 35 | 2 | 0.6232 | 1.0025 | 1.1993 | -- | -- | 0.02 | -- | 0.03 | Snell. 'yx'= 74 |
| 7 | -1490 | -12 | -413 | 2 | 0.6232 | 1.0033 | 1.0105 | -- | -- | 0.02 | -- | 0.12 | Snell. 'yx'= 74 |
| 8 | -1773 | -40 | 34 | 2 | 0.6232 | 0.9948 | 1.2420 | -- | -- | 0.02 | -- | 0.04 | Snell. 'yx'= 74 |

**ASTA NUM. 10** NI 21 NF 22 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -7047 | -124 | 396 | 0 | 443 | 343 | 2 | 0.02 | 0.06 | 0.08 | |
| 1B | 0 | -7047 | 207 | 396 | 0 | 443 | -513 | 2 | 0.02 | 0.06 | 0.13 | |
| 1C | 0 | -7047 | -124 | 162 | 0 | 86 | 343 | 2 | 0.01 | 0.06 | 0.08 | |
| 1D | 0 | -7047 | 207 | 162 | 0 | 86 | -513 | 2 | 0.01 | 0.06 | 0.12 | |
| 1E | 0 | -6789 | -124 | 396 | 0 | 443 | 343 | 2 | 0.02 | 0.06 | 0.08 | |
| 1F | 0 | -6789 | 207 | 396 | 0 | 443 | -513 | 2 | 0.02 | 0.06 | 0.13 | |
| 1G | 0 | -6789 | -124 | 162 | 0 | 86 | 343 | 2 | 0.01 | 0.06 | 0.08 | |
| 1H | 0 | -6789 | 207 | 162 | 0 | 86 | -513 | 2 | 0.01 | 0.06 | 0.12 | |
| 1I | 0 | -7112 | -20 | 569 | 0 | 737 | 68 | 2 | 0.03 | 0.06 | 0.09 | |
| 1J | 0 | -7112 | 103 | 569 | 0 | 737 | -238 | 2 | 0.03 | 0.06 | 0.09 | |
| 1K | 0 | -7112 | -20 | -11 | 0 | -208 | 68 | 2 | 0.00 | 0.06 | 0.02 | |
| 1L | 0 | -7112 | 103 | -11 | 0 | -208 | -238 | 2 | 0.00 | 0.06 | 0.06 | |
| 1M | 0 | -6724 | -20 | 569 | 0 | 737 | 68 | 2 | 0.03 | 0.06 | 0.09 | |
| 1N | 0 | -6724 | 103 | 569 | 0 | 737 | -238 | 2 | 0.03 | 0.06 | 0.09 | |
| 1O | 0 | -6724 | -20 | -11 | 0 | -208 | 68 | 2 | 0.00 | 0.06 | 0.02 | |
| 1P | 0 | -6724 | 103 | -11 | 0 | -208 | -238 | 2 | 0.00 | 0.06 | 0.06 | |
| 2 | 0 | -6904 | 5 | 302 | 0 | 302 | -10 | 2 | 0.01 | 0.06 | 0.03 | |
| 7 | 0 | -6904 | 42 | 300 | 0 | 301 | -86 | 2 | 0.01 | 0.06 | 0.03 | |
| 8 | 0 | -6919 | 5 | 280 | 0 | 265 | -9 | 2 | 0.01 | 0.06 | 0.03 | |
| 1A | 168 | -6970 | -124 | 396 | 0 | -220 | 135 | 2 | 0.02 | 0.06 | 0.03 | |
| 1B | 168 | -6970 | 207 | 396 | 0 | -220 | -166 | 2 | 0.02 | 0.06 | 0.04 | |
| 1C | 168 | -6970 | -124 | 162 | 0 | -185 | 135 | 2 | 0.01 | 0.06 | 0.03 | |
| 1D | 168 | -6970 | 207 | 162 | 0 | -185 | -166 | 2 | 0.01 | 0.06 | 0.04 | |
| 1E | 168 | -6712 | -124 | 396 | 0 | -220 | 135 | 2 | 0.02 | 0.06 | 0.03 | |
| 1F | 168 | -6712 | 207 | 396 | 0 | -220 | -166 | 2 | 0.02 | 0.06 | 0.04 | |
| 1G | 168 | -6712 | -124 | 162 | 0 | -185 | 135 | 2 | 0.01 | 0.06 | 0.03 | |
| 1H | 168 | -6712 | 207 | 162 | 0 | -185 | -166 | 2 | 0.01 | 0.06 | 0.04 | |
| 1I | 168 | -7035 | -20 | 569 | 0 | -215 | 34 | 2 | 0.03 | 0.06 | 0.02 | |
| 1J | 168 | -7035 | 103 | 569 | 0 | -215 | -65 | 2 | 0.03 | 0.06 | 0.02 | |
| 1K | 168 | -7035 | -20 | -11 | 0 | -190 | 34 | 2 | 0.00 | 0.06 | 0.02 | |
| 1L | 168 | -7035 | 103 | -11 | 0 | -190 | -65 | 2 | 0.00 | 0.06 | 0.02 | |
| 1M | 168 | -6647 | -20 | 569 | 0 | -215 | 34 | 2 | 0.03 | 0.05 | 0.02 | |
| 1N | 168 | -6647 | 103 | 569 | 0 | -215 | -65 | 2 | 0.03 | 0.05 | 0.02 | |
| 1O | 168 | -6647 | -20 | -11 | 0 | -190 | 34 | 2 | 0.00 | 0.05 | 0.02 | |
| 1P | 168 | -6647 | 103 | -11 | 0 | -190 | -65 | 2 | 0.00 | 0.05 | 0.02 | |
| 2 | 168 | -6827 | 5 | 302 | 0 | -204 | -1 | 2 | 0.01 | 0.06 | 0.02 | |
| 7 | 168 | -6826 | 42 | 300 | 0 | -202 | -16 | 2 | 0.01 | 0.06 | 0.02 | |
| 8 | 168 | -6842 | 5 | 280 | 0 | -204 | -1 | 2 | 0.01 | 0.06 | 0.02 | |
| 1A | 335 | -6893 | -124 | 396 | 0 | -883 | -73 | 2 | 0.02 | 0.06 | 0.10 | |
| 1B | 335 | -6893 | 207 | 396 | 0 | -883 | 181 | 2 | 0.02 | 0.06 | 0.10 | |
| 1C | 335 | -6893 | -124 | 162 | 0 | -457 | -73 | 2 | 0.01 | 0.06 | 0.05 | |
| 1D | 335 | -6893 | 207 | 162 | 0 | -457 | 181 | 2 | 0.01 | 0.06 | 0.05 | |
| 1E | 335 | -6635 | -124 | 396 | 0 | -883 | -73 | 2 | 0.02 | 0.05 | 0.10 | |
| 1F | 335 | -6635 | 207 | 396 | 0 | -883 | 181 | 2 | 0.02 | 0.05 | 0.10 | |
| 1G | 335 | -6635 | -124 | 162 | 0 | -457 | -73 | 2 | 0.01 | 0.05 | 0.05 | |
| 1H | 335 | -6635 | 207 | 162 | 0 | -457 | 181 | 2 | 0.01 | 0.05 | 0.05 | |
| 1I | 335 | -6958 | -20 | 569 | 0 | -1168 | -0 | 2 | 0.03 | 0.06 | 0.13 | |
| 1J | 335 | -6958 | 103 | 569 | 0 | -1168 | 108 | 2 | 0.03 | 0.06 | 0.13 | |
| 1K | 335 | -6958 | -20 | -11 | 0 | -172 | -0 | 2 | 0.00 | 0.06 | 0.02 | |
| 1L | 335 | -6958 | 103 | -11 | 0 | -172 | 108 | 2 | 0.00 | 0.06 | 0.03 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1M | 335 | -6570 | -20 | 569 | 0 | -1168 | -0 | 2 | 0.03 | 0.05 | 0.13 |
| 1N | 335 | -6570 | 103 | 569 | 0 | -1168 | 108 | 2 | 0.03 | 0.05 | 0.13 |
| 1O | 335 | -6570 | -20 | -11 | 0 | -172 | -0 | 2 | 0.00 | 0.05 | 0.02 |
| 1P | 335 | -6570 | 103 | -11 | 0 | -172 | 108 | 2 | 0.00 | 0.05 | 0.03 |
| 2 | 335 | -6750 | 5 | 302 | 0 | -709 | 7 | 2 | 0.01 | 0.06 | 0.08 |
| 7 | 335 | -6749 | 42 | 300 | 0 | -705 | 54 | 2 | 0.01 | 0.06 | 0.08 |
| 8 | 335 | -6764 | 5 | 280 | 0 | -674 | 7 | 2 | 0.01 | 0.06 | 0.08 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | -- | -- | | | | | | | | | | |
| | kg | kg*m | | | | | | | | | | | |
| 1A | -7047 | -883 | 343 | 2 | 0.6232 | 0.9833 | 0.9615 | -- | -- | 0.09 | -- | 0.27 Snell. 'yx'= | 74 |
| 1B | -7047 | -883 | -513 | 2 | 0.6232 | 0.9833 | 0.9465 | -- | -- | 0.09 | -- | 0.31 Snell. 'yx'= | 74 |
| 1C | -7047 | -457 | 343 | 2 | 0.6232 | 0.9978 | 0.9615 | -- | -- | 0.09 | -- | 0.22 Snell. 'yx'= | 74 |
| 1D | -7047 | -457 | -513 | 2 | 0.6232 | 0.9978 | 0.9465 | -- | -- | 0.09 | -- | 0.26 Snell. 'yx'= | 74 |
| 1E | -6789 | -883 | 343 | 2 | 0.6232 | 0.9839 | 0.9629 | -- | -- | 0.09 | -- | 0.27 Snell. 'yx'= | 74 |
| 1F | -6789 | -883 | -513 | 2 | 0.6232 | 0.9839 | 0.9484 | -- | -- | 0.09 | -- | 0.31 Snell. 'yx'= | 74 |
| 1G | -6789 | -457 | 343 | 2 | 0.6232 | 0.9979 | 0.9629 | -- | -- | 0.09 | -- | 0.22 Snell. 'yx'= | 74 |
| 1H | -6789 | -457 | -513 | 2 | 0.6232 | 0.9979 | 0.9484 | -- | -- | 0.09 | -- | 0.26 Snell. 'yx'= | 74 |
| 1I | -7112 | -1168 | 68 | 2 | 0.6232 | 0.9770 | 0.9839 | -- | -- | 0.09 | -- | 0.24 Snell. 'yx'= | 74 |
| 1J | -7112 | -1168 | -238 | 2 | 0.6232 | 0.9770 | 0.9350 | -- | -- | 0.09 | -- | 0.28 Snell. 'yx'= | 74 |
| 1K | -7112 | -208 | 68 | 2 | 0.6232 | 1.0454 | 0.9839 | -- | -- | 0.09 | -- | 0.14 Snell. 'yx'= | 74 |
| 1L | -7112 | -208 | -238 | 2 | 0.6232 | 1.0454 | 0.9350 | -- | -- | 0.09 | -- | 0.17 Snell. 'yx'= | 74 |
| 1M | -6724 | -1168 | 68 | 2 | 0.6232 | 0.9783 | 0.9848 | -- | -- | 0.09 | -- | 0.24 Snell. 'yx'= | 74 |
| 1N | -6724 | -1168 | -238 | 2 | 0.6232 | 0.9783 | 0.9386 | -- | -- | 0.09 | -- | 0.27 Snell. 'yx'= | 74 |
| 1O | -6724 | -208 | 68 | 2 | 0.6232 | 1.0429 | 0.9848 | -- | -- | 0.09 | -- | 0.13 Snell. 'yx'= | 74 |
| 1P | -6724 | -208 | -238 | 2 | 0.6232 | 1.0429 | 0.9386 | -- | -- | 0.09 | -- | 0.17 Snell. 'yx'= | 74 |
| 2 | -6904 | -709 | -10 | 2 | 0.6232 | 0.9871 | 0.9215 | -- | -- | 0.09 | -- | 0.17 Snell. 'yx'= | 74 |
| 7 | -6904 | -705 | -86 | 2 | 0.6232 | 0.9870 | 0.9215 | -- | -- | 0.09 | -- | 0.19 Snell. 'yx'= | 74 |
| 8 | -6919 | -674 | -9 | 2 | 0.6232 | 0.9885 | 0.9213 | -- | -- | 0.09 | -- | 0.17 Snell. 'yx'= | 74 |

**ASTA NUM. 11** NI 7 NF 10 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

categoria: p.p. y Vento qy tot.
qy medio: 0.0000 1.0888 1.0888 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | -- | -- | -- | -- | -- | -- | ------ | -- | -- | -- | |
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -3669 | 200 | 98 | 0 | 160 | 115 | 2 | 0.00 | 0.03 | 0.03 | |
| 1B | 0 | -3669 | 490 | 98 | 0 | 160 | -674 | 2 | 0.01 | 0.03 | 0.16 | |
| 1C | 0 | -3669 | 200 | -169 | 0 | -302 | 115 | 2 | 0.01 | 0.03 | 0.03 | |
| 1D | 0 | -3669 | 490 | -169 | 0 | -302 | -674 | 2 | 0.01 | 0.03 | 0.16 | |
| 1E | 0 | -473 | 200 | 98 | 0 | 160 | 115 | 2 | 0.00 | 0.00 | 0.03 | |
| 1F | 0 | -473 | 490 | 98 | 0 | 160 | -674 | 2 | 0.01 | 0.00 | 0.16 | |
| 1G | 0 | -473 | 200 | -169 | 0 | -302 | 115 | 2 | 0.01 | 0.00 | 0.03 | |
| 1H | 0 | -473 | 490 | -169 | 0 | -302 | -674 | 2 | 0.01 | 0.00 | 0.16 | |
| 1I | 0 | -5606 | 292 | 237 | 0 | 403 | -140 | 2 | 0.01 | 0.05 | 0.05 | |
| 1J | 0 | -5606 | 398 | 237 | 0 | 403 | -419 | 2 | 0.01 | 0.05 | 0.10 | |
| 1K | 0 | -5606 | 292 | -309 | 0 | -545 | -140 | 2 | 0.01 | 0.05 | 0.06 | |
| 1L | 0 | -5606 | 398 | -309 | 0 | -545 | -419 | 2 | 0.01 | 0.05 | 0.10 | |
| 1M | 0 | 1464 | 292 | 237 | 0 | 403 | -140 | 2 | 0.01 | 0.01 | 0.05 | |
| 1N | 0 | 1464 | 398 | 237 | 0 | 403 | -419 | 2 | 0.01 | 0.01 | 0.10 | |
| 1O | 0 | 1464 | 292 | -309 | 0 | -545 | -140 | 2 | 0.01 | 0.01 | 0.06 | |
| 1P | 0 | 1464 | 398 | -309 | 0 | -545 | -419 | 2 | 0.01 | 0.01 | 0.10 | |
| 2 | 0 | -1817 | 11 | -17 | 0 | -38 | -28 | 2 | 0.00 | 0.02 | 0.01 | |
| 7 | 0 | -1802 | 345 | -14 | 0 | -34 | -280 | 2 | 0.01 | 0.01 | 0.07 | |
| 8 | 0 | -2086 | 10 | -38 | 0 | -75 | -27 | 2 | 0.00 | 0.02 | 0.01 | |
| 1A | 168 | -3591 | -74 | 98 | 0 | -3 | 220 | 2 | 0.00 | 0.03 | 0.05 | |
| 1B | 168 | -3591 | 217 | 98 | 0 | -3 | -82 | 2 | 0.00 | 0.03 | 0.02 | |
| 1C | 168 | -3591 | -74 | -169 | 0 | -20 | 220 | 2 | 0.01 | 0.03 | 0.05 | |
| 1D | 168 | -3591 | 217 | -169 | 0 | -20 | -82 | 2 | 0.01 | 0.03 | 0.02 | |
| 1E | 168 | -396 | -74 | 98 | 0 | -3 | 220 | 2 | 0.00 | 0.00 | 0.05 | |
| 1F | 168 | -396 | 217 | 98 | 0 | -3 | -82 | 2 | 0.00 | 0.00 | 0.02 | |
| 1G | 168 | -396 | -74 | -169 | 0 | -20 | 220 | 2 | 0.01 | 0.00 | 0.05 | |
| 1H | 168 | -396 | 217 | -169 | 0 | -20 | -82 | 2 | 0.01 | 0.00 | 0.02 | |
| 1I | 168 | -5529 | 18 | 237 | 0 | 6 | 119 | 2 | 0.01 | 0.05 | 0.03 | |
| 1J | 168 | -5529 | 124 | 237 | 0 | 6 | 19 | 2 | 0.01 | 0.05 | 0.00 | |
| 1K | 168 | -5529 | 18 | -309 | 0 | -28 | 119 | 2 | 0.01 | 0.05 | 0.03 | |
| 1L | 168 | -5529 | 124 | -309 | 0 | -28 | 19 | 2 | 0.01 | 0.05 | 0.00 | |
| 1M | 168 | 1542 | 18 | 237 | 0 | 6 | 119 | 2 | 0.01 | 0.01 | 0.03 | |
| 1N | 168 | 1542 | 124 | 237 | 0 | 6 | 19 | 2 | 0.01 | 0.01 | 0.00 | |
| 1O | 168 | 1542 | 18 | -309 | 0 | -28 | 119 | 2 | 0.01 | 0.01 | 0.03 | |
| 1P | 168 | 1542 | 124 | -309 | 0 | -28 | 19 | 2 | 0.01 | 0.01 | 0.00 | |
| 2 | 168 | -1740 | 11 | -17 | 0 | -10 | -10 | 2 | 0.00 | 0.01 | 0.00 | |
| 7 | 168 | -1724 | 72 | -14 | 0 | -10 | 69 | 2 | 0.00 | 0.01 | 0.02 | |
| 8 | 168 | -2008 | 10 | -38 | 0 | -12 | -9 | 2 | 0.00 | 0.02 | 0.00 | |
| 1A | 335 | -3514 | -348 | 98 | 0 | -167 | -133 | 2 | 0.01 | 0.03 | 0.03 | |
| 1B | 335 | -3514 | -57 | 98 | 0 | -167 | 52 | 2 | 0.00 | 0.03 | 0.02 | |
| 1C | 335 | -3514 | -348 | -169 | 0 | 263 | -133 | 2 | 0.01 | 0.03 | 0.03 | |
| 1D | 335 | -3514 | -57 | -169 | 0 | 263 | 52 | 2 | 0.01 | 0.03 | 0.03 | |
| 1E | 335 | -318 | -348 | 98 | 0 | -167 | -133 | 2 | 0.01 | 0.00 | 0.03 | |
| 1F | 335 | -318 | -57 | 98 | 0 | -167 | 52 | 2 | 0.00 | 0.00 | 0.02 | |
| 1G | 335 | -318 | -348 | -169 | 0 | 263 | -133 | 2 | 0.01 | 0.00 | 0.03 | |
| 1H | 335 | -318 | -57 | -169 | 0 | 263 | 52 | 2 | 0.01 | 0.00 | 0.03 | |
| 1I | 335 | -5451 | -255 | 237 | 0 | -392 | -79 | 2 | 0.01 | 0.05 | 0.05 | |
| 1J | 335 | -5451 | -149 | 237 | 0 | -392 | -2 | 2 | 0.01 | 0.05 | 0.05 | |
| 1K | 335 | -5451 | -255 | -309 | 0 | 488 | -79 | 2 | 0.01 | 0.05 | 0.06 | |
| 1L | 335 | -5451 | -149 | -309 | 0 | 488 | -2 | 2 | 0.01 | 0.05 | 0.06 | |
| 1M | 335 | 1619 | -255 | 237 | 0 | -392 | -79 | 2 | 0.01 | 0.01 | 0.05 | |
| 1N | 335 | 1619 | -149 | 237 | 0 | -392 | -2 | 2 | 0.01 | 0.01 | 0.05 | |
| 1O | 335 | 1619 | -255 | -309 | 0 | 488 | -79 | 2 | 0.01 | 0.01 | 0.06 | |
| 1P | 335 | 1619 | -149 | -309 | 0 | 488 | -2 | 2 | 0.01 | 0.01 | 0.06 | |
| 2 | 335 | -1663 | 11 | -17 | 0 | 17 | 8 | 2 | 0.00 | 0.01 | 0.00 | |
| 7 | 335 | -1647 | -202 | -14 | 0 | 14 | -40 | 2 | 0.00 | 0.01 | 0.01 | |
| 8 | 335 | -1931 | 10 | -38 | 0 | 52 | 8 | 2 | 0.00 | 0.02 | 0.01 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | -- | -- | | | | | | | | | | |
| | kg | kg*m | | | | | | | | | | | |
| 1A | -3669 | -167 | 220 | 2 | 0.6232 | 0.9802 | 1.0009 | -- | -- | 0.05 | -- | 0.12 Snell. 'yx'= | 74 |



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| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1B | -3669 | -167 | -674 | 2 | 0.6232 | 0.9802 | 1.0015 | -- | -- | 0.05 | -- | 0.23 | Snell. | 'yx'= 74 |
| 1C | -3669 | -302 | 220 | 2 | 0.6232 | 0.9823 | 1.0009 | -- | -- | 0.05 | -- | 0.14 | Snell. | 'yx'= 74 |
| 1D | -3669 | -302 | -674 | 2 | 0.6232 | 0.9823 | 1.0015 | -- | -- | 0.05 | -- | 0.24 | Snell. | 'yx'= 74 |
| 1E | -473 | -167 | 220 | 2 | 0.6232 | 0.9974 | 1.0001 | -- | -- | 0.01 | -- | 0.08 | Snell. | 'yx'= 74 |
| 1F | -473 | -167 | -674 | 2 | 0.6232 | 0.9974 | 1.0002 | -- | -- | 0.01 | -- | 0.19 | Snell. | 'yx'= 74 |
| 1G | -473 | -302 | 220 | 2 | 0.6232 | 0.9977 | 1.0001 | -- | -- | 0.01 | -- | 0.09 | Snell. | 'yx'= 74 |
| 1H | -473 | -302 | -674 | 2 | 0.6232 | 0.9977 | 1.0002 | -- | -- | 0.01 | -- | 0.20 | Snell. | 'yx'= 74 |
| 1I | -5606 | 403 | -140 | 2 | 0.6232 | 0.9693 | 1.0472 | -- | -- | 0.07 | -- | 0.15 | Snell. | 'yx'= 74 |
| 1J | -5606 | 403 | -419 | 2 | 0.6232 | 0.9693 | 1.0197 | -- | -- | 0.07 | -- | 0.22 | Snell. | 'yx'= 74 |
| 1K | -5606 | -545 | -140 | 2 | 0.6232 | 0.9721 | 1.0472 | -- | -- | 0.07 | -- | 0.17 | Snell. | 'yx'= 74 |
| 1L | -5606 | -545 | -419 | 2 | 0.6232 | 0.9721 | 1.0197 | -- | -- | 0.07 | -- | 0.24 | Snell. | 'yx'= 74 |
| 2 | -1817 | -38 | -28 | 2 | 0.6232 | 0.9962 | 1.1679 | -- | -- | 0.02 | -- | 0.04 | Snell. | 'yx'= 74 |
| 7 | -1802 | -34 | -280 | 2 | 0.6232 | 0.9969 | 1.0103 | -- | -- | 0.02 | -- | 0.10 | Snell. | 'yx'= 74 |
| 8 | -2086 | -75 | -27 | 2 | 0.6232 | 0.9924 | 1.1989 | -- | -- | 0.03 | -- | 0.04 | Snell. | 'yx'= 74 |

**ASTA NUM. 12** NI 40 NF 37 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

categoria: p.p. y Vento qy tot.
qy medio: 0.0000 1.1862 1.1862 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -2861 | 163 | 287 | 0 | 469 | 184 | 2 | 0.01 | 0.02 | 0.05 | |
| 1B | 0 | -2861 | 584 | 287 | 0 | 469 | -720 | 2 | 0.01 | 0.02 | 0.18 | |
| 1C | 0 | -2861 | 163 | -312 | 0 | -532 | 184 | 2 | 0.01 | 0.02 | 0.06 | |
| 1D | 0 | -2861 | 584 | -312 | 0 | -532 | -720 | 2 | 0.01 | 0.02 | 0.18 | |
| 1E | 0 | -2193 | 163 | 287 | 0 | 469 | 184 | 2 | 0.01 | 0.02 | 0.05 | |
| 1F | 0 | -2193 | 584 | 287 | 0 | 469 | -720 | 2 | 0.01 | 0.02 | 0.18 | |
| 1G | 0 | -2193 | 163 | -312 | 0 | -532 | 184 | 2 | 0.01 | 0.02 | 0.06 | |
| 1H | 0 | -2193 | 584 | -312 | 0 | -532 | -720 | 2 | 0.01 | 0.02 | 0.18 | |
| 1I | 0 | -2728 | 275 | 416 | 0 | 698 | -75 | 2 | 0.02 | 0.02 | 0.08 | |
| 1J | 0 | -2728 | 472 | 416 | 0 | 698 | -461 | 2 | 0.02 | 0.02 | 0.12 | |
| 1K | 0 | -2728 | 275 | -440 | 0 | -761 | -75 | 2 | 0.02 | 0.02 | 0.09 | |
| 1L | 0 | -2728 | 472 | -440 | 0 | -761 | -461 | 2 | 0.02 | 0.02 | 0.12 | |
| 1M | 0 | -2326 | 275 | 416 | 0 | 698 | -75 | 2 | 0.02 | 0.02 | 0.08 | |
| 1N | 0 | -2326 | 472 | 416 | 0 | 698 | -461 | 2 | 0.02 | 0.02 | 0.12 | |
| 1O | 0 | -2326 | 275 | -440 | 0 | -761 | -75 | 2 | 0.02 | 0.02 | 0.09 | |
| 1P | 0 | -2326 | 472 | -440 | 0 | -761 | -461 | 2 | 0.02 | 0.02 | 0.12 | |
| 2 | 0 | -2475 | -5 | -1 | 0 | -10 | 16 | 2 | 0.00 | 0.02 | 0.00 | |
| 7 | 0 | -2508 | 374 | 16 | 0 | 18 | -269 | 2 | 0.01 | 0.02 | 0.06 | |
| 8 | 0 | -2494 | -5 | -29 | 0 | -60 | 17 | 2 | 0.00 | 0.02 | 0.01 | |
| 1A | 168 | -2784 | -135 | 287 | 0 | -12 | 207 | 2 | 0.01 | 0.02 | 0.05 | |
| 1B | 168 | -2784 | 286 | 287 | 0 | -12 | 8 | 2 | 0.01 | 0.02 | 0.00 | |
| 1C | 168 | -2784 | -135 | -312 | 0 | -10 | 207 | 2 | 0.01 | 0.02 | 0.05 | |
| 1D | 168 | -2784 | 286 | -312 | 0 | -10 | 8 | 2 | 0.01 | 0.02 | 0.00 | |
| 1E | 168 | -2115 | -135 | 287 | 0 | -12 | 207 | 2 | 0.01 | 0.02 | 0.05 | |
| 1F | 168 | -2115 | 286 | 287 | 0 | -12 | 8 | 2 | 0.01 | 0.02 | 0.00 | |
| 1G | 168 | -2115 | -135 | -312 | 0 | -10 | 207 | 2 | 0.01 | 0.02 | 0.05 | |
| 1H | 168 | -2115 | 286 | -312 | 0 | -10 | 8 | 2 | 0.01 | 0.02 | 0.00 | |
| 1I | 168 | -2651 | -24 | 416 | 0 | 2 | 134 | 2 | 0.02 | 0.02 | 0.03 | |
| 1J | 168 | -2651 | 174 | 416 | 0 | 2 | 81 | 2 | 0.02 | 0.02 | 0.02 | |
| 1K | 168 | -2651 | -24 | -440 | 0 | -24 | 134 | 2 | 0.02 | 0.02 | 0.03 | |
| 1L | 168 | -2651 | 174 | -440 | 0 | -24 | 81 | 2 | 0.02 | 0.02 | 0.02 | |
| 1M | 168 | -2248 | -24 | 416 | 0 | 2 | 134 | 2 | 0.02 | 0.02 | 0.03 | |
| 1N | 168 | -2248 | 174 | 416 | 0 | 2 | 81 | 2 | 0.02 | 0.02 | 0.02 | |
| 1O | 168 | -2248 | -24 | -440 | 0 | -24 | 134 | 2 | 0.02 | 0.02 | 0.03 | |
| 1P | 168 | -2248 | 174 | -440 | 0 | -24 | 81 | 2 | 0.02 | 0.02 | 0.02 | |
| 2 | 168 | -2398 | -5 | -1 | 0 | -8 | 8 | 2 | 0.00 | 0.02 | 0.00 | |
| 7 | 168 | -2430 | 76 | 16 | 0 | -9 | 107 | 2 | 0.00 | 0.02 | 0.03 | |
| 8 | 168 | -2416 | -5 | -29 | 0 | -10 | 8 | 2 | 0.00 | 0.02 | 0.00 | |
| 1A | 335 | -2706 | -433 | 287 | 0 | -493 | -269 | 2 | 0.01 | 0.02 | 0.07 | |
| 1B | 335 | -2706 | -13 | 287 | 0 | -493 | 237 | 2 | 0.01 | 0.02 | 0.06 | |
| 1C | 335 | -2706 | -433 | -312 | 0 | 512 | -269 | 2 | 0.01 | 0.02 | 0.07 | |
| 1D | 335 | -2706 | -13 | -312 | 0 | 512 | 237 | 2 | 0.01 | 0.02 | 0.06 | |
| 1E | 335 | -2038 | -433 | 287 | 0 | -493 | -269 | 2 | 0.01 | 0.02 | 0.07 | |
| 1F | 335 | -2038 | -13 | 287 | 0 | -493 | 237 | 2 | 0.01 | 0.02 | 0.06 | |
| 1G | 335 | -2038 | -433 | -312 | 0 | 512 | -269 | 2 | 0.01 | 0.02 | 0.07 | |
| 1H | 335 | -2038 | -13 | -312 | 0 | 512 | 237 | 2 | 0.01 | 0.02 | 0.06 | |
| 1I | 335 | -2573 | -322 | 416 | 0 | -694 | -155 | 2 | 0.02 | 0.02 | 0.08 | |
| 1J | 335 | -2573 | -124 | 416 | 0 | -694 | 123 | 2 | 0.02 | 0.02 | 0.08 | |
| 1K | 335 | -2573 | -322 | -440 | 0 | 713 | -155 | 2 | 0.02 | 0.02 | 0.08 | |
| 1L | 335 | -2573 | -124 | -440 | 0 | 713 | 123 | 2 | 0.02 | 0.02 | 0.08 | |
| 1M | 335 | -2171 | -322 | 416 | 0 | -694 | -155 | 2 | 0.02 | 0.02 | 0.08 | |
| 1N | 335 | -2171 | -124 | 416 | 0 | -694 | 123 | 2 | 0.02 | 0.02 | 0.08 | |
| 1O | 335 | -2171 | -322 | -440 | 0 | 713 | -155 | 2 | 0.02 | 0.02 | 0.08 | |
| 1P | 335 | -2171 | -124 | -440 | 0 | 713 | 123 | 2 | 0.02 | 0.02 | 0.08 | |
| 2 | 335 | -2320 | -5 | -1 | 0 | -6 | -1 | 2 | 0.00 | 0.02 | 0.00 | |
| 7 | 335 | -2353 | -222 | 16 | 0 | -36 | -16 | 2 | 0.00 | 0.02 | 0.00 | |
| 8 | 335 | -2339 | -5 | -29 | 0 | 39 | -1 | 2 | 0.00 | 0.02 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -2861 | -493 | -269 | 2 | 0.6232 | 0.9847 | 0.9959 | -- | -- | 0.04 | -- | 0.16 | Snell. 'yx'= 74 |
| 1B | -2861 | -493 | -720 | 2 | 0.6232 | 0.9847 | 0.9912 | -- | -- | 0.04 | -- | 0.26 | Snell. 'yx'= 74 |
| 1C | -2861 | -532 | -269 | 2 | 0.6232 | 0.9845 | 0.9959 | -- | -- | 0.04 | -- | 0.16 | Snell. 'yx'= 74 |
| 1D | -2861 | -532 | -720 | 2 | 0.6232 | 0.9845 | 0.9912 | -- | -- | 0.04 | -- | 0.27 | Snell. 'yx'= 74 |
| 1E | -2193 | -493 | -269 | 2 | 0.6232 | 0.9883 | 0.9968 | -- | -- | 0.03 | -- | 0.15 | Snell. 'yx'= 74 |
| 1F | -2193 | -493 | -720 | 2 | 0.6232 | 0.9883 | 0.9932 | -- | -- | 0.03 | -- | 0.26 | Snell. 'yx'= 74 |
| 1G | -2193 | -532 | -269 | 2 | 0.6232 | 0.9881 | 0.9968 | -- | -- | 0.03 | -- | 0.15 | Snell. 'yx'= 74 |
| 1H | -2193 | -532 | -720 | 2 | 0.6232 | 0.9881 | 0.9932 | -- | -- | 0.03 | -- | 0.26 | Snell. 'yx'= 74 |
| 1I | -2728 | 698 | -155 | 2 | 0.6232 | 0.9846 | 1.0224 | -- | -- | 0.04 | -- | 0.15 | Snell. 'yx'= 74 |
| 1J | -2728 | 698 | -461 | 2 | 0.6232 | 0.9846 | 1.0003 | -- | -- | 0.04 | -- | 0.23 | Snell. 'yx'= 74 |
| 1K | -2728 | -761 | -155 | 2 | 0.6232 | 0.9857 | 1.0224 | -- | -- | 0.04 | -- | 0.16 | Snell. 'yx'= 74 |
| 1L | -2728 | -761 | -461 | 2 | 0.6232 | 0.9857 | 1.0003 | -- | -- | 0.04 | -- | 0.23 | Snell. 'yx'= 74 |
| 1M | -2326 | 698 | -155 | 2 | 0.6232 | 0.9869 | 1.0191 | -- | -- | 0.03 | -- | 0.15 | Snell. 'yx'= 74 |
| 1N | -2326 | 698 | -461 | 2 | 0.6232 | 0.9869 | 1.0003 | -- | -- | 0.03 | -- | 0.22 | Snell. 'yx'= 74 |
| 1O | -2326 | -761 | -155 | 2 | 0.6232 | 0.9878 | 1.0191 | -- | -- | 0.03 | -- | 0.16 | Snell. 'yx'= 74 |
| 1P | -2326 | -761 | -461 | 2 | 0.6232 | 0.9878 | 1.0003 | -- | -- | 0.03 | -- | 0.23 | Snell. 'yx'= 74 |
| 2 | -2475 | -10 | 16 | 2 | 0.6232 | 1.0121 | 1.4131 | -- | -- | 0.03 | -- | 0.04 | Snell. 'yx'= 74 |
| 7 | -2508 | -36 | -269 | 2 | 0.6232 | 0.9942 | 1.0134 | -- | -- | 0.03 | -- | 0.10 | Snell. 'yx'= 74 |
| 8 | -2494 | -60 | 17 | 2 | 0.6232 | 0.9916 | 1.3999 | -- | -- | 0.03 | -- | 0.05 | Snell. 'yx'= 74 |

**ASTA NUM. 13** NI 39 NF 38 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

categoria: p.p. y Vento qy tot.



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

qy medio: 0.0000 2.3725 2.3725 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -2102 | 509 | 157 | 0 | 260 | 2 | 2 | 0.01 | 0.02 | 0.03 | |
| 1B | 0 | -2102 | 906 | 157 | 0 | 260 | -968 | 2 | 0.02 | 0.02 | 0.23 | |
| 1C | 0 | -2102 | 509 | -201 | 0 | -351 | 2 | 2 | 0.01 | 0.02 | 0.04 | |
| 1D | 0 | -2102 | 906 | -201 | 0 | -351 | -968 | 2 | 0.02 | 0.02 | 0.23 | |
| 1E | 0 | -1980 | 509 | 157 | 0 | 260 | 2 | 2 | 0.01 | 0.02 | 0.03 | |
| 1F | 0 | -1980 | 906 | 157 | 0 | 260 | -968 | 2 | 0.02 | 0.02 | 0.23 | |
| 1G | 0 | -1980 | 509 | -201 | 0 | -351 | 2 | 2 | 0.01 | 0.02 | 0.04 | |
| 1H | 0 | -1980 | 906 | -201 | 0 | -351 | -968 | 2 | 0.02 | 0.02 | 0.23 | |
| 1I | 0 | -2152 | 618 | 362 | 0 | 612 | -283 | 2 | 0.02 | 0.02 | 0.07 | |
| 1J | 0 | -2152 | 796 | 362 | 0 | 612 | -683 | 2 | 0.02 | 0.02 | 0.17 | |
| 1K | 0 | -2152 | 618 | -406 | 0 | -704 | -283 | 2 | 0.02 | 0.02 | 0.08 | |
| 1L | 0 | -2152 | 796 | -406 | 0 | -704 | -683 | 2 | 0.02 | 0.02 | 0.17 | |
| 1M | 0 | -1930 | 618 | 362 | 0 | 612 | -283 | 2 | 0.02 | 0.02 | 0.07 | |
| 1N | 0 | -1930 | 796 | 362 | 0 | 612 | -683 | 2 | 0.02 | 0.02 | 0.17 | |
| 1O | 0 | -1930 | 618 | -406 | 0 | -704 | -283 | 2 | 0.02 | 0.02 | 0.08 | |
| 1P | 0 | -1930 | 796 | -406 | 0 | -704 | -683 | 2 | 0.02 | 0.02 | 0.17 | |
| 2 | 0 | -2027 | -3 | 8 | 0 | 7 | 11 | 2 | 0.00 | 0.02 | 0.00 | |
| 7 | 0 | -2024 | 707 | 6 | 0 | 4 | -482 | 2 | 0.01 | 0.02 | 0.12 | |
| 8 | 0 | -2044 | -3 | -20 | 0 | -42 | 10 | 2 | 0.00 | 0.02 | 0.00 | |
| 1A | 168 | -2025 | -87 | 157 | 0 | -3 | 355 | 2 | 0.01 | 0.02 | 0.09 | |
| 1B | 168 | -2025 | 310 | 157 | 0 | -3 | 50 | 2 | 0.01 | 0.02 | 0.01 | |
| 1C | 168 | -2025 | -87 | -201 | 0 | -15 | 355 | 2 | 0.01 | 0.02 | 0.09 | |
| 1D | 168 | -2025 | 310 | -201 | 0 | -15 | 50 | 2 | 0.01 | 0.02 | 0.01 | |
| 1E | 168 | -1902 | -87 | 157 | 0 | -3 | 355 | 2 | 0.01 | 0.02 | 0.09 | |
| 1F | 168 | -1902 | 310 | 157 | 0 | -3 | 50 | 2 | 0.01 | 0.02 | 0.01 | |
| 1G | 168 | -1902 | -87 | -201 | 0 | -15 | 355 | 2 | 0.01 | 0.02 | 0.09 | |
| 1H | 168 | -1902 | 310 | -201 | 0 | -15 | 50 | 2 | 0.01 | 0.02 | 0.01 | |
| 1I | 168 | -2075 | 22 | 362 | 0 | 6 | 254 | 2 | 0.02 | 0.02 | 0.06 | |
| 1J | 168 | -2075 | 200 | 362 | 0 | 6 | 152 | 2 | 0.02 | 0.02 | 0.04 | |
| 1K | 168 | -2075 | 22 | -406 | 0 | -24 | 254 | 2 | 0.02 | 0.02 | 0.06 | |
| 1L | 168 | -2075 | 200 | -406 | 0 | -24 | 152 | 2 | 0.02 | 0.02 | 0.04 | |
| 1M | 168 | -1852 | 22 | 362 | 0 | 6 | 254 | 2 | 0.02 | 0.02 | 0.06 | |
| 1N | 168 | -1852 | 200 | 362 | 0 | 6 | 152 | 2 | 0.02 | 0.02 | 0.04 | |
| 1O | 168 | -1852 | 22 | -406 | 0 | -24 | 254 | 2 | 0.02 | 0.02 | 0.06 | |
| 1P | 168 | -1852 | 200 | -406 | 0 | -24 | 152 | 2 | 0.02 | 0.02 | 0.04 | |
| 2 | 168 | -1950 | -3 | 8 | 0 | -7 | 6 | 2 | 0.00 | 0.02 | 0.00 | |
| 7 | 168 | -1946 | 111 | 6 | 0 | -7 | 203 | 2 | 0.00 | 0.02 | 0.05 | |
| 8 | 168 | -1966 | -3 | -20 | 0 | -9 | 5 | 2 | 0.00 | 0.02 | 0.00 | |
| 1A | 335 | -1947 | -683 | 157 | 0 | -265 | -290 | 2 | 0.01 | 0.02 | 0.07 | |
| 1B | 335 | -1947 | -286 | 157 | 0 | -265 | 70 | 2 | 0.01 | 0.02 | 0.03 | |
| 1C | 335 | -1947 | -683 | -201 | 0 | 321 | -290 | 2 | 0.01 | 0.02 | 0.07 | |
| 1D | 335 | -1947 | -286 | -201 | 0 | 321 | 70 | 2 | 0.01 | 0.02 | 0.04 | |
| 1E | 335 | -1825 | -683 | 157 | 0 | -265 | -290 | 2 | 0.01 | 0.02 | 0.07 | |
| 1F | 335 | -1825 | -286 | 157 | 0 | -265 | 70 | 2 | 0.01 | 0.02 | 0.03 | |
| 1G | 335 | -1825 | -683 | -201 | 0 | 321 | -290 | 2 | 0.01 | 0.02 | 0.07 | |
| 1H | 335 | -1825 | -286 | -201 | 0 | 321 | 70 | 2 | 0.01 | 0.02 | 0.04 | |
| 1I | 335 | -1997 | -574 | 362 | 0 | -600 | -208 | 2 | 0.02 | 0.02 | 0.07 | |
| 1J | 335 | -1997 | -396 | 362 | 0 | -600 | -13 | 2 | 0.02 | 0.02 | 0.07 | |
| 1K | 335 | -1997 | -574 | -406 | 0 | 655 | -208 | 2 | 0.02 | 0.02 | 0.08 | |
| 1L | 335 | -1997 | -396 | -406 | 0 | 655 | -13 | 2 | 0.02 | 0.02 | 0.08 | |
| 1M | 335 | -1775 | -574 | 362 | 0 | -600 | -208 | 2 | 0.02 | 0.01 | 0.07 | |
| 1N | 335 | -1775 | -396 | 362 | 0 | -600 | -13 | 2 | 0.02 | 0.01 | 0.07 | |
| 1O | 335 | -1775 | -574 | -406 | 0 | 655 | -208 | 2 | 0.02 | 0.01 | 0.08 | |
| 1P | 335 | -1775 | -396 | -406 | 0 | 655 | -13 | 2 | 0.02 | 0.01 | 0.08 | |
| 2 | 335 | -1872 | -3 | 8 | 0 | -21 | 0 | 2 | 0.00 | 0.02 | 0.00 | |
| 7 | 335 | -1869 | -485 | 6 | 0 | -18 | -110 | 2 | 0.01 | 0.02 | 0.03 | |
| 8 | 335 | -1889 | -3 | -20 | 0 | 24 | 0 | 2 | 0.00 | 0.02 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -2102 | -265 | 355 | 2 | 0.6232 | 0.9884 | 1.0130 | -- | -- | 0.03 | -- | 0.14 | Snell. 'yx'= 74 |
| 1B | -2102 | -265 | -968 | 2 | 0.6232 | 0.9884 | 1.0052 | -- | -- | 0.03 | -- | 0.29 | Snell. 'yx'= 74 |
| 1C | -2102 | -351 | 355 | 2 | 0.6232 | 0.9893 | 1.0130 | -- | -- | 0.03 | -- | 0.15 | Snell. 'yx'= 74 |
| 1D | -2102 | -351 | -968 | 2 | 0.6232 | 0.9893 | 1.0052 | -- | -- | 0.03 | -- | 0.30 | Snell. 'yx'= 74 |
| 1E | -1980 | -265 | 355 | 2 | 0.6232 | 0.9891 | 1.0123 | -- | -- | 0.03 | -- | 0.14 | Snell. 'yx'= 74 |
| 1F | -1980 | -265 | -968 | 2 | 0.6232 | 0.9891 | 1.0049 | -- | -- | 0.03 | -- | 0.29 | Snell. 'yx'= 74 |
| 1G | -1980 | -351 | 355 | 2 | 0.6232 | 0.9899 | 1.0123 | -- | -- | 0.03 | -- | 0.15 | Snell. 'yx'= 74 |
| 1H | -1980 | -351 | -968 | 2 | 0.6232 | 0.9899 | 1.0049 | -- | -- | 0.03 | -- | 0.30 | Snell. 'yx'= 74 |
| 1I | -2152 | 612 | -283 | 2 | 0.6232 | 0.9881 | 1.0187 | -- | -- | 0.03 | -- | 0.17 | Snell. 'yx'= 74 |
| 1J | -2152 | 612 | -683 | 2 | 0.6232 | 0.9881 | 1.0095 | -- | -- | 0.03 | -- | 0.26 | Snell. 'yx'= 74 |
| 1K | -2152 | -704 | -283 | 2 | 0.6232 | 0.9888 | 1.0187 | -- | -- | 0.03 | -- | 0.18 | Snell. 'yx'= 74 |
| 1L | -2152 | -704 | -683 | 2 | 0.6232 | 0.9888 | 1.0095 | -- | -- | 0.03 | -- | 0.27 | Snell. 'yx'= 74 |
| 1M | -1930 | 612 | -283 | 2 | 0.6232 | 0.9893 | 1.0168 | -- | -- | 0.03 | -- | 0.16 | Snell. 'yx'= 74 |
| 1N | -1930 | 612 | -683 | 2 | 0.6232 | 0.9893 | 1.0085 | -- | -- | 0.03 | -- | 0.26 | Snell. 'yx'= 74 |
| 1O | -1930 | -704 | -283 | 2 | 0.6232 | 0.9899 | 1.0168 | -- | -- | 0.03 | -- | 0.17 | Snell. 'yx'= 74 |
| 1P | -1930 | -704 | -683 | 2 | 0.6232 | 0.9899 | 1.0085 | -- | -- | 0.03 | -- | 0.27 | Snell. 'yx'= 74 |
| 2 | -2027 | -21 | 11 | 2 | 0.6232 | 0.9974 | 1.5000 | -- | -- | 0.03 | -- | 0.03 | Snell. 'yx'= 74 |
| 7 | -2024 | -18 | -482 | 2 | 0.6232 | 0.9992 | 1.0135 | -- | -- | 0.03 | -- | 0.15 | Snell. 'yx'= 74 |
| 8 | -2044 | -42 | 10 | 2 | 0.6232 | 0.9942 | 1.5000 | -- | -- | 0.03 | -- | 0.04 | Snell. 'yx'= 74 |

**ASTA NUM. 14** NI 34 NF 33 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -4265 | -178 | 123 | 0 | 195 | 431 | 2 | 0.01 | 0.04 | 0.10 | |
| 1B | 0 | -4265 | 310 | 123 | 0 | 195 | -635 | 2 | 0.01 | 0.04 | 0.15 | |
| 1C | 0 | -4265 | -178 | -195 | 0 | -323 | 431 | 2 | 0.01 | 0.04 | 0.10 | |
| 1D | 0 | -4265 | 310 | -195 | 0 | -323 | -635 | 2 | 0.01 | 0.04 | 0.15 | |
| 1E | 0 | -3943 | -178 | 123 | 0 | 195 | 431 | 2 | 0.01 | 0.03 | 0.10 | |
| 1F | 0 | -3943 | 310 | 123 | 0 | 195 | -635 | 2 | 0.01 | 0.03 | 0.15 | |
| 1G | 0 | -3943 | -178 | -195 | 0 | -323 | 431 | 2 | 0.01 | 0.03 | 0.10 | |
| 1H | 0 | -3943 | 310 | -195 | 0 | -323 | -635 | 2 | 0.01 | 0.03 | 0.15 | |
| 1I | 0 | -4199 | -48 | 337 | 0 | 566 | 124 | 2 | 0.02 | 0.03 | 0.07 | |
| 1J | 0 | -4199 | 179 | 337 | 0 | 566 | -328 | 2 | 0.02 | 0.03 | 0.08 | |
| 1K | 0 | -4199 | -48 | -408 | 0 | -695 | 124 | 2 | 0.02 | 0.03 | 0.08 | |
| 1L | 0 | -4199 | 179 | -408 | 0 | -695 | -328 | 2 | 0.02 | 0.03 | 0.08 | |
| 1M | 0 | -4009 | -48 | 337 | 0 | 566 | 124 | 2 | 0.02 | 0.03 | 0.07 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1N | 0 | -4009 | 179 | 337 | 0 | 566 | -328 | 2 | 0.02 | 0.03 | 0.08 |
| 1O | 0 | -4009 | -48 | -408 | 0 | -695 | 124 | 2 | 0.02 | 0.03 | 0.08 |
| 1P | 0 | -4009 | 179 | -408 | 0 | -695 | -328 | 2 | 0.02 | 0.03 | 0.08 |
| 2 | 0 | -4095 | -2 | -4 | 0 | -12 | 9 | 2 | 0.00 | 0.03 | 0.00 |
| 7 | 0 | -4077 | 66 | -8 | 0 | -16 | -101 | 2 | 0.00 | 0.03 | 0.02 |
| 8 | 0 | -4122 | -2 | -33 | 0 | -60 | 8 | 2 | 0.00 | 0.03 | 0.01 |
| 1A | 168 | -4188 | -178 | 123 | 0 | -12 | 133 | 2 | 0.01 | 0.03 | 0.03 |
| 1B | 168 | -4188 | 310 | 123 | 0 | -12 | -117 | 2 | 0.01 | 0.03 | 0.03 |
| 1C | 168 | -4188 | -178 | -195 | 0 | 4 | 133 | 2 | 0.01 | 0.03 | 0.03 |
| 1D | 168 | -4188 | 310 | -195 | 0 | 4 | -117 | 2 | 0.01 | 0.03 | 0.03 |
| 1E | 168 | -3865 | -178 | 123 | 0 | -12 | 133 | 2 | 0.01 | 0.03 | 0.03 |
| 1F | 168 | -3865 | 310 | 123 | 0 | -12 | -117 | 2 | 0.01 | 0.03 | 0.03 |
| 1G | 168 | -3865 | -178 | -195 | 0 | 4 | 133 | 2 | 0.01 | 0.03 | 0.03 |
| 1H | 168 | -3865 | 310 | -195 | 0 | 4 | -117 | 2 | 0.01 | 0.03 | 0.03 |
| 1I | 168 | -4122 | -48 | 337 | 0 | 2 | 44 | 2 | 0.02 | 0.03 | 0.01 |
| 1J | 168 | -4122 | 179 | 337 | 0 | 2 | -28 | 2 | 0.02 | 0.03 | 0.01 |
| 1K | 168 | -4122 | -48 | -408 | 0 | -11 | 44 | 2 | 0.02 | 0.03 | 0.01 |
| 1L | 168 | -4122 | 179 | -408 | 0 | -11 | -28 | 2 | 0.02 | 0.03 | 0.01 |
| 1M | 168 | -3931 | -48 | 337 | 0 | 2 | 44 | 2 | 0.02 | 0.03 | 0.01 |
| 1N | 168 | -3931 | 179 | 337 | 0 | 2 | -28 | 2 | 0.02 | 0.03 | 0.01 |
| 1O | 168 | -3931 | -48 | -408 | 0 | -11 | 44 | 2 | 0.02 | 0.03 | 0.01 |
| 1P | 168 | -3931 | 179 | -408 | 0 | -11 | -28 | 2 | 0.02 | 0.03 | 0.01 |
| 2 | 168 | -4018 | -2 | -4 | 0 | -4 | 5 | 2 | 0.00 | 0.03 | 0.00 |
| 7 | 168 | -4000 | 66 | -8 | 0 | -3 | 8 | 2 | 0.00 | 0.03 | 0.00 |
| 8 | 168 | -4044 | -2 | -33 | 0 | -6 | 5 | 2 | 0.00 | 0.03 | 0.00 |
| 1A | 335 | -4110 | -178 | 123 | 0 | -219 | -165 | 2 | 0.01 | 0.03 | 0.04 |
| 1B | 335 | -4110 | 310 | 123 | 0 | -219 | 402 | 2 | 0.01 | 0.03 | 0.10 |
| 1C | 335 | -4110 | -178 | -195 | 0 | 330 | -165 | 2 | 0.01 | 0.03 | 0.04 |
| 1D | 335 | -4110 | 310 | -195 | 0 | 330 | 402 | 2 | 0.01 | 0.03 | 0.10 |
| 1E | 335 | -3788 | -178 | 123 | 0 | -219 | -165 | 2 | 0.01 | 0.03 | 0.04 |
| 1F | 335 | -3788 | 310 | 123 | 0 | -219 | 402 | 2 | 0.01 | 0.03 | 0.10 |
| 1G | 335 | -3788 | -178 | -195 | 0 | 330 | -165 | 2 | 0.01 | 0.03 | 0.04 |
| 1H | 335 | -3788 | 310 | -195 | 0 | 330 | 402 | 2 | 0.01 | 0.03 | 0.10 |
| 1I | 335 | -4044 | -48 | 337 | 0 | -562 | -36 | 2 | 0.02 | 0.03 | 0.06 |
| 1J | 335 | -4044 | 179 | 337 | 0 | -562 | 272 | 2 | 0.02 | 0.03 | 0.07 |
| 1K | 335 | -4044 | -48 | -408 | 0 | 674 | -36 | 2 | 0.02 | 0.03 | 0.08 |
| 1L | 335 | -4044 | 179 | -408 | 0 | 674 | 272 | 2 | 0.02 | 0.03 | 0.08 |
| 1M | 335 | -3854 | -48 | 337 | 0 | -562 | -36 | 2 | 0.02 | 0.03 | 0.06 |
| 1N | 335 | -3854 | 179 | 337 | 0 | -562 | 272 | 2 | 0.02 | 0.03 | 0.07 |
| 1O | 335 | -3854 | -48 | -408 | 0 | 674 | -36 | 2 | 0.02 | 0.03 | 0.08 |
| 1P | 335 | -3854 | 179 | -408 | 0 | 674 | 272 | 2 | 0.02 | 0.03 | 0.08 |
| 2 | 335 | -3940 | -2 | -4 | 0 | 3 | 1 | 2 | 0.00 | 0.03 | 0.00 |
| 7 | 335 | -3922 | 66 | -8 | 0 | 10 | 118 | 2 | 0.00 | 0.03 | 0.03 |
| 8 | 335 | -3967 | -2 | -33 | 0 | 49 | 1 | 2 | 0.00 | 0.03 | 0.01 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -4265 | -219 | 431 | 2 | 0.6232 | 0.9790 | 0.9656 | -- | -- | 0.06 | -- | 0.18 | Snell. 'yx'= 74 |
| 1B | -4265 | -219 | -635 | 2 | 0.6232 | 0.9790 | 0.9515 | -- | -- | 0.06 | -- | 0.23 | Snell. 'yx'= 74 |
| 1C | -4265 | 330 | 431 | 2 | 0.6232 | 0.9765 | 0.9656 | -- | -- | 0.06 | -- | 0.19 | Snell. 'yx'= 74 |
| 1D | -4265 | 330 | -635 | 2 | 0.6232 | 0.9765 | 0.9515 | -- | -- | 0.06 | -- | 0.24 | Snell. 'yx'= 74 |
| 1E | -3943 | -219 | 431 | 2 | 0.6232 | 0.9806 | 0.9682 | -- | -- | 0.05 | -- | 0.18 | Snell. 'yx'= 74 |
| 1F | -3943 | -219 | -635 | 2 | 0.6232 | 0.9806 | 0.9552 | -- | -- | 0.05 | -- | 0.22 | Snell. 'yx'= 74 |
| 1G | -3943 | 330 | 431 | 2 | 0.6232 | 0.9782 | 0.9682 | -- | -- | 0.05 | -- | 0.19 | Snell. 'yx'= 74 |
| 1H | -3943 | 330 | -635 | 2 | 0.6232 | 0.9782 | 0.9552 | -- | -- | 0.05 | -- | 0.23 | Snell. 'yx'= 74 |
| 1I | -4199 | 566 | 124 | 2 | 0.6232 | 0.9764 | 0.9723 | -- | -- | 0.06 | -- | 0.15 | Snell. 'yx'= 74 |
| 1J | -4199 | 566 | -328 | 2 | 0.6232 | 0.9764 | 0.9522 | -- | -- | 0.06 | -- | 0.19 | Snell. 'yx'= 74 |
| 1K | -4199 | -695 | 124 | 2 | 0.6232 | 0.9771 | 0.9723 | -- | -- | 0.06 | -- | 0.16 | Snell. 'yx'= 74 |
| 1L | -4199 | -695 | -328 | 2 | 0.6232 | 0.9771 | 0.9522 | -- | -- | 0.06 | -- | 0.21 | Snell. 'yx'= 74 |
| 1M | -4009 | 566 | 124 | 2 | 0.6232 | 0.9775 | 0.9735 | -- | -- | 0.05 | -- | 0.15 | Snell. 'yx'= 74 |
| 1N | -4009 | 566 | -328 | 2 | 0.6232 | 0.9775 | 0.9544 | -- | -- | 0.05 | -- | 0.19 | Snell. 'yx'= 74 |
| 1O | -4009 | -695 | 124 | 2 | 0.6232 | 0.9781 | 0.9735 | -- | -- | 0.05 | -- | 0.16 | Snell. 'yx'= 74 |
| 1P | -4009 | -695 | -328 | 2 | 0.6232 | 0.9781 | 0.9544 | -- | -- | 0.05 | -- | 0.21 | Snell. 'yx'= 74 |
| 2 | -4095 | -12 | 9 | 2 | 0.6232 | 0.9962 | 0.9992 | -- | -- | 0.05 | -- | 0.06 | Snell. 'yx'= 74 |
| 7 | -4077 | -16 | 118 | 2 | 0.6232 | 0.9862 | 0.9536 | -- | -- | 0.05 | -- | 0.08 | Snell. 'yx'= 74 |
| 8 | -4122 | -60 | 8 | 2 | 0.6232 | 0.9819 | 1.0001 | -- | -- | 0.05 | -- | 0.06 | Snell. 'yx'= 74 |

**ASTA NUM. 15** NI 41 NF 32 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -1545 | -154 | -19 | 0 | 184 | 452 | 2 | 0.00 | 0.01 | 0.11 | |
| 1B | 0 | -1545 | 209 | -19 | 0 | 184 | -551 | 2 | 0.00 | 0.01 | 0.13 | |
| 1C | 0 | -1545 | -154 | -326 | 0 | -302 | 452 | 2 | 0.01 | 0.01 | 0.11 | |
| 1D | 0 | -1545 | 209 | -326 | 0 | -302 | -551 | 2 | 0.01 | 0.01 | 0.13 | |
| 1E | 0 | -1319 | -154 | -19 | 0 | 184 | 452 | 2 | 0.00 | 0.01 | 0.11 | |
| 1F | 0 | -1319 | 209 | -19 | 0 | 184 | -551 | 2 | 0.00 | 0.01 | 0.13 | |
| 1G | 0 | -1319 | -154 | -326 | 0 | -302 | 452 | 2 | 0.01 | 0.01 | 0.11 | |
| 1H | 0 | -1319 | 209 | -326 | 0 | -302 | -551 | 2 | 0.01 | 0.01 | 0.13 | |
| 1I | 0 | -1638 | -57 | 149 | 0 | 484 | 170 | 2 | 0.01 | 0.01 | 0.06 | |
| 1J | 0 | -1638 | 112 | 149 | 0 | 484 | -269 | 2 | 0.01 | 0.01 | 0.07 | |
| 1K | 0 | -1638 | -57 | -495 | 0 | -601 | 170 | 2 | 0.02 | 0.01 | 0.07 | |
| 1L | 0 | -1638 | 112 | -495 | 0 | -601 | -269 | 2 | 0.02 | 0.01 | 0.07 | |
| 1M | 0 | -1226 | -57 | 149 | 0 | 484 | 170 | 2 | 0.01 | 0.01 | 0.06 | |
| 1N | 0 | -1226 | 112 | 149 | 0 | 484 | -269 | 2 | 0.01 | 0.01 | 0.07 | |
| 1O | 0 | -1226 | -57 | -495 | 0 | -601 | 170 | 2 | 0.02 | 0.01 | 0.07 | |
| 1P | 0 | -1226 | 112 | -495 | 0 | -601 | -269 | 2 | 0.02 | 0.01 | 0.07 | |
| 2 | 0 | -1428 | -10 | 4 | 0 | 68 | 30 | 2 | 0.00 | 0.01 | 0.01 | |
| 7 | 0 | -1439 | 27 | -1 | 0 | 62 | -49 | 2 | 0.00 | 0.01 | 0.01 | |
| 8 | 0 | -1421 | -10 | -167 | 0 | -53 | 30 | 2 | 0.01 | 0.01 | 0.01 | |
| 1A | 168 | -1468 | -154 | 126 | 0 | 95 | 194 | 2 | 0.01 | 0.01 | 0.05 | |
| 1B | 168 | -1468 | 209 | 126 | 0 | 95 | -201 | 2 | 0.01 | 0.01 | 0.05 | |
| 1C | 168 | -1468 | -154 | -181 | 0 | 123 | 194 | 2 | 0.01 | 0.01 | 0.05 | |
| 1D | 168 | -1468 | 209 | -181 | 0 | 123 | -201 | 2 | 0.01 | 0.01 | 0.05 | |
| 1E | 168 | -1241 | -154 | 126 | 0 | 95 | 194 | 2 | 0.01 | 0.01 | 0.05 | |
| 1F | 168 | -1241 | 209 | 126 | 0 | 95 | -201 | 2 | 0.01 | 0.01 | 0.05 | |
| 1G | 168 | -1241 | -154 | -181 | 0 | 123 | 194 | 2 | 0.01 | 0.01 | 0.05 | |
| 1H | 168 | -1241 | 209 | -181 | 0 | 123 | -201 | 2 | 0.01 | 0.01 | 0.05 | |
| 1I | 168 | -1561 | -57 | 294 | 0 | 112 | 75 | 2 | 0.01 | 0.01 | 0.02 | |
| 1J | 168 | -1561 | 112 | 294 | 0 | 112 | -82 | 2 | 0.01 | 0.01 | 0.02 | |
| 1K | 168 | -1561 | -57 | -350 | 0 | 106 | 75 | 2 | 0.02 | 0.01 | 0.02 | |
| 1L | 168 | -1561 | 112 | -350 | 0 | 106 | -82 | 2 | 0.02 | 0.01 | 0.02 | |
| 1M | 168 | -1148 | -57 | 294 | 0 | 112 | 75 | 2 | 0.01 | 0.01 | 0.02 | |
| 1N | 168 | -1148 | 112 | 294 | 0 | 112 | -82 | 2 | 0.01 | 0.01 | 0.02 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1O | 168 | -1148 | -57 | -350 | 0 | 106 | 75 | 2 | 0.02 | 0.01 | 0.02 |
| 1P | 168 | -1148 | 112 | -350 | 0 | 106 | -82 | 2 | 0.02 | 0.01 | 0.02 |
| 2 | 168 | -1350 | -10 | 4 | 0 | 61 | 14 | 2 | 0.00 | 0.01 | 0.01 |
| 7 | 168 | -1362 | 27 | -1 | 0 | 64 | -3 | 2 | 0.00 | 0.01 | 0.01 |
| 8 | 168 | -1344 | -10 | -22 | 0 | 106 | 13 | 2 | 0.00 | 0.01 | 0.01 |
| 1A | 335 | -1390 | -154 | 271 | 0 | -237 | -64 | 2 | 0.01 | 0.01 | 0.03 |
| 1B | 335 | -1390 | 209 | 271 | 0 | -237 | 150 | 2 | 0.01 | 0.01 | 0.04 |
| 1C | 335 | -1390 | -154 | -36 | 0 | 305 | -64 | 2 | 0.00 | 0.01 | 0.04 |
| 1D | 335 | -1390 | 209 | -36 | 0 | 305 | 150 | 2 | 0.00 | 0.01 | 0.04 |
| 1E | 335 | -1164 | -154 | 271 | 0 | -237 | -64 | 2 | 0.01 | 0.01 | 0.03 |
| 1F | 335 | -1164 | 209 | 271 | 0 | -237 | 150 | 2 | 0.01 | 0.01 | 0.04 |
| 1G | 335 | -1164 | -154 | -36 | 0 | 305 | -64 | 2 | 0.00 | 0.01 | 0.04 |
| 1H | 335 | -1164 | 209 | -36 | 0 | 305 | 150 | 2 | 0.00 | 0.01 | 0.04 |
| 1I | 335 | -1483 | -57 | 439 | 0 | -503 | -20 | 2 | 0.02 | 0.01 | 0.06 |
| 1J | 335 | -1483 | 112 | 439 | 0 | -503 | 105 | 2 | 0.02 | 0.01 | 0.06 |
| 1K | 335 | -1483 | -57 | -205 | 0 | 571 | -20 | 2 | 0.01 | 0.01 | 0.07 |
| 1L | 335 | -1483 | 112 | -205 | 0 | 571 | 105 | 2 | 0.01 | 0.01 | 0.07 |
| 1M | 335 | -1071 | -57 | 439 | 0 | -503 | -20 | 2 | 0.02 | 0.01 | 0.06 |
| 1N | 335 | -1071 | 112 | 439 | 0 | -503 | 105 | 2 | 0.02 | 0.01 | 0.06 |
| 1O | 335 | -1071 | -57 | -205 | 0 | 571 | -20 | 2 | 0.01 | 0.01 | 0.07 |
| 1P | 335 | -1071 | 112 | -205 | 0 | 571 | 105 | 2 | 0.01 | 0.01 | 0.07 |
| 2 | 335 | -1273 | -10 | 4 | 0 | 54 | -3 | 2 | 0.00 | 0.01 | 0.01 |
| 7 | 335 | -1284 | 27 | -1 | 0 | 66 | 43 | 2 | 0.00 | 0.01 | 0.01 |
| 8 | 335 | -1266 | -10 | 122 | 0 | 23 | -3 | 2 | 0.01 | 0.01 | 0.00 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -1545 | -237 | 452 | 2 | 0.6232 | 0.9979 | 0.9932 | -- | -- | 0.02 | -- | 0.16 | Snell. 'yx'= 74 |
| 1B | -1545 | -237 | -551 | 2 | 0.6232 | 0.9979 | 0.9902 | -- | -- | 0.02 | -- | 0.18 | Snell. 'yx'= 74 |
| 1C | -1545 | 305 | 452 | 2 | 0.6232 | 0.9948 | 0.9932 | -- | -- | 0.02 | -- | 0.16 | Snell. 'yx'= 74 |
| 1D | -1545 | 305 | -551 | 2 | 0.6232 | 0.9948 | 0.9902 | -- | -- | 0.02 | -- | 0.19 | Snell. 'yx'= 74 |
| 1E | -1319 | -237 | 452 | 2 | 0.6232 | 0.9982 | 0.9942 | -- | -- | 0.02 | -- | 0.15 | Snell. 'yx'= 74 |
| 1F | -1319 | -237 | -551 | 2 | 0.6232 | 0.9982 | 0.9916 | -- | -- | 0.02 | -- | 0.18 | Snell. 'yx'= 74 |
| 1G | -1319 | 305 | 452 | 2 | 0.6232 | 0.9956 | 0.9942 | -- | -- | 0.02 | -- | 0.16 | Snell. 'yx'= 74 |
| 1H | -1319 | 305 | -551 | 2 | 0.6232 | 0.9956 | 0.9916 | -- | -- | 0.02 | -- | 0.18 | Snell. 'yx'= 74 |
| 1I | -1638 | -503 | 170 | 2 | 0.6232 | 0.9934 | 0.9935 | -- | -- | 0.02 | -- | 0.12 | Snell. 'yx'= 74 |
| 1J | -1638 | -503 | -269 | 2 | 0.6232 | 0.9934 | 0.9866 | -- | -- | 0.02 | -- | 0.14 | Snell. 'yx'= 74 |
| 1K | -1638 | -601 | 170 | 2 | 0.6232 | 0.9931 | 0.9935 | -- | -- | 0.02 | -- | 0.13 | Snell. 'yx'= 74 |
| 1L | -1638 | -601 | -269 | 2 | 0.6232 | 0.9931 | 0.9866 | -- | -- | 0.02 | -- | 0.15 | Snell. 'yx'= 74 |
| 1M | -1226 | -503 | 170 | 2 | 0.6232 | 0.9950 | 0.9951 | -- | -- | 0.02 | -- | 0.11 | Snell. 'yx'= 74 |
| 1N | -1226 | -503 | -269 | 2 | 0.6232 | 0.9950 | 0.9900 | -- | -- | 0.02 | -- | 0.14 | Snell. 'yx'= 74 |
| 1O | -1226 | -601 | 170 | 2 | 0.6232 | 0.9949 | 0.9951 | -- | -- | 0.02 | -- | 0.13 | Snell. 'yx'= 74 |
| 1P | -1226 | -601 | -269 | 2 | 0.6232 | 0.9949 | 0.9900 | -- | -- | 0.02 | -- | 0.15 | Snell. 'yx'= 74 |
| 2 | -1428 | 68 | 30 | 2 | 0.6232 | 1.0075 | 0.9947 | -- | -- | 0.02 | -- | 0.03 | Snell. 'yx'= 74 |
| 7 | -1439 | 66 | -49 | 2 | 0.6232 | 1.0063 | 0.9836 | -- | -- | 0.02 | -- | 0.04 | Snell. 'yx'= 74 |
| 8 | -1421 | 106 | 30 | 2 | 0.6232 | 1.0055 | 0.9947 | -- | -- | 0.02 | -- | 0.04 | Snell. 'yx'= 74 |

**ASTA NUM. 16** NI 46 NF 45 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

categoria: p.p. y Vento qy tot.
qy medio: 0.0000 1.1862 1.1862 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -955 | 191 | 27 | 0 | 194 | 227 | 2 | 0.00 | 0.01 | 0.05 | |
| 1B | 0 | -955 | 520 | 27 | 0 | 194 | -732 | 2 | 0.01 | 0.01 | 0.18 | |
| 1C | 0 | -955 | 191 | -280 | 0 | -354 | 227 | 2 | 0.01 | 0.01 | 0.06 | |
| 1D | 0 | -955 | 520 | -280 | 0 | -354 | -732 | 2 | 0.01 | 0.01 | 0.18 | |
| 1E | 0 | -759 | 191 | 27 | 0 | 194 | 227 | 2 | 0.00 | 0.01 | 0.05 | |
| 1F | 0 | -759 | 520 | 27 | 0 | 194 | -732 | 2 | 0.01 | 0.01 | 0.18 | |
| 1G | 0 | -759 | 191 | -280 | 0 | -354 | 227 | 2 | 0.01 | 0.01 | 0.06 | |
| 1H | 0 | -759 | 520 | -280 | 0 | -354 | -732 | 2 | 0.01 | 0.01 | 0.18 | |
| 1I | 0 | -1057 | 280 | 183 | 0 | 472 | -44 | 2 | 0.01 | 0.01 | 0.05 | |
| 1J | 0 | -1057 | 430 | 183 | 0 | 472 | -460 | 2 | 0.01 | 0.01 | 0.11 | |
| 1K | 0 | -1057 | 280 | -436 | 0 | -632 | -44 | 2 | 0.02 | 0.01 | 0.07 | |
| 1L | 0 | -1057 | 430 | -436 | 0 | -632 | -460 | 2 | 0.02 | 0.01 | 0.12 | |
| 1M | 0 | -657 | 280 | 183 | 0 | 472 | -44 | 2 | 0.01 | 0.01 | 0.05 | |
| 1N | 0 | -657 | 430 | 183 | 0 | 472 | -460 | 2 | 0.01 | 0.01 | 0.11 | |
| 1O | 0 | -657 | 280 | -436 | 0 | -632 | -44 | 2 | 0.02 | 0.01 | 0.07 | |
| 1P | 0 | -657 | 430 | -436 | 0 | -632 | -460 | 2 | 0.02 | 0.01 | 0.12 | |
| 2 | 0 | -850 | -6 | -26 | 0 | 8 | 21 | 2 | 0.00 | 0.01 | 0.01 | |
| 7 | 0 | -853 | 355 | -29 | 0 | 2 | -252 | 2 | 0.01 | 0.01 | 0.06 | |
| 8 | 0 | -854 | -6 | -123 | 0 | -74 | 21 | 2 | 0.01 | 0.01 | 0.01 | |
| 1A | 168 | -878 | -107 | 98 | 0 | 89 | 297 | 2 | 0.00 | 0.01 | 0.07 | |
| 1B | 168 | -878 | 222 | 98 | 0 | 89 | -110 | 2 | 0.00 | 0.01 | 0.03 | |
| 1C | 168 | -878 | -107 | -209 | 0 | 55 | 297 | 2 | 0.01 | 0.01 | 0.07 | |
| 1D | 168 | -878 | 222 | -209 | 0 | 55 | -110 | 2 | 0.01 | 0.01 | 0.03 | |
| 1E | 168 | -682 | -107 | 98 | 0 | 89 | 297 | 2 | 0.00 | 0.01 | 0.07 | |
| 1F | 168 | -682 | 222 | 98 | 0 | 89 | -110 | 2 | 0.00 | 0.01 | 0.03 | |
| 1G | 168 | -682 | -107 | -209 | 0 | 55 | 297 | 2 | 0.01 | 0.01 | 0.07 | |
| 1H | 168 | -682 | 222 | -209 | 0 | 55 | -110 | 2 | 0.01 | 0.01 | 0.03 | |
| 1I | 168 | -980 | -18 | 254 | 0 | 106 | 176 | 2 | 0.01 | 0.01 | 0.04 | |
| 1J | 168 | -980 | 132 | 254 | 0 | 106 | 11 | 2 | 0.01 | 0.01 | 0.01 | |
| 1K | 168 | -980 | -18 | -365 | 0 | 39 | 176 | 2 | 0.02 | 0.01 | 0.04 | |
| 1L | 168 | -980 | 132 | -365 | 0 | 39 | 11 | 2 | 0.02 | 0.01 | 0.00 | |
| 1M | 168 | -580 | -18 | 254 | 0 | 106 | 176 | 2 | 0.01 | 0.00 | 0.04 | |
| 1N | 168 | -580 | 132 | 254 | 0 | 106 | 11 | 2 | 0.01 | 0.00 | 0.01 | |
| 1O | 168 | -580 | -18 | -365 | 0 | 39 | 176 | 2 | 0.02 | 0.00 | 0.04 | |
| 1P | 168 | -580 | 132 | -365 | 0 | 39 | 11 | 2 | 0.02 | 0.00 | 0.00 | |
| 2 | 168 | -772 | -6 | -26 | 0 | 52 | 11 | 2 | 0.00 | 0.01 | 0.01 | |
| 7 | 168 | -775 | 57 | -29 | 0 | 51 | 94 | 2 | 0.00 | 0.01 | 0.02 | |
| 8 | 168 | -777 | -6 | -52 | 0 | 73 | 11 | 2 | 0.00 | 0.01 | 0.01 | |
| 1A | 335 | -800 | -405 | 170 | 0 | -135 | -133 | 2 | 0.01 | 0.01 | 0.03 | |
| 1B | 335 | -800 | -76 | 170 | 0 | -135 | 12 | 2 | 0.01 | 0.01 | 0.02 | |
| 1C | 335 | -800 | -405 | -137 | 0 | 345 | -133 | 2 | 0.01 | 0.01 | 0.04 | |
| 1D | 335 | -800 | -76 | -137 | 0 | 345 | 12 | 2 | 0.01 | 0.01 | 0.04 | |
| 1E | 335 | -605 | -405 | 170 | 0 | -135 | -133 | 2 | 0.01 | 0.00 | 0.03 | |
| 1F | 335 | -605 | -76 | 170 | 0 | -135 | 12 | 2 | 0.01 | 0.00 | 0.02 | |
| 1G | 335 | -605 | -405 | -137 | 0 | 345 | -133 | 2 | 0.01 | 0.00 | 0.04 | |
| 1H | 335 | -605 | -76 | -137 | 0 | 345 | 12 | 2 | 0.01 | 0.00 | 0.04 | |
| 1I | 335 | -902 | -316 | 326 | 0 | -380 | -104 | 2 | 0.01 | 0.01 | 0.04 | |
| 1J | 335 | -902 | -166 | 326 | 0 | -380 | -17 | 2 | 0.01 | 0.01 | 0.04 | |
| 1K | 335 | -902 | -316 | -293 | 0 | 590 | -104 | 2 | 0.01 | 0.01 | 0.07 | |
| 1L | 335 | -902 | -166 | -293 | 0 | 590 | -17 | 2 | 0.01 | 0.01 | 0.07 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1M | 335 | -503 | -316 | 326 | 0 | -380 | -104 | 2 | 0.01 | 0.00 | 0.04 |
| 1N | 335 | -503 | -166 | 326 | 0 | -380 | -17 | 2 | 0.01 | 0.00 | 0.04 |
| 1O | 335 | -503 | -316 | -293 | 0 | 590 | -104 | 2 | 0.01 | 0.00 | 0.07 |
| 1P | 335 | -503 | -166 | -293 | 0 | 590 | -17 | 2 | 0.01 | 0.00 | 0.07 |
| 2 | 335 | -695 | -6 | -26 | 0 | 95 | 1 | 2 | 0.00 | 0.01 | 0.01 |
| 7 | 335 | -698 | -241 | -29 | 0 | 100 | -61 | 2 | 0.00 | 0.01 | 0.01 |
| 8 | 335 | -700 | -6 | 20 | 0 | 100 | 1 | 2 | 0.00 | 0.01 | 0.01 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | -- | -- | | | | | | | | | | |
| | kg | kg*m | | | | | | | | | | | |
| 1A | -955 | 194 | 297 | 2 | 0.6232 | 0.9981 | 1.0004 | -- | -- | 0.01 | -- | 0.11 | Snell. 'yx'= 74 |
| 1B | -955 | 194 | -732 | 2 | 0.6232 | 0.9981 | 1.0012 | -- | -- | 0.01 | -- | 0.21 | Snell. 'yx'= 74 |
| 1C | -955 | -354 | 297 | 2 | 0.6232 | 0.9957 | 1.0004 | -- | -- | 0.01 | -- | 0.12 | Snell. 'yx'= 74 |
| 1D | -955 | -354 | -732 | 2 | 0.6232 | 0.9957 | 1.0012 | -- | -- | 0.01 | -- | 0.23 | Snell. 'yx'= 74 |
| 1E | -759 | 194 | 297 | 2 | 0.6232 | 0.9985 | 1.0003 | -- | -- | 0.01 | -- | 0.10 | Snell. 'yx'= 74 |
| 1F | -759 | 194 | -732 | 2 | 0.6232 | 0.9985 | 1.0010 | -- | -- | 0.01 | -- | 0.21 | Snell. 'yx'= 74 |
| 1G | -759 | -354 | 297 | 2 | 0.6232 | 0.9966 | 1.0003 | -- | -- | 0.01 | -- | 0.12 | Snell. 'yx'= 74 |
| 1H | -759 | -354 | -732 | 2 | 0.6232 | 0.9966 | 1.0010 | -- | -- | 0.01 | -- | 0.23 | Snell. 'yx'= 74 |
| 1I | -1057 | 472 | 176 | 2 | 0.6232 | 0.9961 | 1.0087 | -- | -- | 0.01 | -- | 0.11 | Snell. 'yx'= 74 |
| 1J | -1057 | 472 | -460 | 2 | 0.6232 | 0.9961 | 1.0041 | -- | -- | 0.01 | -- | 0.18 | Snell. 'yx'= 74 |
| 1K | -1057 | -632 | 176 | 2 | 0.6232 | 0.9950 | 1.0087 | -- | -- | 0.01 | -- | 0.13 | Snell. 'yx'= 74 |
| 1L | -1057 | -632 | -460 | 2 | 0.6232 | 0.9950 | 1.0041 | -- | -- | 0.01 | -- | 0.20 | Snell. 'yx'= 74 |
| 1M | -657 | 472 | 176 | 2 | 0.6232 | 0.9976 | 1.0054 | -- | -- | 0.01 | -- | 0.11 | Snell. 'yx'= 74 |
| 1N | -657 | 472 | -460 | 2 | 0.6232 | 0.9976 | 1.0025 | -- | -- | 0.01 | -- | 0.17 | Snell. 'yx'= 74 |
| 1O | -657 | -632 | 176 | 2 | 0.6232 | 0.9969 | 1.0054 | -- | -- | 0.01 | -- | 0.12 | Snell. 'yx'= 74 |
| 1P | -657 | -632 | -460 | 2 | 0.6232 | 0.9969 | 1.0025 | -- | -- | 0.01 | -- | 0.19 | Snell. 'yx'= 74 |
| 2 | -850 | 95 | 21 | 2 | 0.6232 | 1.0035 | 1.1014 | -- | -- | 0.01 | -- | 0.03 | Snell. 'yx'= 74 |
| 7 | -853 | 100 | -252 | 2 | 0.6232 | 1.0033 | 1.0057 | -- | -- | 0.01 | -- | 0.08 | Snell. 'yx'= 74 |
| 8 | -854 | 100 | 21 | 2 | 0.6232 | 0.9994 | 1.1048 | -- | -- | 0.01 | -- | 0.03 | Snell. 'yx'= 74 |

**ASTA NUM. 17** NI 43 NF 42 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | -- | -- | -- | -- | -- | ------ | ------ | -- | -- | -- | |
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -11695 | -99 | -551 | 0 | -284 | 280 | 2 | 0.02 | 0.10 | 0.07 | |
| 1B | 0 | -11695 | 140 | -551 | 0 | -284 | -364 | 2 | 0.02 | 0.10 | 0.09 | |
| 1C | 0 | -11695 | -99 | -888 | 0 | -960 | 280 | 2 | 0.04 | 0.10 | 0.11 | |
| 1D | 0 | -11695 | 140 | -888 | 0 | -960 | -364 | 2 | 0.04 | 0.10 | 0.11 | |
| 1E | 0 | 7659 | -99 | -551 | 0 | -284 | 280 | 2 | 0.02 | 0.06 | 0.07 | |
| 1F | 0 | 7659 | 140 | -551 | 0 | -284 | -364 | 2 | 0.02 | 0.06 | 0.09 | |
| 1G | 0 | 7659 | -99 | -888 | 0 | -960 | 280 | 2 | 0.04 | 0.06 | 0.11 | |
| 1H | 0 | 7659 | 140 | -888 | 0 | -960 | -364 | 2 | 0.04 | 0.06 | 0.11 | |
| 1I | 0 | -6166 | -38 | -392 | 0 | -50 | 102 | 2 | 0.02 | 0.05 | 0.02 | |
| 1J | 0 | -6166 | 79 | -392 | 0 | -50 | -186 | 2 | 0.02 | 0.05 | 0.04 | |
| 1K | 0 | -6166 | -38 | -1048 | 0 | -1194 | 102 | 2 | 0.05 | 0.05 | 0.14 | |
| 1L | 0 | -6166 | 79 | -1048 | 0 | -1194 | -186 | 2 | 0.05 | 0.05 | 0.14 | |
| 1M | 0 | 2130 | -38 | -392 | 0 | -50 | 102 | 2 | 0.02 | 0.02 | 0.02 | |
| 1N | 0 | 2130 | 79 | -392 | 0 | -50 | -186 | 2 | 0.02 | 0.02 | 0.04 | |
| 1O | 0 | 2130 | -38 | -1048 | 0 | -1194 | 102 | 2 | 0.05 | 0.02 | 0.14 | |
| 1P | 0 | 2130 | 79 | -1048 | 0 | -1194 | -186 | 2 | 0.05 | 0.02 | 0.14 | |
| 2 | 0 | -3243 | -1 | -528 | 0 | -505 | 7 | 2 | 0.02 | 0.03 | 0.06 | |
| 7 | 0 | -2008 | 21 | -522 | 0 | -487 | -42 | 2 | 0.02 | 0.02 | 0.06 | |
| 8 | 0 | -3253 | -1 | -726 | 0 | -640 | 7 | 2 | 0.03 | 0.03 | 0.07 | |
| 1A | 168 | -11618 | -99 | -383 | 0 | 497 | 114 | 2 | 0.02 | 0.10 | 0.06 | |
| 1B | 168 | -11618 | 140 | -383 | 0 | 497 | -129 | 2 | 0.02 | 0.10 | 0.06 | |
| 1C | 168 | -11618 | -99 | -720 | 0 | 388 | 114 | 2 | 0.03 | 0.10 | 0.04 | |
| 1D | 168 | -11618 | 140 | -720 | 0 | 388 | -129 | 2 | 0.03 | 0.10 | 0.04 | |
| 1E | 168 | 7737 | -99 | -383 | 0 | 497 | 114 | 2 | 0.02 | 0.06 | 0.06 | |
| 1F | 168 | 7737 | 140 | -383 | 0 | 497 | -129 | 2 | 0.02 | 0.06 | 0.06 | |
| 1G | 168 | 7737 | -99 | -720 | 0 | 388 | 114 | 2 | 0.03 | 0.06 | 0.04 | |
| 1H | 168 | 7737 | 140 | -720 | 0 | 388 | -129 | 2 | 0.03 | 0.06 | 0.04 | |
| 1I | 168 | -6089 | -38 | -223 | 0 | 464 | 39 | 2 | 0.01 | 0.05 | 0.05 | |
| 1J | 168 | -6089 | 79 | -223 | 0 | 464 | -54 | 2 | 0.01 | 0.05 | 0.05 | |
| 1K | 168 | -6089 | -38 | -880 | 0 | 420 | 39 | 2 | 0.04 | 0.05 | 0.05 | |
| 1L | 168 | -6089 | 79 | -880 | 0 | 420 | -54 | 2 | 0.04 | 0.05 | 0.05 | |
| 1M | 168 | 2208 | -38 | -223 | 0 | 464 | 39 | 2 | 0.01 | 0.02 | 0.05 | |
| 1N | 168 | 2208 | 79 | -223 | 0 | 464 | -54 | 2 | 0.01 | 0.02 | 0.05 | |
| 1O | 168 | 2208 | -38 | -880 | 0 | 420 | 39 | 2 | 0.04 | 0.02 | 0.05 | |
| 1P | 168 | 2208 | 79 | -880 | 0 | 420 | -54 | 2 | 0.04 | 0.02 | 0.05 | |
| 2 | 168 | -3166 | -1 | -528 | 0 | 380 | 5 | 2 | 0.02 | 0.03 | 0.04 | |
| 7 | 168 | -1930 | 21 | -522 | 0 | 388 | -8 | 2 | 0.02 | 0.02 | 0.04 | |
| 8 | 168 | -3176 | -1 | -557 | 0 | 434 | 5 | 2 | 0.02 | 0.03 | 0.05 | |
| 1A | 335 | -11540 | -99 | -215 | 0 | 996 | -51 | 2 | 0.01 | 0.10 | 0.11 | |
| 1B | 335 | -11540 | 140 | -215 | 0 | 996 | 105 | 2 | 0.01 | 0.10 | 0.11 | |
| 1C | 335 | -11540 | -99 | -552 | 0 | 1454 | -51 | 2 | 0.02 | 0.10 | 0.17 | |
| 1D | 335 | -11540 | 140 | -552 | 0 | 1454 | 105 | 2 | 0.02 | 0.10 | 0.17 | |
| 1E | 335 | 7814 | -99 | -215 | 0 | 996 | -51 | 2 | 0.01 | 0.06 | 0.11 | |
| 1F | 335 | 7814 | 140 | -215 | 0 | 996 | 105 | 2 | 0.01 | 0.06 | 0.11 | |
| 1G | 335 | 7814 | -99 | -552 | 0 | 1454 | -51 | 2 | 0.02 | 0.06 | 0.17 | |
| 1H | 335 | 7814 | 140 | -552 | 0 | 1454 | 105 | 2 | 0.02 | 0.06 | 0.17 | |
| 1I | 335 | -6011 | -38 | -55 | 0 | 697 | -25 | 2 | 0.00 | 0.05 | 0.08 | |
| 1J | 335 | -6011 | 79 | -55 | 0 | 697 | 78 | 2 | 0.00 | 0.05 | 0.08 | |
| 1K | 335 | -6011 | -38 | -711 | 0 | 1753 | -25 | 2 | 0.03 | 0.05 | 0.20 | |
| 1L | 335 | -6011 | 79 | -711 | 0 | 1753 | 78 | 2 | 0.03 | 0.05 | 0.20 | |
| 1M | 335 | 2285 | -38 | -55 | 0 | 697 | -25 | 2 | 0.00 | 0.02 | 0.08 | |
| 1N | 335 | 2285 | 79 | -55 | 0 | 697 | 78 | 2 | 0.00 | 0.02 | 0.08 | |
| 1O | 335 | 2285 | -38 | -711 | 0 | 1753 | -25 | 2 | 0.03 | 0.02 | 0.20 | |
| 1P | 335 | 2285 | 79 | -711 | 0 | 1753 | 78 | 2 | 0.03 | 0.02 | 0.20 | |
| 2 | 335 | -3088 | -1 | -528 | 0 | 1264 | 3 | 2 | 0.02 | 0.03 | 0.15 | |
| 7 | 335 | -1853 | 21 | -522 | 0 | 1262 | 27 | 2 | 0.02 | 0.02 | 0.15 | |
| 8 | 335 | -3099 | -1 | -389 | 0 | 1227 | 3 | 2 | 0.02 | 0.03 | 0.14 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | -- | -- | | | | | | | | | | |
| | kg | kg*m | | | | | | | | | | | |
| 1A | -11695 | 996 | 280 | 2 | 0.6232 | 0.9974 | 0.9414 | -- | -- | 0.16 | -- | 0.33 | Snell. 'yx'= 74 |
| 1B | -11695 | 996 | -364 | 2 | 0.6232 | 0.9974 | 0.9229 | -- | -- | 0.16 | -- | 0.35 | Snell. 'yx'= 74 |
| 1C | -11695 | 1454 | 280 | 2 | 0.6232 | 0.9662 | 0.9414 | -- | -- | 0.16 | -- | 0.38 | Snell. 'yx'= 74 |
| 1D | -11695 | 1454 | -364 | 2 | 0.6232 | 0.9662 | 0.9229 | -- | -- | 0.16 | -- | 0.40 | Snell. 'yx'= 74 |



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| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1I | -6166 | 697 | 102 | 2 | 0.6232 | 1.0089 | 0.9637 | -- | -- | 0.08 | -- | 0.19 | Snell. 'yx'= | 74 |
| 1J | -6166 | 697 | -186 | 2 | 0.6232 | 1.0089 | 0.9470 | -- | -- | 0.08 | -- | 0.20 | Snell. 'yx'= | 74 |
| 1K | -6166 | 1753 | 102 | 2 | 0.6232 | 0.9808 | 0.9637 | -- | -- | 0.08 | -- | 0.30 | Snell. 'yx'= | 74 |
| 1L | -6166 | 1753 | -186 | 2 | 0.6232 | 0.9808 | 0.9470 | -- | -- | 0.08 | -- | 0.32 | Snell. 'yx'= | 74 |
| 2 | -3243 | 1264 | 7 | 2 | 0.6232 | 0.9964 | 1.0129 | -- | -- | 0.04 | -- | 0.19 | Snell. 'yx'= | 74 |
| 7 | -2008 | 1262 | -42 | 2 | 0.6232 | 0.9979 | 0.9772 | -- | -- | 0.03 | -- | 0.18 | Snell. 'yx'= | 74 |
| 8 | -3253 | 1227 | 7 | 2 | 0.6232 | 0.9939 | 1.0119 | -- | -- | 0.04 | -- | 0.19 | Snell. 'yx'= | 74 |

**ASTA NUM. 18** NI 47 NF 44 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

categoria: p.p. y Vento qy tot.
qy medio: 0.0000 0.5931 0.5931 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -11386 | 105 | 234 | 0 | 590 | 86 | 2 | 0.01 | 0.09 | 0.07 | |
| 1B | 0 | -11386 | 257 | 234 | 0 | 590 | -354 | 2 | 0.01 | 0.09 | 0.09 | |
| 1C | 0 | -11386 | 105 | -452 | 0 | -627 | 86 | 2 | 0.02 | 0.09 | 0.07 | |
| 1D | 0 | -11386 | 257 | -452 | 0 | -627 | -354 | 2 | 0.02 | 0.09 | 0.09 | |
| 1E | 0 | 7440 | 105 | 234 | 0 | 590 | 86 | 2 | 0.01 | 0.06 | 0.07 | |
| 1F | 0 | 7440 | 257 | 234 | 0 | 590 | -354 | 2 | 0.01 | 0.06 | 0.09 | |
| 1G | 0 | 7440 | 105 | -452 | 0 | -627 | 86 | 2 | 0.02 | 0.06 | 0.07 | |
| 1H | 0 | 7440 | 257 | -452 | 0 | -627 | -354 | 2 | 0.02 | 0.06 | 0.09 | |
| 1I | 0 | -5891 | 143 | 272 | 0 | 660 | -35 | 2 | 0.01 | 0.05 | 0.08 | |
| 1J | 0 | -5891 | 219 | 272 | 0 | 660 | -233 | 2 | 0.01 | 0.05 | 0.08 | |
| 1K | 0 | -5891 | 143 | -491 | 0 | -696 | -35 | 2 | 0.02 | 0.05 | 0.08 | |
| 1L | 0 | -5891 | 219 | -491 | 0 | -696 | -233 | 2 | 0.02 | 0.05 | 0.08 | |
| 1M | 0 | 1945 | 143 | 272 | 0 | 660 | -35 | 2 | 0.01 | 0.02 | 0.08 | |
| 1N | 0 | 1945 | 219 | 272 | 0 | 660 | -233 | 2 | 0.01 | 0.02 | 0.08 | |
| 1O | 0 | 1945 | 143 | -491 | 0 | -696 | -35 | 2 | 0.02 | 0.02 | 0.08 | |
| 1P | 0 | 1945 | 219 | -491 | 0 | -696 | -233 | 2 | 0.02 | 0.02 | 0.08 | |
| 2 | 0 | -773 | 1 | -23 | 0 | 24 | 1 | 2 | 0.00 | 0.01 | 0.00 | |
| 7 | 0 | -1984 | 181 | 6 | 0 | 74 | -134 | 2 | 0.00 | 0.02 | 0.03 | |
| 8 | 0 | -762 | 0 | -138 | 0 | -68 | 1 | 2 | 0.01 | 0.01 | 0.01 | |
| 1A | 168 | -11308 | -44 | 321 | 0 | 126 | 137 | 2 | 0.01 | 0.09 | 0.03 | |
| 1B | 168 | -11308 | 108 | 321 | 0 | 126 | -48 | 2 | 0.01 | 0.09 | 0.01 | |
| 1C | 168 | -11308 | -44 | -365 | 0 | 58 | 137 | 2 | 0.02 | 0.09 | 0.03 | |
| 1D | 168 | -11308 | 108 | -365 | 0 | 58 | -48 | 2 | 0.02 | 0.09 | 0.01 | |
| 1E | 168 | 7517 | -44 | 321 | 0 | 126 | 137 | 2 | 0.01 | 0.06 | 0.03 | |
| 1F | 168 | 7517 | 108 | 321 | 0 | 126 | -48 | 2 | 0.01 | 0.06 | 0.01 | |
| 1G | 168 | 7517 | -44 | -365 | 0 | 58 | 137 | 2 | 0.02 | 0.06 | 0.03 | |
| 1H | 168 | 7517 | 108 | -365 | 0 | 58 | -48 | 2 | 0.02 | 0.06 | 0.01 | |
| 1I | 168 | -5813 | -6 | 360 | 0 | 131 | 80 | 2 | 0.02 | 0.05 | 0.02 | |
| 1J | 168 | -5813 | 70 | 360 | 0 | 131 | 9 | 2 | 0.02 | 0.05 | 0.02 | |
| 1K | 168 | -5813 | -6 | -403 | 0 | 52 | 80 | 2 | 0.02 | 0.05 | 0.02 | |
| 1L | 168 | -5813 | 70 | -403 | 0 | 52 | 9 | 2 | 0.02 | 0.05 | 0.01 | |
| 1M | 168 | 2022 | -6 | 360 | 0 | 131 | 80 | 2 | 0.02 | 0.02 | 0.02 | |
| 1N | 168 | 2022 | 70 | 360 | 0 | 131 | 9 | 2 | 0.02 | 0.02 | 0.02 | |
| 1O | 168 | 2022 | -6 | -403 | 0 | 52 | 80 | 2 | 0.02 | 0.02 | 0.02 | |
| 1P | 168 | 2022 | 70 | -403 | 0 | 52 | 9 | 2 | 0.02 | 0.02 | 0.01 | |
| 2 | 168 | -695 | 1 | -23 | 0 | 63 | 2 | 2 | 0.00 | 0.01 | 0.01 | |
| 7 | 168 | -1906 | 32 | 6 | 0 | 65 | 44 | 2 | 0.00 | 0.02 | 0.01 | |
| 8 | 168 | -684 | 0 | -50 | 0 | 89 | 2 | 2 | 0.00 | 0.01 | 0.01 | |
| 1A | 335 | -11231 | -193 | 409 | 0 | -486 | -63 | 2 | 0.02 | 0.09 | 0.06 | |
| 1B | 335 | -11231 | -41 | 409 | 0 | -486 | 8 | 2 | 0.02 | 0.09 | 0.06 | |
| 1C | 335 | -11231 | -193 | -277 | 0 | 595 | -63 | 2 | 0.01 | 0.09 | 0.07 | |
| 1D | 335 | -11231 | -41 | -277 | 0 | 595 | 8 | 2 | 0.01 | 0.09 | 0.07 | |
| 1E | 335 | 7595 | -193 | 409 | 0 | -486 | -63 | 2 | 0.02 | 0.06 | 0.06 | |
| 1F | 335 | 7595 | -41 | 409 | 0 | -486 | 8 | 2 | 0.02 | 0.06 | 0.06 | |
| 1G | 335 | 7595 | -193 | -277 | 0 | 595 | -63 | 2 | 0.01 | 0.06 | 0.07 | |
| 1H | 335 | 7595 | -41 | -277 | 0 | 595 | 8 | 2 | 0.01 | 0.06 | 0.07 | |
| 1I | 335 | -5736 | -155 | 447 | 0 | -545 | -55 | 2 | 0.02 | 0.05 | 0.06 | |
| 1J | 335 | -5736 | -79 | 447 | 0 | -545 | 1 | 2 | 0.02 | 0.05 | 0.06 | |
| 1K | 335 | -5736 | -155 | -315 | 0 | 654 | -55 | 2 | 0.01 | 0.05 | 0.08 | |
| 1L | 335 | -5736 | -79 | -315 | 0 | 654 | 1 | 2 | 0.01 | 0.05 | 0.08 | |
| 1M | 335 | 2100 | -155 | 447 | 0 | -545 | -55 | 2 | 0.02 | 0.02 | 0.06 | |
| 1N | 335 | 2100 | -79 | 447 | 0 | -545 | 1 | 2 | 0.02 | 0.02 | 0.06 | |
| 1O | 335 | 2100 | -155 | -315 | 0 | 654 | -55 | 2 | 0.01 | 0.02 | 0.08 | |
| 1P | 335 | 2100 | -79 | -315 | 0 | 654 | 1 | 2 | 0.01 | 0.02 | 0.08 | |
| 2 | 335 | -618 | 1 | -23 | 0 | 101 | 3 | 2 | 0.00 | 0.01 | 0.01 | |
| 7 | 335 | -1829 | -117 | 6 | 0 | 56 | -27 | 2 | 0.00 | 0.02 | 0.01 | |
| 8 | 335 | -607 | 0 | 38 | 0 | 100 | 3 | 2 | 0.00 | 0.01 | 0.01 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -11386 | 590 | 137 | 2 | 0.6232 | 0.9567 | 1.0055 | -- | -- | 0.15 | -- | 0.25 | Snell. 'yx'= 74 |
| 1B | -11386 | 590 | -354 | 2 | 0.6232 | 0.9567 | 1.0150 | -- | -- | 0.15 | -- | 0.30 | Snell. 'yx'= 74 |
| 1C | -11386 | -627 | 137 | 2 | 0.6232 | 0.9468 | 1.0055 | -- | -- | 0.15 | -- | 0.25 | Snell. 'yx'= 74 |
| 1D | -11386 | -627 | -354 | 2 | 0.6232 | 0.9468 | 1.0150 | -- | -- | 0.15 | -- | 0.31 | Snell. 'yx'= 74 |
| 1I | -5891 | 660 | 80 | 2 | 0.6232 | 0.9771 | 1.0506 | -- | -- | 0.08 | -- | 0.17 | Snell. 'yx'= 74 |
| 1J | -5891 | 660 | -233 | 2 | 0.6232 | 0.9771 | 1.0200 | -- | -- | 0.08 | -- | 0.21 | Snell. 'yx'= 74 |
| 1K | -5891 | -696 | 80 | 2 | 0.6232 | 0.9725 | 1.0506 | -- | -- | 0.08 | -- | 0.18 | Snell. 'yx'= 74 |
| 1L | -5891 | -696 | -233 | 2 | 0.6232 | 0.9725 | 1.0200 | -- | -- | 0.08 | -- | 0.21 | Snell. 'yx'= 74 |
| 2 | -773 | 101 | 3 | 2 | 0.6232 | 1.0037 | 1.2101 | -- | -- | 0.01 | -- | 0.02 | Snell. 'yx'= 74 |
| 7 | -1984 | 74 | -134 | 2 | 0.6232 | 1.0112 | 1.0126 | -- | -- | 0.03 | -- | 0.07 | Snell. 'yx'= 74 |
| 8 | -762 | 100 | 3 | 2 | 0.6232 | 1.0004 | 1.1296 | -- | -- | 0.01 | -- | 0.02 | Snell. 'yx'= 74 |

**ASTA NUM. 19** NI 36 NF 31 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -7005 | -124 | -202 | 0 | -137 | 344 | 2 | 0.01 | 0.06 | 0.08 | |
| 1B | 0 | -7005 | 195 | -202 | 0 | -137 | -495 | 2 | 0.01 | 0.06 | 0.12 | |
| 1C | 0 | -7005 | -124 | -455 | 0 | -552 | 344 | 2 | 0.02 | 0.06 | 0.09 | |
| 1D | 0 | -7005 | 195 | -455 | 0 | -552 | -495 | 2 | 0.02 | 0.06 | 0.12 | |
| 1E | 0 | -6737 | -124 | -202 | 0 | -137 | 344 | 2 | 0.01 | 0.06 | 0.08 | |
| 1F | 0 | -6737 | 195 | -202 | 0 | -137 | -495 | 2 | 0.01 | 0.06 | 0.12 | |
| 1G | 0 | -6737 | -124 | -455 | 0 | -552 | 344 | 2 | 0.02 | 0.06 | 0.09 | |
| 1H | 0 | -6737 | 195 | -455 | 0 | -552 | -495 | 2 | 0.02 | 0.06 | 0.12 | |
| 1I | 0 | -7103 | -25 | -4 | 0 | 218 | 77 | 2 | 0.00 | 0.06 | 0.03 | |
| 1J | 0 | -7103 | 96 | -4 | 0 | 218 | -227 | 2 | 0.00 | 0.06 | 0.05 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1K | 0 | -7103 | -25 | -653 | 0 | -907 | 77 | 2 | 0.03 | 0.06 | 0.10 |
| 1L | 0 | -7103 | 96 | -653 | 0 | -907 | -227 | 2 | 0.03 | 0.06 | 0.10 |
| 1M | 0 | -6639 | -25 | -4 | 0 | 218 | 77 | 2 | 0.00 | 0.05 | 0.03 |
| 1N | 0 | -6639 | 96 | -4 | 0 | 218 | -227 | 2 | 0.00 | 0.05 | 0.05 |
| 1O | 0 | -6639 | -25 | -653 | 0 | -907 | 77 | 2 | 0.03 | 0.05 | 0.10 |
| 1P | 0 | -6639 | 96 | -653 | 0 | -907 | -227 | 2 | 0.03 | 0.05 | 0.10 |
| 2 | 0 | -6899 | 2 | -307 | 0 | -304 | -3 | 2 | 0.01 | 0.06 | 0.04 |
| 7 | 0 | -6898 | 35 | -307 | 0 | -304 | -75 | 2 | 0.01 | 0.06 | 0.04 |
| 8 | 0 | -6872 | 3 | -329 | 0 | -344 | -4 | 2 | 0.01 | 0.06 | 0.04 |
| 1A | 168 | -6928 | -124 | -202 | 0 | 200 | 136 | 2 | 0.01 | 0.06 | 0.03 |
| 1B | 168 | -6928 | 195 | -202 | 0 | 200 | -167 | 2 | 0.01 | 0.06 | 0.04 |
| 1C | 168 | -6928 | -124 | -455 | 0 | 211 | 136 | 2 | 0.02 | 0.06 | 0.03 |
| 1D | 168 | -6928 | 195 | -455 | 0 | 211 | -167 | 2 | 0.02 | 0.06 | 0.04 |
| 1E | 168 | -6659 | -124 | -202 | 0 | 200 | 136 | 2 | 0.01 | 0.06 | 0.03 |
| 1F | 168 | -6659 | 195 | -202 | 0 | 200 | -167 | 2 | 0.01 | 0.06 | 0.04 |
| 1G | 168 | -6659 | -124 | -455 | 0 | 211 | 136 | 2 | 0.02 | 0.06 | 0.03 |
| 1H | 168 | -6659 | 195 | -455 | 0 | 211 | -167 | 2 | 0.02 | 0.06 | 0.04 |
| 1I | 168 | -7025 | -25 | -4 | 0 | 224 | 35 | 2 | 0.00 | 0.06 | 0.03 |
| 1J | 168 | -7025 | 96 | -4 | 0 | 224 | -66 | 2 | 0.00 | 0.06 | 0.03 |
| 1K | 168 | -7025 | -25 | -653 | 0 | 186 | 35 | 2 | 0.03 | 0.06 | 0.02 |
| 1L | 168 | -7025 | 96 | -653 | 0 | 186 | -66 | 2 | 0.03 | 0.06 | 0.02 |
| 1M | 168 | -6562 | -25 | -4 | 0 | 224 | 35 | 2 | 0.00 | 0.05 | 0.03 |
| 1N | 168 | -6562 | 96 | -4 | 0 | 224 | -66 | 2 | 0.00 | 0.05 | 0.03 |
| 1O | 168 | -6562 | -25 | -653 | 0 | 186 | 35 | 2 | 0.03 | 0.05 | 0.02 |
| 1P | 168 | -6562 | 96 | -653 | 0 | 186 | -66 | 2 | 0.03 | 0.05 | 0.02 |
| 2 | 168 | -6822 | 2 | -307 | 0 | 211 | 1 | 2 | 0.01 | 0.06 | 0.02 |
| 7 | 168 | -6820 | 35 | -307 | 0 | 210 | -15 | 2 | 0.01 | 0.06 | 0.02 |
| 8 | 168 | -6794 | 3 | -329 | 0 | 207 | 1 | 2 | 0.01 | 0.06 | 0.02 |
| 1A | 335 | -6850 | -124 | -202 | 0 | 538 | -72 | 2 | 0.01 | 0.06 | 0.06 |
| 1B | 335 | -6850 | 195 | -202 | 0 | 538 | 160 | 2 | 0.01 | 0.06 | 0.06 |
| 1C | 335 | -6850 | -124 | -455 | 0 | 973 | -72 | 2 | 0.02 | 0.06 | 0.11 |
| 1D | 335 | -6850 | 195 | -455 | 0 | 973 | 160 | 2 | 0.02 | 0.06 | 0.11 |
| 1E | 335 | -6582 | -124 | -202 | 0 | 538 | -72 | 2 | 0.01 | 0.05 | 0.06 |
| 1F | 335 | -6582 | 195 | -202 | 0 | 538 | 160 | 2 | 0.01 | 0.05 | 0.06 |
| 1G | 335 | -6582 | -124 | -455 | 0 | 973 | -72 | 2 | 0.02 | 0.05 | 0.11 |
| 1H | 335 | -6582 | 195 | -455 | 0 | 973 | 160 | 2 | 0.02 | 0.05 | 0.11 |
| 1I | 335 | -6948 | -25 | -4 | 0 | 231 | -7 | 2 | 0.00 | 0.06 | 0.03 |
| 1J | 335 | -6948 | 96 | -4 | 0 | 231 | 95 | 2 | 0.00 | 0.06 | 0.03 |
| 1K | 335 | -6948 | -25 | -653 | 0 | 1280 | -7 | 2 | 0.03 | 0.06 | 0.15 |
| 1L | 335 | -6948 | 96 | -653 | 0 | 1280 | 95 | 2 | 0.03 | 0.06 | 0.15 |
| 1M | 335 | -6484 | -25 | -4 | 0 | 231 | -7 | 2 | 0.00 | 0.05 | 0.03 |
| 1N | 335 | -6484 | 96 | -4 | 0 | 231 | 95 | 2 | 0.00 | 0.05 | 0.03 |
| 1O | 335 | -6484 | -25 | -653 | 0 | 1280 | -7 | 2 | 0.03 | 0.05 | 0.15 |
| 1P | 335 | -6484 | 96 | -653 | 0 | 1280 | 95 | 2 | 0.03 | 0.05 | 0.15 |
| 2 | 335 | -6744 | 2 | -307 | 0 | 726 | 5 | 2 | 0.01 | 0.06 | 0.08 |
| 7 | 335 | -6743 | 35 | -307 | 0 | 723 | 44 | 2 | 0.01 | 0.06 | 0.08 |
| 8 | 335 | -6717 | 3 | -329 | 0 | 758 | 5 | 2 | 0.01 | 0.06 | 0.09 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -7005 | 538 | 344 | 2 | 0.6232 | 0.9948 | 0.9622 | -- | -- | 0.09 | -- | 0.23 Snell. 'yx'= | 74 |
| 1B | -7005 | 538 | -495 | 2 | 0.6232 | 0.9948 | 0.9499 | -- | -- | 0.09 | -- | 0.27 Snell. 'yx'= | 74 |
| 1C | -7005 | 973 | 344 | 2 | 0.6232 | 0.9803 | 0.9622 | -- | -- | 0.09 | -- | 0.28 Snell. 'yx'= | 74 |
| 1D | -7005 | 973 | -495 | 2 | 0.6232 | 0.9803 | 0.9499 | -- | -- | 0.09 | -- | 0.32 Snell. 'yx'= | 74 |
| 1E | -6737 | 538 | 344 | 2 | 0.6232 | 0.9950 | 0.9636 | -- | -- | 0.09 | -- | 0.23 Snell. 'yx'= | 74 |
| 1F | -6737 | 538 | -495 | 2 | 0.6232 | 0.9950 | 0.9518 | -- | -- | 0.09 | -- | 0.26 Snell. 'yx'= | 74 |
| 1G | -6737 | 973 | 344 | 2 | 0.6232 | 0.9811 | 0.9636 | -- | -- | 0.09 | -- | 0.28 Snell. 'yx'= | 74 |
| 1H | -6737 | 973 | -495 | 2 | 0.6232 | 0.9811 | 0.9518 | -- | -- | 0.09 | -- | 0.31 Snell. 'yx'= | 74 |
| 1I | -7103 | 231 | 77 | 2 | 0.6232 | 1.0509 | 0.9743 | -- | -- | 0.09 | -- | 0.14 Snell. 'yx'= | 74 |
| 1J | -7103 | 231 | -227 | 2 | 0.6232 | 1.0509 | 0.9389 | -- | -- | 0.09 | -- | 0.17 Snell. 'yx'= | 74 |
| 1K | -7103 | 1280 | 77 | 2 | 0.6232 | 0.9734 | 0.9743 | -- | -- | 0.09 | -- | 0.26 Snell. 'yx'= | 74 |
| 1L | -7103 | 1280 | -227 | 2 | 0.6232 | 0.9734 | 0.9389 | -- | -- | 0.09 | -- | 0.29 Snell. 'yx'= | 74 |
| 1M | -6639 | 231 | 77 | 2 | 0.6232 | 1.0476 | 0.9760 | -- | -- | 0.09 | -- | 0.13 Snell. 'yx'= | 74 |
| 1N | -6639 | 231 | -227 | 2 | 0.6232 | 1.0476 | 0.9429 | -- | -- | 0.09 | -- | 0.17 Snell. 'yx'= | 74 |
| 1O | -6639 | 1280 | 77 | 2 | 0.6232 | 0.9752 | 0.9760 | -- | -- | 0.09 | -- | 0.25 Snell. 'yx'= | 74 |
| 1P | -6639 | 1280 | -227 | 2 | 0.6232 | 0.9752 | 0.9429 | -- | -- | 0.09 | -- | 0.28 Snell. 'yx'= | 74 |
| 2 | -6899 | 726 | 5 | 2 | 0.6232 | 0.9874 | 0.9242 | -- | -- | 0.09 | -- | 0.18 Snell. 'yx'= | 74 |
| 7 | -6898 | 723 | -75 | 2 | 0.6232 | 0.9873 | 0.9228 | -- | -- | 0.09 | -- | 0.19 Snell. 'yx'= | 74 |
| 8 | -6872 | 758 | 5 | 2 | 0.6232 | 0.9858 | 0.9219 | -- | -- | 0.09 | -- | 0.18 Snell. 'yx'= | 74 |

**ASTA NUM. 20** NI 57 NF 59 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -6491 | -151 | 375 | 0 | 418 | 408 | 2 | 0.02 | 0.05 | 0.10 | |
| 1B | 0 | -6491 | 187 | 375 | 0 | 418 | -461 | 2 | 0.02 | 0.05 | 0.11 | |
| 1C | 0 | -6491 | -151 | 135 | 0 | 63 | 408 | 2 | 0.01 | 0.05 | 0.10 | |
| 1D | 0 | -6491 | 187 | 135 | 0 | 63 | -461 | 2 | 0.01 | 0.05 | 0.11 | |
| 1E | 0 | -6243 | -151 | 375 | 0 | 418 | 408 | 2 | 0.02 | 0.05 | 0.10 | |
| 1F | 0 | -6243 | 187 | 375 | 0 | 418 | -461 | 2 | 0.02 | 0.05 | 0.11 | |
| 1G | 0 | -6243 | -151 | 135 | 0 | 63 | 408 | 2 | 0.01 | 0.05 | 0.10 | |
| 1H | 0 | -6243 | 187 | 135 | 0 | 63 | -461 | 2 | 0.01 | 0.05 | 0.11 | |
| 1I | 0 | -6490 | -44 | 552 | 0 | 723 | 127 | 2 | 0.02 | 0.05 | 0.08 | |
| 1J | 0 | -6490 | 81 | 552 | 0 | 723 | -180 | 2 | 0.02 | 0.05 | 0.08 | |
| 1K | 0 | -6490 | -44 | -42 | 0 | -241 | 127 | 2 | 0.00 | 0.05 | 0.03 | |
| 1L | 0 | -6490 | 81 | -42 | 0 | -241 | -180 | 2 | 0.00 | 0.05 | 0.04 | |
| 1M | 0 | -6244 | -44 | 552 | 0 | 723 | 127 | 2 | 0.02 | 0.05 | 0.08 | |
| 1N | 0 | -6244 | 81 | 552 | 0 | 723 | -180 | 2 | 0.02 | 0.05 | 0.08 | |
| 1O | 0 | -6244 | -44 | -42 | 0 | -241 | 127 | 2 | 0.00 | 0.05 | 0.03 | |
| 1P | 0 | -6244 | 81 | -42 | 0 | -241 | -180 | 2 | 0.00 | 0.05 | 0.04 | |
| 2 | 0 | -6355 | -17 | 279 | 0 | 280 | 48 | 2 | 0.01 | 0.05 | 0.03 | |
| 7 | 0 | -6352 | 18 | 277 | 0 | 278 | -27 | 2 | 0.01 | 0.05 | 0.03 | |
| 8 | 0 | -6369 | -17 | 258 | 0 | 243 | 48 | 2 | 0.01 | 0.05 | 0.03 | |
| 1A | 168 | -6414 | -151 | 375 | 0 | -209 | 155 | 2 | 0.02 | 0.05 | 0.04 | |
| 1B | 168 | -6414 | 187 | 375 | 0 | -209 | -148 | 2 | 0.02 | 0.05 | 0.04 | |
| 1C | 168 | -6414 | -151 | 135 | 0 | -163 | 155 | 2 | 0.01 | 0.05 | 0.04 | |
| 1D | 168 | -6414 | 187 | 135 | 0 | -163 | -148 | 2 | 0.01 | 0.05 | 0.04 | |
| 1E | 168 | -6165 | -151 | 375 | 0 | -209 | 155 | 2 | 0.02 | 0.05 | 0.04 | |
| 1F | 168 | -6165 | 187 | 375 | 0 | -209 | -148 | 2 | 0.02 | 0.05 | 0.04 | |
| 1G | 168 | -6165 | -151 | 135 | 0 | -163 | 155 | 2 | 0.01 | 0.05 | 0.04 | |
| 1H | 168 | -6165 | 187 | 135 | 0 | -163 | -148 | 2 | 0.01 | 0.05 | 0.04 | |
| 1I | 168 | -6413 | -44 | 552 | 0 | -202 | 52 | 2 | 0.02 | 0.05 | 0.02 | |
| 1J | 168 | -6413 | 81 | 552 | 0 | -202 | -45 | 2 | 0.02 | 0.05 | 0.02 | |
| 1K | 168 | -6413 | -44 | -42 | 0 | -170 | 52 | 2 | 0.00 | 0.05 | 0.02 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1L | 168 | -6413 | 81 | -42 | 0 | -170 | -45 | 2 | 0.00 | 0.05 | 0.02 |
| 1M | 168 | -6166 | -44 | 552 | 0 | -202 | 52 | 2 | 0.02 | 0.05 | 0.02 |
| 1N | 168 | -6166 | 81 | 552 | 0 | -202 | -45 | 2 | 0.02 | 0.05 | 0.02 |
| 1O | 168 | -6166 | -44 | -42 | 0 | -170 | 52 | 2 | 0.00 | 0.05 | 0.02 |
| 1P | 168 | -6166 | 81 | -42 | 0 | -170 | -45 | 2 | 0.00 | 0.05 | 0.02 |
| 2 | 168 | -6278 | -17 | 279 | 0 | -188 | 19 | 2 | 0.01 | 0.05 | 0.02 |
| 7 | 168 | -6275 | 18 | 277 | 0 | -186 | 4 | 2 | 0.01 | 0.05 | 0.02 |
| 8 | 168 | -6292 | -17 | 258 | 0 | -188 | 19 | 2 | 0.01 | 0.05 | 0.02 |
| 1A | 335 | -6336 | -151 | 375 | 0 | -837 | -97 | 2 | 0.02 | 0.05 | 0.10 |
| 1B | 335 | -6336 | 187 | 375 | 0 | -837 | 165 | 2 | 0.02 | 0.05 | 0.10 |
| 1C | 335 | -6336 | -151 | 135 | 0 | -390 | -97 | 2 | 0.01 | 0.05 | 0.04 |
| 1D | 335 | -6336 | 187 | 135 | 0 | -390 | 165 | 2 | 0.01 | 0.05 | 0.04 |
| 1E | 335 | -6088 | -151 | 375 | 0 | -837 | -97 | 2 | 0.02 | 0.05 | 0.10 |
| 1F | 335 | -6088 | 187 | 375 | 0 | -837 | 165 | 2 | 0.02 | 0.05 | 0.10 |
| 1G | 335 | -6088 | -151 | 135 | 0 | -390 | -97 | 2 | 0.01 | 0.05 | 0.04 |
| 1H | 335 | -6088 | 187 | 135 | 0 | -390 | 165 | 2 | 0.01 | 0.05 | 0.04 |
| 1I | 335 | -6335 | -44 | 552 | 0 | -1128 | -22 | 2 | 0.02 | 0.05 | 0.13 |
| 1J | 335 | -6335 | 81 | 552 | 0 | -1128 | 90 | 2 | 0.02 | 0.05 | 0.13 |
| 1K | 335 | -6335 | -44 | -42 | 0 | -99 | -22 | 2 | 0.00 | 0.05 | 0.01 |
| 1L | 335 | -6335 | 81 | -42 | 0 | -99 | 90 | 2 | 0.00 | 0.05 | 0.02 |
| 1M | 335 | -6089 | -44 | 552 | 0 | -1128 | -22 | 2 | 0.02 | 0.05 | 0.13 |
| 1N | 335 | -6089 | 81 | 552 | 0 | -1128 | 90 | 2 | 0.02 | 0.05 | 0.13 |
| 1O | 335 | -6089 | -44 | -42 | 0 | -99 | -22 | 2 | 0.00 | 0.05 | 0.01 |
| 1P | 335 | -6089 | 81 | -42 | 0 | -99 | 90 | 2 | 0.00 | 0.05 | 0.02 |
| 2 | 335 | -6200 | -17 | 279 | 0 | -656 | -9 | 2 | 0.01 | 0.05 | 0.08 |
| 7 | 335 | -6198 | 18 | 277 | 0 | -650 | 34 | 2 | 0.01 | 0.05 | 0.07 |
| 8 | 335 | -6214 | -17 | 258 | 0 | -620 | -9 | 2 | 0.01 | 0.05 | 0.07 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -6491 | -837 | 408 | 2 | 0.6232 | 0.9847 | 0.9621 | -- | -- | 0.09 | -- | 0.28 | Snell. 'yx'= 74 |
| 1B | -6491 | -837 | -461 | 2 | 0.6232 | 0.9847 | 0.9503 | -- | -- | 0.09 | -- | 0.29 | Snell. 'yx'= 74 |
| 1C | -6491 | -390 | 408 | 2 | 0.6232 | 0.9992 | 0.9621 | -- | -- | 0.09 | -- | 0.22 | Snell. 'yx'= 74 |
| 1D | -6491 | -390 | -461 | 2 | 0.6232 | 0.9992 | 0.9503 | -- | -- | 0.09 | -- | 0.24 | Snell. 'yx'= 74 |
| 1E | -6243 | -837 | 408 | 2 | 0.6232 | 0.9853 | 0.9636 | -- | -- | 0.08 | -- | 0.27 | Snell. 'yx'= 74 |
| 1F | -6243 | -837 | -461 | 2 | 0.6232 | 0.9853 | 0.9522 | -- | -- | 0.08 | -- | 0.28 | Snell. 'yx'= 74 |
| 1G | -6243 | -390 | 408 | 2 | 0.6232 | 0.9992 | 0.9636 | -- | -- | 0.08 | -- | 0.22 | Snell. 'yx'= 74 |
| 1H | -6243 | -390 | -461 | 2 | 0.6232 | 0.9992 | 0.9522 | -- | -- | 0.08 | -- | 0.23 | Snell. 'yx'= 74 |
| 1I | -6490 | -1128 | 127 | 2 | 0.6232 | 0.9786 | 0.9685 | -- | -- | 0.09 | -- | 0.24 | Snell. 'yx'= 74 |
| 1J | -6490 | -1128 | -180 | 2 | 0.6232 | 0.9786 | 0.9364 | -- | -- | 0.09 | -- | 0.25 | Snell. 'yx'= 74 |
| 1K | -6490 | -241 | 127 | 2 | 0.6232 | 1.0237 | 0.9685 | -- | -- | 0.09 | -- | 0.14 | Snell. 'yx'= 74 |
| 1L | -6490 | -241 | -180 | 2 | 0.6232 | 1.0237 | 0.9364 | -- | -- | 0.09 | -- | 0.16 | Snell. 'yx'= 74 |
| 1M | -6244 | -1128 | 127 | 2 | 0.6232 | 0.9794 | 0.9697 | -- | -- | 0.08 | -- | 0.24 | Snell. 'yx'= 74 |
| 1N | -6244 | -1128 | -180 | 2 | 0.6232 | 0.9794 | 0.9388 | -- | -- | 0.08 | -- | 0.25 | Snell. 'yx'= 74 |
| 1O | -6244 | -241 | 127 | 2 | 0.6232 | 1.0228 | 0.9697 | -- | -- | 0.08 | -- | 0.14 | Snell. 'yx'= 74 |
| 1P | -6244 | -241 | -180 | 2 | 0.6232 | 1.0228 | 0.9388 | -- | -- | 0.08 | -- | 0.15 | Snell. 'yx'= 74 |
| 2 | -6355 | -656 | 48 | 2 | 0.6232 | 0.9880 | 0.9678 | -- | -- | 0.08 | -- | 0.17 | Snell. 'yx'= 74 |
| 7 | -6352 | -650 | 34 | 2 | 0.6232 | 0.9881 | 0.9278 | -- | -- | 0.08 | -- | 0.17 | Snell. 'yx'= 74 |
| 8 | -6369 | -619 | 48 | 2 | 0.6232 | 0.9895 | 0.9677 | -- | -- | 0.08 | -- | 0.17 | Snell. 'yx'= 74 |

**ASTA NUM. 21** NI 56 NF 58 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -6456 | -147 | -182 | 0 | -131 | 399 | 2 | 0.01 | 0.05 | 0.10 | |
| 1B | 0 | -6456 | 179 | -182 | 0 | -131 | -452 | 2 | 0.01 | 0.05 | 0.11 | |
| 1C | 0 | -6456 | -147 | -424 | 0 | -507 | 399 | 2 | 0.02 | 0.05 | 0.10 | |
| 1D | 0 | -6456 | 179 | -424 | 0 | -507 | -452 | 2 | 0.02 | 0.05 | 0.11 | |
| 1E | 0 | -6208 | -147 | -182 | 0 | -131 | 399 | 2 | 0.01 | 0.05 | 0.10 | |
| 1F | 0 | -6208 | 179 | -182 | 0 | -131 | -452 | 2 | 0.01 | 0.05 | 0.11 | |
| 1G | 0 | -6208 | -147 | -424 | 0 | -507 | 399 | 2 | 0.02 | 0.05 | 0.10 | |
| 1H | 0 | -6208 | 179 | -424 | 0 | -507 | -452 | 2 | 0.02 | 0.05 | 0.11 | |
| 1I | 0 | -6470 | -45 | 22 | 0 | 237 | 126 | 2 | 0.00 | 0.05 | 0.03 | |
| 1J | 0 | -6470 | 77 | 22 | 0 | 237 | -178 | 2 | 0.00 | 0.05 | 0.04 | |
| 1K | 0 | -6470 | -45 | -629 | 0 | -875 | 126 | 2 | 0.03 | 0.05 | 0.10 | |
| 1L | 0 | -6470 | 77 | -629 | 0 | -875 | -178 | 2 | 0.03 | 0.05 | 0.10 | |
| 1M | 0 | -6194 | -45 | 22 | 0 | 237 | 126 | 2 | 0.00 | 0.05 | 0.03 | |
| 1N | 0 | -6194 | 77 | 22 | 0 | 237 | -178 | 2 | 0.00 | 0.05 | 0.04 | |
| 1O | 0 | -6194 | -45 | -629 | 0 | -875 | 126 | 2 | 0.03 | 0.05 | 0.10 | |
| 1P | 0 | -6194 | 77 | -629 | 0 | -875 | -178 | 2 | 0.03 | 0.05 | 0.10 | |
| 2 | 0 | -6360 | -16 | -283 | 0 | -280 | 44 | 2 | 0.01 | 0.05 | 0.03 | |
| 7 | 0 | -6357 | 16 | -281 | 0 | -278 | -26 | 2 | 0.01 | 0.05 | 0.03 | |
| 8 | 0 | -6334 | -16 | -305 | 0 | -321 | 44 | 2 | 0.01 | 0.05 | 0.04 | |
| 1A | 168 | -6379 | -147 | -182 | 0 | 175 | 153 | 2 | 0.01 | 0.05 | 0.04 | |
| 1B | 168 | -6379 | 179 | -182 | 0 | 175 | -152 | 2 | 0.01 | 0.05 | 0.04 | |
| 1C | 168 | -6379 | -147 | -424 | 0 | 204 | 153 | 2 | 0.02 | 0.05 | 0.04 | |
| 1D | 168 | -6379 | 179 | -424 | 0 | 204 | -152 | 2 | 0.02 | 0.05 | 0.04 | |
| 1E | 168 | -6130 | -147 | -182 | 0 | 175 | 153 | 2 | 0.01 | 0.05 | 0.04 | |
| 1F | 168 | -6130 | 179 | -182 | 0 | 175 | -152 | 2 | 0.01 | 0.05 | 0.04 | |
| 1G | 168 | -6130 | -147 | -424 | 0 | 204 | 153 | 2 | 0.02 | 0.05 | 0.04 | |
| 1H | 168 | -6130 | 179 | -424 | 0 | 204 | -152 | 2 | 0.02 | 0.05 | 0.04 | |
| 1I | 168 | -6392 | -45 | 22 | 0 | 200 | 50 | 2 | 0.00 | 0.05 | 0.02 | |
| 1J | 168 | -6392 | 77 | 22 | 0 | 200 | -49 | 2 | 0.00 | 0.05 | 0.02 | |
| 1K | 168 | -6392 | -45 | -629 | 0 | 179 | 50 | 2 | 0.03 | 0.05 | 0.02 | |
| 1L | 168 | -6392 | 77 | -629 | 0 | 179 | -49 | 2 | 0.03 | 0.05 | 0.02 | |
| 1M | 168 | -6117 | -45 | 22 | 0 | 200 | 50 | 2 | 0.00 | 0.05 | 0.02 | |
| 1N | 168 | -6117 | 77 | 22 | 0 | 200 | -49 | 2 | 0.00 | 0.05 | 0.02 | |
| 1O | 168 | -6117 | -45 | -629 | 0 | 179 | 50 | 2 | 0.03 | 0.05 | 0.02 | |
| 1P | 168 | -6117 | 77 | -629 | 0 | 179 | -49 | 2 | 0.03 | 0.05 | 0.02 | |
| 2 | 168 | -6282 | -16 | -283 | 0 | 194 | 18 | 2 | 0.01 | 0.05 | 0.02 | |
| 7 | 168 | -6280 | 16 | -281 | 0 | 193 | 0 | 2 | 0.01 | 0.05 | 0.02 | |
| 8 | 168 | -6256 | -16 | -305 | 0 | 191 | 18 | 2 | 0.01 | 0.05 | 0.02 | |
| 1A | 335 | -6301 | -147 | -182 | 0 | 480 | -92 | 2 | 0.01 | 0.05 | 0.06 | |
| 1B | 335 | -6301 | 179 | -182 | 0 | 480 | 147 | 2 | 0.01 | 0.05 | 0.06 | |
| 1C | 335 | -6301 | -147 | -424 | 0 | 914 | -92 | 2 | 0.02 | 0.05 | 0.11 | |
| 1D | 335 | -6301 | 179 | -424 | 0 | 914 | 147 | 2 | 0.02 | 0.05 | 0.11 | |
| 1E | 335 | -6053 | -147 | -182 | 0 | 480 | -92 | 2 | 0.01 | 0.05 | 0.06 | |
| 1F | 335 | -6053 | 179 | -182 | 0 | 480 | 147 | 2 | 0.01 | 0.05 | 0.06 | |
| 1G | 335 | -6053 | -147 | -424 | 0 | 914 | -92 | 2 | 0.02 | 0.05 | 0.11 | |
| 1H | 335 | -6053 | 179 | -424 | 0 | 914 | 147 | 2 | 0.02 | 0.05 | 0.11 | |
| 1I | 335 | -6315 | -45 | 22 | 0 | 163 | -26 | 2 | 0.00 | 0.05 | 0.02 | |
| 1J | 335 | -6315 | 77 | 22 | 0 | 163 | 80 | 2 | 0.00 | 0.05 | 0.02 | |
| 1K | 335 | -6315 | -45 | -629 | 0 | 1232 | -26 | 2 | 0.03 | 0.05 | 0.14 | |
| 1L | 335 | -6315 | 77 | -629 | 0 | 1232 | 80 | 2 | 0.03 | 0.05 | 0.14 | |



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| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1M | 335 | -6039 | -45 | 22 | 0 | 163 | -26 | 2 | 0.00 | 0.05 | 0.02 | |
| 1N | 335 | -6039 | 77 | 22 | 0 | 163 | 80 | 2 | 0.00 | 0.05 | 0.02 | |
| 1O | 335 | -6039 | -45 | -629 | 0 | 1232 | -26 | 2 | 0.03 | 0.05 | 0.14 | |
| 1P | 335 | -6039 | 77 | -629 | 0 | 1232 | 80 | 2 | 0.03 | 0.05 | 0.14 | |
| 2 | 335 | -6205 | -16 | -283 | 0 | 669 | -8 | 2 | 0.01 | 0.05 | 0.08 | |
| 7 | 335 | -6203 | 16 | -281 | 0 | 664 | 27 | 2 | 0.01 | 0.05 | 0.08 | |
| 8 | 335 | -6179 | -16 | -305 | 0 | 702 | -8 | 2 | 0.01 | 0.05 | 0.08 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -6456 | 480 | 399 | 2 | 0.6232 | 0.9944 | 0.9630 | -- | -- | 0.09 | -- | 0.23 | Snell. 'yx'= 74 |
| 1B | -6456 | 480 | -452 | 2 | 0.6232 | 0.9944 | 0.9538 | -- | -- | 0.09 | -- | 0.24 | Snell. 'yx'= 74 |
| 1C | -6456 | 914 | 399 | 2 | 0.6232 | 0.9824 | 0.9630 | -- | -- | 0.09 | -- | 0.28 | Snell. 'yx'= 74 |
| 1D | -6456 | 914 | -452 | 2 | 0.6232 | 0.9824 | 0.9538 | -- | -- | 0.09 | -- | 0.29 | Snell. 'yx'= 74 |
| 1E | -6208 | 480 | 399 | 2 | 0.6232 | 0.9947 | 0.9644 | -- | -- | 0.08 | -- | 0.23 | Snell. 'yx'= 74 |
| 1F | -6208 | 480 | -452 | 2 | 0.6232 | 0.9947 | 0.9555 | -- | -- | 0.08 | -- | 0.24 | Snell. 'yx'= 74 |
| 1G | -6208 | 914 | 399 | 2 | 0.6232 | 0.9831 | 0.9644 | -- | -- | 0.08 | -- | 0.28 | Snell. 'yx'= 74 |
| 1H | -6208 | 914 | -452 | 2 | 0.6232 | 0.9831 | 0.9555 | -- | -- | 0.08 | -- | 0.29 | Snell. 'yx'= 74 |
| 1I | -6470 | 237 | 126 | 2 | 0.6232 | 1.0354 | 0.9656 | -- | -- | 0.09 | -- | 0.14 | Snell. 'yx'= 74 |
| 1J | -6470 | 237 | -178 | 2 | 0.6232 | 1.0354 | 0.9414 | -- | -- | 0.09 | -- | 0.15 | Snell. 'yx'= 74 |
| 1K | -6470 | 1232 | 126 | 2 | 0.6232 | 0.9757 | 0.9656 | -- | -- | 0.09 | -- | 0.25 | Snell. 'yx'= 74 |
| 1L | -6470 | 1232 | -178 | 2 | 0.6232 | 0.9757 | 0.9414 | -- | -- | 0.09 | -- | 0.26 | Snell. 'yx'= 74 |
| 1M | -6194 | 237 | 126 | 2 | 0.6232 | 1.0339 | 0.9671 | -- | -- | 0.08 | -- | 0.14 | Snell. 'yx'= 74 |
| 1N | -6194 | 237 | -178 | 2 | 0.6232 | 1.0339 | 0.9439 | -- | -- | 0.08 | -- | 0.15 | Snell. 'yx'= 74 |
| 1O | -6194 | 1232 | 126 | 2 | 0.6232 | 0.9768 | 0.9671 | -- | -- | 0.08 | -- | 0.25 | Snell. 'yx'= 74 |
| 1P | -6194 | 1232 | -178 | 2 | 0.6232 | 0.9768 | 0.9439 | -- | -- | 0.08 | -- | 0.26 | Snell. 'yx'= 74 |
| 2 | -6360 | 669 | 44 | 2 | 0.6232 | 0.9884 | 0.9681 | -- | -- | 0.08 | -- | 0.17 | Snell. 'yx'= 74 |
| 7 | -6357 | 664 | 27 | 2 | 0.6232 | 0.9884 | 0.9277 | -- | -- | 0.08 | -- | 0.17 | Snell. 'yx'= 74 |
| 8 | -6334 | 702 | 44 | 2 | 0.6232 | 0.9868 | 0.9683 | -- | -- | 0.08 | -- | 0.17 | Snell. 'yx'= 74 |

**ASTA NUM. 22** NI 86 NF 87 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -2654 | -125 | 112 | 0 | 168 | 360 | 2 | 0.01 | 0.02 | 0.09 | |
| 1B | 0 | -2654 | 208 | 112 | 0 | 168 | -482 | 2 | 0.01 | 0.02 | 0.12 | |
| 1C | 0 | -2654 | -125 | -104 | 0 | -201 | 360 | 2 | 0.00 | 0.02 | 0.09 | |
| 1D | 0 | -2654 | 208 | -104 | 0 | -201 | -482 | 2 | 0.00 | 0.02 | 0.12 | |
| 1E | 0 | -2502 | -125 | 112 | 0 | 168 | 360 | 2 | 0.01 | 0.02 | 0.09 | |
| 1F | 0 | -2502 | 208 | 112 | 0 | 168 | -482 | 2 | 0.01 | 0.02 | 0.12 | |
| 1G | 0 | -2502 | -125 | -104 | 0 | -201 | 360 | 2 | 0.00 | 0.02 | 0.09 | |
| 1H | 0 | -2502 | 208 | -104 | 0 | -201 | -482 | 2 | 0.00 | 0.02 | 0.12 | |
| 1I | 0 | -2708 | -14 | 297 | 0 | 485 | 82 | 2 | 0.01 | 0.02 | 0.06 | |
| 1J | 0 | -2708 | 97 | 297 | 0 | 485 | -204 | 2 | 0.01 | 0.02 | 0.06 | |
| 1K | 0 | -2708 | -14 | -288 | 0 | -517 | 82 | 2 | 0.01 | 0.02 | 0.06 | |
| 1L | 0 | -2708 | 97 | -288 | 0 | -517 | -204 | 2 | 0.01 | 0.02 | 0.06 | |
| 1M | 0 | -2448 | -14 | 297 | 0 | 485 | 82 | 2 | 0.01 | 0.02 | 0.06 | |
| 1N | 0 | -2448 | 97 | 297 | 0 | 485 | -204 | 2 | 0.01 | 0.02 | 0.06 | |
| 1O | 0 | -2448 | -14 | -288 | 0 | -517 | 82 | 2 | 0.01 | 0.02 | 0.06 | |
| 1P | 0 | -2448 | 97 | -288 | 0 | -517 | -204 | 2 | 0.01 | 0.02 | 0.06 | |
| 2 | 0 | -2584 | -9 | 28 | 0 | 24 | 27 | 2 | 0.00 | 0.02 | 0.01 | |
| 7 | 0 | -2568 | 42 | 28 | 0 | 24 | -63 | 2 | 0.00 | 0.02 | 0.01 | |
| 8 | 0 | -2594 | -10 | 4 | 0 | -16 | 29 | 2 | 0.00 | 0.02 | 0.01 | |
| 1A | 168 | -2576 | -125 | 112 | 0 | -20 | 150 | 2 | 0.01 | 0.02 | 0.04 | |
| 1B | 168 | -2576 | 208 | 112 | 0 | -20 | -133 | 2 | 0.01 | 0.02 | 0.03 | |
| 1C | 168 | -2576 | -125 | -104 | 0 | -27 | 150 | 2 | 0.00 | 0.02 | 0.04 | |
| 1D | 168 | -2576 | 208 | -104 | 0 | -27 | -133 | 2 | 0.00 | 0.02 | 0.03 | |
| 1E | 168 | -2425 | -125 | 112 | 0 | -20 | 150 | 2 | 0.01 | 0.02 | 0.04 | |
| 1F | 168 | -2425 | 208 | 112 | 0 | -20 | -133 | 2 | 0.01 | 0.02 | 0.03 | |
| 1G | 168 | -2425 | -125 | -104 | 0 | -27 | 150 | 2 | 0.00 | 0.02 | 0.04 | |
| 1H | 168 | -2425 | 208 | -104 | 0 | -27 | -133 | 2 | 0.00 | 0.02 | 0.03 | |
| 1I | 168 | -2630 | -14 | 297 | 0 | -13 | 58 | 2 | 0.01 | 0.02 | 0.01 | |
| 1J | 168 | -2630 | 97 | 297 | 0 | -13 | -41 | 2 | 0.01 | 0.02 | 0.01 | |
| 1K | 168 | -2630 | -14 | -288 | 0 | -34 | 58 | 2 | 0.01 | 0.02 | 0.01 | |
| 1L | 168 | -2630 | 97 | -288 | 0 | -34 | -41 | 2 | 0.01 | 0.02 | 0.01 | |
| 1M | 168 | -2371 | -14 | 297 | 0 | -13 | 58 | 2 | 0.01 | 0.02 | 0.01 | |
| 1N | 168 | -2371 | 97 | 297 | 0 | -13 | -41 | 2 | 0.01 | 0.02 | 0.01 | |
| 1O | 168 | -2371 | -14 | -288 | 0 | -34 | 58 | 2 | 0.01 | 0.02 | 0.01 | |
| 1P | 168 | -2371 | 97 | -288 | 0 | -34 | -41 | 2 | 0.01 | 0.02 | 0.01 | |
| 2 | 168 | -2506 | -9 | 28 | 0 | -22 | 12 | 2 | 0.00 | 0.02 | 0.00 | |
| 7 | 168 | -2490 | 42 | 28 | 0 | -22 | 8 | 2 | 0.00 | 0.02 | 0.00 | |
| 8 | 168 | -2516 | -10 | 4 | 0 | -23 | 12 | 2 | 0.00 | 0.02 | 0.00 | |
| 1A | 335 | -2499 | -125 | 112 | 0 | -208 | -60 | 2 | 0.01 | 0.02 | 0.02 | |
| 1B | 335 | -2499 | 208 | 112 | 0 | -208 | 217 | 2 | 0.01 | 0.02 | 0.05 | |
| 1C | 335 | -2499 | -125 | -104 | 0 | 147 | -60 | 2 | 0.00 | 0.02 | 0.02 | |
| 1D | 335 | -2499 | 208 | -104 | 0 | 147 | 217 | 2 | 0.00 | 0.02 | 0.05 | |
| 1E | 335 | -2347 | -125 | 112 | 0 | -208 | -60 | 2 | 0.01 | 0.02 | 0.02 | |
| 1F | 335 | -2347 | 208 | 112 | 0 | -208 | 217 | 2 | 0.01 | 0.02 | 0.05 | |
| 1G | 335 | -2347 | -125 | -104 | 0 | 147 | -60 | 2 | 0.00 | 0.02 | 0.02 | |
| 1H | 335 | -2347 | 208 | -104 | 0 | 147 | 217 | 2 | 0.00 | 0.02 | 0.05 | |
| 1I | 335 | -2553 | -14 | 297 | 0 | -510 | 35 | 2 | 0.01 | 0.02 | 0.06 | |
| 1J | 335 | -2553 | 97 | 297 | 0 | -510 | 123 | 2 | 0.01 | 0.02 | 0.06 | |
| 1K | 335 | -2553 | -14 | -288 | 0 | 449 | 35 | 2 | 0.01 | 0.02 | 0.05 | |
| 1L | 335 | -2553 | 97 | -288 | 0 | 449 | 123 | 2 | 0.01 | 0.02 | 0.05 | |
| 1M | 335 | -2293 | -14 | 297 | 0 | -510 | 35 | 2 | 0.01 | 0.02 | 0.06 | |
| 1N | 335 | -2293 | 97 | 297 | 0 | -510 | 123 | 2 | 0.01 | 0.02 | 0.06 | |
| 1O | 335 | -2293 | -14 | -288 | 0 | 449 | 35 | 2 | 0.01 | 0.02 | 0.05 | |
| 1P | 335 | -2293 | 97 | -288 | 0 | 449 | 123 | 2 | 0.01 | 0.02 | 0.05 | |
| 2 | 335 | -2429 | -9 | 28 | 0 | -69 | -4 | 2 | 0.00 | 0.02 | 0.01 | |
| 7 | 335 | -2413 | 42 | 28 | 0 | -68 | 79 | 2 | 0.00 | 0.02 | 0.02 | |
| 8 | 335 | -2439 | -10 | 4 | 0 | -31 | -4 | 2 | 0.00 | 0.02 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -2654 | -208 | 360 | 2 | 0.6232 | 0.9884 | 0.9874 | -- | -- | 0.04 | -- | 0.14 | Snell. 'yx'= 74 |
| 1B | -2654 | -208 | -482 | 2 | 0.6232 | 0.9884 | 0.9759 | -- | -- | 0.04 | -- | 0.17 | Snell. 'yx'= 74 |
| 1C | -2654 | -201 | 360 | 2 | 0.6232 | 0.9896 | 0.9874 | -- | -- | 0.04 | -- | 0.14 | Snell. 'yx'= 74 |
| 1D | -2654 | -201 | -482 | 2 | 0.6232 | 0.9896 | 0.9759 | -- | -- | 0.04 | -- | 0.17 | Snell. 'yx'= 74 |



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| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1E | -2502 | -208 | 360 | 2 | 0.6232 | 0.9890 | 0.9882 | -- | -- | 0.03 | -- | 0.14 Snell. 'yx'= | 74 |
| 1F | -2502 | -208 | -482 | 2 | 0.6232 | 0.9890 | 0.9773 | -- | -- | 0.03 | -- | 0.17 Snell. 'yx'= | 74 |
| 1G | -2502 | -201 | 360 | 2 | 0.6232 | 0.9902 | 0.9882 | -- | -- | 0.03 | -- | 0.14 Snell. 'yx'= | 74 |
| 1H | -2502 | -201 | -482 | 2 | 0.6232 | 0.9902 | 0.9773 | -- | -- | 0.03 | -- | 0.17 Snell. 'yx'= | 74 |
| 1I | -2708 | -510 | 82 | 2 | 0.6232 | 0.9855 | 1.0115 | -- | -- | 0.04 | -- | 0.11 Snell. 'yx'= | 74 |
| 1J | -2708 | -510 | -204 | 2 | 0.6232 | 0.9855 | 0.9692 | -- | -- | 0.04 | -- | 0.14 Snell. 'yx'= | 74 |
| 1K | -2708 | -517 | 82 | 2 | 0.6232 | 0.9870 | 1.0115 | -- | -- | 0.04 | -- | 0.11 Snell. 'yx'= | 74 |
| 1L | -2708 | -517 | -204 | 2 | 0.6232 | 0.9870 | 0.9692 | -- | -- | 0.04 | -- | 0.14 Snell. 'yx'= | 74 |
| 1M | -2448 | -510 | 82 | 2 | 0.6232 | 0.9869 | 1.0104 | -- | -- | 0.03 | -- | 0.11 Snell. 'yx'= | 74 |
| 1N | -2448 | -510 | -204 | 2 | 0.6232 | 0.9869 | 0.9722 | -- | -- | 0.03 | -- | 0.14 Snell. 'yx'= | 74 |
| 1O | -2448 | -517 | 82 | 2 | 0.6232 | 0.9883 | 1.0104 | -- | -- | 0.03 | -- | 0.11 Snell. 'yx'= | 74 |
| 1P | -2448 | -517 | -204 | 2 | 0.6232 | 0.9883 | 0.9722 | -- | -- | 0.03 | -- | 0.14 Snell. 'yx'= | 74 |
| 2 | -2584 | -69 | 27 | 2 | 0.6232 | 0.9965 | 0.9888 | -- | -- | 0.03 | -- | 0.05 Snell. 'yx'= | 74 |
| 7 | -2568 | -68 | 79 | 2 | 0.6232 | 0.9965 | 0.9708 | -- | -- | 0.03 | -- | 0.06 Snell. 'yx'= | 74 |
| 8 | -2594 | -31 | 29 | 2 | 0.6232 | 1.0116 | 0.9887 | -- | -- | 0.03 | -- | 0.04 Snell. 'yx'= | 74 |

**ASTA NUM. 23** NI 53 NF 93 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

categoria: p.p. y Vento qy tot.
qy medio: 0.0000 0.8288 0.8288 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -2549 | 117 | 124 | 0 | 205 | 162 | 2 | 0.01 | 0.02 | 0.04 | |
| 1B | 0 | -2549 | 440 | 124 | 0 | 205 | -638 | 2 | 0.01 | 0.02 | 0.15 | |
| 1C | 0 | -2549 | 117 | -115 | 0 | -210 | 162 | 2 | 0.01 | 0.02 | 0.04 | |
| 1D | 0 | -2549 | 440 | -115 | 0 | -210 | -638 | 2 | 0.01 | 0.02 | 0.15 | |
| 1E | 0 | 447 | 117 | 124 | 0 | 205 | 162 | 2 | 0.01 | 0.00 | 0.04 | |
| 1F | 0 | 447 | 440 | 124 | 0 | 205 | -638 | 2 | 0.01 | 0.00 | 0.15 | |
| 1G | 0 | 447 | 117 | -115 | 0 | -210 | 162 | 2 | 0.01 | 0.00 | 0.04 | |
| 1H | 0 | 447 | 440 | -115 | 0 | -210 | -638 | 2 | 0.01 | 0.00 | 0.15 | |
| 1I | 0 | -4411 | 228 | 283 | 0 | 481 | -114 | 2 | 0.01 | 0.04 | 0.06 | |
| 1J | 0 | -4411 | 329 | 283 | 0 | 481 | -362 | 2 | 0.01 | 0.04 | 0.09 | |
| 1K | 0 | -4411 | 228 | -274 | 0 | -486 | -114 | 2 | 0.01 | 0.04 | 0.06 | |
| 1L | 0 | -4411 | 329 | -274 | 0 | -486 | -362 | 2 | 0.01 | 0.04 | 0.09 | |
| 1M | 0 | 2309 | 228 | 283 | 0 | 481 | -114 | 2 | 0.01 | 0.02 | 0.06 | |
| 1N | 0 | 2309 | 329 | 283 | 0 | 481 | -362 | 2 | 0.01 | 0.02 | 0.09 | |
| 1O | 0 | 2309 | 228 | -274 | 0 | -486 | -114 | 2 | 0.01 | 0.02 | 0.06 | |
| 1P | 0 | 2309 | 329 | -274 | 0 | -486 | -362 | 2 | 0.01 | 0.02 | 0.09 | |
| 2 | 0 | -1299 | 8 | 27 | 0 | 36 | -22 | 2 | 0.00 | 0.01 | 0.01 | |
| 7 | 0 | -1310 | 278 | 26 | 0 | 35 | -238 | 2 | 0.01 | 0.01 | 0.06 | |
| 8 | 0 | -1040 | 8 | 5 | 0 | -1 | -22 | 2 | 0.00 | 0.01 | 0.01 | |
| 1A | 168 | -2472 | -91 | 124 | 0 | -3 | 184 | 2 | 0.01 | 0.02 | 0.04 | |
| 1B | 168 | -2472 | 232 | 124 | 0 | -3 | -75 | 2 | 0.01 | 0.02 | 0.02 | |
| 1C | 168 | -2472 | -91 | -115 | 0 | -17 | 184 | 2 | 0.01 | 0.02 | 0.04 | |
| 1D | 168 | -2472 | 232 | -115 | 0 | -17 | -75 | 2 | 0.01 | 0.02 | 0.02 | |
| 1E | 168 | 525 | -91 | 124 | 0 | -3 | 184 | 1 | 0.01 | 0.00 | 0.04 | |
| 1F | 168 | 525 | 232 | 124 | 0 | -3 | -75 | 2 | 0.01 | 0.00 | 0.02 | |
| 1G | 168 | 525 | -91 | -115 | 0 | -17 | 184 | 1 | 0.01 | 0.00 | 0.04 | |
| 1H | 168 | 525 | 232 | -115 | 0 | -17 | -75 | 2 | 0.01 | 0.00 | 0.02 | |
| 1I | 168 | -4333 | 20 | 283 | 0 | 7 | 94 | 2 | 0.01 | 0.04 | 0.02 | |
| 1J | 168 | -4333 | 121 | 283 | 0 | 7 | 14 | 2 | 0.01 | 0.04 | 0.00 | |
| 1K | 168 | -4333 | 20 | -274 | 0 | -27 | 94 | 2 | 0.01 | 0.04 | 0.02 | |
| 1L | 168 | -4333 | 121 | -274 | 0 | -27 | 14 | 2 | 0.01 | 0.04 | 0.00 | |
| 1M | 168 | 2386 | 20 | 283 | 0 | 7 | 94 | 2 | 0.01 | 0.02 | 0.02 | |
| 1N | 168 | 2386 | 121 | 283 | 0 | 7 | 14 | 2 | 0.01 | 0.02 | 0.00 | |
| 1O | 168 | 2386 | 20 | -274 | 0 | -27 | 94 | 2 | 0.01 | 0.02 | 0.02 | |
| 1P | 168 | 2386 | 121 | -274 | 0 | -27 | 14 | 2 | 0.01 | 0.02 | 0.00 | |
| 2 | 168 | -1222 | 8 | 27 | 0 | -8 | -8 | 2 | 0.00 | 0.01 | 0.00 | |
| 7 | 168 | -1232 | 70 | 26 | 0 | -8 | 54 | 2 | 0.00 | 0.01 | 0.01 | |
| 8 | 168 | -963 | 8 | 5 | 0 | -10 | -8 | 2 | 0.00 | 0.01 | 0.00 | |
| 1A | 335 | -2394 | -299 | 124 | 0 | -210 | -144 | 2 | 0.01 | 0.02 | 0.03 | |
| 1B | 335 | -2394 | 24 | 124 | 0 | -210 | 139 | 2 | 0.01 | 0.02 | 0.03 | |
| 1C | 335 | -2394 | -299 | -115 | 0 | 176 | -144 | 2 | 0.01 | 0.02 | 0.03 | |
| 1D | 335 | -2394 | 24 | -115 | 0 | 176 | 139 | 2 | 0.01 | 0.02 | 0.03 | |
| 1E | 335 | 602 | -299 | 124 | 0 | -210 | -144 | 2 | 0.01 | 0.00 | 0.03 | |
| 1F | 335 | 602 | 24 | 124 | 0 | -210 | 139 | 2 | 0.01 | 0.00 | 0.03 | |
| 1G | 335 | 602 | -299 | -115 | 0 | 176 | -144 | 2 | 0.01 | 0.00 | 0.03 | |
| 1H | 335 | 602 | 24 | -115 | 0 | 176 | 139 | 2 | 0.01 | 0.00 | 0.03 | |
| 1I | 335 | -4256 | -188 | 283 | 0 | -467 | -47 | 2 | 0.01 | 0.04 | 0.05 | |
| 1J | 335 | -4256 | -87 | 283 | 0 | -467 | 42 | 2 | 0.01 | 0.04 | 0.05 | |
| 1K | 335 | -4256 | -188 | -274 | 0 | 433 | -47 | 2 | 0.01 | 0.04 | 0.05 | |
| 1L | 335 | -4256 | -87 | -274 | 0 | 433 | 42 | 2 | 0.01 | 0.04 | 0.05 | |
| 1M | 335 | 2464 | -188 | 283 | 0 | -467 | -47 | 2 | 0.01 | 0.02 | 0.05 | |
| 1N | 335 | 2464 | -87 | 283 | 0 | -467 | 42 | 2 | 0.01 | 0.02 | 0.05 | |
| 1O | 335 | 2464 | -188 | -274 | 0 | 433 | -47 | 2 | 0.01 | 0.02 | 0.05 | |
| 1P | 335 | 2464 | -87 | -274 | 0 | 433 | 42 | 2 | 0.01 | 0.02 | 0.05 | |
| 2 | 335 | -1145 | 8 | 27 | 0 | -53 | 6 | 2 | 0.00 | 0.01 | 0.01 | |
| 7 | 335 | -1155 | -138 | 26 | 0 | -52 | -2 | 2 | 0.00 | 0.01 | 0.01 | |
| 8 | 335 | -885 | 8 | 5 | 0 | -18 | 6 | 2 | 0.00 | 0.01 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -2549 | -210 | 184 | 2 | 0.6232 | 0.9860 | 0.9931 | -- | -- | 0.03 | -- | 0.10 Snell. 'yx'= | 74 |
| 1B | -2549 | -210 | -638 | 2 | 0.6232 | 0.9860 | 0.9940 | -- | -- | 0.03 | -- | 0.21 Snell. 'yx'= | 74 |
| 1C | -2549 | -210 | 184 | 2 | 0.6232 | 0.9883 | 0.9931 | -- | -- | 0.03 | -- | 0.10 Snell. 'yx'= | 74 |
| 1D | -2549 | -210 | -638 | 2 | 0.6232 | 0.9883 | 0.9940 | -- | -- | 0.03 | -- | 0.21 Snell. 'yx'= | 74 |
| 1I | -4411 | 481 | -114 | 2 | 0.6232 | 0.9759 | 1.0351 | -- | -- | 0.06 | -- | 0.14 Snell. 'yx'= | 74 |
| 1J | -4411 | 481 | -362 | 2 | 0.6232 | 0.9759 | 1.0065 | -- | -- | 0.06 | -- | 0.20 Snell. 'yx'= | 74 |
| 1K | -4411 | -486 | -114 | 2 | 0.6232 | 0.9782 | 1.0351 | -- | -- | 0.06 | -- | 0.14 Snell. 'yx'= | 74 |
| 1L | -4411 | -486 | -362 | 2 | 0.6232 | 0.9782 | 1.0065 | -- | -- | 0.06 | -- | 0.20 Snell. 'yx'= | 74 |
| 2 | -1299 | -53 | -22 | 2 | 0.6232 | 0.9953 | 1.1162 | -- | -- | 0.02 | -- | 0.03 Snell. 'yx'= | 74 |
| 7 | -1310 | -52 | -238 | 2 | 0.6232 | 0.9954 | 1.0057 | -- | -- | 0.02 | -- | 0.08 Snell. 'yx'= | 74 |
| 8 | -1040 | -18 | -22 | 2 | 0.6232 | 1.0015 | 1.0927 | -- | -- | 0.01 | -- | 0.02 Snell. 'yx'= | 74 |

**ASTA NUM. 24** NI 54 NF 92 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

categoria: p.p. y Vento qy tot.
qy medio: 0.0000 1.6575 1.6575 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |



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| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 0 | -2437 | 343 | 117 | 0 | 195 | 70 | 2 | 0.01 | 0.02 | 0.02 | |
| 1B | 0 | -2437 | 641 | 117 | 0 | 195 | -732 | 2 | 0.01 | 0.02 | 0.18 | |
| 1C | 0 | -2437 | 343 | -130 | 0 | -234 | 70 | 2 | 0.01 | 0.02 | 0.03 | |
| 1D | 0 | -2437 | 641 | -130 | 0 | -234 | -732 | 2 | 0.01 | 0.02 | 0.18 | |
| 1E | 0 | 642 | 343 | 117 | 0 | 195 | 70 | 2 | 0.01 | 0.01 | 0.02 | |
| 1F | 0 | 642 | 641 | 117 | 0 | 195 | -732 | 2 | 0.01 | 0.01 | 0.18 | |
| 1G | 0 | 642 | 343 | -130 | 0 | -234 | 70 | 2 | 0.01 | 0.01 | 0.03 | |
| 1H | 0 | 642 | 641 | -130 | 0 | -234 | -732 | 2 | 0.01 | 0.01 | 0.18 | |
| 1I | 0 | -4443 | 443 | 278 | 0 | 475 | -198 | 2 | 0.01 | 0.04 | 0.05 | |
| 1J | 0 | -4443 | 541 | 278 | 0 | 475 | -465 | 2 | 0.01 | 0.04 | 0.11 | |
| 1K | 0 | -4443 | 443 | -291 | 0 | -514 | -198 | 2 | 0.01 | 0.04 | 0.06 | |
| 1L | 0 | -4443 | 541 | -291 | 0 | -514 | -465 | 2 | 0.01 | 0.04 | 0.11 | |
| 1M | 0 | 2649 | 443 | 278 | 0 | 475 | -198 | 2 | 0.01 | 0.02 | 0.05 | |
| 1N | 0 | 2649 | 541 | 278 | 0 | 475 | -465 | 2 | 0.01 | 0.02 | 0.11 | |
| 1O | 0 | 2649 | 443 | -291 | 0 | -514 | -198 | 2 | 0.01 | 0.02 | 0.06 | |
| 1P | 0 | 2649 | 541 | -291 | 0 | -514 | -465 | 2 | 0.01 | 0.02 | 0.11 | |
| 2 | 0 | -1178 | -8 | 17 | 0 | 20 | 26 | 2 | 0.00 | 0.01 | 0.01 | |
| 7 | 0 | -1175 | 492 | 16 | 0 | 19 | -332 | 2 | 0.01 | 0.01 | 0.08 | |
| 8 | 0 | -900 | -8 | -6 | 0 | -18 | 27 | 2 | 0.00 | 0.01 | 0.01 | |
| 1A | 168 | -2359 | -73 | 117 | 0 | -1 | 295 | 2 | 0.01 | 0.02 | 0.07 | |
| 1B | 168 | -2359 | 224 | 117 | 0 | -1 | -7 | 2 | 0.01 | 0.02 | 0.00 | |
| 1C | 168 | -2359 | -73 | -130 | 0 | -17 | 295 | 2 | 0.01 | 0.02 | 0.07 | |
| 1D | 168 | -2359 | 224 | -130 | 0 | -17 | -7 | 2 | 0.01 | 0.02 | 0.00 | |
| 1E | 168 | 720 | -73 | 117 | 0 | -1 | 295 | 1 | 0.01 | 0.01 | 0.07 | |
| 1F | 168 | 720 | 224 | 117 | 0 | -1 | -7 | 2 | 0.01 | 0.01 | 0.00 | |
| 1G | 168 | 720 | -73 | -130 | 0 | -17 | 295 | 1 | 0.01 | 0.01 | 0.07 | |
| 1H | 168 | 720 | 224 | -130 | 0 | -17 | -7 | 2 | 0.01 | 0.01 | 0.00 | |
| 1I | 168 | -4365 | 27 | 278 | 0 | 9 | 196 | 2 | 0.01 | 0.04 | 0.05 | |
| 1J | 168 | -4365 | 124 | 278 | 0 | 9 | 93 | 2 | 0.01 | 0.04 | 0.02 | |
| 1K | 168 | -4365 | 27 | -291 | 0 | -27 | 196 | 2 | 0.01 | 0.04 | 0.05 | |
| 1L | 168 | -4365 | 124 | -291 | 0 | -27 | 93 | 2 | 0.01 | 0.04 | 0.02 | |
| 1M | 168 | 2726 | 27 | 278 | 0 | 9 | 196 | 2 | 0.01 | 0.02 | 0.05 | |
| 1N | 168 | 2726 | 124 | 278 | 0 | 9 | 93 | 2 | 0.01 | 0.02 | 0.02 | |
| 1O | 168 | 2726 | 27 | -291 | 0 | -27 | 196 | 2 | 0.01 | 0.02 | 0.05 | |
| 1P | 168 | 2726 | 124 | -291 | 0 | -27 | 93 | 2 | 0.01 | 0.02 | 0.02 | |
| 2 | 168 | -1100 | -8 | 17 | 0 | -8 | 12 | 2 | 0.00 | 0.01 | 0.00 | |
| 7 | 168 | -1098 | 76 | 16 | 0 | -8 | 144 | 2 | 0.00 | 0.01 | 0.03 | |
| 8 | 168 | -823 | -8 | -6 | 0 | -9 | 12 | 2 | 0.00 | 0.01 | 0.00 | |
| 1A | 335 | -2282 | -490 | 117 | 0 | -198 | -177 | 2 | 0.01 | 0.02 | 0.04 | |
| 1B | 335 | -2282 | -192 | 117 | 0 | -198 | 21 | 2 | 0.01 | 0.02 | 0.02 | |
| 1C | 335 | -2282 | -490 | -130 | 0 | 200 | -177 | 2 | 0.01 | 0.02 | 0.04 | |
| 1D | 335 | -2282 | -192 | -130 | 0 | 200 | 21 | 2 | 0.01 | 0.02 | 0.02 | |
| 1E | 335 | 797 | -490 | 117 | 0 | -198 | -177 | 2 | 0.01 | 0.01 | 0.04 | |
| 1F | 335 | 797 | -192 | 117 | 0 | -198 | 21 | 2 | 0.01 | 0.01 | 0.02 | |
| 1G | 335 | 797 | -490 | -130 | 0 | 200 | -177 | 2 | 0.01 | 0.01 | 0.04 | |
| 1H | 335 | 797 | -192 | -130 | 0 | 200 | 21 | 2 | 0.01 | 0.01 | 0.02 | |
| 1I | 335 | -4288 | -389 | 278 | 0 | -458 | -109 | 2 | 0.01 | 0.04 | 0.05 | |
| 1J | 335 | -4288 | -292 | 278 | 0 | -458 | -47 | 2 | 0.01 | 0.04 | 0.05 | |
| 1K | 335 | -4288 | -389 | -291 | 0 | 460 | -109 | 2 | 0.01 | 0.04 | 0.05 | |
| 1L | 335 | -4288 | -292 | -291 | 0 | 460 | -47 | 2 | 0.01 | 0.04 | 0.05 | |
| 1M | 335 | 2804 | -389 | 278 | 0 | -458 | -109 | 2 | 0.01 | 0.02 | 0.05 | |
| 1N | 335 | 2804 | -292 | 278 | 0 | -458 | -47 | 2 | 0.01 | 0.02 | 0.05 | |
| 1O | 335 | 2804 | -389 | -291 | 0 | 460 | -109 | 2 | 0.01 | 0.02 | 0.05 | |
| 1P | 335 | 2804 | -292 | -291 | 0 | 460 | -47 | 2 | 0.01 | 0.02 | 0.05 | |
| 2 | 335 | -1023 | -8 | 17 | 0 | -35 | -2 | 2 | 0.00 | 0.01 | 0.00 | |
| 7 | 335 | -1020 | -340 | 16 | 0 | -35 | -78 | 2 | 0.01 | 0.01 | 0.02 | |
| 8 | 335 | -745 | -8 | -6 | 0 | 0 | -2 | 2 | 0.00 | 0.01 | 0.00 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -2437 | -198 | 295 | 2 | 0.6232 | 0.9864 | 1.0104 | -- | -- | 0.03 | -- | 0.13 | Snell. 'yx'= 74 |
| 1B | -2437 | -198 | -732 | 2 | 0.6232 | 0.9864 | 1.0064 | -- | -- | 0.03 | -- | 0.23 | Snell. 'yx'= 74 |
| 1C | -2437 | -234 | 295 | 2 | 0.6232 | 0.9885 | 1.0104 | -- | -- | 0.03 | -- | 0.13 | Snell. 'yx'= 74 |
| 1D | -2437 | -234 | -732 | 2 | 0.6232 | 0.9885 | 1.0064 | -- | -- | 0.03 | -- | 0.24 | Snell. 'yx'= 74 |
| 1I | -4443 | 475 | -198 | 2 | 0.6232 | 0.9759 | 1.0373 | -- | -- | 0.06 | -- | 0.16 | Snell. 'yx'= 74 |
| 1J | -4443 | 475 | -465 | 2 | 0.6232 | 0.9759 | 1.0231 | -- | -- | 0.06 | -- | 0.23 | Snell. 'yx'= 74 |
| 1K | -4443 | -514 | -198 | 2 | 0.6232 | 0.9779 | 1.0373 | -- | -- | 0.06 | -- | 0.17 | Snell. 'yx'= 74 |
| 1L | -4443 | -514 | -465 | 2 | 0.6232 | 0.9779 | 1.0231 | -- | -- | 0.06 | -- | 0.23 | Snell. 'yx'= 74 |
| 2 | -1178 | -35 | 26 | 2 | 0.6232 | 0.9966 | 1.1759 | -- | -- | 0.02 | -- | 0.03 | Snell. 'yx'= 74 |
| 7 | -1175 | -35 | -332 | 2 | 0.6232 | 0.9967 | 1.0079 | -- | -- | 0.02 | -- | 0.10 | Snell. 'yx'= 74 |
| 8 | -900 | -18 | 27 | 2 | 0.6232 | 1.0007 | 1.1288 | -- | -- | 0.01 | -- | 0.02 | Snell. 'yx'= 74 |

**ASTA NUM. 25** NI 82 NF 67 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -3465 | -159 | -557 | 0 | -368 | 436 | 2 | 0.02 | 0.03 | 0.11 | |
| 1B | 0 | -3465 | 196 | -557 | 0 | -368 | -514 | 2 | 0.02 | 0.03 | 0.12 | |
| 1C | 0 | -3465 | -159 | -764 | 0 | -768 | 436 | 2 | 0.03 | 0.03 | 0.11 | |
| 1D | 0 | -3465 | 196 | -764 | 0 | -768 | -514 | 2 | 0.03 | 0.03 | 0.13 | |
| 1E | 0 | -3177 | -159 | -557 | 0 | -368 | 436 | 2 | 0.02 | 0.03 | 0.11 | |
| 1F | 0 | -3177 | 196 | -557 | 0 | -368 | -514 | 2 | 0.02 | 0.03 | 0.12 | |
| 1G | 0 | -3177 | -159 | -764 | 0 | -768 | 436 | 2 | 0.03 | 0.03 | 0.11 | |
| 1H | 0 | -3177 | 196 | -764 | 0 | -768 | -514 | 2 | 0.03 | 0.03 | 0.13 | |
| 1I | 0 | -3468 | -64 | -365 | 0 | -56 | 170 | 2 | 0.02 | 0.03 | 0.04 | |
| 1J | 0 | -3468 | 101 | -365 | 0 | -56 | -248 | 2 | 0.02 | 0.03 | 0.06 | |
| 1K | 0 | -3468 | -64 | -957 | 0 | -1080 | 170 | 2 | 0.04 | 0.03 | 0.12 | |
| 1L | 0 | -3468 | 101 | -957 | 0 | -1080 | -248 | 2 | 0.04 | 0.03 | 0.12 | |
| 1M | 0 | -3174 | -64 | -365 | 0 | -56 | 170 | 2 | 0.02 | 0.03 | 0.04 | |
| 1N | 0 | -3174 | 101 | -365 | 0 | -56 | -248 | 2 | 0.02 | 0.03 | 0.06 | |
| 1O | 0 | -3174 | -64 | -957 | 0 | -1080 | 170 | 2 | 0.04 | 0.03 | 0.12 | |
| 1P | 0 | -3174 | 101 | -957 | 0 | -1080 | -248 | 2 | 0.04 | 0.03 | 0.12 | |
| 2 | 0 | -3321 | -9 | -479 | 0 | -448 | 28 | 2 | 0.02 | 0.03 | 0.05 | |
| 7 | 0 | -3324 | 18 | -479 | 0 | -443 | -39 | 2 | 0.02 | 0.03 | 0.05 | |
| 8 | 0 | -3319 | -9 | -661 | 0 | -573 | 28 | 2 | 0.03 | 0.03 | 0.07 | |
| 1A | 168 | -3387 | -159 | -404 | 0 | 426 | 170 | 2 | 0.02 | 0.03 | 0.05 | |
| 1B | 168 | -3387 | 196 | -404 | 0 | 426 | -186 | 2 | 0.02 | 0.03 | 0.05 | |
| 1C | 168 | -3387 | -159 | -610 | 0 | 394 | 170 | 2 | 0.03 | 0.03 | 0.05 | |
| 1D | 168 | -3387 | 196 | -610 | 0 | 394 | -186 | 2 | 0.03 | 0.03 | 0.05 | |
| 1E | 168 | -3100 | -159 | -404 | 0 | 426 | 170 | 2 | 0.02 | 0.03 | 0.05 | |
| 1F | 168 | -3100 | 196 | -404 | 0 | 426 | -186 | 2 | 0.02 | 0.03 | 0.05 | |
| 1G | 168 | -3100 | -159 | -610 | 0 | 394 | 170 | 2 | 0.03 | 0.03 | 0.05 | |
| 1H | 168 | -3100 | 196 | -610 | 0 | 394 | -186 | 2 | 0.03 | 0.03 | 0.05 | |



47521 CESENA (FC) – Via Cesare Battisti, 149 – Tel.Fax - 0547-613143 - Email:studio.ingegneria@aruba.it

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1I | 168 | -3390 | -64 | -211 | 0 | 423 | 62 | 2 | 0.01 | 0.03 | 0.05 |
| 1J | 168 | -3390 | 101 | -211 | 0 | 423 | -78 | 2 | 0.01 | 0.03 | 0.05 |
| 1K | 168 | -3390 | -64 | -803 | 0 | 397 | 62 | 2 | 0.04 | 0.03 | 0.05 |
| 1L | 168 | -3390 | 101 | -803 | 0 | 397 | -78 | 2 | 0.04 | 0.03 | 0.05 |
| 1M | 168 | -3097 | -64 | -211 | 0 | 423 | 62 | 2 | 0.01 | 0.03 | 0.05 |
| 1N | 168 | -3097 | 101 | -211 | 0 | 423 | -78 | 2 | 0.01 | 0.03 | 0.05 |
| 1O | 168 | -3097 | -64 | -803 | 0 | 397 | 62 | 2 | 0.04 | 0.03 | 0.05 |
| 1P | 168 | -3097 | 101 | -803 | 0 | 397 | -78 | 2 | 0.04 | 0.03 | 0.05 |
| 2 | 168 | -3244 | -9 | -479 | 0 | 354 | 12 | 2 | 0.02 | 0.03 | 0.04 |
| 7 | 168 | -3246 | 18 | -479 | 0 | 360 | -8 | 2 | 0.02 | 0.03 | 0.04 |
| 8 | 168 | -3242 | -9 | -507 | 0 | 405 | 12 | 2 | 0.02 | 0.03 | 0.05 |
| 1A | 335 | -3310 | -159 | -250 | 0 | 962 | -96 | 2 | 0.01 | 0.03 | 0.11 |
| 1B | 335 | -3310 | 196 | -250 | 0 | 962 | 142 | 2 | 0.01 | 0.03 | 0.11 |
| 1C | 335 | -3310 | -159 | -456 | 0 | 1298 | -96 | 2 | 0.02 | 0.03 | 0.15 |
| 1D | 335 | -3310 | 196 | -456 | 0 | 1298 | 142 | 2 | 0.02 | 0.03 | 0.15 |
| 1E | 335 | -3022 | -159 | -250 | 0 | 962 | -96 | 2 | 0.01 | 0.02 | 0.11 |
| 1F | 335 | -3022 | 196 | -250 | 0 | 962 | 142 | 2 | 0.01 | 0.02 | 0.11 |
| 1G | 335 | -3022 | -159 | -456 | 0 | 1298 | -96 | 2 | 0.02 | 0.02 | 0.15 |
| 1H | 335 | -3022 | 196 | -456 | 0 | 1298 | 142 | 2 | 0.02 | 0.02 | 0.15 |
| 1I | 335 | -3313 | -64 | -57 | 0 | 644 | -46 | 2 | 0.00 | 0.03 | 0.07 |
| 1J | 335 | -3313 | 101 | -57 | 0 | 644 | 92 | 2 | 0.00 | 0.03 | 0.07 |
| 1K | 335 | -3313 | -64 | -649 | 0 | 1616 | -46 | 2 | 0.03 | 0.03 | 0.19 |
| 1L | 335 | -3313 | 101 | -649 | 0 | 1616 | 92 | 2 | 0.03 | 0.03 | 0.19 |
| 1M | 335 | -3019 | -64 | -57 | 0 | 644 | -46 | 2 | 0.00 | 0.02 | 0.07 |
| 1N | 335 | -3019 | 101 | -57 | 0 | 644 | 92 | 2 | 0.00 | 0.02 | 0.07 |
| 1O | 335 | -3019 | -64 | -649 | 0 | 1616 | -46 | 2 | 0.03 | 0.02 | 0.19 |
| 1P | 335 | -3019 | 101 | -649 | 0 | 1616 | 92 | 2 | 0.03 | 0.02 | 0.19 |
| 2 | 335 | -3167 | -9 | -479 | 0 | 1157 | -4 | 2 | 0.02 | 0.03 | 0.13 |
| 7 | 335 | -3169 | 18 | -479 | 0 | 1162 | 23 | 2 | 0.02 | 0.03 | 0.13 |
| 8 | 335 | -3164 | -9 | -353 | 0 | 1125 | -4 | 2 | 0.02 | 0.03 | 0.13 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -3465 | 962 | 436 | 2 | 0.6232 | 0.9969 | 0.9808 | -- | -- | 0.05 | -- | 0.26 | Snell. 'yx'= 74 |
| 1B | -3465 | 962 | -514 | 2 | 0.6232 | 0.9969 | 0.9778 | -- | -- | 0.05 | -- | 0.28 | Snell. 'yx'= 74 |
| 1C | -3465 | 1298 | 436 | 2 | 0.6232 | 0.9916 | 0.9808 | -- | -- | 0.05 | -- | 0.30 | Snell. 'yx'= 74 |
| 1D | -3465 | 1298 | -514 | 2 | 0.6232 | 0.9916 | 0.9778 | -- | -- | 0.05 | -- | 0.31 | Snell. 'yx'= 74 |
| 1E | -3177 | 962 | 436 | 2 | 0.6232 | 0.9972 | 0.9824 | -- | -- | 0.04 | -- | 0.26 | Snell. 'yx'= 74 |
| 1F | -3177 | 962 | -514 | 2 | 0.6232 | 0.9972 | 0.9796 | -- | -- | 0.04 | -- | 0.27 | Snell. 'yx'= 74 |
| 1G | -3177 | 1298 | 436 | 2 | 0.6232 | 0.9923 | 0.9824 | -- | -- | 0.04 | -- | 0.29 | Snell. 'yx'= 74 |
| 1H | -3177 | 1298 | -514 | 2 | 0.6232 | 0.9923 | 0.9796 | -- | -- | 0.04 | -- | 0.31 | Snell. 'yx'= 74 |
| 1I | -3468 | 644 | 170 | 2 | 0.6232 | 1.0047 | 0.9780 | -- | -- | 0.05 | -- | 0.16 | Snell. 'yx'= 74 |
| 1J | -3468 | 644 | -248 | 2 | 0.6232 | 1.0047 | 0.9727 | -- | -- | 0.05 | -- | 0.18 | Snell. 'yx'= 74 |
| 1K | -3468 | 1616 | 170 | 2 | 0.6232 | 0.9895 | 0.9780 | -- | -- | 0.05 | -- | 0.27 | Snell. 'yx'= 74 |
| 1L | -3468 | 1616 | -248 | 2 | 0.6232 | 0.9895 | 0.9727 | -- | -- | 0.05 | -- | 0.29 | Snell. 'yx'= 74 |
| 1M | -3174 | 644 | 170 | 2 | 0.6232 | 1.0043 | 0.9799 | -- | -- | 0.04 | -- | 0.16 | Snell. 'yx'= 74 |
| 1N | -3174 | 644 | -248 | 2 | 0.6232 | 1.0043 | 0.9750 | -- | -- | 0.04 | -- | 0.17 | Snell. 'yx'= 74 |
| 1O | -3174 | 1616 | 170 | 2 | 0.6232 | 0.9904 | 0.9799 | -- | -- | 0.04 | -- | 0.27 | Snell. 'yx'= 74 |
| 1P | -3174 | 1616 | -248 | 2 | 0.6232 | 0.9904 | 0.9750 | -- | -- | 0.04 | -- | 0.28 | Snell. 'yx'= 74 |
| 2 | -3321 | 1157 | 28 | 2 | 0.6232 | 0.9966 | 0.9864 | -- | -- | 0.04 | -- | 0.18 | Snell. 'yx'= 74 |
| 7 | -3324 | 1162 | -39 | 2 | 0.6232 | 0.9967 | 0.9626 | -- | -- | 0.04 | -- | 0.19 | Snell. 'yx'= 74 |
| 8 | -3319 | 1125 | 28 | 2 | 0.6232 | 0.9940 | 0.9863 | -- | -- | 0.04 | -- | 0.18 | Snell. 'yx'= 74 |

**ASTA NUM. 26** NI 94 NF 70 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -3411 | -340 | 234 | 0 | 420 | 630 | 2 | 0.01 | 0.03 | 0.15 | |
| 1B | 0 | -3411 | 392 | 234 | 0 | 420 | -722 | 2 | 0.01 | 0.03 | 0.18 | |
| 1C | 0 | -3411 | -340 | 19 | 0 | 11 | 630 | 2 | 0.01 | 0.03 | 0.15 | |
| 1D | 0 | -3411 | 392 | 19 | 0 | 11 | -722 | 2 | 0.01 | 0.03 | 0.17 | |
| 1E | 0 | -3237 | -340 | 234 | 0 | 420 | 630 | 2 | 0.01 | 0.03 | 0.15 | |
| 1F | 0 | -3237 | 392 | 234 | 0 | 420 | -722 | 2 | 0.01 | 0.03 | 0.18 | |
| 1G | 0 | -3237 | -340 | 19 | 0 | 11 | 630 | 2 | 0.01 | 0.03 | 0.15 | |
| 1H | 0 | -3237 | 392 | 19 | 0 | 11 | -722 | 2 | 0.01 | 0.03 | 0.17 | |
| 1I | 0 | -3476 | -132 | 423 | 0 | 720 | 244 | 2 | 0.02 | 0.03 | 0.08 | |
| 1J | 0 | -3476 | 184 | 423 | 0 | 720 | -336 | 2 | 0.02 | 0.03 | 0.09 | |
| 1K | 0 | -3476 | -132 | -170 | 0 | -289 | 244 | 2 | 0.01 | 0.03 | 0.06 | |
| 1L | 0 | -3476 | 184 | -170 | 0 | -289 | -336 | 2 | 0.01 | 0.03 | 0.08 | |
| 1M | 0 | -3172 | -132 | 423 | 0 | 720 | 244 | 2 | 0.02 | 0.03 | 0.08 | |
| 1N | 0 | -3172 | 184 | 423 | 0 | 720 | -336 | 2 | 0.02 | 0.03 | 0.09 | |
| 1O | 0 | -3172 | -132 | -170 | 0 | -289 | 244 | 2 | 0.01 | 0.03 | 0.06 | |
| 1P | 0 | -3172 | 184 | -170 | 0 | -289 | -336 | 2 | 0.01 | 0.03 | 0.08 | |
| 2 | 0 | -3298 | -24 | 468 | 0 | 432 | 44 | 2 | 0.02 | 0.03 | 0.05 | |
| 7 | 0 | -3311 | 26 | 467 | 0 | 426 | -47 | 2 | 0.02 | 0.03 | 0.05 | |
| 8 | 0 | -3311 | -24 | 127 | 0 | 222 | 45 | 2 | 0.01 | 0.03 | 0.03 | |
| 1A | 168 | -3334 | -340 | 542 | 0 | -236 | 60 | 2 | 0.02 | 0.03 | 0.03 | |
| 1B | 168 | -3334 | 392 | 542 | 0 | -236 | -66 | 2 | 0.02 | 0.03 | 0.03 | |
| 1C | 168 | -3334 | -340 | 327 | 0 | -271 | 60 | 2 | 0.01 | 0.03 | 0.03 | |
| 1D | 168 | -3334 | 392 | 327 | 0 | -271 | -66 | 2 | 0.01 | 0.03 | 0.03 | |
| 1E | 168 | -3160 | -340 | 542 | 0 | -236 | 60 | 2 | 0.02 | 0.03 | 0.03 | |
| 1F | 168 | -3160 | 392 | 542 | 0 | -236 | -66 | 2 | 0.02 | 0.03 | 0.03 | |
| 1G | 168 | -3160 | -340 | 327 | 0 | -271 | 60 | 2 | 0.01 | 0.03 | 0.03 | |
| 1H | 168 | -3160 | 392 | 327 | 0 | -271 | -66 | 2 | 0.01 | 0.03 | 0.03 | |
| 1I | 168 | -3399 | -132 | 731 | 0 | -248 | 22 | 2 | 0.03 | 0.03 | 0.03 | |
| 1J | 168 | -3399 | 184 | 731 | 0 | -248 | -28 | 2 | 0.03 | 0.03 | 0.03 | |
| 1K | 168 | -3399 | -132 | 138 | 0 | -260 | 22 | 2 | 0.01 | 0.03 | 0.03 | |
| 1L | 168 | -3399 | 184 | 138 | 0 | -260 | -28 | 2 | 0.01 | 0.03 | 0.03 | |
| 1M | 168 | -3095 | -132 | 731 | 0 | -248 | 22 | 2 | 0.03 | 0.03 | 0.03 | |
| 1N | 168 | -3095 | 184 | 731 | 0 | -248 | -28 | 2 | 0.03 | 0.03 | 0.03 | |
| 1O | 168 | -3095 | -132 | 138 | 0 | -260 | 22 | 2 | 0.01 | 0.03 | 0.03 | |
| 1P | 168 | -3095 | 184 | 138 | 0 | -260 | -28 | 2 | 0.01 | 0.03 | 0.03 | |
| 2 | 168 | -3220 | -24 | 468 | 0 | -351 | 4 | 2 | 0.02 | 0.03 | 0.04 | |
| 7 | 168 | -3234 | 26 | 467 | 0 | -356 | -3 | 2 | 0.02 | 0.03 | 0.04 | |
| 8 | 168 | -3234 | -24 | 435 | 0 | -249 | 4 | 2 | 0.02 | 0.03 | 0.03 | |
| 1A | 335 | -3257 | -340 | 849 | 0 | -1409 | -509 | 2 | 0.04 | 0.03 | 0.16 | |
| 1B | 335 | -3257 | 392 | 849 | 0 | -1409 | 590 | 2 | 0.04 | 0.03 | 0.17 | |
| 1C | 335 | -3257 | -340 | 635 | 0 | -1069 | -509 | 2 | 0.03 | 0.03 | 0.14 | |
| 1D | 335 | -3257 | 392 | 635 | 0 | -1069 | 590 | 2 | 0.03 | 0.03 | 0.16 | |
| 1E | 335 | -3083 | -340 | 849 | 0 | -1409 | -509 | 2 | 0.04 | 0.03 | 0.16 | |
| 1F | 335 | -3083 | 392 | 849 | 0 | -1409 | 590 | 2 | 0.04 | 0.03 | 0.17 | |
| 1G | 335 | -3083 | -340 | 635 | 0 | -1069 | -509 | 2 | 0.03 | 0.03 | 0.14 | |
| 1H | 335 | -3083 | 392 | 635 | 0 | -1069 | 590 | 2 | 0.03 | 0.03 | 0.16 | |
| 1I | 335 | -3322 | -132 | 1038 | 0 | -1732 | -199 | 2 | 0.05 | 0.03 | 0.20 | |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1J | 335 | -3322 | 184 | 1038 | 0 | -1732 | 281 | 2 | 0.05 | 0.03 | 0.20 |
| 1K | 335 | -3322 | -132 | 446 | 0 | -746 | -199 | 2 | 0.02 | 0.03 | 0.09 |
| 1L | 335 | -3322 | 184 | 446 | 0 | -746 | 281 | 2 | 0.02 | 0.03 | 0.09 |
| 1M | 335 | -3018 | -132 | 1038 | 0 | -1732 | -199 | 2 | 0.05 | 0.02 | 0.20 |
| 1N | 335 | -3018 | 184 | 1038 | 0 | -1732 | 281 | 2 | 0.05 | 0.02 | 0.20 |
| 1O | 335 | -3018 | -132 | 446 | 0 | -746 | -199 | 2 | 0.02 | 0.02 | 0.09 |
| 1P | 335 | -3018 | 184 | 446 | 0 | -746 | 281 | 2 | 0.02 | 0.02 | 0.09 |
| 2 | 335 | -3143 | -24 | 468 | 0 | -1134 | -36 | 2 | 0.02 | 0.03 | 0.13 |
| 7 | 335 | -3156 | 26 | 467 | 0 | -1138 | 41 | 2 | 0.02 | 0.03 | 0.13 |
| 8 | 335 | -3156 | -24 | 743 | 0 | -1235 | -36 | 2 | 0.03 | 0.03 | 0.14 |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -3411 | -1409 | 630 | 2 | 0.6232 | 0.9997 | 0.9612 | -- | -- | 0.05 | -- | 0.35 | Snell. 'yx'= 74 |
| 1B | -3411 | -1409 | -722 | 2 | 0.6232 | 0.9997 | 0.9612 | -- | -- | 0.05 | -- | 0.37 | Snell. 'yx'= 74 |
| 1C | -3411 | -1069 | 630 | 2 | 0.6232 | 1.0069 | 0.9612 | -- | -- | 0.05 | -- | 0.31 | Snell. 'yx'= 74 |
| 1D | -3411 | -1069 | -722 | 2 | 0.6232 | 1.0069 | 0.9612 | -- | -- | 0.05 | -- | 0.34 | Snell. 'yx'= 74 |
| 1E | -3237 | -1409 | 630 | 2 | 0.6232 | 0.9997 | 0.9632 | -- | -- | 0.04 | -- | 0.35 | Snell. 'yx'= 74 |
| 1F | -3237 | -1409 | -722 | 2 | 0.6232 | 0.9997 | 0.9632 | -- | -- | 0.04 | -- | 0.37 | Snell. 'yx'= 74 |
| 1G | -3237 | -1069 | 630 | 2 | 0.6232 | 1.0065 | 0.9632 | -- | -- | 0.04 | -- | 0.31 | Snell. 'yx'= 74 |
| 1H | -3237 | -1069 | -722 | 2 | 0.6232 | 1.0065 | 0.9632 | -- | -- | 0.04 | -- | 0.33 | Snell. 'yx'= 74 |
| 1I | -3476 | -1732 | 244 | 2 | 0.6232 | 0.9964 | 0.9605 | -- | -- | 0.05 | -- | 0.30 | Snell. 'yx'= 74 |
| 1J | -3476 | -1732 | -336 | 2 | 0.6232 | 0.9964 | 0.9605 | -- | -- | 0.05 | -- | 0.32 | Snell. 'yx'= 74 |
| 1K | -3476 | -746 | 244 | 2 | 0.6232 | 1.0147 | 0.9605 | -- | -- | 0.05 | -- | 0.19 | Snell. 'yx'= 74 |
| 1L | -3476 | -746 | -336 | 2 | 0.6232 | 1.0147 | 0.9605 | -- | -- | 0.05 | -- | 0.21 | Snell. 'yx'= 74 |
| 1M | -3172 | -1732 | 244 | 2 | 0.6232 | 0.9968 | 0.9639 | -- | -- | 0.04 | -- | 0.30 | Snell. 'yx'= 74 |
| 1N | -3172 | -1732 | -336 | 2 | 0.6232 | 0.9968 | 0.9639 | -- | -- | 0.04 | -- | 0.32 | Snell. 'yx'= 74 |
| 1O | -3172 | -746 | 244 | 2 | 0.6232 | 1.0135 | 0.9639 | -- | -- | 0.04 | -- | 0.19 | Snell. 'yx'= 74 |
| 1P | -3172 | -746 | -336 | 2 | 0.6232 | 1.0135 | 0.9639 | -- | -- | 0.04 | -- | 0.21 | Snell. 'yx'= 74 |
| 2 | -3298 | -1134 | 44 | 2 | 0.6232 | 0.9987 | 0.9625 | -- | -- | 0.04 | -- | 0.18 | Snell. 'yx'= 74 |
| 7 | -3311 | -1138 | -47 | 2 | 0.6232 | 0.9989 | 0.9623 | -- | -- | 0.04 | -- | 0.19 | Snell. 'yx'= 74 |
| 8 | -3311 | -1235 | 45 | 2 | 0.6232 | 1.0026 | 0.9623 | -- | -- | 0.04 | -- | 0.20 | Snell. 'yx'= 74 |

**ASTA NUM. 27** NI 95 NF 83 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

categoria: p.p. y Vento qy tot.
qy medio: 0.0000 2.3725 2.3725 kg/cm
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -2058 | 511 | 111 | 0 | 195 | -5 | 2 | 0.01 | 0.02 | 0.02 | |
| 1B | 0 | -2058 | 904 | 111 | 0 | 195 | -959 | 2 | 0.02 | 0.02 | 0.23 | |
| 1C | 0 | -2058 | 511 | -198 | 0 | -335 | -5 | 2 | 0.01 | 0.02 | 0.04 | |
| 1D | 0 | -2058 | 904 | -198 | 0 | -335 | -959 | 2 | 0.02 | 0.02 | 0.23 | |
| 1E | 0 | -1976 | 511 | 111 | 0 | 195 | -5 | 2 | 0.01 | 0.02 | 0.02 | |
| 1F | 0 | -1976 | 904 | 111 | 0 | 195 | -959 | 2 | 0.02 | 0.02 | 0.23 | |
| 1G | 0 | -1976 | 511 | -198 | 0 | -335 | -5 | 2 | 0.01 | 0.02 | 0.04 | |
| 1H | 0 | -1976 | 904 | -198 | 0 | -335 | -959 | 2 | 0.02 | 0.02 | 0.23 | |
| 1I | 0 | -2040 | 619 | 318 | 0 | 552 | -284 | 2 | 0.01 | 0.02 | 0.07 | |
| 1J | 0 | -2040 | 796 | 318 | 0 | 552 | -680 | 2 | 0.01 | 0.02 | 0.17 | |
| 1K | 0 | -2040 | 619 | -405 | 0 | -692 | -284 | 2 | 0.02 | 0.02 | 0.08 | |
| 1L | 0 | -2040 | 796 | -405 | 0 | -692 | -680 | 2 | 0.02 | 0.02 | 0.17 | |
| 1M | 0 | -1994 | 619 | 318 | 0 | 552 | -284 | 2 | 0.01 | 0.02 | 0.07 | |
| 1N | 0 | -1994 | 796 | 318 | 0 | 552 | -680 | 2 | 0.01 | 0.02 | 0.17 | |
| 1O | 0 | -1994 | 619 | -405 | 0 | -692 | -284 | 2 | 0.02 | 0.02 | 0.08 | |
| 1P | 0 | -1994 | 796 | -405 | 0 | -692 | -680 | 2 | 0.02 | 0.02 | 0.17 | |
| 2 | 0 | -2044 | -3 | -18 | 0 | -25 | 10 | 2 | 0.00 | 0.02 | 0.00 | |
| 7 | 0 | -2041 | 707 | -17 | 0 | -24 | -483 | 2 | 0.01 | 0.02 | 0.12 | |
| 8 | 0 | -2020 | -3 | -44 | 0 | -71 | 10 | 2 | 0.00 | 0.02 | 0.01 | |
| 1A | 168 | -1980 | -85 | 111 | 0 | 8 | 351 | 2 | 0.00 | 0.02 | 0.08 | |
| 1B | 168 | -1980 | 308 | 111 | 0 | 8 | 55 | 2 | 0.01 | 0.02 | 0.01 | |
| 1C | 168 | -1980 | -85 | -198 | 0 | -4 | 351 | 2 | 0.01 | 0.02 | 0.08 | |
| 1D | 168 | -1980 | 308 | -198 | 0 | -4 | 55 | 2 | 0.01 | 0.02 | 0.01 | |
| 1E | 168 | -1899 | -85 | 111 | 0 | 8 | 351 | 2 | 0.00 | 0.02 | 0.08 | |
| 1F | 168 | -1899 | 308 | 111 | 0 | 8 | 55 | 2 | 0.01 | 0.02 | 0.01 | |
| 1G | 168 | -1899 | -85 | -198 | 0 | -4 | 351 | 2 | 0.01 | 0.02 | 0.08 | |
| 1H | 168 | -1899 | 308 | -198 | 0 | -4 | 55 | 2 | 0.01 | 0.02 | 0.01 | |
| 1I | 168 | -1962 | 22 | 318 | 0 | 19 | 252 | 2 | 0.01 | 0.02 | 0.06 | |
| 1J | 168 | -1962 | 200 | 318 | 0 | 19 | 154 | 2 | 0.01 | 0.02 | 0.04 | |
| 1K | 168 | -1962 | 22 | -405 | 0 | -14 | 252 | 2 | 0.02 | 0.02 | 0.06 | |
| 1L | 168 | -1962 | 200 | -405 | 0 | -14 | 154 | 2 | 0.02 | 0.02 | 0.04 | |
| 1M | 168 | -1917 | 22 | 318 | 0 | 19 | 252 | 2 | 0.01 | 0.02 | 0.06 | |
| 1N | 168 | -1917 | 200 | 318 | 0 | 19 | 154 | 2 | 0.01 | 0.02 | 0.04 | |
| 1O | 168 | -1917 | 22 | -405 | 0 | -14 | 252 | 2 | 0.02 | 0.02 | 0.06 | |
| 1P | 168 | -1917 | 200 | -405 | 0 | -14 | 154 | 2 | 0.02 | 0.02 | 0.04 | |
| 2 | 168 | -1966 | -3 | -18 | 0 | 5 | 5 | 2 | 0.00 | 0.02 | 0.00 | |
| 7 | 168 | -1964 | 111 | -17 | 0 | 5 | 203 | 2 | 0.00 | 0.02 | 0.05 | |
| 8 | 168 | -1943 | -3 | -44 | 0 | 2 | 5 | 2 | 0.00 | 0.02 | 0.00 | |
| 1A | 335 | -1903 | -682 | 111 | 0 | -178 | -291 | 2 | 0.01 | 0.02 | 0.07 | |
| 1B | 335 | -1903 | -288 | 111 | 0 | -178 | 71 | 2 | 0.01 | 0.02 | 0.02 | |
| 1C | 335 | -1903 | -682 | -198 | 0 | 327 | -291 | 2 | 0.01 | 0.02 | 0.07 | |
| 1D | 335 | -1903 | -288 | -198 | 0 | 327 | 71 | 2 | 0.01 | 0.02 | 0.04 | |
| 1E | 335 | -1821 | -682 | 111 | 0 | -178 | -291 | 2 | 0.01 | 0.02 | 0.07 | |
| 1F | 335 | -1821 | -288 | 111 | 0 | -178 | 71 | 2 | 0.01 | 0.02 | 0.02 | |
| 1G | 335 | -1821 | -682 | -198 | 0 | 327 | -291 | 2 | 0.01 | 0.02 | 0.07 | |
| 1H | 335 | -1821 | -288 | -198 | 0 | 327 | 71 | 2 | 0.01 | 0.02 | 0.04 | |
| 1I | 335 | -1885 | -574 | 318 | 0 | -515 | -209 | 2 | 0.01 | 0.02 | 0.06 | |
| 1J | 335 | -1885 | -396 | 318 | 0 | -515 | -11 | 2 | 0.01 | 0.02 | 0.06 | |
| 1K | 335 | -1885 | -574 | -405 | 0 | 664 | -209 | 2 | 0.02 | 0.02 | 0.08 | |
| 1L | 335 | -1885 | -396 | -405 | 0 | 664 | -11 | 2 | 0.02 | 0.02 | 0.08 | |
| 1M | 335 | -1839 | -574 | 318 | 0 | -515 | -209 | 2 | 0.01 | 0.02 | 0.06 | |
| 1N | 335 | -1839 | -396 | 318 | 0 | -515 | -11 | 2 | 0.01 | 0.02 | 0.06 | |
| 1O | 335 | -1839 | -574 | -405 | 0 | 664 | -209 | 2 | 0.02 | 0.02 | 0.08 | |
| 1P | 335 | -1839 | -396 | -405 | 0 | 664 | -11 | 2 | 0.02 | 0.02 | 0.08 | |
| 2 | 335 | -1889 | -3 | -18 | 0 | 35 | 0 | 2 | 0.00 | 0.02 | 0.00 | |
| 7 | 335 | -1886 | -485 | -17 | 0 | 33 | -110 | 2 | 0.01 | 0.02 | 0.03 | |
| 8 | 335 | -1866 | -3 | -44 | 0 | 76 | 0 | 2 | 0.00 | 0.02 | 0.01 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |



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| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | -2058 | 195 | 351 | 2 | 0.6232 | 0.9895 | 1.0130 | -- | -- | 0.03 | -- | 0.13 Snell. 'yx'= | 74 |
| 1B | -2058 | 195 | -959 | 2 | 0.6232 | 0.9895 | 1.0051 | -- | -- | 0.03 | -- | 0.28 Snell. 'yx'= | 74 |
| 1C | -2058 | -335 | 351 | 2 | 0.6232 | 0.9887 | 1.0130 | -- | -- | 0.03 | -- | 0.15 Snell. 'yx'= | 74 |
| 1D | -2058 | -335 | -959 | 2 | 0.6232 | 0.9887 | 1.0051 | -- | -- | 0.03 | -- | 0.30 Snell. 'yx'= | 74 |
| 1E | -1976 | 195 | 351 | 2 | 0.6232 | 0.9899 | 1.0125 | -- | -- | 0.03 | -- | 0.13 Snell. 'yx'= | 74 |
| 1F | -1976 | 195 | -959 | 2 | 0.6232 | 0.9899 | 1.0049 | -- | -- | 0.03 | -- | 0.28 Snell. 'yx'= | 74 |
| 1G | -1976 | -335 | 351 | 2 | 0.6232 | 0.9891 | 1.0125 | -- | -- | 0.03 | -- | 0.15 Snell. 'yx'= | 74 |
| 1H | -1976 | -335 | -959 | 2 | 0.6232 | 0.9891 | 1.0049 | -- | -- | 0.03 | -- | 0.30 Snell. 'yx'= | 74 |
| 1I | -2040 | 552 | -284 | 2 | 0.6232 | 0.9894 | 1.0178 | -- | -- | 0.03 | -- | 0.16 Snell. 'yx'= | 74 |
| 1J | -2040 | 552 | -680 | 2 | 0.6232 | 0.9894 | 1.0090 | -- | -- | 0.03 | -- | 0.25 Snell. 'yx'= | 74 |
| 1K | -2040 | -692 | -284 | 2 | 0.6232 | 0.9890 | 1.0178 | -- | -- | 0.03 | -- | 0.18 Snell. 'yx'= | 74 |
| 1L | -2040 | -692 | -680 | 2 | 0.6232 | 0.9890 | 1.0090 | -- | -- | 0.03 | -- | 0.27 Snell. 'yx'= | 74 |
| 1M | -1994 | 552 | -284 | 2 | 0.6232 | 0.9896 | 1.0174 | -- | -- | 0.03 | -- | 0.16 Snell. 'yx'= | 74 |
| 1N | -1994 | 552 | -680 | 2 | 0.6232 | 0.9896 | 1.0088 | -- | -- | 0.03 | -- | 0.25 Snell. 'yx'= | 74 |
| 1O | -1994 | -692 | -284 | 2 | 0.6232 | 0.9892 | 1.0174 | -- | -- | 0.03 | -- | 0.17 Snell. 'yx'= | 74 |
| 1P | -1994 | -692 | -680 | 2 | 0.6232 | 0.9892 | 1.0088 | -- | -- | 0.03 | -- | 0.27 Snell. 'yx'= | 74 |
| 2 | -2044 | 35 | 10 | 2 | 0.6232 | 0.9923 | 1.5000 | -- | -- | 0.03 | -- | 0.03 Snell. 'yx'= | 74 |
| 7 | -2041 | 33 | -483 | 2 | 0.6232 | 0.9924 | 1.0136 | -- | -- | 0.03 | -- | 0.15 Snell. 'yx'= | 74 |
| 8 | -2020 | 76 | 10 | 2 | 0.6232 | 0.9894 | 1.5000 | -- | -- | 0.03 | -- | 0.04 Snell. 'yx'= | 74 |

**ASTA NUM. 28** NI 96 NF 62 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -4202 | -177 | 111 | 0 | 176 | 425 | 2 | 0.00 | 0.03 | 0.10 | |
| 1B | 0 | -4202 | 307 | 111 | 0 | 176 | -626 | 2 | 0.01 | 0.03 | 0.15 | |
| 1C | 0 | -4202 | -177 | -179 | 0 | -289 | 425 | 2 | 0.01 | 0.03 | 0.10 | |
| 1D | 0 | -4202 | 307 | -179 | 0 | -289 | -626 | 2 | 0.01 | 0.03 | 0.15 | |
| 1E | 0 | -3862 | -177 | 111 | 0 | 176 | 425 | 2 | 0.00 | 0.03 | 0.10 | |
| 1F | 0 | -3862 | 307 | 111 | 0 | 176 | -626 | 2 | 0.01 | 0.03 | 0.15 | |
| 1G | 0 | -3862 | -177 | -179 | 0 | -289 | 425 | 2 | 0.01 | 0.03 | 0.10 | |
| 1H | 0 | -3862 | 307 | -179 | 0 | -289 | -626 | 2 | 0.01 | 0.03 | 0.15 | |
| 1I | 0 | -4142 | -48 | 329 | 0 | 553 | 124 | 2 | 0.01 | 0.03 | 0.06 | |
| 1J | 0 | -4142 | 179 | 329 | 0 | 553 | -325 | 2 | 0.01 | 0.03 | 0.08 | |
| 1K | 0 | -4142 | -48 | -397 | 0 | -666 | 124 | 2 | 0.02 | 0.03 | 0.08 | |
| 1L | 0 | -4142 | 179 | -397 | 0 | -666 | -325 | 2 | 0.02 | 0.03 | 0.08 | |
| 1M | 0 | -3922 | -48 | 329 | 0 | 553 | 124 | 2 | 0.01 | 0.03 | 0.06 | |
| 1N | 0 | -3922 | 179 | 329 | 0 | 553 | -325 | 2 | 0.01 | 0.03 | 0.08 | |
| 1O | 0 | -3922 | -48 | -397 | 0 | -666 | 124 | 2 | 0.02 | 0.03 | 0.08 | |
| 1P | 0 | -3922 | 179 | -397 | 0 | -666 | -325 | 2 | 0.02 | 0.03 | 0.08 | |
| 2 | 0 | -4107 | -2 | -9 | 0 | -11 | 9 | 2 | 0.00 | 0.03 | 0.00 | |
| 7 | 0 | -4088 | 65 | -7 | 0 | -9 | -101 | 2 | 0.00 | 0.03 | 0.02 | |
| 8 | 0 | -4051 | -2 | -36 | 0 | -59 | 9 | 2 | 0.00 | 0.03 | 0.01 | |
| 1A | 168 | -4124 | -177 | 111 | 0 | -9 | 128 | 2 | 0.00 | 0.03 | 0.03 | |
| 1B | 168 | -4124 | 307 | 111 | 0 | -9 | -111 | 2 | 0.01 | 0.03 | 0.03 | |
| 1C | 168 | -4124 | -177 | -179 | 0 | 10 | 128 | 2 | 0.01 | 0.03 | 0.03 | |
| 1D | 168 | -4124 | 307 | -179 | 0 | 10 | -111 | 2 | 0.01 | 0.03 | 0.03 | |
| 1E | 168 | -3785 | -177 | 111 | 0 | -9 | 128 | 2 | 0.00 | 0.03 | 0.03 | |
| 1F | 168 | -3785 | 307 | 111 | 0 | -9 | -111 | 2 | 0.01 | 0.03 | 0.03 | |
| 1G | 168 | -3785 | -177 | -179 | 0 | 10 | 128 | 2 | 0.01 | 0.03 | 0.03 | |
| 1H | 168 | -3785 | 307 | -179 | 0 | 10 | -111 | 2 | 0.01 | 0.03 | 0.03 | |
| 1I | 168 | -4065 | -48 | 329 | 0 | 3 | 43 | 2 | 0.01 | 0.03 | 0.01 | |
| 1J | 168 | -4065 | 179 | 329 | 0 | 3 | -25 | 2 | 0.01 | 0.03 | 0.01 | |
| 1K | 168 | -4065 | -48 | -397 | 0 | -2 | 43 | 2 | 0.02 | 0.03 | 0.01 | |
| 1L | 168 | -4065 | 179 | -397 | 0 | -2 | -25 | 2 | 0.02 | 0.03 | 0.01 | |
| 1M | 168 | -3844 | -48 | 329 | 0 | 3 | 43 | 2 | 0.01 | 0.03 | 0.01 | |
| 1N | 168 | -3844 | 179 | 329 | 0 | 3 | -25 | 2 | 0.01 | 0.03 | 0.01 | |
| 1O | 168 | -3844 | -48 | -397 | 0 | -2 | 43 | 2 | 0.02 | 0.03 | 0.01 | |
| 1P | 168 | -3844 | 179 | -397 | 0 | -2 | -25 | 2 | 0.02 | 0.03 | 0.01 | |
| 2 | 168 | -4030 | -2 | -9 | 0 | 4 | 5 | 2 | 0.00 | 0.03 | 0.00 | |
| 7 | 168 | -4010 | 65 | -7 | 0 | 2 | 8 | 2 | 0.00 | 0.03 | 0.00 | |
| 8 | 168 | -3974 | -2 | -36 | 0 | 2 | 5 | 2 | 0.00 | 0.03 | 0.00 | |
| 1A | 335 | -4047 | -177 | 111 | 0 | -195 | -168 | 2 | 0.00 | 0.03 | 0.04 | |
| 1B | 335 | -4047 | 307 | 111 | 0 | -195 | 404 | 2 | 0.01 | 0.03 | 0.10 | |
| 1C | 335 | -4047 | -177 | -179 | 0 | 309 | -168 | 2 | 0.01 | 0.03 | 0.04 | |
| 1D | 335 | -4047 | 307 | -179 | 0 | 309 | 404 | 2 | 0.01 | 0.03 | 0.10 | |
| 1E | 335 | -3707 | -177 | 111 | 0 | -195 | -168 | 2 | 0.00 | 0.03 | 0.04 | |
| 1F | 335 | -3707 | 307 | 111 | 0 | -195 | 404 | 2 | 0.01 | 0.03 | 0.10 | |
| 1G | 335 | -3707 | -177 | -179 | 0 | 309 | -168 | 2 | 0.01 | 0.03 | 0.04 | |
| 1H | 335 | -3707 | 307 | -179 | 0 | 309 | 404 | 2 | 0.01 | 0.03 | 0.10 | |
| 1I | 335 | -3987 | -48 | 329 | 0 | -548 | -39 | 2 | 0.01 | 0.03 | 0.06 | |
| 1J | 335 | -3987 | 179 | 329 | 0 | -548 | 275 | 2 | 0.01 | 0.03 | 0.07 | |
| 1K | 335 | -3987 | -48 | -397 | 0 | 662 | -39 | 2 | 0.02 | 0.03 | 0.08 | |
| 1L | 335 | -3987 | 179 | -397 | 0 | 662 | 275 | 2 | 0.02 | 0.03 | 0.08 | |
| 1M | 335 | -3767 | -48 | 329 | 0 | -548 | -39 | 2 | 0.01 | 0.03 | 0.06 | |
| 1N | 335 | -3767 | 179 | 329 | 0 | -548 | 275 | 2 | 0.01 | 0.03 | 0.07 | |
| 1O | 335 | -3767 | -48 | -397 | 0 | 662 | -39 | 2 | 0.02 | 0.03 | 0.08 | |
| 1P | 335 | -3767 | 179 | -397 | 0 | 662 | 275 | 2 | 0.02 | 0.03 | 0.08 | |
| 2 | 335 | -3952 | -2 | -9 | 0 | 19 | 1 | 2 | 0.00 | 0.03 | 0.00 | |
| 7 | 335 | -3933 | 65 | -7 | 0 | 14 | 118 | 2 | 0.00 | 0.03 | 0.03 | |
| 8 | 335 | -3896 | -2 | -36 | 0 | 62 | 1 | 2 | 0.00 | 0.03 | 0.01 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -4202 | -195 | 425 | 2 | 0.6232 | 0.9789 | 0.9654 | -- | -- | 0.06 | -- | 0.18 Snell. 'yx'= | 74 |
| 1B | -4202 | -195 | -626 | 2 | 0.6232 | 0.9789 | 0.9522 | -- | -- | 0.06 | -- | 0.22 Snell. 'yx'= | 74 |
| 1C | -4202 | 309 | 425 | 2 | 0.6232 | 0.9780 | 0.9654 | -- | -- | 0.06 | -- | 0.19 Snell. 'yx'= | 74 |
| 1D | -4202 | 309 | -626 | 2 | 0.6232 | 0.9780 | 0.9522 | -- | -- | 0.06 | -- | 0.23 Snell. 'yx'= | 74 |
| 1E | -3862 | -195 | 425 | 2 | 0.6232 | 0.9806 | 0.9682 | -- | -- | 0.05 | -- | 0.17 Snell. 'yx'= | 74 |
| 1F | -3862 | -195 | -626 | 2 | 0.6232 | 0.9806 | 0.9561 | -- | -- | 0.05 | -- | 0.22 Snell. 'yx'= | 74 |
| 1G | -3862 | 309 | 425 | 2 | 0.6232 | 0.9797 | 0.9682 | -- | -- | 0.05 | -- | 0.18 Snell. 'yx'= | 74 |
| 1H | -3862 | 309 | -626 | 2 | 0.6232 | 0.9797 | 0.9561 | -- | -- | 0.05 | -- | 0.23 Snell. 'yx'= | 74 |
| 1I | -4142 | 553 | 124 | 2 | 0.6232 | 0.9768 | 0.9712 | -- | -- | 0.05 | -- | 0.15 Snell. 'yx'= | 74 |
| 1J | -4142 | 553 | -325 | 2 | 0.6232 | 0.9768 | 0.9529 | -- | -- | 0.05 | -- | 0.19 Snell. 'yx'= | 74 |
| 1K | -4142 | -666 | 124 | 2 | 0.6232 | 0.9767 | 0.9712 | -- | -- | 0.05 | -- | 0.16 Snell. 'yx'= | 74 |
| 1L | -4142 | -666 | -325 | 2 | 0.6232 | 0.9767 | 0.9529 | -- | -- | 0.05 | -- | 0.20 Snell. 'yx'= | 74 |
| 1M | -3922 | 553 | 124 | 2 | 0.6232 | 0.9780 | 0.9727 | -- | -- | 0.05 | -- | 0.14 Snell. 'yx'= | 74 |
| 1N | -3922 | 553 | -325 | 2 | 0.6232 | 0.9780 | 0.9554 | -- | -- | 0.05 | -- | 0.19 Snell. 'yx'= | 74 |
| 1O | -3922 | -666 | 124 | 2 | 0.6232 | 0.9779 | 0.9727 | -- | -- | 0.05 | -- | 0.16 Snell. 'yx'= | 74 |
| 1P | -3922 | -666 | -325 | 2 | 0.6232 | 0.9779 | 0.9554 | -- | -- | 0.05 | -- | 0.20 Snell. 'yx'= | 74 |
| 2 | -4107 | 19 | 9 | 2 | 0.6232 | 0.9875 | 0.9965 | -- | -- | 0.05 | -- | 0.06 Snell. 'yx'= | 74 |
| 7 | -4088 | 14 | 118 | 2 | 0.6232 | 0.9855 | 0.9535 | -- | -- | 0.05 | -- | 0.08 Snell. 'yx'= | 74 |
| 8 | -4051 | 62 | 9 | 2 | 0.6232 | 0.9786 | 0.9963 | -- | -- | 0.05 | -- | 0.06 Snell. 'yx'= | 74 |



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**ASTA NUM. 29** NI 97 NF 77 Lungh. 335.0 cm SEZ. 7 Ps HEA 180 capovolto

categoria: p.p. y Vento qy tot.
qy medio: 0.0000 1.1862 1.1862 kg/cm

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

| NC | x | Fx | Fy | Fz | Mx | My | Mz | Classe | I.V.T. | I.R.n. | I.R. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | kg | | | kg*m | | | | | | | |
| 1A | 0 | -2823 | 164 | 233 | 0 | 393 | 178 | 2 | 0.01 | 0.02 | 0.05 | |
| 1B | 0 | -2823 | 582 | 233 | 0 | 393 | -713 | 2 | 0.01 | 0.02 | 0.17 | |
| 1C | 0 | -2823 | 164 | -339 | 0 | -563 | 178 | 2 | 0.02 | 0.02 | 0.06 | |
| 1D | 0 | -2823 | 582 | -339 | 0 | -563 | -713 | 2 | 0.02 | 0.02 | 0.17 | |
| 1E | 0 | -2169 | 164 | 233 | 0 | 393 | 178 | 2 | 0.01 | 0.02 | 0.05 | |
| 1F | 0 | -2169 | 582 | 233 | 0 | 393 | -713 | 2 | 0.01 | 0.02 | 0.17 | |
| 1G | 0 | -2169 | 164 | -339 | 0 | -563 | 178 | 2 | 0.02 | 0.02 | 0.06 | |
| 1H | 0 | -2169 | 582 | -339 | 0 | -563 | -713 | 2 | 0.02 | 0.02 | 0.17 | |
| 1I | 0 | -2646 | 274 | 359 | 0 | 618 | -77 | 2 | 0.02 | 0.02 | 0.07 | |
| 1J | 0 | -2646 | 472 | 359 | 0 | 618 | -458 | 2 | 0.02 | 0.02 | 0.11 | |
| 1K | 0 | -2646 | 274 | -465 | 0 | -789 | -77 | 2 | 0.02 | 0.02 | 0.09 | |
| 1L | 0 | -2646 | 472 | -465 | 0 | -789 | -458 | 2 | 0.02 | 0.02 | 0.12 | |
| 1M | 0 | -2346 | 274 | 359 | 0 | 618 | -77 | 2 | 0.02 | 0.02 | 0.07 | |
| 1N | 0 | -2346 | 472 | 359 | 0 | 618 | -458 | 2 | 0.02 | 0.02 | 0.11 | |
| 1O | 0 | -2346 | 274 | -465 | 0 | -789 | -77 | 2 | 0.02 | 0.02 | 0.09 | |
| 1P | 0 | -2346 | 472 | -465 | 0 | -789 | -458 | 2 | 0.02 | 0.02 | 0.12 | |
| 2 | 0 | -2493 | -6 | -10 | 0 | -10 | 17 | 2 | 0.00 | 0.02 | 0.00 | |
| 7 | 0 | -2526 | 373 | -27 | 0 | -38 | -268 | 2 | 0.01 | 0.02 | 0.06 | |
| 8 | 0 | -2463 | -5 | -36 | 0 | -57 | 17 | 2 | 0.00 | 0.02 | 0.01 | |
| 1A | 168 | -2746 | -134 | 233 | 0 | 3 | 203 | 2 | 0.01 | 0.02 | 0.05 | |
| 1B | 168 | -2746 | 284 | 233 | 0 | 3 | 13 | 2 | 0.01 | 0.02 | 0.00 | |
| 1C | 168 | -2746 | -134 | -339 | 0 | 4 | 203 | 2 | 0.02 | 0.02 | 0.05 | |
| 1D | 168 | -2746 | 284 | -339 | 0 | 4 | 13 | 2 | 0.02 | 0.02 | 0.00 | |
| 1E | 168 | -2091 | -134 | 233 | 0 | 3 | 203 | 2 | 0.01 | 0.02 | 0.05 | |
| 1F | 168 | -2091 | 284 | 233 | 0 | 3 | 13 | 2 | 0.01 | 0.02 | 0.00 | |
| 1G | 168 | -2091 | -134 | -339 | 0 | 4 | 203 | 2 | 0.02 | 0.02 | 0.05 | |
| 1H | 168 | -2091 | 284 | -339 | 0 | 4 | 13 | 2 | 0.02 | 0.02 | 0.00 | |
| 1I | 168 | -2568 | -24 | 359 | 0 | 18 | 132 | 2 | 0.02 | 0.02 | 0.03 | |
| 1J | 168 | -2568 | 174 | 359 | 0 | 18 | 83 | 2 | 0.02 | 0.02 | 0.02 | |
| 1K | 168 | -2568 | -24 | -465 | 0 | -10 | 132 | 2 | 0.02 | 0.02 | 0.03 | |
| 1L | 168 | -2568 | 174 | -465 | 0 | -10 | 83 | 2 | 0.02 | 0.02 | 0.02 | |
| 1M | 168 | -2269 | -24 | 359 | 0 | 18 | 132 | 2 | 0.02 | 0.02 | 0.03 | |
| 1N | 168 | -2269 | 174 | 359 | 0 | 18 | 83 | 2 | 0.02 | 0.02 | 0.02 | |
| 1O | 168 | -2269 | -24 | -465 | 0 | -10 | 132 | 2 | 0.02 | 0.02 | 0.03 | |
| 1P | 168 | -2269 | 174 | -465 | 0 | -10 | 83 | 2 | 0.02 | 0.02 | 0.02 | |
| 2 | 168 | -2416 | -6 | -10 | 0 | 6 | 8 | 2 | 0.00 | 0.02 | 0.00 | |
| 7 | 168 | -2448 | 75 | -27 | 0 | 7 | 108 | 2 | 0.00 | 0.02 | 0.03 | |
| 8 | 168 | -2386 | -5 | -36 | 0 | 3 | 8 | 2 | 0.00 | 0.02 | 0.00 | |
| 1A | 335 | -2668 | -432 | 233 | 0 | -387 | -271 | 2 | 0.01 | 0.02 | 0.07 | |
| 1B | 335 | -2668 | -14 | 233 | 0 | -387 | 239 | 2 | 0.01 | 0.02 | 0.06 | |
| 1C | 335 | -2668 | -432 | -339 | 0 | 572 | -271 | 2 | 0.02 | 0.02 | 0.07 | |
| 1D | 335 | -2668 | -14 | -339 | 0 | 572 | 239 | 2 | 0.02 | 0.02 | 0.07 | |
| 1E | 335 | -2014 | -432 | 233 | 0 | -387 | -271 | 2 | 0.01 | 0.02 | 0.07 | |
| 1F | 335 | -2014 | -14 | 233 | 0 | -387 | 239 | 2 | 0.01 | 0.02 | 0.06 | |
| 1G | 335 | -2014 | -432 | -339 | 0 | 572 | -271 | 2 | 0.02 | 0.02 | 0.07 | |
| 1H | 335 | -2014 | -14 | -339 | 0 | 572 | 239 | 2 | 0.02 | 0.02 | 0.07 | |
| 1I | 335 | -2491 | -322 | 359 | 0 | -583 | -157 | 2 | 0.02 | 0.02 | 0.07 | |
| 1J | 335 | -2491 | -124 | 359 | 0 | -583 | 126 | 2 | 0.02 | 0.02 | 0.07 | |
| 1K | 335 | -2491 | -322 | -465 | 0 | 769 | -157 | 2 | 0.02 | 0.02 | 0.09 | |
| 1L | 335 | -2491 | -124 | -465 | 0 | 769 | 126 | 2 | 0.02 | 0.02 | 0.09 | |
| 1M | 335 | -2191 | -322 | 359 | 0 | -583 | -157 | 2 | 0.02 | 0.02 | 0.07 | |
| 1N | 335 | -2191 | -124 | 359 | 0 | -583 | 126 | 2 | 0.02 | 0.02 | 0.07 | |
| 1O | 335 | -2191 | -322 | -465 | 0 | 769 | -157 | 2 | 0.02 | 0.02 | 0.09 | |
| 1P | 335 | -2191 | -124 | -465 | 0 | 769 | 126 | 2 | 0.02 | 0.02 | 0.09 | |
| 2 | 335 | -2338 | -6 | -10 | 0 | 22 | -1 | 2 | 0.00 | 0.02 | 0.00 | |
| 7 | 335 | -2371 | -223 | -27 | 0 | 52 | -16 | 2 | 0.00 | 0.02 | 0.01 | |
| 8 | 335 | -2308 | -5 | -36 | 0 | 63 | -1 | 2 | 0.00 | 0.02 | 0.01 | |

**Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE**

| NC | Fx | My | Mz | Classe | χmin. | ky | kz | kLT | χLT | I.S.n. | I.S.m. | I.S. | Nota |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kg | kg*m | | | | | | | | | | | |
| 1A | -2823 | 393 | -271 | 2 | 0.6232 | 0.9843 | 0.9966 | -- | -- | 0.04 | -- | 0.15 Snell. 'yx'= | 74 |
| 1B | -2823 | 393 | -713 | 2 | 0.6232 | 0.9843 | 0.9912 | -- | -- | 0.04 | -- | 0.25 Snell. 'yx'= | 74 |
| 1C | -2823 | 572 | -271 | 2 | 0.6232 | 0.9843 | 0.9966 | -- | -- | 0.04 | -- | 0.17 Snell. 'yx'= | 74 |
| 1D | -2823 | 572 | -713 | 2 | 0.6232 | 0.9843 | 0.9912 | -- | -- | 0.04 | -- | 0.27 Snell. 'yx'= | 74 |
| 1E | -2169 | 393 | -271 | 2 | 0.6232 | 0.9879 | 0.9974 | -- | -- | 0.03 | -- | 0.14 Snell. 'yx'= | 74 |
| 1F | -2169 | 393 | -713 | 2 | 0.6232 | 0.9879 | 0.9932 | -- | -- | 0.03 | -- | 0.24 Snell. 'yx'= | 74 |
| 1G | -2169 | 572 | -271 | 2 | 0.6232 | 0.9879 | 0.9974 | -- | -- | 0.03 | -- | 0.16 Snell. 'yx'= | 74 |
| 1H | -2169 | 572 | -713 | 2 | 0.6232 | 0.9879 | 0.9932 | -- | -- | 0.03 | -- | 0.26 Snell. 'yx'= | 74 |
| 1I | -2646 | 618 | -157 | 2 | 0.6232 | 0.9860 | 1.0217 | -- | -- | 0.04 | -- | 0.14 Snell. 'yx'= | 74 |
| 1J | -2646 | 618 | -458 | 2 | 0.6232 | 0.9860 | 1.0002 | -- | -- | 0.04 | -- | 0.22 Snell. 'yx'= | 74 |
| 1K | -2646 | -789 | -157 | 2 | 0.6232 | 0.9855 | 1.0217 | -- | -- | 0.04 | -- | 0.16 Snell. 'yx'= | 74 |
| 1L | -2646 | -789 | -458 | 2 | 0.6232 | 0.9855 | 1.0002 | -- | -- | 0.04 | -- | 0.23 Snell. 'yx'= | 74 |
| 1M | -2346 | 618 | -157 | 2 | 0.6232 | 0.9876 | 1.0193 | -- | -- | 0.03 | -- | 0.14 Snell. 'yx'= | 74 |
| 1N | -2346 | 618 | -458 | 2 | 0.6232 | 0.9876 | 1.0001 | -- | -- | 0.03 | -- | 0.21 Snell. 'yx'= | 74 |
| 1O | -2346 | -789 | -157 | 2 | 0.6232 | 0.9871 | 1.0193 | -- | -- | 0.03 | -- | 0.16 Snell. 'yx'= | 74 |
| 1P | -2346 | -789 | -458 | 2 | 0.6232 | 0.9871 | 1.0001 | -- | -- | 0.03 | -- | 0.23 Snell. 'yx'= | 74 |
| 2 | -2493 | 22 | 17 | 2 | 0.6232 | 0.9947 | 1.3929 | -- | -- | 0.03 | -- | 0.04 Snell. 'yx'= | 74 |
| 7 | -2526 | 52 | -267 | 2 | 0.6232 | 0.9900 | 1.0135 | -- | -- | 0.03 | -- | 0.10 Snell. 'yx'= | 74 |
| 8 | -2463 | 63 | 17 | 2 | 0.6232 | 0.9876 | 1.3904 | -- | -- | 0.03 | -- | 0.05 Snell. 'yx'= | 74 |



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## 2h) VERIFICHE GIUNTI METALLICI

### GIUNTI
### MONTANTI HEA 180

**Colonna-Fondazione**

Colonna: Gruppo = 1 Elemento = 3 Nodo = 2 **HEA 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
Assi locali piastra
N = -21992.90 kg
Ty = 581.73 kg My = 39457.20 kg*cm
Tz = -7278.79 kg Mz = 87399.50 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]** (S 275 (Fe 430), Rck 300)
320x320x20 Tipologia n. 2 A = 260 B = 260 (mm)
**[Verifica cls]**
Verifica cls: I.R. = 0.50 (c.c. 1G)
Verifica piastra: Sigma id = 1686.4 kg/cm² I.R. = 0.63 (c.c. 1C)
**[Verifica tirafondo]** (S 235 (Fe 360))
Numero 6 tirafondi ad aderenza: Diam. = 18 Lunghezza = 566 (mm) (aggiungere uncino)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 18.46 kg Ftb,Sd = 4045.41 kg
Fvb,Rd = 3361.79 kg Ft,Rd = 5042.69 kg I.R. = 0.80 (c.c. 1G)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 180 (mm) Lunghezza2: 122 (mm)
Sigma id = 981.7 kg/cm² I.R. = 0.37
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [tirafondo]

**Colonna-Fondazione**

Colonna: Gruppo = 1 Elemento = 2 Nodo = 20 **HEA 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
Assi locali piastra
N = -19568.73 kg
Ty = -517.60 kg My = 44044.20 kg*cm
Tz = -6841.82 kg Mz = -80459.24 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]** (S 275 (Fe 430), Rck 300)
320x320x20 Tipologia n. 2 A = 260 B = 260 (mm)
**[Verifica cls]**
Verifica cls: I.R. = 0.53 (c.c. 1E)
Verifica piastra: Sigma id = 1164.5 kg/cm² I.R. = 0.44 (c.c. 1B)
**[Verifica tirafondo]** (S 235 (Fe 360))
Numero 6 tirafondi ad aderenza: Diam. = 18 Lunghezza = 563 (mm) (aggiungere uncino)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 1140.30 kg Ftb,Sd = 3366.67 kg
Fvb,Rd = 3361.79 kg Ft,Rd = 5042.69 kg I.R. = 0.82 (c.c. 1F)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 180 (mm) Lunghezza2: 122 (mm)
Sigma id = 942.4 kg/cm² I.R. = 0.35
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [tirafondo]

**Colonna-Fondazione**

Colonna: Gruppo = 1 Elemento = 26 Nodo = 94 **HEA 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
Assi locali piastra
N = -3475.72 kg
Ty = -467.50 kg My = 72201.00 kg*cm
Tz = -391.64 kg Mz = -72024.80 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]** (S 275 (Fe 430), Rck 300)
320x320x20 Tipologia n. 2 A = 260 B = 260 (mm)
**[Verifica cls]**
Verifica cls: I.R. = 0.12 (c.c. 1M)
Verifica piastra: Sigma id = 693.2 kg/cm² I.R. = 0.26
**[Verifica tirafondo]** (S 235 (Fe 360))
Numero 6 tirafondi ad aderenza: Diam. = 18 Lunghezza = 360 (mm) (pari a 20 diametri, aggiungere uncino)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 28.29 kg Ftb,Sd = 586.07 kg
Fvb,Rd = 3361.79 kg Ft,Rd = 5042.69 kg I.R. = 0.12 (c.c. 1M)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 180 (mm) Lunghezza2: 122 (mm)
Sigma id = 785.9 kg/cm² I.R. = 0.29
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [saldatura colonna-piastra]



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**Colonna-Fondazione**

Colonna: Gruppo = 1 Elemento = 4 Nodo = 18 **HEA 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
Assi locali piastra
N = -1756.95 kg
Ty = 630.26 kg My = 62406.30 kg*cm
Tz = -284.12 kg Mz = 78832.90 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]** (S 275 (Fe 430), Rck 300)
320x320x20 Tipologia n. 2 A = 260 B = 260 (mm)
**[Verifica cls]**
Verifica cls: I.R. = 0.14 (c.c. 1O)
Verifica piastra: Sigma id = 705.9 kg/cm² I.R. = 0.26 (c.c. 1K)
**[Verifica tirafondo]** (S 235 (Fe 360))
Numero 6 tirafondi ad aderenza: Diam. = 18 Lunghezza = 360 (mm) (pari a 20 diametri, aggiungere uncino)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 2.92 kg Ftb,Sd = 975.81 kg
Fvb,Rd = 3361.79 kg Ft,Rd = 5042.69 kg I.R. = 0.19 (c.c. 1O)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 180 (mm) Lunghezza2: 122 (mm)
Sigma id = 650.5 kg/cm² I.R. = 0.24
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [Verifica piastra]

**Colonna-Fondazione**

Colonna: Gruppo = 1 Elemento = 1 Nodo = 1 **HEA 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
Assi locali piastra
N = -1041.64 kg
Ty = 442.61 kg My = 77515.10 kg*cm
Tz = -578.38 kg Mz = 65958.70 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]** (S 275 (Fe 430), Rck 300)
320x320x20 Tipologia n. 2 A = 260 B = 260 (mm)
**[Verifica cls]**
Verifica cls: I.R. = 0.14 (c.c. 1E)
Verifica piastra: Sigma id = 674.7 kg/cm² I.R. = 0.25
**[Verifica tirafondo]** (S 235 (Fe 360))
Numero 6 tirafondi ad aderenza: Diam. = 18 Lunghezza = 360 (mm) (pari a 20 diametri, aggiungere uncino)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 23.93 kg Ftb,Sd = 878.75 kg
Fvb,Rd = 3361.79 kg Ft,Rd = 5042.69 kg I.R. = 0.17 (c.c. 1O)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 180 (mm) Lunghezza2: 122 (mm)
Sigma id = 778.0 kg/cm² I.R. = 0.29
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [saldatura colonna-piastra]

**Colonna-Fondazione**

Colonna: Gruppo = 1 Elemento = 27 Nodo = 95 **HEA 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
Assi locali piastra
N = -2057.52 kg
Ty = 404.45 kg My = 95906.30 kg*cm
Tz = -903.60 kg Mz = 69138.40 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]** (S 275 (Fe 430), Rck 300)
320x320x20 Tipologia n. 2 A = 260 B = 260 (mm)
**[Verifica cls]**
Verifica cls: I.R. = 0.17 (c.c. 1E)
Verifica piastra: Sigma id = 860.1 kg/cm² I.R. = 0.32
**[Verifica tirafondo]** (S 235 (Fe 360))
Numero 6 tirafondi ad aderenza: Diam. = 18 Lunghezza = 360 (mm) (pari a 20 diametri, aggiungere uncino)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 85.13 kg Ftb,Sd = 853.32 kg
Fvb,Rd = 3361.79 kg Ft,Rd = 5042.69 kg I.R. = 0.17 (c.c. 1E)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 180 (mm) Lunghezza2: 122 (mm)
Sigma id = 984.4 kg/cm² I.R. = 0.37
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [saldatura colonna-piastra]

**Colonna-Fondazione**

Colonna: Gruppo = 1 Elemento = 28 Nodo = 96 **HEA 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV



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Assi locali piastra
N = -4201.65 kg
Ty = 396.42 kg  My = 62615.30 kg*cm
Tz = -307.39 kg  Mz = 66614.30 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]** (S 275 (Fe 430), Rck 300)
320x320x20  Tipologia n. 2  A = 260  B = 260  (mm)
**[Verifica cls]**
Verifica cls:  I.R. = 0.11  (c.c. 1O)
Verifica piastra:  Sigma id = 631.2 kg/cm²  I.R. = 0.24
**[Verifica tirafondo]** (S 235 (Fe 360))
Numero 6 tirafondi ad aderenza:  Diam. = 18  Lunghezza = 360  (mm) (pari a 20 diametri, aggiungere uncino)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 54.77 kg  Ftb,Sd = 420.32 kg
Fvb,Rd = 3361.79 kg  Ft,Rd = 5042.69 kg  I.R. = 0.08  (c.c. 1O)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  180 (mm)  Lunghezza2:  122 (mm)
Sigma id = 711.4 kg/cm²  I.R. = 0.27
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [saldatura colonna-piastra]

**Colonna-Fondazione**

Colonna: Gruppo = 1  Elemento = 29  Nodo = 97  **HEA 180**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
Assi locali piastra
N = -2823.04 kg
Ty = 464.68 kg  My = 71328.10 kg*cm
Tz = -582.31 kg  Mz = 78837.00 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]** (S 275 (Fe 430), Rck 300)
320x320x20  Tipologia n. 2  A = 260  B = 260  (mm)
**[Verifica cls]**
Verifica cls:  I.R. = 0.14  (c.c. 1O)
Verifica piastra:  Sigma id = 713.9 kg/cm²  I.R. = 0.27  (c.c. 1K)
**[Verifica tirafondo]** (S 235 (Fe 360))
Numero 6 tirafondi ad aderenza:  Diam. = 18  Lunghezza = 360  (mm) (pari a 20 diametri, aggiungere uncino)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 59.76 kg  Ftb,Sd = 800.28 kg
Fvb,Rd = 3361.79 kg  Ft,Rd = 5042.69 kg  I.R. = 0.16  (c.c. 1O)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  180 (mm)  Lunghezza2:  122 (mm)
Sigma id = 763.1 kg/cm²  I.R. = 0.29
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [saldatura colonna-piastra]

**Colonna-Fondazione**

Colonna: Gruppo = 1  Elemento = 6  Nodo = 5  **HEA 180**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
Assi locali piastra
N = -1664.45 kg
Ty = 415.58 kg  My = 70967.40 kg*cm
Tz = -643.66 kg  Mz = 66031.20 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]** (S 275 (Fe 430), Rck 300)
320x320x20  Tipologia n. 2  A = 260  B = 260  (mm)
**[Verifica cls]**
Verifica cls:  I.R. = 0.13  (c.c. 1E)
Verifica piastra:  Sigma id = 636.2 kg/cm²  I.R. = 0.24
**[Verifica tirafondo]** (S 235 (Fe 360))
Numero 6 tirafondi:  Diam. tirafondo = 18  (mm)
Rosetta:  Diam. = 36  Spessore = 4  (mm)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 52.49 kg  Ftb,Sd = 799.18 kg
Fvb,Rd = 3361.79 kg  Ft,Rd = 5042.69 kg  I.R. = 0.16  (c.c. 1O)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  180 (mm)  Lunghezza2:  122 (mm)
Sigma id = 728.2 kg/cm²  I.R. = 0.27
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [saldatura colonna-piastra]

**Colonna-Fondazione**

Colonna: Gruppo = 1  Elemento = 7  Nodo = 29  **HEA 180**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
Assi locali piastra
N = -2441.70 kg
Ty = 396.08 kg  My = 44927.90 kg*cm
Tz = -192.81 kg  Mz = 61123.00 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.



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**[Verifica piastra di base]** (S 275 (Fe 430), Rck 300)
320x320x20 Tipologia n. 2 A = 260 B = 260 (mm)
**[Verifica cls]**
Verifica cls: I.R. = 0.11 (c.c. 1O)
Verifica piastra: Sigma id = 556.3 kg/cm² I.R. = 0.21 (c.c. 1K)
**[Verifica tirafondo]** (S 235 (Fe 360))
Numero 6 tirafondi: Diam. tirafondo = 18 (mm)
Rosetta: Diam. = 31 Spessore = 3 (mm)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 51.63 kg Ftb,Sd = 551.72 kg
Fvb,Rd = 3361.79 kg Ft,Rd = 5042.69 kg I.R. = 0.11 (c.c. 1O)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 180 (mm) Lunghezza2: 122 (mm)
Sigma id = 496.7 kg/cm² I.R. = 0.19
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [Verifica piastra]

**Colonna-Fondazione**

Colonna: Gruppo = 1 Elemento = 21 Nodo = 56 **HEA 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
Assi locali piastra
N = -6499.65 kg
Ty = 663.82 kg My = 44795.50 kg*cm
Tz = -187.36 kg Mz = 85879.60 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]** (S 275 (Fe 430), Rck 300)
320x320x20 Tipologia n. 2 A = 260 B = 260 (mm)
**[Verifica cls]**
Verifica cls: I.R. = 0.14 (c.c. 1O)
Verifica piastra: Sigma id = 811.0 kg/cm² I.R. = 0.30 (c.c. 1K)
**[Verifica tirafondo]** (S 235 (Fe 360))
Numero 6 tirafondi: Diam. tirafondo = 18 (mm)
Rosetta: Diam. = 29 Spessore = 3 (mm)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 2.00 kg Ftb,Sd = 425.75 kg
Fvb,Rd = 3361.79 kg Ft,Rd = 5042.69 kg I.R. = 0.08 (c.c. 1O)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 180 (mm) Lunghezza2: 122 (mm)
Sigma id = 592.6 kg/cm² I.R. = 0.22
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [Verifica piastra]

**Colonna-Fondazione**

Colonna: Gruppo = 1 Elemento = 19 Nodo = 36 **HEA 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
Assi locali piastra
N = -7180.57 kg
Ty = 688.95 kg My = 48771.20 kg*cm
Tz = -203.99 kg Mz = 89172.50 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]** (S 275 (Fe 430), Rck 300)
320x320x20 Tipologia n. 2 A = 260 B = 260 (mm)
**[Verifica cls]**
Verifica cls: I.R. = 0.15 (c.c. 1O)
Verifica piastra: Sigma id = 847.8 kg/cm² I.R. = 0.32 (c.c. 1K)
**[Verifica tirafondo]** (S 235 (Fe 360))
Numero 6 tirafondi: Diam. tirafondo = 18 (mm)
Rosetta: Diam. = 29 Spessore = 3 (mm)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 7.64 kg Ftb,Sd = 426.39 kg
Fvb,Rd = 3361.79 kg Ft,Rd = 5042.69 kg I.R. = 0.08 (c.c. 1O)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 180 (mm) Lunghezza2: 122 (mm)
Sigma id = 644.9 kg/cm² I.R. = 0.24
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [Verifica piastra]

**Colonna-Fondazione**

Colonna: Gruppo = 1 Elemento = 5 Nodo = 6 **HEA 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
Assi locali piastra
N = -1937.45 kg
Ty = 410.21 kg My = 58277.10 kg*cm
Tz = -409.54 kg Mz = 64694.00 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]** (S 275 (Fe 430), Rck 300)
320x320x20 Tipologia n. 2 A = 260 B = 260 (mm)



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**[Verifica cls]**
Verifica cls: I.R. = 0.12 (c.c. 1O)
Verifica piastra: Sigma id = 584.0 kg/cm² I.R. = 0.22 (c.c. 1K)
**[Verifica tirafondo]** (S 235 (Fe 360))
Numero 6 tirafondi: Diam. tirafondo = 18 (mm)
Rosetta: Diam. = 35 Spessore = 4 (mm)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 54.00 kg Ftb,Sd = 742.54 kg
Fvb,Rd = 3361.79 kg Ft,Rd = 5042.69 kg I.R. = 0.15 (c.c. 1O)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 180 (mm) Lunghezza2: 122 (mm)
Sigma id = 611.1 kg/cm² I.R. = 0.23
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [saldatura colonna-piastra]

**Colonna-Fondazione**

Colonna: Gruppo = 1 Elemento = 24 Nodo = 54 **HEA 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
Assi locali piastra
N = -7427.83 kg
Ty = 3768.72 kg My = 69434.85 kg*cm
Tz = -621.09 kg Mz = 48480.00 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]** (S 275 (Fe 430), Rck 300)
320x320x20 Tipologia n. 2 A = 260 B = 260 (mm)
**[Verifica cls]**
Verifica cls: I.R. = 0.23 (c.c. 1O)
Verifica piastra: Sigma id = 677.1 kg/cm² I.R. = 0.25
**[Verifica tirafondo]** (S 235 (Fe 360))
Numero 6 tirafondi: Diam. tirafondo = 18 (mm)
Rosetta: Diam. = 51 Spessore = 8 (mm)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 628.12 kg Ftb,Sd = 1817.17 kg
Fvb,Rd = 3361.79 kg Ft,Rd = 5042.69 kg I.R. = 0.44 (c.c. 1M)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 180 (mm) Lunghezza2: 122 (mm)
Sigma id = 927.9 kg/cm² I.R. = 0.35
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [tirafondo]

**Colonna-Fondazione**

Colonna: Gruppo = 1 Elemento = 9 Nodo = 8 **HEA 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
Assi locali piastra
N = -8858.83 kg
Ty = 4008.55 kg My = 77940.39 kg*cm
Tz = -759.80 kg Mz = 49122.81 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]** (S 275 (Fe 430), Rck 300)
320x320x20 Tipologia n. 2 A = 260 B = 260 (mm)
**[Verifica cls]**
Verifica cls: I.R. = 0.20 (c.c. 1M)
Verifica piastra: Sigma id = 813.9 kg/cm² I.R. = 0.30 (c.c. 1K)
**[Verifica tirafondo]** (S 235 (Fe 360))
Numero 6 tirafondi: Diam. tirafondo = 18 (mm)
Rosetta: Diam. = 49 Spessore = 7 (mm)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 553.20 kg Ftb,Sd = 1689.77 kg
Fvb,Rd = 3361.79 kg Ft,Rd = 5042.69 kg I.R. = 0.40 (c.c. 1O)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 180 (mm) Lunghezza2: 122 (mm)
Sigma id = 1002.4 kg/cm² I.R. = 0.38
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [tirafondo]

**Colonna-Fondazione**

Colonna: Gruppo = 1 Elemento = 13 Nodo = 39 **HEA 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
Assi locali piastra
N = -2120.30 kg
Ty = 406.29 kg My = 90825.10 kg*cm
Tz = -875.17 kg Mz = 66506.01 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]** (S 275 (Fe 430), Rck 300)
320x320x20 Tipologia n. 2 A = 260 B = 260 (mm)
**[Verifica cls]**



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Verifica cls: I.R. = 0.16 (c.c. 1E)
Verifica piastra: Sigma id = 818.0 kg/cm² I.R. = 0.31
**[Verifica tirafondo]** (S 235 (Fe 360))
Numero 6 tirafondi: Diam. tirafondo = 18 (mm)
Rosetta: Diam. = 36 Spessore = 4 (mm)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 75.17 kg Ftb,Sd = 797.04 kg
Fvb,Rd = 3361.79 kg Ft,Rd = 5042.69 kg I.R. = 0.16 (c.c. 1E)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 180 (mm) Lunghezza2: 122 (mm)
Sigma id = 935.4 kg/cm² I.R. = 0.35
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [saldatura colonna-piastra]

**Colonna-Fondazione**

Colonna: Gruppo = 1 Elemento = 16 Nodo = 46 **HEA 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
Assi locali piastra
N = -1050.46 kg
Ty = 441.57 kg My = 70036.60 kg*cm
Tz = -508.38 kg Mz = 60415.01 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]** (S 275 (Fe 430), Rck 300)
320x320x20 Tipologia n. 2 A = 260 B = 260 (mm)
**[Verifica cls]**
Verifica cls: I.R. = 0.12 (c.c. 1E)
Verifica piastra: Sigma id = 612.8 kg/cm² I.R. = 0.23
**[Verifica tirafondo]** (S 235 (Fe 360))
Numero 6 tirafondi: Diam. tirafondo = 18 (mm)
Rosetta: Diam. = 36 Spessore = 4 (mm)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 29.79 kg Ftb,Sd = 795.65 kg
Fvb,Rd = 3361.79 kg Ft,Rd = 5042.69 kg I.R. = 0.16 (c.c. 1O)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 180 (mm) Lunghezza2: 122 (mm)
Sigma id = 705.5 kg/cm² I.R. = 0.26
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [saldatura colonna-piastra]

**Colonna-Fondazione**

Colonna: Gruppo = 1 Elemento = 23 Nodo = 53 **HEA 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
Assi locali piastra
N = -7235.72 kg
Ty = 3536.74 kg My = 60402.40 kg*cm
Tz = -431.19 kg Mz = 45813.10 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]** (S 275 (Fe 430), Rck 300)
320x320x20 Tipologia n. 2 A = 260 B = 260 (mm)
**[Verifica cls]**
Verifica cls: I.R. = 0.21 (c.c. 1O)
Verifica piastra: Sigma id = 603.8 kg/cm² I.R. = 0.23
**[Verifica tirafondo]** (S 235 (Fe 360))
Numero 6 tirafondi: Diam. tirafondo = 18 (mm)
Rosetta: Diam. = 49 Spessore = 7 (mm)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 589.46 kg Ftb,Sd = 1694.22 kg
Fvb,Rd = 3361.79 kg Ft,Rd = 5042.69 kg I.R. = 0.42 (c.c. 1M)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 180 (mm) Lunghezza2: 122 (mm)
Sigma id = 870.6 kg/cm² I.R. = 0.33
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [tirafondo]

**Colonna-Fondazione**

Colonna: Gruppo = 1 Elemento = 11 Nodo = 7 **HEA 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
Assi locali piastra
N = -8774.06 kg
Ty = 3831.27 kg My = 63414.53 kg*cm
Tz = -475.74 kg Mz = 48505.50 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]** (S 275 (Fe 430), Rck 300)
320x320x20 Tipologia n. 2 A = 260 B = 260 (mm)
**[Verifica cls]**
Verifica cls: I.R. = 0.18 (c.c. 1O)



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Verifica piastra: Sigma id = 804.9 kg/cm² I.R. = 0.30 (c.c. 1K)
**[Verifica tirafondo]** (S 235 (Fe 360))
Numero 6 tirafondi: Diam. tirafondo = 18 (mm)
Rosetta: Diam. = 47 Spessore = 7 (mm)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 512.26 kg Ftb,Sd = 1547.25 kg
Fvb,Rd = 3361.79 kg Ft,Rd = 5042.69 kg I.R. = 0.37 (c.c. 1O)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 180 (mm) Lunghezza2: 122 (mm)
Sigma id = 959.1 kg/cm² I.R. = 0.36
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [tirafondo]

**Colonna-Fondazione**

Colonna: Gruppo = 1 Elemento = 12 Nodo = 40 **HEA 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
Assi locali piastra
N = -2798.84 kg
Ty = 441.62 kg My = 63357.70 kg*cm
Tz = -554.89 kg Mz = 72201.00 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]** (S 275 (Fe 430), Rck 300)
320x320x20 Tipologia n. 2 A = 260 B = 260 (mm)
**[Verifica cls]**
Verifica cls: I.R. = 0.13 (c.c. 1O)
Verifica piastra: Sigma id = 655.6 kg/cm² I.R. = 0.25 (c.c. 1K)
**[Verifica tirafondo]** (S 235 (Fe 360))
Numero 6 tirafondi: Diam. tirafondo = 18 (mm)
Rosetta: Diam. = 34 Spessore = 4 (mm)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 68.80 kg Ftb,Sd = 716.97 kg
Fvb,Rd = 3361.79 kg Ft,Rd = 5042.69 kg I.R. = 0.14 (c.c. 1O)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 180 (mm) Lunghezza2: 122 (mm)
Sigma id = 684.8 kg/cm² I.R. = 0.26
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [saldatura colonna-piastra]

**Colonna-Fondazione**

Colonna: Gruppo = 1 Elemento = 10 Nodo = 21 **HEA 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
Assi locali piastra
N = -7185.93 kg
Ty = -599.68 kg My = 50624.70 kg*cm
Tz = -216.30 kg Mz = -72465.30 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]** (S 275 (Fe 430), Rck 300)
320x320x20 Tipologia n. 2 A = 260 B = 260 (mm)
**[Verifica cls]**
Verifica cls: I.R. = 0.12 (c.c. 1M)
Verifica piastra: Sigma id = 711.0 kg/cm² I.R. = 0.27 (c.c. 1I)
**[Verifica tirafondo]** (S 235 (Fe 360))
Numero 6 tirafondi: Diam. tirafondo = 18 (mm)
Rosetta: Diam. = 25 Spessore = 2 (mm)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 4.62 kg Ftb,Sd = 232.33 kg
Fvb,Rd = 3361.79 kg Ft,Rd = 5042.69 kg I.R. = 0.05 (c.c. 1M)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 180 (mm) Lunghezza2: 122 (mm)
Sigma id = 663.9 kg/cm² I.R. = 0.25
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [Verifica piastra]

**Colonna-Fondazione**

Colonna: Gruppo = 1 Elemento = 8 Nodo = 23 **HEA 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
Assi locali piastra
N = -2946.09 kg
Ty = 341.68 kg My = 45759.40 kg*cm
Tz = -202.73 kg Mz = 54018.50 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]** (S 275 (Fe 430), Rck 300)
320x320x20 Tipologia n. 2 A = 260 B = 260 (mm)
**[Verifica cls]**
Verifica cls: I.R. = 0.09 (c.c. 1O)
Verifica piastra: Sigma id = 498.2 kg/cm² I.R. = 0.19 (c.c. 1K)



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**[Verifica tirafondo]** (S 235 (Fe 360))
Numero 6 tirafondi: Diam. tirafondo = 18 (mm)
Rosetta: Diam. = 28 Spessore = 3 (mm)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 46.42 kg Ftb,Sd = 391.82 kg
Fvb,Rd = 3361.79 kg Ft,Rd = 5042.69 kg I.R. = 0.08 (c.c. 1O)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 180 (mm) Lunghezza2: 122 (mm)
Sigma id = 516.8 kg/cm² I.R. = 0.19
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [saldatura colonna-piastra]

**Colonna-Fondazione**

Colonna: Gruppo = 1 Elemento = 20 Nodo = 57 **HEA 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
Assi locali piastra
N = -6509.32 kg
Ty = -584.08 kg My = 45653.70 kg*cm
Tz = -195.38 kg Mz = -71112.90 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]** (S 275 (Fe 430), Rck 300)
320x320x20 Tipologia n. 2 A = 260 B = 260 (mm)
**[Verifica cls]**
Verifica cls: I.R. = 0.12 (c.c. 1M)
Verifica piastra: Sigma id = 688.1 kg/cm² I.R. = 0.26 (c.c. 1I)
**[Verifica tirafondo]** (S 235 (Fe 360))
Numero 6 tirafondi: Diam. tirafondo = 18 (mm)
Rosetta: Diam. = 25 Spessore = 2 (mm)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 1.98 kg Ftb,Sd = 252.33 kg
Fvb,Rd = 3361.79 kg Ft,Rd = 5042.69 kg I.R. = 0.05 (c.c. 1M)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 180 (mm) Lunghezza2: 122 (mm)
Sigma id = 601.6 kg/cm² I.R. = 0.23
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [Verifica piastra]

**Colonna-Fondazione**

Colonna: Gruppo = 1 Elemento = 18 Nodo = 47 **HEA 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
Assi locali piastra
N = -20662.38 kg
Ty = 515.94 kg My = 32387.20 kg*cm
Tz = -7186.75 kg Mz = 69827.01 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]** (S 275 (Fe 430), Rck 300)
320x320x20 Tipologia n. 2 A = 260 B = 260 (mm)
**[Verifica cls]**
Verifica cls: I.R. = 0.46 (c.c. 1G)
Verifica piastra: Sigma id = 1505.8 kg/cm² I.R. = 0.56 (c.c. 1C)
**[Verifica tirafondo]** (S 235 (Fe 360))
Numero 6 tirafondi: Diam. tirafondo = 18 (mm)
Rosetta: Diam. = 69 Spessore = 12 (mm)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 38.74 kg Ftb,Sd = 3637.72 kg
Fvb,Rd = 3361.79 kg Ft,Rd = 5042.69 kg I.R. = 0.72 (c.c. 1G)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 180 (mm) Lunghezza2: 122 (mm)
Sigma id = 888.0 kg/cm² I.R. = 0.33
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [tirafondo]

**Colonna-Fondazione**

Colonna: Gruppo = 1 Elemento = 15 Nodo = 41 **HEA 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
Assi locali piastra
N = -1640.46 kg
Ty = 499.23 kg My = 54277.30 kg*cm
Tz = -217.74 kg Mz = 57542.20 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]** (S 275 (Fe 430), Rck 300)
320x320x20 Tipologia n. 2 A = 260 B = 260 (mm)
**[Verifica cls]**
Verifica cls: I.R. = 0.10 (c.c. 1O)
Verifica piastra: Sigma id = 518.7 kg/cm² I.R. = 0.19 (c.c. 1K)
**[Verifica tirafondo]** (S 235 (Fe 360))



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Numero 6 tirafondi:  Diam. tirafondo = 18  (mm)
Rosetta:  Diam. = 33  Spessore = 4  (mm)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 24.54 kg  Ftb,Sd = 654.33 kg
Fvb,Rd = 3361.79 kg  Ft,Rd = 5042.69 kg  I.R. = 0.13  (c.c. 1O)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  180 (mm)  Lunghezza2:  122 (mm)
Sigma id = 566.7 kg/cm²  I.R. = 0.21
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [saldatura colonna-piastra]

**Colonna-Fondazione**

Colonna: Gruppo = 1  Elemento = 25  Nodo = 82  **HEA 180**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
Assi locali piastra
N = -3489.57 kg
Ty = 1007.69 kg  My = 50700.50 kg*cm
Tz = -204.66 kg  Mz = 107313.80 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]**  (S 275 (Fe 430), Rck 300)
320x320x20  Tipologia n. 2  A = 260  B = 260  (mm)
**[Verifica cls]**
Verifica cls:  I.R. = 0.19  (c.c. 1O)
Verifica piastra:  Sigma id = 970.9 kg/cm²  I.R. = 0.36  (c.c. 1K)
**[Verifica tirafondo]**  (S 235 (Fe 360))
Numero 6 tirafondi:  Diam. tirafondo = 18  (mm)
Rosetta:  Diam. = 41  Spessore = 5  (mm)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 68.35 kg  Ftb,Sd = 1096.50 kg
Fvb,Rd = 3361.79 kg  Ft,Rd = 5042.69 kg  I.R. = 0.22  (c.c. 1O)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  180 (mm)  Lunghezza2:  122 (mm)
Sigma id = 578.1 kg/cm²  I.R. = 0.22
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [Verifica piastra]

**Colonna-Fondazione**

Colonna: Gruppo = 1  Elemento = 14  Nodo = 34  **HEA 180**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
Assi locali piastra
N = -4228.22 kg
Ty = 417.00 kg  My = 62042.70 kg*cm
Tz = -320.84 kg  Mz = 66913.01 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]**  (S 275 (Fe 430), Rck 300)
320x320x20  Tipologia n. 2  A = 260  B = 260  (mm)
**[Verifica cls]**
Verifica cls:  I.R. = 0.11  (c.c. 1O)
Verifica piastra:  Sigma id = 627.1 kg/cm²  I.R. = 0.23
**[Verifica tirafondo]**  (S 235 (Fe 360))
Numero 6 tirafondi:  Diam. tirafondo = 18  (mm)
Rosetta:  Diam. = 29  Spessore = 3  (mm)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 56.60 kg  Ftb,Sd = 423.07 kg
Fvb,Rd = 3361.79 kg  Ft,Rd = 5042.69 kg  I.R. = 0.08  (c.c. 1O)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  180 (mm)  Lunghezza2:  122 (mm)
Sigma id = 706.5 kg/cm²  I.R. = 0.26
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [saldatura colonna-piastra]

**Colonna-Fondazione**

Colonna: Gruppo = 1  Elemento = 22  Nodo = 86  **HEA 180**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
Assi locali piastra
N = -2684.75 kg
Ty = -298.75 kg  My = 47537.90 kg*cm
Tz = -216.15 kg  Mz = 49094.61 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]**  (S 275 (Fe 430), Rck 300)
320x320x20  Tipologia n. 2  A = 260  B = 260  (mm)
**[Verifica cls]**
Verifica cls:  I.R. = 0.09  (c.c. 1O)
Verifica piastra:  Sigma id = 465.9 kg/cm²  I.R. = 0.17
**[Verifica tirafondo]**  (S 235 (Fe 360))
Numero 6 tirafondi:  Diam. tirafondo = 18  (mm)



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Rosetta: Diam. = 28 Spessore = 2 (mm)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 49.79 kg Ftb,Sd = 363.81 kg
Fvb,Rd = 3361.79 kg Ft,Rd = 5042.69 kg I.R. = 0.07 (c.c. 1O)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 180 (mm) Lunghezza2: 122 (mm)
Sigma id = 527.0 kg/cm² I.R. = 0.20
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [saldatura colonna-piastra]

**Colonna-Fondazione**

Colonna: Gruppo = 1 Elemento = 17 Nodo = 43 **HEA 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
Assi locali piastra
N = -19005.67 kg
Ty = 1111.22 kg My = 35597.90 kg*cm
Tz = -6750.16 kg Mz = 119915.07 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica piastra di base]** (S 275 (Fe 430), Rck 300)
320x320x20 Tipologia n. 2 A = 260 B = 260 (mm)
**[Verifica cls]**
Verifica cls: I.R. = 0.57 (c.c. 1G)
Verifica piastra: Sigma id = 1696.5 kg/cm² I.R. = 0.64 (c.c. 1C)
**[Verifica tirafondo]** (S 235 (Fe 360))
Numero 6 tirafondi: Diam. tirafondo = 18 (mm)
Rosetta: Diam. = 77 Spessore = 14 (mm)
Massime forze trasmesse al singolo tirafondo e relative resistenze:
Fvb,Sd = 98.42 kg Ftb,Sd = 4644.66 kg
Fvb,Rd = 3361.79 kg Ft,Rd = 5042.69 kg I.R. = 0.92 (c.c. 1G)
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 180 (mm) Lunghezza2: 122 (mm)
Sigma id = 851.6 kg/cm² I.R. = 0.32
**[Resistenza del nodo]**
Modalità di collasso: **nessuna**, situazione più gravosa [tirafondo]

## TRAVI DI COPERTURA

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 3 **HEA 180**
Trave: Gruppo = 2 Elemento = 4 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 1030.37 kg T (taglio massimo) = -26.22 kg Mmax neg.= 0.00 kg*cm M torcente = -42.99 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale]** **(calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.05**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 49.0 kg/cm² I.R. = 0.02



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**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 2 **HEA 180**
Trave: Gruppo = 2 Elemento = 4 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 1030.37 kg T (taglio massimo) = 26.22 kg Mmax neg.= 0.00 kg*cm M torcente = -42.99 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.05**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 49.0 kg/cm² I.R. = 0.02

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 2 **HEA 180**
Trave: Gruppo = 2 Elemento = 3 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -2287.20 kg T (taglio massimo) = -236.17 kg Mmax neg.= 0.00 kg*cm M torcente = 4.79 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.11**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.01**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 115.9 kg/cm² I.R. = 0.04



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**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 26 **HEA 180**
Trave: Gruppo = 2 Elemento = 3 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -2287.20 kg T (taglio massimo) = 211.17 kg Mmax pos.= 41784.30 kg*cm Mmax neg.= -36858.30 kg*cm M torcente = 4.79 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente negativo]**
Mj,Rd = 108685.3 kg*cm
**[Momento resistente positivo]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale (M negativo)] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Rigidezza rotazionale (M positivo)] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.38**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.35**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.01**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 398.3 kg/cm² I.R. = 0.15

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 26 **HEA 180**
Trave: Gruppo = 2 Elemento = 2 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -3327.27 kg T (taglio massimo) = -330.03 kg Mmax pos.= 53358.30 kg*cm Mmax neg.= -55450.30 kg*cm M torcente = 40.56 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente negativo]**
Mj,Rd = 108685.3 kg*cm
**[Momento resistente positivo]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale (M negativo)] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Rigidezza rotazionale (M positivo)] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| > 0.05 Npl,Rd
**[Sforzo normale resistente del giunto]**
Nj,Rd = 19728.4 kg (a trazione)
Nj,Rd = 63807.6 kg (a compressione)
**[Verifica a presso-tensoflessione del giunto]**



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**I.R. = 0.56**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.48**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.01**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 541.9 kg/cm² I.R. = 0.20

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 4 **HEA 180**
Trave: Gruppo = 2 Elemento = 2 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -3327.27 kg T (taglio massimo) = 318.41 kg Mmax neg.= -0.00 kg*cm M torcente = 40.56 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| > 0.05 Npl,Rd
**[Sforzo normale resistente del giunto]**
Nj,Rd = 19728.4 kg (a trazione)
Nj,Rd = 63807.6 kg (a compressione)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.05**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.16**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.01**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 169.8 kg/cm² I.R. = 0.06

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 4 **HEA 180**
Trave: Gruppo = 2 Elemento = 1 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -1981.31 kg T (taglio massimo) = -21.34 kg Mmax neg.= 0.00 kg*cm M torcente = -3.74 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**



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Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.03**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 89.0 kg/cm² I.R. = 0.03

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 1 **HEA 180**
Trave: Gruppo = 2 Elemento = 1 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -1981.31 kg T (taglio massimo) = 21.34 kg Mmax neg.= 0.00 kg*cm M torcente = -3.74 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.03**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 89.0 kg/cm² I.R. = 0.03

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 27 **HEA 180**
Trave: Gruppo = 2 Elemento = 9 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -2392.01 kg T (taglio massimo) = 21.34 kg Mmax neg.= 0.00 kg*cm M torcente = 2.08 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)



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**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 107.4 kg/cm² I.R. = 0.04

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 28 **HEA 180**
Trave: Gruppo = 2 Elemento = 9 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -2392.01 kg T (taglio massimo) = -21.34 kg Mmax neg.= 0.00 kg*cm M torcente = 2.08 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale]** **(calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 107.4 kg/cm² I.R. = 0.04

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 28 **HEA 180**
Trave: Gruppo = 2 Elemento = 10 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 2377.49 kg T (taglio massimo) = 21.95 kg Mmax neg.= -0.00 kg*cm M torcente = -3.76 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale]** **(calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**



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**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.12**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 106.8 kg/cm² I.R. = 0.04

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 29 **HEA 180**
Trave: Gruppo = 2 Elemento = 12 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 2116.79 kg T (taglio massimo) = -26.22 kg Mmax neg.= 0.00 kg*cm M torcente = 7.50 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.11**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 95.2 kg/cm² I.R. = 0.04

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 6 **HEA 180**
Trave: Gruppo = 2 Elemento = 17 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -1318.08 kg T (taglio massimo) = 21.34 kg Mmax neg.= 0.00 kg*cm M torcente = -0.43 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**



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**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 59.3 kg/cm² I.R. = 0.02

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 7 **HEA 180**
Trave: Gruppo = 2 Elemento = 17 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -1318.08 kg T (taglio massimo) = -21.34 kg Mmax neg.= 0.00 kg*cm M torcente = -0.43 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 59.3 kg/cm² I.R. = 0.02

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 7 **HEA 180**
Trave: Gruppo = 2 Elemento = 18 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -503.36 kg T (taglio massimo) = 21.95 kg Mmax neg.= -0.00 kg*cm M torcente = -25.27 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**



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F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 25.1 kg/cm² I.R. = 0.01

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 21 **HEA 180**
Trave: Gruppo = 2 Elemento = 18 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -503.36 kg T (taglio massimo) = -21.95 kg Mmax neg.= 0.00 kg*cm M torcente = -25.27 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x200x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 25.1 kg/cm² I.R. = 0.01

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 21 **HEA 180**
Trave: Gruppo = 2 Elemento = 19 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -138.70 kg T (taglio massimo) = 24.02 kg Mmax neg.= 0.00 kg*cm M torcente = -3.04 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x200x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)



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F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 8.7 kg/cm² I.R. = 0.00

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 19 **HEA 180**
Trave: Gruppo = 2 Elemento = 19 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -138.70 kg T (taglio massimo) = -24.02 kg Mmax neg.= 0.00 kg*cm M torcente = -3.04 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x200x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 8.7 kg/cm² I.R. = 0.00

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 19 **HEA 180**
Trave: Gruppo = 2 Elemento = 20 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 594.56 kg T (taglio massimo) = 26.22 kg Mmax neg.= 0.00 kg*cm M torcente = 23.69 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x200x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)



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**I.R. = 0.03**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 29.1 kg/cm² I.R. = 0.01

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 5 **HEA 180**
Trave: Gruppo = 2 Elemento = 20 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 594.56 kg T (taglio massimo) = -26.22 kg Mmax neg.= 0.00 kg*cm M torcente = 23.69 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.03**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 29.1 kg/cm² I.R. = 0.01

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 24 **HEA 180**
Trave: Gruppo = 2 Elemento = 21 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -1297.59 kg T (taglio massimo) = 21.34 kg Mmax neg.= 0.00 kg*cm M torcente = 2.73 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**



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**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 58.4 kg/cm² I.R. = 0.02

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 22 **HEA 180**
Trave: Gruppo = 2 Elemento = 21 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -1297.59 kg T (taglio massimo) = -21.34 kg Mmax neg.= 0.00 kg*cm M torcente = 2.73 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 58.4 kg/cm² I.R. = 0.02

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 22 **HEA 180**
Trave: Gruppo = 2 Elemento = 22 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 1081.83 kg T (taglio massimo) = 21.95 kg Mmax neg.= -0.00 kg*cm M torcente = -5.73 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.05**
**[Verifica di rifollamento]**



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F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 48.9 kg/cm² I.R. = 0.02

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 9 **HEA 180**
Trave: Gruppo = 2 Elemento = 29 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -1540.73 kg T (taglio massimo) = 21.34 kg Mmax neg.= 0.00 kg*cm M torcente = -4.18 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 69.3 kg/cm² I.R. = 0.03

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 8 **HEA 180**
Trave: Gruppo = 2 Elemento = 29 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -1540.73 kg T (taglio massimo) = -21.34 kg Mmax neg.= 0.00 kg*cm M torcente = -4.18 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)



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**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 69.3 kg/cm² I.R. = 0.03

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 8 **HEA 180**
Trave: Gruppo = 2 Elemento = 30 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -587.74 kg T (taglio massimo) = 21.95 kg Mmax neg.= -0.00 kg*cm M torcente = 26.99 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 28.7 kg/cm² I.R. = 0.01

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 20 **HEA 180**
Trave: Gruppo = 2 Elemento = 30 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -587.74 kg T (taglio massimo) = -21.95 kg Mmax neg.= 0.00 kg*cm M torcente = 26.99 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**



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**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 28.7 kg/cm² I.R. = 0.01

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 20 **HEA 180**
Trave: Gruppo = 2 Elemento = 31 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -166.00 kg T (taglio massimo) = 24.02 kg Mmax neg.= 0.00 kg*cm M torcente = 2.84 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 9.4 kg/cm² I.R. = 0.00

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 10 **HEA 180**
Trave: Gruppo = 2 Elemento = 31 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -166.00 kg T (taglio massimo) = -24.02 kg Mmax neg.= 0.00 kg*cm M torcente = 2.84 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**



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Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 9.4 kg/cm² I.R. = 0.00

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 10 **HEA 180**
Trave: Gruppo = 2 Elemento = 32 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 670.44 kg T (taglio massimo) = 26.22 kg Mmax neg.= 0.00 kg*cm M torcente = -24.68 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.03**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 32.3 kg/cm² I.R. = 0.01

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 11 **HEA 180**
Trave: Gruppo = 2 Elemento = 32 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 670.44 kg T (taglio massimo) = -26.22 kg Mmax neg.= 0.00 kg*cm M torcente = -24.68 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.03**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata



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Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 32.3 kg/cm² I.R. = 0.01

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 23 **HEA 180**
Trave: Gruppo = 2 Elemento = 24 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 894.47 kg T (taglio massimo) = -26.22 kg Mmax neg.= 0.00 kg*cm M torcente = 4.73 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.05**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 40.7 kg/cm² I.R. = 0.02

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 12 **HEA 180**
Trave: Gruppo = 2 Elemento = 40 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 2097.50 kg T (taglio massimo) = -26.22 kg Mmax neg.= 0.00 kg*cm M torcente = 7.38 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.11**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)



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Sigma id = 94.4 kg/cm²  I.R. = 0.04

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1  Elemento = 13  **HEA 180**
Trave:  Gruppo = 2  Elemento = 37  **IPE 180**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
N = -2383.37 kg  T (taglio massimo) = 21.34 kg  Mmax neg.= 0.00 kg*cm  M torcente = -2.23 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10  A = 90  B = 90  C = 50  (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12  Incremento foro: 1.0 (mm)  (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale]  (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg  |N| <= 0.05 Npl,Rd  (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  91 (mm)  Lunghezza2:  146 (mm)
Sigma id = 107.0 kg/cm²  I.R. = 0.04

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1  Elemento = 14  **HEA 180**
Trave:  Gruppo = 2  Elemento = 37  **IPE 180**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
N = -2383.37 kg  T (taglio massimo) = -21.34 kg  Mmax neg.= 0.00 kg*cm  M torcente = -2.23 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10  A = 90  B = 90  C = 50  (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12  Incremento foro: 1.0 (mm)  (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale]  (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg  |N| <= 0.05 Npl,Rd  (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  91 (mm)  Lunghezza2:  146 (mm)
Sigma id = 107.0 kg/cm²  I.R. = 0.04



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**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 14 **HEA 180**
Trave: Gruppo = 2 Elemento = 38 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 2365.67 kg T (taglio massimo) = 21.95 kg Mmax neg.= -0.00 kg*cm M torcente = 3.17 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.12**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 106.2 kg/cm² I.R. = 0.04

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 16 **HEA 180**
Trave: Gruppo = 2 Elemento = 45 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -1022.15 kg T (taglio massimo) = 21.34 kg Mmax neg.= 0.00 kg*cm M torcente = 3.32 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 46.2 kg/cm² I.R. = 0.02



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**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 15 **HEA 180**
Trave: Gruppo = 2 Elemento = 45 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -1022.15 kg T (taglio massimo) = -21.34 kg Mmax neg.= 0.00 kg*cm M torcente = 3.32 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 46.2 kg/cm² I.R. = 0.02

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 15 **HEA 180**
Trave: Gruppo = 2 Elemento = 46 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -567.87 kg T (taglio massimo) = 21.95 kg Mmax neg.= -0.00 kg*cm M torcente = -41.77 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.01**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 29.6 kg/cm² I.R. = 0.01



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**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 25 **HEA 180**
Trave: Gruppo = 2 Elemento = 46 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -567.87 kg T (taglio massimo) = -21.95 kg Mmax neg.= 0.00 kg*cm M torcente = -41.77 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.01**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 29.6 kg/cm² I.R. = 0.01

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 25 **HEA 180**
Trave: Gruppo = 2 Elemento = 47 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 498.89 kg T (taglio massimo) = 24.02 kg Mmax neg.= 0.00 kg*cm M torcente = -4.64 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.03**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 23.3 kg/cm² I.R. = 0.01



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**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 17 **HEA 180**
Trave: Gruppo = 2 Elemento = 47 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 498.89 kg T (taglio massimo) = -24.02 kg Mmax neg.= 0.00 kg*cm M torcente = -4.64 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.03**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 23.3 kg/cm² I.R. = 0.01

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 17 **HEA 180**
Trave: Gruppo = 2 Elemento = 48 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 425.40 kg T (taglio massimo) = 26.22 kg Mmax neg.= 0.00 kg*cm M torcente = 44.18 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.02**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 25.2 kg/cm² I.R. = 0.01



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**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 18 **HEA 180**
Trave: Gruppo = 2 Elemento = 48 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 425.40 kg T (taglio massimo) = -26.22 kg Mmax neg.= 0.00 kg*cm M torcente = 44.18 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 171x180x10 A = 90 B = 90 C = 50 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 17764.5 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8625.8 kg (resistenza ala colonna)
F,Rd = 9151.0 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 8625.8 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 108685.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 29035830.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.02**
**[Verifica di rifollamento]**
F,b,Rd = 10519.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 25.2 kg/cm² I.R. = 0.01

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 1 **HEA 180**
Trave: Gruppo = 2 Elemento = 49 **IPE 240** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 2627.77 kg T (taglio massimo) = 859.00 kg Mmax pos.= 1508.30 kg*cm Mmax neg.= -54628.30 kg*cm M torcente = -564.82 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x240x15 A = 90 B = 120 C = 60 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 10648.2 kg (resistenza ala colonna)
F,Rd = 13504.6 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)
**[Momento resistente negativo]**
Mj,Rd = 186450.8 kg*cm
**[Momento resistente positivo]**
Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale (M negativo)] (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Rigidezza rotazionale (M positivo)] (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.29**
**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.27**
**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.01**



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**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 120 (mm) Lunghezza2: 190 (mm)
Sigma id = 280.7 kg/cm² I.R. = 0.11

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 3 **HEA 180**
Trave: Gruppo = 2 Elemento = 93 **IPE 240** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 3242.63 kg T (taglio massimo) = 1025.47 kg Mmax pos.= 8122.00 kg*cm Mmax neg.= -62882.00 kg*cm M torcente = 550.76 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x240x15 A = 90 B = 120 C = 60 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 10648.2 kg (resistenza ala colonna)
F,Rd = 13504.6 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)
**[Momento resistente negativo]**
Mj,Rd = 186450.8 kg*cm
**[Momento resistente positivo]**
Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale (M negativo)] (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Rigidezza rotazionale (M positivo)] (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.34**
**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.32**
**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.01**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 120 (mm) Lunghezza2: 190 (mm)
Sigma id = 333.4 kg/cm² I.R. = 0.12

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 29 **HEA 180**
Trave: Gruppo = 2 Elemento = 94 **IPE 240** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -1675.88 kg T (taglio massimo) = -1535.75 kg Mmax neg.= -124204.00 kg*cm M torcente = 536.91 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x240x15 A = 90 B = 120 C = 60 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 10648.2 kg (resistenza ala colonna)
F,Rd = 13504.6 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.67**
**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)



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**I.R. = 0.43**
**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.02**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 120 (mm) Lunghezza2: 190 (mm)
Sigma id = 469.8 kg/cm² I.R. = 0.18

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 27 **HEA 180**
Trave: Gruppo = 2 Elemento = 50 **IPE 240** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -470.50 kg T (taglio massimo) = -1151.23 kg Mmax neg.= -84277.80 kg*cm M torcente = 570.71 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x240x15 A = 90 B = 120 C = 60 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 10648.2 kg (resistenza ala colonna)
F,Rd = 13504.6 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.45**
**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.28**
**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.02**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 120 (mm) Lunghezza2: 190 (mm)
Sigma id = 300.6 kg/cm² I.R. = 0.11

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 27 **HEA 180**
Trave: Gruppo = 2 Elemento = 51 **IPE 240** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -949.60 kg T (taglio massimo) = 1047.13 kg Mmax neg.= -78754.40 kg*cm M torcente = -506.87 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x240x15 A = 90 B = 120 C = 60 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 10648.2 kg (resistenza ala colonna)
F,Rd = 13504.6 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.42**
**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.28**



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**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.01**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 120 (mm) Lunghezza2: 190 (mm)
Sigma id = 306.0 kg/cm² I.R. = 0.11

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 6 **HEA 180**
Trave: Gruppo = 2 Elemento = 52 **IPE 240** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 1136.28 kg T (taglio massimo) = -925.86 kg Mmax neg.= -63614.40 kg*cm M torcente = 508.72 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x240x15 A = 90 B = 120 C = 60 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 10648.2 kg (resistenza ala colonna)
F,Rd = 13504.6 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.34**
**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.25**
**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.01**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 120 (mm) Lunghezza2: 190 (mm)
Sigma id = 248.0 kg/cm² I.R. = 0.09

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 6 **HEA 180**
Trave: Gruppo = 2 Elemento = 53 **IPE 240** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -1416.09 kg T (taglio massimo) = 862.52 kg Mmax pos.= 13252.90 kg*cm Mmax neg.= -57012.90 kg*cm M torcente = -9.73 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x240x15 A = 90 B = 120 C = 60 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 10648.2 kg (resistenza ala colonna)
F,Rd = 13504.6 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)
**[Momento resistente negativo]**
Mj,Rd = 186450.8 kg*cm
**[Momento resistente positivo]**
Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale (M negativo)] (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Rigidezza rotazionale (M positivo)] (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.31**



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**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.18**
**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.01**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 120 (mm) Lunghezza2: 190 (mm)
Sigma id = 233.9 kg/cm² I.R. = 0.09

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 5 **HEA 180**
Trave: Gruppo = 2 Elemento = 96 **IPE 240** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 1479.27 kg T (taglio massimo) = -1047.50 kg Mmax neg.= -68296.80 kg*cm M torcente = -505.94 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x240x15 A = 90 B = 120 C = 60 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 10648.2 kg (resistenza ala colonna)
F,Rd = 13504.6 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.37**
**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.27**
**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.01**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 120 (mm) Lunghezza2: 190 (mm)
Sigma id = 272.6 kg/cm² I.R. = 0.10

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 5 **HEA 180**
Trave: Gruppo = 2 Elemento = 97 **IPE 240** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -1529.18 kg T (taglio massimo) = 971.68 kg Mmax pos.= 7681.80 kg*cm Mmax neg.= -61641.80 kg*cm M torcente = 23.00 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x240x15 A = 90 B = 120 C = 60 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 10648.2 kg (resistenza ala colonna)
F,Rd = 13504.6 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)
**[Momento resistente negativo]**
Mj,Rd = 186450.8 kg*cm
**[Momento resistente positivo]**
Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale (M negativo)] (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Rigidezza rotazionale (M positivo)] (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)



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**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.33**
**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.20**
**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.01**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 120 (mm) Lunghezza2: 190 (mm)
Sigma id = 256.5 kg/cm² I.R. = 0.10

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 23 **HEA 180**
Trave: Gruppo = 2 Elemento = 97 **IPE 240** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -1529.18 kg T (taglio massimo) = -927.38 kg Mmax pos.= 25074.60 kg*cm Mmax neg.= -69954.60 kg*cm M torcente = 23.00 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x240x15 A = 90 B = 120 C = 60 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 10648.2 kg (resistenza ala colonna)
F,Rd = 13504.6 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)
**[Momento resistente negativo]**
Mj,Rd = 186450.8 kg*cm
**[Momento resistente positivo]**
Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale (M negativo)] (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Rigidezza rotazionale (M positivo)] (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.38**
**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.23**
**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.01**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 120 (mm) Lunghezza2: 190 (mm)
Sigma id = 275.0 kg/cm² I.R. = 0.10

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 23 **HEA 180**
Trave: Gruppo = 2 Elemento = 98 **IPE 240** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 688.53 kg T (taglio massimo) = 898.18 kg Mmax neg.= -45756.90 kg*cm M torcente = 481.00 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x240x15 A = 90 B = 120 C = 60 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 10648.2 kg (resistenza ala colonna)
F,Rd = 13504.6 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)



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**[Momento resistente]**
Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale]** **(calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.25**
**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.17**
**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.01**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 120 (mm) Lunghezza2: 190 (mm)
Sigma id = 220.0 kg/cm² I.R. = 0.08

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 11 **HEA 180**
Trave: Gruppo = 2 Elemento = 99 **IPE 240** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 483.51 kg T (taglio massimo) = -974.93 kg Mmax neg.= -57364.70 kg*cm M torcente = -401.22 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x240x15 A = 90 B = 120 C = 60 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 10648.2 kg (resistenza ala colonna)
F,Rd = 13504.6 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale]** **(calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.31**
**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.20**
**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.01**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 120 (mm) Lunghezza2: 190 (mm)
Sigma id = 229.0 kg/cm² I.R. = 0.09

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 11 **HEA 180**
Trave: Gruppo = 2 Elemento = 100 **IPE 240** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 2365.74 kg T (taglio massimo) = 1067.42 kg Mmax neg.= -77341.10 kg*cm M torcente = 502.97 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x240x15 A = 90 B = 120 C = 60 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 10648.2 kg (resistenza ala colonna)
F,Rd = 13504.6 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**



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Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale]** **(calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.41**
**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.34**
**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.01**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 120 (mm) Lunghezza2: 190 (mm)
Sigma id = 335.8 kg/cm² I.R. = 0.13

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 24 **HEA 180**
Trave: Gruppo = 2 Elemento = 53 **IPE 240** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -1416.09 kg T (taglio massimo) = -851.52 kg Mmax pos.= 26365.20 kg*cm Mmax neg.= -67885.20 kg*cm M torcente = -9.73 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x240x15 A = 90 B = 120 C = 60 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 10648.2 kg (resistenza ala colonna)
F,Rd = 13504.6 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)
**[Momento resistente negativo]**
Mj,Rd = 186450.8 kg*cm
**[Momento resistente positivo]**
Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale (M negativo)]** **(calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Rigidezza rotazionale (M positivo)]** **(calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.36**
**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.22**
**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.01**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 120 (mm) Lunghezza2: 190 (mm)
Sigma id = 265.0 kg/cm² I.R. = 0.10

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 24 **HEA 180**
Trave: Gruppo = 2 Elemento = 54 **IPE 240** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 440.63 kg T (taglio massimo) = 743.93 kg Mmax neg.= -38650.40 kg*cm M torcente = -509.99 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x240x15 A = 90 B = 120 C = 60 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 10648.2 kg (resistenza ala colonna)



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F,Rd = 13504.6 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale]  (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg  |N| <= 0.05 Npl,Rd  (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.21**
**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.14**
**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.01**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  120 (mm)  Lunghezza2:  190 (mm)
Sigma id = 190.9 kg/cm²  I.R. = 0.07

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1  Elemento = 9  **HEA 180**
Trave:  Gruppo = 2  Elemento = 55  **IPE 240**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
N = 272.89 kg  T (taglio massimo) = -806.10 kg  Mmax neg.= -48148.00 kg*cm  M torcente = 422.95 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]**  (S 275 (Fe 430))
Flangia tipo 1: 180x240x15  A = 90  B = 120  C = 60  (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14  Incremento foro: 1.0 (mm)  (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 10648.2 kg (resistenza ala colonna)
F,Rd = 13504.6 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale]  (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg  |N| <= 0.05 Npl,Rd  (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.26**
**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.16**
**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.01**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  120 (mm)  Lunghezza2:  190 (mm)
Sigma id = 193.9 kg/cm²  I.R. = 0.07

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1  Elemento = 9  **HEA 180**
Trave:  Gruppo = 2  Elemento = 56  **IPE 240**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
N = 2055.04 kg  T (taglio massimo) = 957.51 kg  Mmax neg.= -73682.10 kg*cm  M torcente = -515.76 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]**  (S 275 (Fe 430))
Flangia tipo 1: 180x240x15  A = 90  B = 120  C = 60  (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14  Incremento foro: 1.0 (mm)  (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 10648.2 kg (resistenza ala colonna)
F,Rd = 13504.6 kg (resistenza flangia di estremità)



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F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale]  (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg  |N| <= 0.05 Npl,Rd  (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.40**
**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.31**
**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.01**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  120 (mm)  Lunghezza2:  190 (mm)
Sigma id = 312.2 kg/cm²  I.R. = 0.12

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1  Elemento = 13  **HEA 180**
Trave:  Gruppo = 2  Elemento = 57  **IPE 240**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
N = -957.23 kg  T (taglio massimo) = -1159.02 kg  Mmax neg.= -88870.40 kg*cm  M torcente = 509.79 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]**  (S 275 (Fe 430))
Flangia tipo 1: 180x240x15  A = 90  B = 120  C = 60  (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14  Incremento foro: 1.0 (mm)  (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 10648.2 kg (resistenza ala colonna)
F,Rd = 13504.6 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale]  (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg  |N| <= 0.05 Npl,Rd  (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.48**
**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.30**
**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.02**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  120 (mm)  Lunghezza2:  190 (mm)
Sigma id = 325.6 kg/cm²  I.R. = 0.12

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1  Elemento = 13  **HEA 180**
Trave:  Gruppo = 2  Elemento = 58  **IPE 240**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
N = 449.61 kg  T (taglio massimo) = 1149.03 kg  Mmax neg.= -82867.20 kg*cm  M torcente = -546.06 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]**  (S 275 (Fe 430))
Flangia tipo 1: 180x240x15  A = 90  B = 120  C = 60  (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14  Incremento foro: 1.0 (mm)  (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 10648.2 kg (resistenza ala colonna)
F,Rd = 13504.6 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)



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F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale]  (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg  |N| <= 0.05 Npl,Rd  (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.44**
**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.28**
**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.02**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  120 (mm)  Lunghezza2:  190 (mm)
Sigma id = 319.3 kg/cm²  I.R. = 0.12

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1  Elemento = 12  **HEA 180**
Trave:  Gruppo = 2  Elemento = 101  **IPE 240**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
N = -1639.91 kg  T (taglio massimo) = -1395.62 kg  Mmax neg.= -109483.00 kg*cm  M torcente = 474.97 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]**  (S 275 (Fe 430))
Flangia tipo 1: 180x240x15  A = 90  B = 120  C = 60  (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14  Incremento foro: 1.0 (mm)  (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 10648.2 kg (resistenza ala colonna)
F,Rd = 13504.6 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale]  (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg  |N| <= 0.05 Npl,Rd  (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.59**
**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.35**
**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.02**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  120 (mm)  Lunghezza2:  190 (mm)
Sigma id = 406.5 kg/cm²  I.R. = 0.15

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1  Elemento = 12  **HEA 180**
Trave:  Gruppo = 2  Elemento = 102  **IPE 240**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
N = -1571.48 kg  T (taglio massimo) = 1544.71 kg  Mmax neg.= -124165.00 kg*cm  M torcente = -512.39 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]**  (S 275 (Fe 430))
Flangia tipo 1: 180x240x15  A = 90  B = 120  C = 60  (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14  Incremento foro: 1.0 (mm)  (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 10648.2 kg (resistenza ala colonna)
F,Rd = 13504.6 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)



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**[Momento resistente]**
Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale]  (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg  |N| <= 0.05 Npl,Rd  (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.67**
**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.44**
**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.02**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  120 (mm)  Lunghezza2:  190 (mm)
Sigma id = 480.3 kg/cm²  I.R. = 0.18

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1  Elemento = 16  **HEA 180**
Trave:  Gruppo = 2  Elemento = 59  **IPE 240**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
N = 2783.41 kg  T (taglio massimo) = -873.72 kg  Mmax pos.= 3192.00 kg*cm  Mmax neg.= -56072.00 kg*cm  M torcente = 559.97 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]**  (S 275 (Fe 430))
Flangia tipo 1: 180x240x15  A = 90  B = 120  C = 60  (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14  Incremento foro: 1.0 (mm)  (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 10648.2 kg (resistenza ala colonna)
F,Rd = 13504.6 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)
**[Momento resistente negativo]**
Mj,Rd = 186450.8 kg*cm
**[Momento resistente positivo]**
Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale (M negativo)]  (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Rigidezza rotazionale (M positivo)]  (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg  |N| <= 0.05 Npl,Rd  (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.30**
**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.28**
**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.01**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  120 (mm)  Lunghezza2:  190 (mm)
Sigma id = 272.8 kg/cm²  I.R. = 0.10

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1  Elemento = 18  **HEA 180**
Trave:  Gruppo = 2  Elemento = 103  **IPE 240**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
N = 3449.90 kg  T (taglio massimo) = -1035.42 kg  Mmax pos.= 11444.00 kg*cm  Mmax neg.= -63664.00 kg*cm  M torcente = -544.11 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]**  (S 275 (Fe 430))
Flangia tipo 1: 180x240x15  A = 90  B = 120  C = 60  (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14  Incremento foro: 1.0 (mm)  (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**



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[Seconda fila di bulloni]
F,Rd = 10648.2 kg (resistenza ala colonna)
F,Rd = 13504.6 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)
**[Momento resistente negativo]**
Mj,Rd = 186450.8 kg*cm
**[Momento resistente positivo]**
Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale (M negativo)] (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Rigidezza rotazionale (M positivo)] (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.34**
**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.33**
**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.01**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 120 (mm) Lunghezza2: 190 (mm)
Sigma id = 315.5 kg/cm² I.R. = 0.12

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 4 **HEA 180**
Trave: Gruppo = 2 Elemento = 60 **IPE 300** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 3302.29 kg T (taglio massimo) = 1445.77 kg Mmax neg.= -75151.90 kg*cm M torcente = 847.87 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x340x12 A = 100 B = 160 C = 70 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M16 Incremento foro: 2.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 18775.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 12884.9 kg (resistenza ala colonna)
F,Rd = 15226.0 kg (resistenza flangia di estremità)
F,Rd = 22676.7 kg (resistenza anima colonna)
F,t2,Rd,ult = 12884.9 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 289459.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 72374736.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 143633.8 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.26**
**[Verifica a taglio del nodo]**
F,v,Rd = 6145.6 kg (resistenza dei bulloni a taglio)
F,t,Rd = 9218.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.23**
**[Verifica di rifollamento]**
F,b,Rd = 16831.8 kg (resistenza a rifollamento)
**I.R. = 0.02**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 150 (mm) Lunghezza2: 249 (mm)
Sigma id = 265.5 kg/cm² I.R. = 0.10

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 28 **HEA 180**
Trave: Gruppo = 2 Elemento = 61 **IPE 300** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -1010.36 kg T (taglio massimo) = -2147.90 kg Mmax neg.= -154971.00 kg*cm M torcente = 812.20 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x340x12 A = 100 B = 160 C = 70 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M16 Incremento foro: 2.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)



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**[Resistenza zona a compressione]**
F,Rd = 18775.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 12884.9 kg (resistenza ala colonna)
F,Rd = 15226.0 kg (resistenza flangia di estremità)
F,Rd = 22676.7 kg (resistenza anima colonna)
F,t2,Rd,ult = 12884.9 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 289459.3 kg*cm
**[Rigidezza rotazionale]  (calcolata per N trascurabile)**
S,j = 72374736.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 143633.8 kg  |N| <= 0.05 Npl,Rd  (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.54**
**[Verifica a taglio del nodo]**
F,v,Rd = 6145.6 kg (resistenza dei bulloni a taglio)
F,t,Rd = 9218.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.29**
**[Verifica di rifollamento]**
F,b,Rd = 16831.8 kg (resistenza a rifollamento)
**I.R. = 0.03**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  150 (mm)  Lunghezza2:  249 (mm)
Sigma id = 365.9 kg/cm²  I.R. = 0.14

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1  Elemento = 28  **HEA 180**
Trave:  Gruppo = 2  Elemento = 62  **IPE 300**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
N = -1377.37 kg  T (taglio massimo) = 2087.62 kg  Mmax neg.= -156086.50 kg*cm  M torcente = -711.67 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]**  (S 275 (Fe 430))
Flangia tipo 1: 180x340x12  A = 100  B = 160  C = 70  (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M16  Incremento foro: 2.0 (mm)  (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 18775.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 12884.9 kg (resistenza ala colonna)
F,Rd = 15226.0 kg (resistenza flangia di estremità)
F,Rd = 22676.7 kg (resistenza anima colonna)
F,t2,Rd,ult = 12884.9 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 289459.3 kg*cm
**[Rigidezza rotazionale]  (calcolata per N trascurabile)**
S,j = 72374736.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 143633.8 kg  |N| <= 0.05 Npl,Rd  (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.54**
**[Verifica a taglio del nodo]**
F,v,Rd = 6145.6 kg (resistenza dei bulloni a taglio)
F,t,Rd = 9218.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.30**
**[Verifica di rifollamento]**
F,b,Rd = 16831.8 kg (resistenza a rifollamento)
**I.R. = 0.03**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  150 (mm)  Lunghezza2:  249 (mm)
Sigma id = 366.9 kg/cm²  I.R. = 0.14

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1  Elemento = 7  **HEA 180**
Trave:  Gruppo = 2  Elemento = 63  **IPE 300**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
N = 2236.16 kg  T (taglio massimo) = -1568.16 kg  Mmax neg.= -92248.40 kg*cm  M torcente = -771.00 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]**  (S 275 (Fe 430))
Flangia tipo 1: 180x340x12  A = 100  B = 160  C = 70  (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M16  Incremento foro: 2.0 (mm)  (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**



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F,Rd = 18775.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 12884.9 kg (resistenza ala colonna)
F,Rd = 15226.0 kg (resistenza flangia di estremità)
F,Rd = 22676.7 kg (resistenza anima colonna)
F,t2,Rd,ult = 12884.9 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 289459.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 72374736.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 143633.8 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.32**
**[Verifica a taglio del nodo]**
F,v,Rd = 6145.6 kg (resistenza dei bulloni a taglio)
F,t,Rd = 9218.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.23**
**[Verifica di rifollamento]**
F,b,Rd = 16831.8 kg (resistenza a rifollamento)
**I.R. = 0.02**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 150 (mm) Lunghezza2: 249 (mm)
Sigma id = 245.3 kg/cm² I.R. = 0.09

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 14 **HEA 180**
Trave: Gruppo = 2 Elemento = 69 **IPE 300** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -1006.82 kg T (taglio massimo) = 2206.92 kg Mmax neg.= -161696.00 kg*cm M torcente = -773.35 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x340x12 A = 100 B = 160 C = 70 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M16 Incremento foro: 2.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 18775.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 12884.9 kg (resistenza ala colonna)
F,Rd = 15226.0 kg (resistenza flangia di estremità)
F,Rd = 22676.7 kg (resistenza anima colonna)
F,t2,Rd,ult = 12884.9 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 289459.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 72374736.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 143633.8 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.56**
**[Verifica a taglio del nodo]**
F,v,Rd = 6145.6 kg (resistenza dei bulloni a taglio)
F,t,Rd = 9218.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.31**
**[Verifica di rifollamento]**
F,b,Rd = 16831.8 kg (resistenza a rifollamento)
**I.R. = 0.03**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 150 (mm) Lunghezza2: 249 (mm)
Sigma id = 392.3 kg/cm² I.R. = 0.15

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 15 **HEA 180**
Trave: Gruppo = 2 Elemento = 70 **IPE 300** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 3640.44 kg T (taglio massimo) = -1437.28 kg Mmax neg.= -70670.70 kg*cm M torcente = -876.39 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x340x12 A = 100 B = 160 C = 70 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M16 Incremento foro: 2.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 18775.2 kg (resistenza anima colonna)



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**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 12884.9 kg (resistenza ala colonna)
F,Rd = 15226.0 kg (resistenza flangia di estremità)
F,Rd = 22676.7 kg (resistenza anima colonna)
F,t2,Rd,ult = 12884.9 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 289459.3 kg*cm
**[Rigidezza rotazionale]  (calcolata per N trascurabile)**
S,j = 72374736.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 143633.8 kg  |N| <= 0.05 Npl,Rd  (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.24**
**[Verifica a taglio del nodo]**
F,v,Rd = 6145.6 kg (resistenza dei bulloni a taglio)
F,t,Rd = 9218.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.23**
**[Verifica di rifollamento]**
F,b,Rd = 16831.8 kg (resistenza a rifollamento)
**I.R. = 0.02**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  150 (mm)  Lunghezza2:  249 (mm)
Sigma id = 238.5 kg/cm²  I.R. = 0.09

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1  Elemento = 7  **HEA 180**
Trave:  Gruppo = 2  Elemento = 64  **IPE 240**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
N = -1539.23 kg  T (taglio massimo) = 952.64 kg  Mmax neg.= -41514.80 kg*cm  M torcente = 14.08 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]**  (S 275 (Fe 430))
Flangia tipo 1: 180x240x15  A = 90  B = 120  C = 60  (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14  Incremento foro: 1.0 (mm)  (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 10648.2 kg (resistenza ala colonna)
F,Rd = 13504.6 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale]  (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg  |N| <= 0.05 Npl,Rd  (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.22**
**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.13**
**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.01**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  120 (mm)  Lunghezza2:  190 (mm)
Sigma id = 211.1 kg/cm²  I.R. = 0.08

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1  Elemento = 22  **HEA 180**
Trave:  Gruppo = 2  Elemento = 64  **IPE 240**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
N = -1539.23 kg  T (taglio massimo) = -1189.73 kg  Mmax neg.= -74395.09 kg*cm  M torcente = 14.08 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]**  (S 275 (Fe 430))
Flangia tipo 1: 180x240x15  A = 90  B = 120  C = 60  (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14  Incremento foro: 1.0 (mm)  (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**



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[Seconda fila di bulloni]
F,Rd = 10648.2 kg (resistenza ala colonna)
F,Rd = 13504.6 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale]  (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg  |N| <= 0.05 Npl,Rd  (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.40**
**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.22**
**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.02**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  120 (mm)  Lunghezza2:  190 (mm)
Sigma id = 290.0 kg/cm²  I.R. = 0.11

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1  Elemento = 22  **HEA 180**
Trave:  Gruppo = 2  Elemento = 65  **IPE 240**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
N = 609.54 kg  T (taglio massimo) = 1420.78 kg  Mmax neg.= -74080.80 kg*cm  M torcente = 488.98 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]**  (S 275 (Fe 430))
Flangia tipo 1: 180x240x15  A = 90  B = 120  C = 60  (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14  Incremento foro: 1.0 (mm)  (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 10648.2 kg (resistenza ala colonna)
F,Rd = 13504.6 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale]  (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg  |N| <= 0.05 Npl,Rd  (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.40**
**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.27**
**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.02**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  120 (mm)  Lunghezza2:  190 (mm)
Sigma id = 332.5 kg/cm²  I.R. = 0.12

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1  Elemento = 8  **HEA 180**
Trave:  Gruppo = 2  Elemento = 66  **IPE 240**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
N = 760.88 kg  T (taglio massimo) = -1337.91 kg  Mmax neg.= -66181.80 kg*cm  M torcente = -397.13 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]**  (S 275 (Fe 430))
Flangia tipo 1: 180x240x15  A = 90  B = 120  C = 60  (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14  Incremento foro: 1.0 (mm)  (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]



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F,Rd = 10648.2 kg (resistenza ala colonna)
F,Rd = 13504.6 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale]  (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg  |N| <= 0.05 Npl,Rd  (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.35**
**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.24**
**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.02**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  120 (mm)  Lunghezza2:  190 (mm)
Sigma id = 305.5 kg/cm²  I.R. = 0.11

**Trave-Colonna flangia con mensola**

Colonna: Gruppo = 1  Elemento = 26  **HEA 180**
Trave:  Gruppo = 2  Elemento = 71  **IPE 300**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
N = 5809.22 kg
T (taglio massimo) = 3275.51 kg
Mmax neg.= -214741.91 kg*cm
M torcente = 744.80 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]**  (S 275 (Fe 430))
Flangia tipo 1: 180x430x15  A = 100  B = 300  C = 70  G = 0  (mm)
n. 0 file intermedie di bulloni per infittimento
Mensola di rinforzo:  h = 120  l = 150  s = 5  t = 8 (mm)
Diam. bulloni M16  Incremento foro: 2.0 (mm)  (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19583.4 kg (resistenza anima colonna)
F,Rd = inf kg (resistenza ala trave)
F,Rd = 38444.7 kg (resistenza flangia mensola)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 12884.9 kg (resistenza ala colonna)
F,Rd = 18436.7 kg (resistenza flangia di estremità)
F,Rd = 22676.7 kg (resistenza anima colonna)
F,t2,Rd,ult = 12884.9 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 444947.8 kg*cm
**[Rigidezza rotazionale]  (calcolata per N trascurabile)**
S,j = 201780928.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 143633.8 kg  |N| <= 0.05 Npl,Rd  (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.48**
**[Verifica a taglio del nodo]**
F,v,Rd = 6145.6 kg (resistenza dei bulloni a taglio)
F,t,Rd = 9218.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.45**
**[Verifica di rifollamento]**
F,b,Rd = 21039.8 kg (resistenza a rifollamento)
**I.R. = 0.04**
**[Verifica saldatura profilo con rinforzo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  150 (mm)  Lunghezza2:  371 (mm)
Sigma id = 504.3 kg/cm²  I.R. = 0.19

**Trave-Colonna flangia con mensola**

Colonna: Gruppo = 1  Elemento = 2  **HEA 180**
Trave:  Gruppo = 2  Elemento = 82  **IPE 300**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
N = 6126.06 kg  T (taglio massimo) = 3614.31 kg  Mmax neg.= -236433.00 kg*cm  M torcente = 839.64 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]**  (S 275 (Fe 430))
Flangia tipo 1: 180x430x15  A = 100  B = 300  C = 70  G = 0  (mm)
n. 0 file intermedie di bulloni per infittimento
Mensola di rinforzo:  h = 120  l = 150  s = 5  t = 8 (mm)
Diam. bulloni M16  Incremento foro: 2.0 (mm)  (Classe 8.8)



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**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19583.4 kg (resistenza anima colonna)
F,Rd = inf kg (resistenza ala trave)
F,Rd = 38444.7 kg (resistenza flangia mensola)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 12884.9 kg (resistenza ala colonna)
F,Rd = 18436.7 kg (resistenza flangia di estremità)
F,Rd = 22676.7 kg (resistenza anima colonna)
F,t2,Rd,ult = 12884.9 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 444947.8 kg*cm
**[Rigidezza rotazionale]** **(calcolata per N trascurabile)**
S,j = 201780928.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 143633.8 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.53**
**[Verifica a taglio del nodo]**
F,v,Rd = 6145.6 kg (resistenza dei bulloni a taglio)
F,t,Rd = 9218.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.49**
**[Verifica di rifollamento]**
F,b,Rd = 21039.8 kg (resistenza a rifollamento)
**I.R. = 0.04**
**[Verifica saldatura profilo con rinforzo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 150 (mm) Lunghezza2: 371 (mm)
Sigma id = 550.2 kg/cm² I.R. = 0.21

**Trave-Colonna flangia con mensola**

Colonna: Gruppo = 1 Elemento = 21 **HEA 180**
Trave: Gruppo = 2 Elemento = 74 **IPE 300** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -3879.80 kg T (taglio massimo) = -3888.71 kg Mmax neg.= -339748.00 kg*cm M torcente = -784.77 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x430x15 A = 100 B = 300 C = 70 G = 0 (mm)
n. 0 file intermedie di bulloni per infittimento
Mensola di rinforzo: h = 120 l = 150 s = 5 t = 8 (mm)
Diam. bulloni M16 Incremento foro: 2.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19583.4 kg (resistenza anima colonna)
F,Rd = inf kg (resistenza ala trave)
F,Rd = 38444.7 kg (resistenza flangia mensola)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 12884.9 kg (resistenza ala colonna)
F,Rd = 18436.7 kg (resistenza flangia di estremità)
F,Rd = 22676.7 kg (resistenza anima colonna)
F,t2,Rd,ult = 12884.9 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 444947.8 kg*cm
**[Rigidezza rotazionale]** **(calcolata per N trascurabile)**
S,j = 201780928.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 143633.8 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.76**
**[Verifica a taglio del nodo]**
F,v,Rd = 6145.6 kg (resistenza dei bulloni a taglio)
F,t,Rd = 9218.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.44**
**[Verifica di rifollamento]**
F,b,Rd = 21039.8 kg (resistenza a rifollamento)
**I.R. = 0.05**
**[Verifica saldatura profilo con rinforzo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 150 (mm) Lunghezza2: 371 (mm)
Sigma id = 669.8 kg/cm² I.R. = 0.25

**Trave-Colonna flangia con mensola**

Colonna: Gruppo = 1 Elemento = 19 **HEA 180**
Trave: Gruppo = 2 Elemento = 85 **IPE 300** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -4162.21 kg T (taglio massimo) = -4258.40 kg Mmax neg.= -366314.09 kg*cm M torcente = -794.48 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.



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**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x430x15 A = 100 B = 300 C = 70 G = 0 (mm)
n. 0 file intermedie di bulloni per infittimento
Mensola di rinforzo: h = 120 l = 150 s = 5 t = 8 (mm)
Diam. bulloni M16 Incremento foro: 2.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19583.4 kg (resistenza anima colonna)
F,Rd = inf kg (resistenza ala trave)
F,Rd = 38444.7 kg (resistenza flangia mensola)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 12884.9 kg (resistenza ala colonna)
F,Rd = 18436.7 kg (resistenza flangia di estremità)
F,Rd = 22676.7 kg (resistenza anima colonna)
F,t2,Rd,ult = 12884.9 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 444947.8 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 201780928.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 143633.8 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.82**
**[Verifica a taglio del nodo]**
F,v,Rd = 6145.6 kg (resistenza dei bulloni a taglio)
F,t,Rd = 9218.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.48**
**[Verifica di rifollamento]**
F,b,Rd = 21039.8 kg (resistenza a rifollamento)
**I.R. = 0.05**
**[Verifica saldatura profilo con rinforzo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 150 (mm) Lunghezza2: 371 (mm)
Sigma id = 721.7 kg/cm² I.R. = 0.27

**Trave-Colonna flangia con mensola**

Colonna: Gruppo = 1 Elemento = 10 **HEA 180**
Trave: Gruppo = 2 Elemento = 89 **IPE 300** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -3910.53 kg T (taglio massimo) = 4244.20 kg Mmax neg.= -365819.59 kg*cm M torcente = 793.93 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x430x15 A = 100 B = 300 C = 70 G = 0 (mm)
n. 0 file intermedie di bulloni per infittimento
Mensola di rinforzo: h = 120 l = 150 s = 5 t = 8 (mm)
Diam. bulloni M16 Incremento foro: 2.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19583.4 kg (resistenza anima colonna)
F,Rd = inf kg (resistenza ala trave)
F,Rd = 38444.7 kg (resistenza flangia mensola)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 12884.9 kg (resistenza ala colonna)
F,Rd = 18436.7 kg (resistenza flangia di estremità)
F,Rd = 22676.7 kg (resistenza anima colonna)
F,t2,Rd,ult = 12884.9 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 444947.8 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 201780928.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 143633.8 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.82**
**[Verifica a taglio del nodo]**
F,v,Rd = 6145.6 kg (resistenza dei bulloni a taglio)
F,t,Rd = 9218.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.49**
**[Verifica di rifollamento]**
F,b,Rd = 21039.8 kg (resistenza a rifollamento)
**I.R. = 0.05**
**[Verifica saldatura profilo con rinforzo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 150 (mm) Lunghezza2: 371 (mm)
Sigma id = 716.0 kg/cm² I.R. = 0.27

**Trave-Colonna flangia con mensola**



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Colonna: Gruppo = 1 Elemento = 17 **HEA 180**
Trave: Gruppo = 2 Elemento = 92 **IPE 300** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 6636.79 kg T (taglio massimo) = -3563.33 kg Mmax neg.= -227810.11 kg*cm M torcente = -864.52 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x430x15 A = 100 B = 300 C = 70 G = 0 (mm)
n. 0 file intermedie di bulloni per infittimento
Mensola di rinforzo: h = 120 l = 150 s = 5 t = 8 (mm)
Diam. bulloni M16 Incremento foro: 2.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19583.4 kg (resistenza anima colonna)
F,Rd = inf kg (resistenza ala trave)
F,Rd = 38444.7 kg (resistenza flangia mensola)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 12884.9 kg (resistenza ala colonna)
F,Rd = 18436.7 kg (resistenza flangia di estremità)
F,Rd = 22676.7 kg (resistenza anima colonna)
F,t2,Rd,ult = 12884.9 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 444947.8 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 201780928.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 143633.8 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.51**
**[Verifica a taglio del nodo]**
F,v,Rd = 6145.6 kg (resistenza dei bulloni a taglio)
F,t,Rd = 9218.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.48**
**[Verifica di rifollamento]**
F,b,Rd = 21039.8 kg (resistenza a rifollamento)
**I.R. = 0.04**
**[Verifica saldatura profilo con rinforzo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 150 (mm) Lunghezza2: 371 (mm)
Sigma id = 538.0 kg/cm² I.R. = 0.20

**Trave-Colonna flangia con mensola**

Colonna: Gruppo = 1 Elemento = 25 **HEA 180**
Trave: Gruppo = 2 Elemento = 81 **IPE 300** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 6259.68 kg T (taglio massimo) = -3243.30 kg Mmax neg.= -208320.20 kg*cm M torcente = -876.57 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x430x15 A = 100 B = 300 C = 70 G = 0 (mm)
n. 0 file intermedie di bulloni per infittimento
Mensola di rinforzo: h = 120 l = 150 s = 5 t = 8 (mm)
Diam. bulloni M16 Incremento foro: 2.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19583.4 kg (resistenza anima colonna)
F,Rd = inf kg (resistenza ala trave)
F,Rd = 38444.7 kg (resistenza flangia mensola)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 12884.9 kg (resistenza ala colonna)
F,Rd = 18436.7 kg (resistenza flangia di estremità)
F,Rd = 22676.7 kg (resistenza anima colonna)
F,t2,Rd,ult = 12884.9 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 444947.8 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 201780928.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 143633.8 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.47**
**[Verifica a taglio del nodo]**
F,v,Rd = 6145.6 kg (resistenza dei bulloni a taglio)
F,t,Rd = 9218.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.44**
**[Verifica di rifollamento]**
F,b,Rd = 21039.8 kg (resistenza a rifollamento)
**I.R. = 0.04**
**[Verifica saldatura profilo con rinforzo]**



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Saldatura a completa penetrazione: verificata
Lunghezza1: 150 (mm) Lunghezza2: 371 (mm)
Sigma id = 499.4 kg/cm² I.R. = 0.19

**Trave-Colonna flangia con mensola**

Colonna: Gruppo = 1 Elemento = 20 **HEA 180**
Trave: Gruppo = 2 Elemento = 78 **IPE 300** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -3613.13 kg T (taglio massimo) = 3902.91 kg Mmax neg.= -338867.00 kg*cm M torcente = 783.51 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x430x15 A = 100 B = 300 C = 70 G = 0 (mm)
n. 0 file intermedie di bulloni per infittimento
Mensola di rinforzo: h = 120 l = 150 s = 5 t = 8 (mm)
Diam. bulloni M16 Incremento foro: 2.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19583.4 kg (resistenza anima colonna)
F,Rd = inf kg (resistenza ala trave)
F,Rd = 38444.7 kg (resistenza flangia mensola)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 12884.9 kg (resistenza ala colonna)
F,Rd = 18436.7 kg (resistenza flangia di estremità)
F,Rd = 22676.7 kg (resistenza anima colonna)
F,t2,Rd,ult = 12884.9 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 444947.8 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 201780928.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 143633.8 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.76**
**[Verifica a taglio del nodo]**
F,v,Rd = 6145.6 kg (resistenza dei bulloni a taglio)
F,t,Rd = 9218.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.45**
**[Verifica di rifollamento]**
F,b,Rd = 21039.8 kg (resistenza a rifollamento)
**I.R. = 0.05**
**[Verifica saldatura profilo con rinforzo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 150 (mm) Lunghezza2: 371 (mm)
Sigma id = 663.2 kg/cm² I.R. = 0.25

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 49 **IPE 240**
Trave secondaria: Gruppo = 2 Elemento = 5 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -37.79 kg T (taglio massimo) = 21.34 kg
Mmax neg.= 0.00 kg*cm M torcente = -2.21 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x240x9 A = 60 B = 100 C = 50 D = 20 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8363.5 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8363.5 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 122106.8 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 124999976.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 5.6 kg/cm² I.R. = 0.00



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**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 93 **IPE 240**
Trave secondaria: Gruppo = 2 Elemento = 8 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 88.11 kg T (taglio massimo) = -26.22 kg Mmax neg.= 0.00 kg*cm M torcente = -41.84 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x240x9 A = 60 B = 100 C = 50 D = 20 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8363.5 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8363.5 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 122106.8 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 124999976.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 16.4 kg/cm² I.R. = 0.01

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 95 **IPE 240**
Trave secondaria: Gruppo = 2 Elemento = 16 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 88.35 kg T (taglio massimo) = -26.22 kg Mmax neg.= 0.00 kg*cm M torcente = 32.86 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x240x9 A = 60 B = 100 C = 50 D = 20 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8363.5 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8363.5 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 122106.8 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 124999976.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 14.3 kg/cm² I.R. = 0.01

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 51 **IPE 240**
Trave secondaria: Gruppo = 2 Elemento = 13 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -26.84 kg T (taglio massimo) = 21.34 kg Mmax neg.= 0.00 kg*cm M torcente = 2.08 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x240x9 A = 60 B = 100 C = 50 D = 20 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**



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[Seconda fila di bulloni]
F,Rd = 8363.5 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8363.5 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 122106.8 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 124999976.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 5.4 kg/cm² I.R. = 0.00

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 100 **IPE 240**
Trave secondaria: Gruppo = 2 Elemento = 36 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 89.52 kg T (taglio massimo) = -26.22 kg Mmax neg.= 0.00 kg*cm M torcente = -33.39 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x240x9 A = 60 B = 100 C = 50 D = 20 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8363.5 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8363.5 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 122106.8 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 124999976.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 14.4 kg/cm² I.R. = 0.01

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 102 **IPE 240**
Trave secondaria: Gruppo = 2 Elemento = 44 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 105.84 kg T (taglio massimo) = -26.22 kg Mmax neg.= 0.00 kg*cm M torcente = 42.86 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x240x9 A = 60 B = 100 C = 50 D = 20 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8363.5 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8363.5 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 122106.8 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 124999976.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)



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F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 16.8 kg/cm² I.R. = 0.01

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 14 **HEA 180**
Trave: Gruppo = 2 Elemento = 68 **IPE 300** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -1578.80 kg T (taglio massimo) = -2106.37 kg Mmax neg.= -159822.91 kg*cm M torcente = 716.69 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x340x12 A = 100 B = 160 C = 70 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M16 Incremento foro: 2.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 18775.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 12884.9 kg (resistenza ala colonna)
F,Rd = 15226.0 kg (resistenza flangia di estremità)
F,Rd = 22676.7 kg (resistenza anima colonna)
F,t2,Rd,ult = 12884.9 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 289459.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 72374736.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 143633.8 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.55**
**[Verifica a taglio del nodo]**
F,v,Rd = 6145.6 kg (resistenza dei bulloni a taglio)
F,t,Rd = 9218.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.29**
**[Verifica di rifollamento]**
F,b,Rd = 16831.8 kg (resistenza a rifollamento)
**I.R. = 0.03**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 150 (mm) Lunghezza2: 249 (mm)
Sigma id = 362.0 kg/cm² I.R. = 0.14

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 8 **HEA 180**
Trave: Gruppo = 2 Elemento = 67 **IPE 300** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 2156.79 kg T (taglio massimo) = 1510.34 kg Mmax neg.= -89449.80 kg*cm M torcente = 766.36 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x340x12 A = 100 B = 160 C = 70 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M16 Incremento foro: 2.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 18775.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 12884.9 kg (resistenza ala colonna)
F,Rd = 15226.0 kg (resistenza flangia di estremità)
F,Rd = 22676.7 kg (resistenza anima colonna)
F,t2,Rd,ult = 12884.9 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 289459.3 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 72374736.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 143633.8 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.31**
**[Verifica a taglio del nodo]**
F,v,Rd = 6145.6 kg (resistenza dei bulloni a taglio)
F,t,Rd = 9218.3 kg (resistenza dei bulloni a trazione)



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**I.R. = 0.23**
**[Verifica di rifollamento]**
F,b,Rd = 16831.8 kg (resistenza a rifollamento)
**I.R. = 0.02**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 150 (mm) Lunghezza2: 249 (mm)
Sigma id = 260.9 kg/cm² I.R. = 0.10

**Trave-Colonna (flangia)**

Colonna: Gruppo = 1 Elemento = 29 **HEA 180**
Trave: Gruppo = 2 Elemento = 95 **IPE 240** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -1491.32 kg T (taglio massimo) = 1291.53 kg Mmax neg.= -100429.00 kg*cm M torcente = -471.95 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x240x15 A = 90 B = 120 C = 60 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M14 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 10648.2 kg (resistenza ala colonna)
F,Rd = 13504.6 kg (resistenza flangia di estremità)
F,Rd = 21720.4 kg (resistenza anima colonna)
F,t2,Rd,ult = 10648.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 186450.8 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 52421312.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.54**
**[Verifica a taglio del nodo]**
F,v,Rd = 4501.5 kg (resistenza dei bulloni a taglio)
F,t,Rd = 6752.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.34**
**[Verifica di rifollamento]**
F,b,Rd = 18409.8 kg (resistenza a rifollamento)
**I.R. = 0.02**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 120 (mm) Lunghezza2: 190 (mm)
Sigma id = 385.8 kg/cm² I.R. = 0.14

**Trave-Colonna flangia con mensola**

Colonna: Gruppo = 1 Elemento = 19 **HEA 180**
Trave: Gruppo = 2 Elemento = 86 **IPE 240** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -6604.42 kg T (taglio massimo) = 2612.14 kg
Mmax neg.= -252476.50 kg*cm
M torcente = 46.51 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x450x15 A = 110 B = 270 C = 70 G = 0 (mm)
n. 0 file intermedie di bulloni per infittimento
Mensola di rinforzo: h = 150 l = 150 s = 6 t = 8 (mm)
Diam. bulloni M16 Incremento foro: 2.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
F,Rd = 44570.6 kg (resistenza ala trave)
F,Rd = 27184.5 kg (resistenza flangia mensola)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 11876.7 kg (resistenza ala colonna)
F,Rd = 18436.7 kg (resistenza flangia di estremità)
F,Rd = 23545.1 kg (resistenza anima colonna)
F,t2,Rd,ult = 11876.7 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 374767.8 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 166320112.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg |N| > 0.05 Npl,Rd
**[Sforzo normale resistente del giunto]**



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Nj,Rd = 36873.4 kg (a trazione)
Nj,Rd = 104388.1 kg (a compressione)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.74**
**[Verifica a taglio del nodo]**
F,v,Rd = 6145.6 kg (resistenza dei bulloni a taglio)
F,t,Rd = 9218.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.26**
**[Verifica di rifollamento]**
F,b,Rd = 21039.8 kg (resistenza a rifollamento)
**I.R. = 0.03**
**[Verifica saldatura profilo con rinforzo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 120 (mm) Lunghezza2: 348 (mm)
Sigma id = 713.2 kg/cm² I.R. = 0.27

**Trave-Colonna flangia con mensola**

Colonna: Gruppo = 1 Elemento = 21 **HEA 180**
Trave: Gruppo = 2 Elemento = 75 **IPE 240** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -6085.67 kg T (taglio massimo) = 2393.69 kg Mmax neg.= -231417.50 kg*cm M torcente = 41.10 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x450x15 A = 110 B = 270 C = 70 G = 0 (mm)
n. 0 file intermedie di bulloni per infittimento
Mensola di rinforzo: h = 150 l = 150 s = 6 t = 8 (mm)
Diam. bulloni M16 Incremento foro: 2.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
F,Rd = 44570.6 kg (resistenza ala trave)
F,Rd = 27184.5 kg (resistenza flangia mensola)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 11876.7 kg (resistenza ala colonna)
F,Rd = 18436.7 kg (resistenza flangia di estremità)
F,Rd = 23545.1 kg (resistenza anima colonna)
F,t2,Rd,ult = 11876.7 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 374767.8 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 166320112.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg |N| > 0.05 Npl,Rd
**[Sforzo normale resistente del giunto]**
Nj,Rd = 36873.4 kg (a trazione)
Nj,Rd = 104388.1 kg (a compressione)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.68**
**[Verifica a taglio del nodo]**
F,v,Rd = 6145.6 kg (resistenza dei bulloni a taglio)
F,t,Rd = 9218.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.24**
**[Verifica di rifollamento]**
F,b,Rd = 21039.8 kg (resistenza a rifollamento)
**I.R. = 0.03**
**[Verifica saldatura profilo con rinforzo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 120 (mm) Lunghezza2: 348 (mm)
Sigma id = 654.4 kg/cm² I.R. = 0.25

**Trave-Colonna flangia con mensola**

Colonna: Gruppo = 1 Elemento = 20 **HEA 180**
Trave: Gruppo = 2 Elemento = 77 **IPE 240** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -7216.92 kg T (taglio massimo) = -2424.06 kg Mmax neg.= -221540.31 kg*cm M torcente = -409.01 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x450x15 A = 110 B = 270 C = 70 G = 0 (mm)
n. 0 file intermedie di bulloni per infittimento
Mensola di rinforzo: h = 150 l = 150 s = 6 t = 8 (mm)
Diam. bulloni M16 Incremento foro: 2.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
F,Rd = 44570.6 kg (resistenza ala trave)
F,Rd = 27184.5 kg (resistenza flangia mensola)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]



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F,Rd = 11876.7 kg (resistenza ala colonna)
F,Rd = 18436.7 kg (resistenza flangia di estremità)
F,Rd = 23545.1 kg (resistenza anima colonna)
F,t2,Rd,ult = 11876.7 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 374767.8 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 166320112.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg |N| > 0.05 Npl,Rd
**[Sforzo normale resistente del giunto]**
Nj,Rd = 36873.4 kg (a trazione)
Nj,Rd = 104388.1 kg (a compressione)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.66**
**[Verifica a taglio del nodo]**
F,v,Rd = 6145.6 kg (resistenza dei bulloni a taglio)
F,t,Rd = 9218.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.20**
**[Verifica di rifollamento]**
F,b,Rd = 21039.8 kg (resistenza a rifollamento)
**I.R. = 0.03**
**[Verifica saldatura profilo con rinforzo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 120 (mm) Lunghezza2: 348 (mm)
Sigma id = 657.1 kg/cm² I.R. = 0.25

**Trave-Colonna flangia con mensola**

Colonna: Gruppo = 1 Elemento = 10 **HEA 180**
Trave: Gruppo = 2 Elemento = 88 **IPE 240** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -7855.31 kg T (taglio massimo) = -2649.85 kg Mmax neg.= -242144.91 kg*cm M torcente = -412.55 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 1: 180x450x15 A = 110 B = 270 C = 70 G = 0 (mm)
n. 0 file intermedie di bulloni per infittimento
Mensola di rinforzo: h = 150 l = 150 s = 6 t = 8 (mm)
Diam. bulloni M16 Incremento foro: 2.0 (mm) (Classe 8.8)
**[Resistenza zona a taglio]**
F,Rd = 20142.9 kg (resistenza anima colonna)
**[Resistenza zona a compressione]**
F,Rd = 19016.2 kg (resistenza anima colonna)
F,Rd = 44570.6 kg (resistenza ala trave)
F,Rd = 27184.5 kg (resistenza flangia mensola)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 11876.7 kg (resistenza ala colonna)
F,Rd = 18436.7 kg (resistenza flangia di estremità)
F,Rd = 23545.1 kg (resistenza anima colonna)
F,t2,Rd,ult = 11876.7 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 374767.8 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 166320112.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 104388.1 kg |N| > 0.05 Npl,Rd
**[Sforzo normale resistente del giunto]**
Nj,Rd = 36873.4 kg (a trazione)
Nj,Rd = 104388.1 kg (a compressione)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.72**
**[Verifica a taglio del nodo]**
F,v,Rd = 6145.6 kg (resistenza dei bulloni a taglio)
F,t,Rd = 9218.3 kg (resistenza dei bulloni a trazione)
**I.R. = 0.22**
**[Verifica di rifollamento]**
F,b,Rd = 21039.8 kg (resistenza a rifollamento)
**I.R. = 0.03**
**[Verifica saldatura profilo con rinforzo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 120 (mm) Lunghezza2: 348 (mm)
Sigma id = 717.5 kg/cm² I.R. = 0.27

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 60 **IPE 300**
Trave secondaria: Gruppo = 2 Elemento = 5 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -37.79 kg T (taglio massimo) = -21.34 kg
Mmax neg.= 0.00 kg*cm
M torcente = -2.21 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.



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**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x240x9 A = 60 B = 100 C = 50 D = 20 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8363.5 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8363.5 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 122106.8 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 122661752.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 5.6 kg/cm² I.R. = 0.00

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 60 **IPE 300**
Trave secondaria: Gruppo = 2 Elemento = 6 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -200.80 kg T (taglio massimo) = 21.95 kg Mmax neg.= -0.00 kg*cm M torcente = 34.94 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x240x9 A = 60 B = 100 C = 50 D = 20 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8363.5 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8363.5 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 122106.8 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 122661752.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.01**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 16.0 kg/cm² I.R. = 0.01

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 62 **IPE 300**
Trave secondaria: Gruppo = 2 Elemento = 13 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -26.84 kg T (taglio massimo) = -21.34 kg Mmax neg.= 0.00 kg*cm M torcente = 2.08 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x240x9 A = 60 B = 100 C = 50 D = 20 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8363.5 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8363.5 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 122106.8 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 122661752.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**



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Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 5.4 kg/cm² I.R. = 0.00

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 62 **IPE 300**
Trave secondaria: Gruppo = 2 Elemento = 14 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -156.34 kg T (taglio massimo) = 21.95 kg Mmax neg.= -0.00 kg*cm M torcente = -34.12 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x240x9 A = 60 B = 100 C = 50 D = 20 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8363.5 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8363.5 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 122106.8 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 122661752.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 14.8 kg/cm² I.R. = 0.01

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 56 **IPE 240**
Trave secondaria: Gruppo = 2 Elemento = 33 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -29.04 kg T (taglio massimo) = 21.34 kg Mmax neg.= 0.00 kg*cm M torcente = -2.94 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x240x9 A = 60 B = 100 C = 50 D = 20 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8363.5 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8363.5 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 122106.8 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 124999976.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)



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Sigma id = 5.6 kg/cm²  I.R. = 0.00

**Trave-Trave flangiata**

Trave principale:  Gruppo = 2  Elemento = 67  **IPE 300**
Trave secondaria:  Gruppo = 2  Elemento = 33  **IPE 180**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
N = -29.04 kg  T (taglio massimo) = -21.34 kg  Mmax neg.= 0.00 kg*cm  M torcente = -2.94 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x240x9  A = 60  B = 100  C = 50  D = 20  E = 5  (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12  Incremento foro: 1.0 (mm)  (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8363.5 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8363.5 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 122106.8 kg*cm
**[Rigidezza rotazionale]  (calcolata per N trascurabile)**
S,j = 122661752.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg  |N| <= 0.05 Npl,Rd  (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  91 (mm)  Lunghezza2:  146 (mm)
Sigma id = 5.6 kg/cm²  I.R. = 0.00

**Trave-Trave flangiata**

Trave principale:  Gruppo = 2  Elemento = 67  **IPE 300**
Trave secondaria:  Gruppo = 2  Elemento = 34  **IPE 180**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
N = -159.69 kg  T (taglio massimo) = 21.95 kg  Mmax neg.= -0.00 kg*cm  M torcente = 35.07 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x240x9  A = 60  B = 100  C = 50  D = 20  E = 5  (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12  Incremento foro: 1.0 (mm)  (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8363.5 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8363.5 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 122106.8 kg*cm
**[Rigidezza rotazionale]  (calcolata per N trascurabile)**
S,j = 122661752.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg  |N| <= 0.05 Npl,Rd  (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  91 (mm)  Lunghezza2:  146 (mm)
Sigma id = 15.1 kg/cm²  I.R. = 0.01

**Trave-Trave flangiata**

Trave principale:  Gruppo = 2  Elemento = 58  **IPE 240**
Trave secondaria:  Gruppo = 2  Elemento = 41  **IPE 180**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
N = -23.21 kg  T (taglio massimo) = 21.34 kg  Mmax neg.= 0.00 kg*cm  M torcente = 2.17 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x240x9  A = 60  B = 100  C = 50  D = 20  E = 5  (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12  Incremento foro: 1.0 (mm)  (Classe 8.8)



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**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8363.5 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8363.5 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 122106.8 kg*cm
**[Rigidezza rotazionale]** **(calcolata per N trascurabile)**
S,j = 124999976.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 5.4 kg/cm² I.R. = 0.00

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 69 **IPE 300**
Trave secondaria: Gruppo = 2 Elemento = 41 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -23.21 kg T (taglio massimo) = -21.34 kg Mmax neg.= 0.00 kg*cm M torcente = 2.17 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x240x9 A = 60 B = 100 C = 50 D = 20 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8363.5 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8363.5 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 122106.8 kg*cm
**[Rigidezza rotazionale]** **(calcolata per N trascurabile)**
S,j = 122661752.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 5.4 kg/cm² I.R. = 0.00

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 69 **IPE 300**
Trave secondaria: Gruppo = 2 Elemento = 42 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -171.08 kg T (taglio massimo) = 21.95 kg Mmax neg.= -0.00 kg*cm M torcente = -35.95 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x240x9 A = 60 B = 100 C = 50 D = 20 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8363.5 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8363.5 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 122106.8 kg*cm
**[Rigidezza rotazionale]** **(calcolata per N trascurabile)**
S,j = 122661752.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**



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F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.01**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 15.6 kg/cm² I.R. = 0.01

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 71 **IPE 300**
Trave secondaria: Gruppo = 2 Elemento = 6 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -200.80 kg T (taglio massimo) = -21.95 kg Mmax neg.= 0.00 kg*cm M torcente = 34.94 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x300x9 A = 60 B = 100 C = 50 D = 60 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8123.2 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8123.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 118598.7 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 118282808.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.01**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 16.0 kg/cm² I.R. = 0.01

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 71 **IPE 300**
Trave secondaria: Gruppo = 2 Elemento = 7 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -155.15 kg T (taglio massimo) = 24.02 kg Mmax neg.= 0.00 kg*cm M torcente = 3.81 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x300x9 A = 60 B = 100 C = 50 D = 60 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8123.2 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8123.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 118598.7 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 118282808.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.01**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 9.3 kg/cm² I.R. = 0.00

**Trave-Trave flangiata**



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Trave principale: Gruppo = 2 Elemento = 82 **IPE 300**
Trave secondaria: Gruppo = 2 Elemento = 7 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -155.15 kg T (taglio massimo) = -24.02 kg Mmax neg.= 0.00 kg*cm M torcente = 3.81 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x300x9 A = 60 B = 100 C = 50 D = 60 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8123.2 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8123.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 118598.7 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 118282808.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.01**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 9.3 kg/cm² I.R. = 0.00

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 82 **IPE 300**
Trave secondaria: Gruppo = 2 Elemento = 8 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 88.11 kg T (taglio massimo) = 26.22 kg Mmax neg.= 0.00 kg*cm M torcente = -41.84 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x300x9 A = 60 B = 100 C = 50 D = 60 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8123.2 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8123.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 118598.7 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 118282808.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 16.4 kg/cm² I.R. = 0.01

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 72 **IPE 300**
Trave secondaria: Gruppo = 2 Elemento = 10 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 2377.49 kg T (taglio massimo) = -21.95 kg Mmax neg.= 0.00 kg*cm M torcente = -3.76 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x300x9 A = 60 B = 100 C = 50 D = 60 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8123.2 kg (resistenza flangia di estremità)



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F,t2,Rd,ult = 8123.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 118598.7 kg*cm
**[Rigidezza rotazionale]  (calcolata per N trascurabile)**
S,j = 118282808.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg  |N| <= 0.05 Npl,Rd  (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.08**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  91 (mm)  Lunghezza2:  146 (mm)
Sigma id = 106.8 kg/cm²  I.R. = 0.04

**Trave-Trave flangiata**

Trave principale:  Gruppo = 2  Elemento = 83  **IPE 300**
Trave secondaria:  Gruppo = 2  Elemento = 11  **IPE 180**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
N = 331.17 kg  T (taglio massimo) = -24.02 kg  Mmax neg.= 0.00 kg*cm  M torcente = -1.02 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]**  (S 275 (Fe 430))
Flangia tipo 5: 120x300x9  A = 60  B = 100  C = 50  D = 60  E = 5  (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12  Incremento foro: 1.0 (mm)  (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8123.2 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8123.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 118598.7 kg*cm
**[Rigidezza rotazionale]  (calcolata per N trascurabile)**
S,j = 118282808.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg  |N| <= 0.05 Npl,Rd  (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.01**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  91 (mm)  Lunghezza2:  146 (mm)
Sigma id = 15.9 kg/cm²  I.R. = 0.01

**Trave-Trave flangiata**

Trave principale:  Gruppo = 2  Elemento = 72  **IPE 300**
Trave secondaria:  Gruppo = 2  Elemento = 11  **IPE 180**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
N = 331.17 kg  T (taglio massimo) = 24.02 kg  Mmax neg.= 0.00 kg*cm  M torcente = -1.02 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]**  (S 275 (Fe 430))
Flangia tipo 5: 120x300x9  A = 60  B = 100  C = 50  D = 60  E = 5  (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12  Incremento foro: 1.0 (mm)  (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8123.2 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8123.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 118598.7 kg*cm
**[Rigidezza rotazionale]  (calcolata per N trascurabile)**
S,j = 118282808.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg  |N| <= 0.05 Npl,Rd  (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.01**



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**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 15.9 kg/cm² I.R. = 0.01

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 83 **IPE 300**
Trave secondaria: Gruppo = 2 Elemento = 12 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 2116.79 kg T (taglio massimo) = 26.22 kg Mmax neg.= 0.00 kg*cm M torcente = 7.50 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x300x9 A = 60 B = 100 C = 50 D = 60 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8123.2 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8123.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 118598.7 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 118282808.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.07**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 95.2 kg/cm² I.R. = 0.04

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 73 **IPE 300**
Trave secondaria: Gruppo = 2 Elemento = 14 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -156.34 kg T (taglio massimo) = -21.95 kg Mmax neg.= 0.00 kg*cm M torcente = -34.12 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x300x9 A = 60 B = 100 C = 50 D = 60 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8123.2 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8123.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 118598.7 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 118282808.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 14.8 kg/cm² I.R. = 0.01

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 73 **IPE 300**
Trave secondaria: Gruppo = 2 Elemento = 15 **IPE 180** S 275 (Fe 430)



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[Verifica] Banca n. 0: Banche generali AMV
N = -163.36 kg T (taglio massimo) = 24.02 kg Mmax neg.= 0.00 kg*cm M torcente = -3.53 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x300x9 A = 60 B = 100 C = 50 D = 60 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8123.2 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8123.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 118598.7 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 118282808.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.01**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 9.6 kg/cm² I.R. = 0.00

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 84 **IPE 300**
Trave secondaria: Gruppo = 2 Elemento = 15 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -163.36 kg T (taglio massimo) = -24.02 kg Mmax neg.= 0.00 kg*cm M torcente = -3.53 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x300x9 A = 60 B = 100 C = 50 D = 60 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8123.2 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8123.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 118598.7 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 118282808.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.01**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 9.6 kg/cm² I.R. = 0.00

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 84 **IPE 300**
Trave secondaria: Gruppo = 2 Elemento = 16 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 88.35 kg T (taglio massimo) = 26.22 kg Mmax neg.= 0.00 kg*cm M torcente = 32.86 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x300x9 A = 60 B = 100 C = 50 D = 60 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8123.2 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8123.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 118598.7 kg*cm



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**[Rigidezza rotazionale]** **(calcolata per N trascurabile)**
S,j = 118282808.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 14.3 kg/cm² I.R. = 0.01

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 78 **IPE 300**
Trave secondaria: Gruppo = 2 Elemento = 34 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -159.69 kg T (taglio massimo) = -21.95 kg Mmax neg.= 0.00 kg*cm M torcente = 35.07 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x300x9 A = 60 B = 100 C = 50 D = 60 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8123.2 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8123.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 118598.7 kg*cm
**[Rigidezza rotazionale]** **(calcolata per N trascurabile)**
S,j = 118282808.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 15.1 kg/cm² I.R. = 0.01

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 78 **IPE 300**
Trave secondaria: Gruppo = 2 Elemento = 35 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -165.86 kg T (taglio massimo) = 24.02 kg Mmax neg.= 0.00 kg*cm M torcente = 3.48 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x300x9 A = 60 B = 100 C = 50 D = 60 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8123.2 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8123.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 118598.7 kg*cm
**[Rigidezza rotazionale]** **(calcolata per N trascurabile)**
S,j = 118282808.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.01**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**



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**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 9.7 kg/cm² I.R. = 0.00

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 89 **IPE 300**
Trave secondaria: Gruppo = 2 Elemento = 35 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -165.86 kg T (taglio massimo) = -24.02 kg Mmax neg.= 0.00 kg*cm M torcente = 3.48 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x300x9 A = 60 B = 100 C = 50 D = 60 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8123.2 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8123.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 118598.7 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 118282808.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.01**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 9.7 kg/cm² I.R. = 0.00

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 89 **IPE 300**
Trave secondaria: Gruppo = 2 Elemento = 36 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 89.52 kg T (taglio massimo) = 26.22 kg Mmax neg.= 0.00 kg*cm M torcente = -33.39 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x300x9 A = 60 B = 100 C = 50 D = 60 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8123.2 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8123.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 118598.7 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 118282808.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 14.4 kg/cm² I.R. = 0.01

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 79 **IPE 300**
Trave secondaria: Gruppo = 2 Elemento = 38 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 2365.67 kg T (taglio massimo) = -21.95 kg Mmax neg.= 0.00 kg*cm M torcente = 3.17 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.



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**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x300x9 A = 60 B = 100 C = 50 D = 60 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8123.2 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8123.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 118598.7 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 118282808.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.08**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 106.2 kg/cm² I.R. = 0.04

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 79 **IPE 300**
Trave secondaria: Gruppo = 2 Elemento = 39 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 336.32 kg T (taglio massimo) = 24.02 kg Mmax neg.= 0.00 kg*cm M torcente = 1.02 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x300x9 A = 60 B = 100 C = 50 D = 60 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8123.2 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8123.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 118598.7 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 118282808.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.01**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 16.1 kg/cm² I.R. = 0.01

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 90 **IPE 300**
Trave secondaria: Gruppo = 2 Elemento = 39 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 336.32 kg T (taglio massimo) = -24.02 kg Mmax neg.= 0.00 kg*cm M torcente = 1.02 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x300x9 A = 60 B = 100 C = 50 D = 60 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8123.2 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8123.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 118598.7 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 118282808.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**



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Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.01**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 16.1 kg/cm² I.R. = 0.01

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 90 **IPE 300**
Trave secondaria: Gruppo = 2 Elemento = 40 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = 2097.50 kg T (taglio massimo) = 26.22 kg Mmax neg.= 0.00 kg*cm M torcente = 7.38 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x300x9 A = 60 B = 100 C = 50 D = 60 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8123.2 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8123.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 118598.7 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 118282808.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.07**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)
Sigma id = 94.4 kg/cm² I.R. = 0.04

**Trave-Trave flangiata**

Trave principale: Gruppo = 2 Elemento = 80 **IPE 300**
Trave secondaria: Gruppo = 2 Elemento = 42 **IPE 180** S 275 (Fe 430)
[Verifica] Banca n. 0: Banche generali AMV
N = -171.08 kg T (taglio massimo) = -21.95 kg Mmax neg.= 0.00 kg*cm M torcente = -35.95 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x300x9 A = 60 B = 100 C = 50 D = 60 E = 5 (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12 Incremento foro: 1.0 (mm) (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8123.2 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8123.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 118598.7 kg*cm
**[Rigidezza rotazionale] (calcolata per N trascurabile)**
S,j = 118282808.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg |N| <= 0.05 Npl,Rd (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.01**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1: 91 (mm) Lunghezza2: 146 (mm)



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Sigma id = 15.6 kg/cm²  I.R. = 0.01

**Trave-Trave flangiata**

Trave principale:  Gruppo = 2  Elemento = 80  **IPE 300**
Trave secondaria:  Gruppo = 2  Elemento = 43  **IPE 180**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
N = 188.86 kg  T (taglio massimo) = 24.02 kg  Mmax neg.= 0.00 kg*cm  M torcente = -3.56 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x300x9  A = 60  B = 100  C = 50  D = 60  E = 5  (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12  Incremento foro: 1.0 (mm)  (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8123.2 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8123.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 118598.7 kg*cm
**[Rigidezza rotazionale]  (calcolata per N trascurabile)**
S,j = 118282808.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg  |N| <= 0.05 Npl,Rd  (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.01**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  91 (mm)  Lunghezza2:  146 (mm)
Sigma id = 10.5 kg/cm²  I.R. = 0.00

**Trave-Trave flangiata**

Trave principale:  Gruppo = 2  Elemento = 91  **IPE 300**
Trave secondaria:  Gruppo = 2  Elemento = 43  **IPE 180**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
N = 188.86 kg  T (taglio massimo) = -24.02 kg  Mmax neg.= 0.00 kg*cm  M torcente = -3.56 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x300x9  A = 60  B = 100  C = 50  D = 60  E = 5  (mm)
n. 0 file intermedie di bulloni per infittimento
Diam. bulloni M12  Incremento foro: 1.0 (mm)  (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8123.2 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8123.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 118598.7 kg*cm
**[Rigidezza rotazionale]  (calcolata per N trascurabile)**
S,j = 118282808.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg  |N| <= 0.05 Npl,Rd  (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.01**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  91 (mm)  Lunghezza2:  146 (mm)
Sigma id = 10.5 kg/cm²  I.R. = 0.00

**Trave-Trave flangiata**

Trave principale:  Gruppo = 2  Elemento = 91  **IPE 300**
Trave secondaria:  Gruppo = 2  Elemento = 44  **IPE 180**  S 275 (Fe 430)
[Verifica]  Banca n. 0: Banche generali AMV
N = 105.84 kg  T (taglio massimo) = 26.22 kg  Mmax neg.= 0.00 kg*cm  M torcente = 42.86 kg*cm
Per le sollecitazioni di ogni c.c. riferirsi ai risultati dell'analisi strutturale.
**[Verifica flangia]** (S 275 (Fe 430))
Flangia tipo 5: 120x300x9  A = 60  B = 100  C = 50  D = 60  E = 5  (mm)
n. 0 file intermedie di bulloni per infittimento



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Diam. bulloni M12  Incremento foro: 1.0 (mm)  (Classe 8.8)
**[Resistenza zona a trazione]**
[Seconda fila di bulloni]
F,Rd = 8123.2 kg (resistenza flangia di estremità)
F,t2,Rd,ult = 8123.2 kg (resistenza efficace seconda fila)
**[Momento resistente]**
Mj,Rd = 118598.7 kg*cm
**[Rigidezza rotazionale]  (calcolata per N trascurabile)**
S,j = 118282808.0 kg*cm/rad (rigidezza del giunto)
**[Resistenza assiale profilo]**
Npl,Rd = 63807.6 kg  |N| <= 0.05 Npl,Rd  (trascurabile)
**[Verifica a presso-tensoflessione del giunto]**
**I.R. = 0.00**
**[Verifica a taglio del nodo]**
F,v,Rd = 3288.1 kg (resistenza dei bulloni a taglio)
F,t,Rd = 4932.1 kg (resistenza dei bulloni a trazione)
**I.R. = 0.00**
**[Verifica di rifollamento]**
F,b,Rd = 9467.9 kg (resistenza a rifollamento)
**I.R. = 0.00**
**[Verifica saldatura profilo]**
Saldatura a completa penetrazione: verificata
Lunghezza1:  91 (mm)  Lunghezza2:  146 (mm)
Sigma id = 16.8 kg/cm²  I.R. = 0.01

Il progettista delle strutture

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