*REGIONE PIEMONTE*

*Provincia di Cuneo*

# COMUNE DI BARBARESCO

# RICOSTRUZIONE DI SBARRAMENTO FLUVIALE ESISTENTE AD USO IRRIGUO CON INNALZAMENTO ABBATTIBILE AD USO IDROELETTRICO E CENTRALE IN CORPO TRAVERSA

## PROGETTO DEFINITIVO

**Elaborato n.**

# A1-18

# *"Integrazione alla relazione di calcolo strutturale traversa"*

Luglio 2016

Luglio 2016: richiesta integrazioni del 16/01/2016 prot. n. 3915/DVA

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# 1 PREMESSA

*La* presente relazione riporta tutte le necessarie verifiche previste dalla normativa vigente ed in particolare il decreto 26 giugno 2014 - Norme tecniche per la progettazione e la costruzione degli sbarramenti di ritenuta (dighe e traverse), di tipo strutturale ed idraulico inerenti le opere in progetto.

# 2 CONSIDERAZIONI SULLO SCHEMA DI CALCOLO DELLA STABILITÀ GLOBALE DELLA TRAVERSA

## 2.1 Normativa

- Legge 5 novembre 1971, n° 1086: “Norme tecniche per la disciplina delle opere di conglomerato cementizio armato, normale e precompresso ed a struttura metallica” e successivi decreti applicativi;
- Classificazione sismica del territorio secondo:
- Ordinanza n. 3274 del Presidente del Consiglio dei Ministri: “Primi elementi in materia di criteri per la classificazione sismica del territorio nazionale e di normative tecniche per le costruzioni in zona sismica” e s.m.i.
- D.M. 14 gennaio 2008: “Norme tecniche per le costruzioni”;
- Consiglio superiore dei lavori pubblici, Circolare 2 febbraio 2009 n.617: “Istruzioni per l’applicazione delle norme tecniche per le costruzioni di cui al D.M. 14 Gennaio 2008;
- UNI EN 206-1:2006: “Calcetruzzo – Parte 1:Specificazione, prestazione, produzione e conformità”;
- Ministero delle infrastrutture e dei trasporti “Norme tecniche per la progettazione e la costruzione degli sbarramenti di ritenuta (dighe e traverse)” D.26-07-2014.

## 2.2 Classificazione della costruzione

La tabella sottostante riassume i valori adottati, ai fini della determinazione dell’azione sismica, per la classificazione del sottosuolo e della struttura; i paragrafi seguenti illustrano nel dettaglio le motivazioni delle scelte operate.

| **Parametri della struttura** | | | | | |
|---|---|---|---|---|---|
| Classe d'uso | Vita Vn [anni] | Coeff. Uso | Periodo Vr [anni] | Tipo di suolo | Categoria topografica |
| II | 50.0 | 1.0 | 50.0 | B | T1 |

## 2.3 Coordinate geografiche

La struttura in progetto ha le seguenti coordinate geografiche, espresse in gradi decimali:

| Id nodo | Longitudine | Latitudine |
|---|---|---|
| Loc. | 8.033 | 44.6928 |


*Ubicazione opera*

### Vita nominale della costruzione

La costruzione in progetto è stata considerata di tipo 2 (opere ordinarie); in base alla Tabella 2.4.I, si pertanto è assunto:

VN = 50 anni

### Classe d'uso della costruzione

La costruzione in progetto è stata considerata appartenente alla classe II (costruzioni il cui uso preveda normali affollamenti, senza contenuti pericolosi per l'ambiente e senza funzioni pubbliche e sociali essenziali; industrie con attività non pericolose per l'ambiente) per cui è definito un valore del coefficiente d'uso pari a:
CU = 1.0

**Periodo di riferimento per l'azione sismica**

In base all'adozione dei suddetti valori per la vita nominale VN e per il coefficiente d'uso CU, il periodo di riferimento per l'azione sismica risulta pari a:
VR = VR × CU = 50 anni

come evidenziato graficamente dalla tabella seguente:

| **Periodo di riferimento per l'azione sismica VR** | | | | | |
|---|---|---|---|---|---|
| Tipo della costruzione | Vita Vn [anni] | I | II | III | IV |
| 1 Opere provvisiorie | < 10 | 35 | 35 | 35 | 35 |
| 2 Opere ordinarie | > 50 | 35 | 50 | 75 | 100 |
| 3 Grandi opere | > 100 | 70 | 100 | 150 | 200 |

**Categoria del sottosuolo**

L'influenza del profilo stratigrafico sulla risposta sismica locale è stata valutata mediante l'approccio semplificato, consistente nell'attribuzione del sottosuolo ad una delle categorie di riferimento indicate in Tabella 3.2.II.
Tale attribuzione è stata effettuata dal geologo sulla base dell'assetto lito-stratigrafico locale (cfr. A1-3_Relazione geologica): il sottosuolo del sito di progetto è stato classificato come appartenente al tipo B.

**Condizioni topografiche del sito**

Il sito di costruzione è posto su una superficie pianeggiante, pendio con inclinazione media non superiore a 15°, per cui rientra nella categoria T1.

**Classificazione sismica del sito**

Il territorio del Comune di Barbaresco risulta attualmente classificato come zona sismica 4.

## 2.4 Modello geologico-geotecnico preliminare

In riferimento alla relazione "A1-3 Relazione geologica" lo stato attuale dell'area dell' intervento si individuano dai dati tecnici a disposizione e della tipologia di deposito attesi in relazione all'ambiente sedimentario, la presenza di quattro tipologie di strati:
- uno strato superficiale di 2.20 m costituito da sabbia medio fine, da limosa a con limo, con rara ghiaia eterometrica poligenica;

- uno strato di circa 4 m costituito da ghiaia eterometrica poligenica e sabbia medio grossa limosa muscovilici addensata;
- uno strato di 25 m costituito da argilla debolmente plastica molto consistente, con presenza di locali intervalazioni di limo sabbioso argilloso.

## 2.5 Analisi dei carichi

### 2.5.1 Peso proprio(Gk)

I valori del peso proprio della struttura è stato ricavato moltiplicando il volume dei singoli elementi per il peso specifico dei singoli materiali:

- Strutture in c.a. 25.00 kN/m$^3$
- Strutture in acciaio 78.50 kN/m$^3$
- Terreno 19.00 kN/m$^3$
- Acqua 10.00 kN/m$^3$
- Legno 4.00 kN/m$^3$
- Massi cementati 24.00 kN/m$^3$

### 2.5.2 Carichi Permanenti (Gk)

**Spinta delle terre**

La spinta delle terre è stata considerata soltanto a monte della traversa a favore di sicurezza definita con riferimento al coefficiente di spinta attiva ka. In base alla stratificazione del terreno si è potuto considerare nei calcoli strutturali un terreno con le seguenti caratteristiche:

terreno sabbioso

peso specifico: 19 kN/mc

angolo di attrito : 30°

La spinta di progetto del terreno è regolato dalla seguente espressione:

$St = 1/2 * ka * \gamma t * ht^2$

dove:

St = Spinte del terreno in condizioni statiche

$\gamma t$ = peso specifico del terreno

ht = affondamento del punto rispetto al piano di calpestio

ka = coefficiente di spinta attiva

### Spinta idrostatica

La spinta idrostatica è stata considerata pari al livello di invaso sulla traversa (sempre presente).

La spinta sulle superfici è regolata dalla seguente espressione:

$Ews = 1/2*\gamma_{H2O} * hs^2$

Ews = Spinta dell'acqua in condizioni statiche

$\gamma_{H2O}$ = peso specifico dell'acqua

hs = affondamento del punto rispetto al pelo libero

Le verifiche globali riguardano sia la condizione di esercizio che di massima piena duecentennale.

## 2.6 Azioni Sismica (Esk)

L'azione sismica sulla costruzione è valutata a partire dalla "pericolosità sismica di base", in condizioni ideali di sito di riferimento rigido con superficie topografica orizzontale.

Allo stato attuale, la pericolosità sismica su reticolo di riferimento nell'intervallo di riferimento è fornita dai dati pubblicati sul sito http://esse1.mi.ingv.it/. Per punti non coincidenti con il reticolo di riferimento e periodi di ritorno non contemplati direttamente si opera come indicato nell' allegato alle NTC (rispettivamente media pesata e interpolazione).

L'azione sismica viene definita in relazione ad un periodo di riferimento Vr che si ricava, per ciascun tipo di costruzione, moltiplicandone la vita nominale per il coefficiente d'uso (vedi tabella Parametri della struttura). Fissato il periodo di riferimento Vr e la probabilità di superamento Pver associata a ciascuno degli stati limite considerati, si ottiene il periodo di ritorno Tr e i relativi parametri di pericolosità sismica (vedi tabella successiva):

ag: accelerazione orizzontale massima del terreno;

Fo: valore massimo del fattore di amplificazione dello spettro in accelerazione orizzontale;

T*c: periodo di inizio del tratto a velocità costante dello spettro in accelerazione orizzontale;

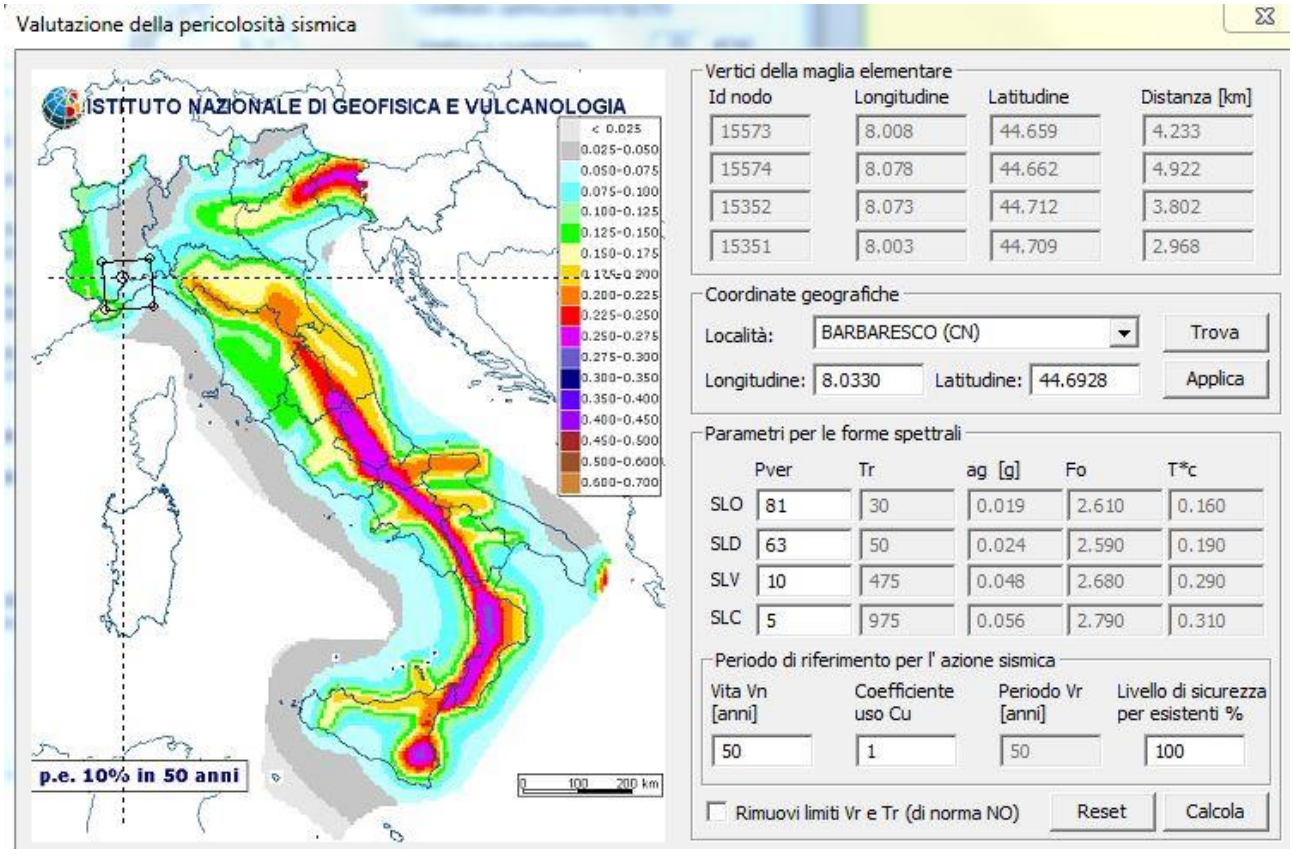
Parametri della struttura secondo allegato B delle N.T.C. 2008 ed i punti 3.2.2.2 – 3.2.3.2.1 delle N.T.C. 2008

| **Parametri della struttura** |
|---|

| Classe d'uso | VitaVn [anni] | Coeff. Uso | Periodo Vr [anni] | Tipo di suolo | Categoria topografica |
|---|---|---|---|---|---|
| II | 50.0 | 1.0 | 50.0 | C | T1 |

### 2.6.1 **Spettri di risposta elastici**

In funzione delle coordinate del sito di costruzione e delle classificazioni operate, sono stati ricavati i valori delle grandezze per la definizione dello spettro elastico di riferimento.




*Ubicazione opera*

La traversa per il ruolo che assume si deve considerare fissa in quanto non è in grado di subire spostamenti rispetto al terreno a tale scopo si assume il coefficiente $\beta m$ pari ad 1 per cui si ottiene:

- $k_h = \beta m \times a_{max}/g$
- $k_v = \pm 0.5 \times k_h$

L'analisi simica è stata condotta con il metodo di analisi statica equivalente caratterizzate dal prodotto delle masse per i coefficienti sismici calcolati precedentemente.

**Spinte di progetto del terreno e dell'acqua in condizioni sismiche**

La spinta di progetto totale Ed (statica + dinamica) viene calcolata secondo la relazione:

$Ed = 0.5 * \gamma^{*}*(1\pm kv) * K* H^{2}+Ews+Ewd$

in cui:

$\gamma^{*}$ è il peso dell'unità di volume del terreno

Kv è il coefficiente sismico verticale

K è il coefficiente di spinta del terreno (statico+dinamico) calcolato con Mononobe Okabe

H è l'altezza della traversa

Ews è la spinta dell'acqua in condizioni statiche

Ewd è l'incremento di spinta dell'acqua in condizioni dinamiche

**Spinta idrodinamica**

La spinta idrodinamica è stata considerata pari al livello di invaso sulla traversa (sempre presente).

La spinta sulle superfici è regolata dalla seguente espressione:

$Ewd = a*\gamma_{H2O} *c* y_0$

Ewd = Azione di inerzia dell'acqua in condizioni dinamiche

$\gamma_{H2O}$ = peso specifico dell'acqua

$Y_0$ = differenza tra la quota dell'acqua presente nella combinazione sismica e la quota del punto più depresso dell'alveo naturale al piede del paramento;

$$c = \frac{cm}{2}\left[\frac{y}{y_0}\left(2-\frac{y}{y_0}\right)+\sqrt{\frac{y}{y_0}\left(2-\frac{y}{y_0}\right)}\right]$$

Y= differenza tra la quota dell'acqua presente nella combinazione sismica e la quota del punto generico del paramento a cui è associata la pressione p;

$c_m = -0.0073\alpha + 0.7412$

$\alpha$ = angolo di inclinazione del paramento rispetto alla verticale.

Le verifiche globali riguardano sia la condizione di esercizio che di massima piena due centennale.

**Azione sismica**

Nell'ambito di analisi pseudo statiche, l'azione sismica viene rappresentata da una serie di forze statiche equivalenti, orizzontali e verticali dati dal prodotto dei pesi delle masse in

gioco per i cosiddetti coefficienti sismici. Per quanto riguarda le azioni sismiche in direzione verticale, esse possono agire sia verso il basso sia verso l'alto di volta in volta sono prese le condizioni più sfavorevoli.

## 2.7 Approccio progettuale

### 2.7.1 Coefficienti parziali di sicurezza sui materiali

Le verifiche devono essere eseguite almeno nei confronti dei seguenti stati limiti:

1- Stabilità globale del complesso traversa-terreno
   (Approccio 1 – Comb. 2 (A2+M2+R2)
2- Collasso per scorrimento del piano di posa
   (Approccio 1 – Comb. 1 (A1+M1+R1) e Comb.2 (A2+M2+R2) e/o
   Approccio 2 – (A1+M1+R3))
3- Collasso per carico limite dell'insieme traversa-terreno
   (Approccio 1 – Comb. 1 (A1+M1+R1) e Comb.2 (A2+M2+R2) e/o
   Approccio 2 – (A1+M1+R3))

I coefficienti parziali sulle azioni, e sui materiali $\gamma_M$ sono stati adottati come specificato nel seguito.

Approccio 1 combinazione 1 e combinazione 2

a) Coefficienti parziali per le azioni o per l'effetto delle azioni

**Tabella 6.2.I** – *Coefficienti parziali per le azioni o per l'effetto delle azioni.*

| CARICHI | EFFETTO | Coefficiente Parziale $\gamma_F$ (o $\gamma_E$) | EQU | (A1) STR | (A2) GEO |
|---|---|---|---|---|---|
| Permanenti | Favorevole | $\gamma_{G1}$ | 0,9 | 1,0 | 1,0 |
| | Sfavorevole | | 1,1 | 1,3 | 1,0 |
| Permanenti non strutturali (1) | Favorevole | $\gamma_{G2}$ | 0,0 | 0,0 | 0,0 |
| | Sfavorevole | | 1,5 | 1,5 | 1,3 |
| Variabili | Favorevole | $\gamma_{Qi}$ | 0,0 | 0,0 | 0,0 |
| | Sfavorevole | | 1,5 | 1,5 | 1,3 |

(1) Nel caso in cui i carichi permanenti non strutturali (ad es. i carichi permanenti portati) siano compiutamente definiti, si potranno adottare gli stessi coefficienti validi per le azioni permanenti.

b) Coefficienti parziali per i parametri geotecnici dei terreno

**Tabella 6.2.II** – *Coefficienti parziali per i parametri geotecnici del terreno*

| PARAMETRO | GRANDEZZA ALLA QUALE APPLICARE IL COEFFICIENTE PARZIALE | COEFFICIENTE PARZIALE $\gamma_M$ | (M1) | (M2) |
|---|---|---|---|---|
| *Tangente dell'angolo di resistenza al taglio* | $\tan \varphi'_k$ | $\gamma_{\varphi'}$ | 1,0 | 1,25 |
| *Coesione efficace* | $c'_k$ | $\gamma_{c'}$ | 1,0 | 1,25 |
| *Resistenza non drenata* | $c_{uk}$ | $\gamma_{cu}$ | 1,0 | 1,4 |
| *Peso dell'unità di volume* | $\gamma$ | $\gamma_\gamma$ | 1,0 | 1,0 |

c) Coefficienti parziali $\gamma_R$ per le verifiche agli stati limite ultimi di fondazioni

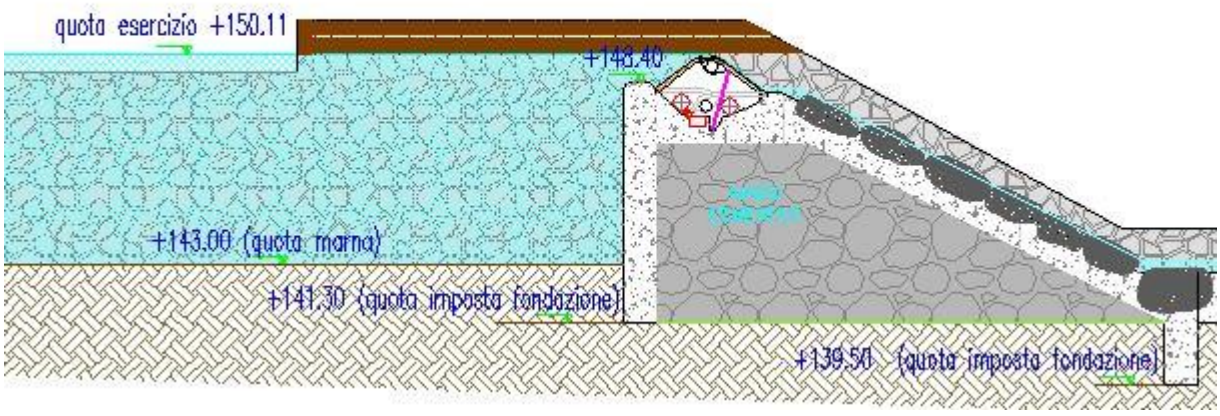
**Tabella 6.4.I** - *Coefficienti parziali $\gamma_R$ per le verifiche agli stati limite ultimi di fondazioni superficiali.*

| VERIFICA | COEFFICIENTE PARZIALE (R1) | COEFFICIENTE PARZIALE (R2) | COEFFICIENTE PARZIALE (R3) |
|---|---|---|---|
| Capacità portante | $\gamma_R = 1,0$ | $\gamma_R = 1,8$ | $\gamma_R = 2,3$ |
| Scorrimento | $\gamma_R = 1,0$ | $\gamma_R = 1,1$ | $\gamma_R = 1,1$ |

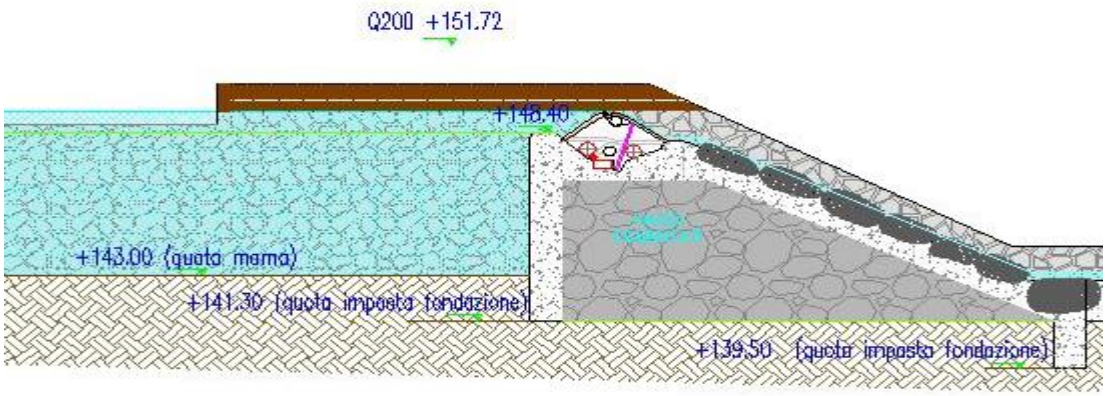
## 2.7.2 **Geometria *dell'opera***

Per le verifiche globali della traversa si è considerata la condizione di traversa in esercizio caratterizzata dalle ventole completamente aperte e con livello di acqua corrispondente al massimo invaso. Di seguito vengono riportate le sezioni trasversali di verifica:

*Sezione 1- Condizione di esercizio*



Sezione 2-Condizione di piena




### 2.7.3 **Verifiche a S.L.U a ribaltamento e scorrimento**

Le verifiche sono state condotte considerando la traversa di dimensioni 85 m x 16.23m.

Il sistema di riferimento adottato risulta:

-asse x – parallela all'alveo;

-asse y - trasversale all'alveo;

-asse z - verticale verso l'alto;

Si riportano di seguito le verifiche a ribaltamento e scorrimento in condizioni statiche e sismiche slv:

**SOLLECITAZIONI AD INTRADOSSO PLATEA**

| Carico | Fx (kN) | Fy (kN) | Fz (kN) | Mx (kNm) | Mstab (kNm) | Mrib (kNm) | My (kNm) | Mstab (kNm) | Mrib (kNm) |
|---|---|---|---|---|---|---|---|---|---|
| **PESO PROPRIO CLS SPALLA:** | 0 | 0 | 54545 | -2318141 | -2318141 | 0 | -510307 | -510307 | 0 |
| **PESO TERRENO:** | 0 | 0 | 99954 | -4248031 | -4248031 | 0 | -1013530 | -1013530 | 0 |
| **SPINTA TERRENO SOLLECITANTE:** | 4040 | 0 | 1715 | 0 | 0 | 0 | -22311 | 0 | -22311 |
| **SPINTA TERRENO RESISTENTE:** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **SOTTOSPINTA IDRAULICA** | 0 | 0 | -93809,4 | 3986900 | 3986900 | 0 | -761263,3 | -761263,3 | 0 |
| **SPINTA IDROSTATICA:** | 13328 | 0 | 1700 | -72250 | -72250 | 0 | 54058 | -25466 | 79524 |
| **AZIONE DEL SISMA LONG. - VERT.(BASSO):** | | | | | | | | | |
| Massa spalla | 554 | 0 | 277 | -11768 | -11768 | 0 | 333 | -2591 | 2924 |
| Massa terreno | 1015 | 0 | 507 | -21565 | -21565 | 0 | -1116 | -5145 | 4029 |
| Totale incremento di spinta attiva | 175 | 0 | 74 | 0 | 0 | 0 | -967 | 0 | -967 |
| Totale decrem. spinta passiva | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Totale spinta idrodinamica | 12,2 | 0 | 0 | 0 | 0 | 0 | 72 | 0 | 72 |
| **AZIONE DEL SISMA TRASV. - VERT.(BASSO):** | | | | | | | | | |
| Massa spalla | 0 | 554 | 277 | -8844 | -11768 | 2924 | -2591 | -2591 | 0 |
| Massa terreno | 0 | 1015 | 507 | -17536 | -21565 | 4029 | -5145 | -5145 | 0 |
| **AZIONE DEL SISMA LONG. - VERT.(ALTO):** | | | | | | | | | |
| Massa platea | 554 | 0 | -277 | 11768 | 0 | 11768 | 5515 | 0 | 5515 |
| Massa terreno | 1015 | 0 | -507 | 21565 | 0 | 21565 | 9174 | 0 | 9174 |
| Totale incremento di spinta attiva | 175 | 0 | -74 | 0 | 0 | 0 | -967 | 0 | -967 |
| Totale decrem. spinta passiva | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Totale spinta idrodinamica | 12 | 0 | 0 | 0 | 0 | 0 | 72 | 0 | 72 |
| **AZIONE DEL SISMA TRASV. - VERT.(ALTO):** | | | | | | | | | |
| Massa spalla | 0 | 554 | -277 | 14692 | 0 | 14692 | 2591 | 0 | 2591 |
| Massa terreno | 0 | 1015 | -507 | 25594 | 0 | 25594 | 5145 | 0 | 5145 |

**VERIFICA A TRASLAZIONE E RIBALTAMENTO IN SENSO LONGITUDINALE**

| Combinazione | Combo | Fsoll (kN) | Fres (kN) | Fsic (>1) | Mystab (kNm) | Myrib (kNm) | Fsic (>1) |
|---|---|---|---|---|---|---|---|
| 1 | 1 | 5252 | 80540 | 15,34 | -1827896 | -29004 | 63,02 |
| 2 | 2 | 22578 | 28889 | 1,28 | -2751537 | 0 | 11,72 |
| 3 | 3 | 22578 | 80540 | 3,57 | -7840582 | 0 | 24,58 |
| 4 | 4 | 22578 | 81494 | 3,61 | -7934507 | 0 | 25,02 |
| 5 | 5 | 22578 | 81494 | 3,61 | -7934507 | 0 | 25,02 |
| 6 | 6 | 30375 | 80540 | 2,65 | -7840582 | 0 | 15,12 |
| SISMA X/-Z | 7 | 19145 | 27821 | 1,45 | -2664617 | 0 | 12,54 |
| SISMA Y/-Z | 8 | 4060 | 27274 | 6,72 | -2613931 | 6953 | 34,41 |
| SISMA X/+Z | 9 | 5774 | 26969 | 4,67 | -2621077 | 33333 | 91,86 |
| SISMA Y/+Z | 10 | 4019 | 27001 | 6,72 | -2621077 | 40286 | 53,35 |

**VERIFICA A TRASLAZIONE E RIBALTAMENTO IN SENSO TRASVERSALE**

| Combinazione | Combo | Fsoll (kN) | Fres (kN) | Fsic (> 1.3 ;>1) | Mxstab (kNm) | Mxrib (kNm) | Fsic (> 1.5 ;>1) |
|---|---|---|---|---|---|---|---|
| 1 | 1 | 0 | 80540 | oo | -7840582 | 0 | oo |
| 2 | 2 | 0 | 28889 | oo | -2751537 | 0 | oo |
| 3 | 3 | 0 | 80540 | oo | -7840582 | 0 | oo |
| 4 | 4 | 0 | 81494 | oo | -7934507 | 0 | oo |
| 5 | 5 | 0 | 81494 | oo | -7934507 | 0 | oo |
| 6 | 6 | 0 | 80540 | oo | -7840582 | 0 | oo |
| SISMA X/-Z | 7 | 0 | 27821 | oo | -2664617 | 0 | oo |
| SISMA Y/-Z | 8 | 1569 | 27274 | 17,39 | -2613931 | 6953 | 376,0 |
| SISMA X/+Z | 9 | 0 | 26969 | oo | -2621077 | 33333 | 78,6 |
| SISMA Y/+Z | 10 | 1569 | 27001 | 17,21 | -2621077 | 40286 | 65,1 |

Si riportano di seguito le verifiche a ribaltamento e scorrimento in condizioni sismiche sld:

**SOLLECITAZIONI AD INTRADOSSO TRAVERSA**

| Carico | Fx (kN) | Fy (kN) | Fz (kN) | Mx (kNm) | Mstab (kNm) | Mrib (kNm) | My (kNm) | Mstab (kNm) | Mrib (kNm) |
|---|---|---|---|---|---|---|---|---|---|
| **AZIONE DEL SISMA LONG. - VERT.(BASSO):** | | | | | | | | | |
| Massa traversa | 160 | 0 | 80 | -3403 | -3403 | 0 | 96 | -749 | 846 |
| Massa massi cementati | 293 | 0 | 147 | -6236 | -6236 | 0 | -323 | -1488 | 1165 |
| Totale incremento di spinta attiva | 59 | 0 | 21 | 0 | 0 | 0 | -266 | 0 | -266 |
| Totale decrem. spinta passiva | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Totale spinta idrodinamica | 7,0 | 0 | 0 | 0 | 0 | 0 | 42 | 0 | 42 |
| **AZIONE DEL SISMA TRASV. - VERT.(BASSO):** | | | | | | | | | |
| Massa traversa | 0 | 160 | 80 | -2557 | -3403 | 846 | -749 | -749 | 0 |
| Massa massi cementati | 0 | 293 | 147 | -5071 | -6236 | 1165 | -1488 | -1488 | 0 |
| **AZIONE DEL SISMA LONG. - VERT.(ALTO):** | | | | | | | | | |
| Massa traversa | 160 | 0 | -80 | 3403 | 0 | 3403 | 1595 | 0 | 1595 |
| Massa massi cementati | 293 | 0 | -147 | 6236 | 0 | 6236 | 2653 | 0 | 2653 |
| Totale incremento di spinta attiva | 59 | 0 | -21 | 0 | 0 | 0 | -266 | 0 | -266 |
| Totale decrem. spinta passiva | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Totale spinta idrodinamica | 7 | 0 | 0 | 0 | 0 | 0 | 42 | 0 | 42 |
| **AZIONE DEL SISMA TRASV. - VERT.(ALTO):** | | | | | | | | | |
| Massa traversa | 0 | 160 | -80 | 4248 | 0 | 4248 | 749 | 0 | 749 |
| Massa massi cementati | 0 | 293 | -147 | 7401 | 0 | 7401 | 1488 | 0 | 1488 |

**VERIFICA A TRASLAZIONE E RIBALTAMENTO IN SENSO LONGITUDINALE**

| Combinazione | Combo | Fsoll (kN) | Fres (kN) | Fsic (>1,1) | Mystab (kNm) | Myrib (kNm) | Fsic (>1) |
|---|---|---|---|---|---|---|---|
| SISMA X/-Z | 7 | 18689 | 30018 | 1,61 | -3429302 | 0 | 14,61 |
| SISMA Y/-Z | 8 | 4842 | 29445 | 6,08 | -3363287 | 2010 | 38,33 |
| SISMA X/+Z | 9 | 5347 | 29351 | 5,49 | -3363085 | 9638 | 47,08 |
| SISMA Y/+Z | 10 | 4828 | 29358 | 6,08 | -3363085 | 11649 | 42,80 |

**VERIFICA A TRASLAZIONE E RIBALTAMENTO IN SENSO TRASVERSALE**

| Combinazione | Combo | Fsoll (kN) | Fres (kN) | Fsic (>1,1) | Mxstab (kNm) | Mxrib (kNm) | Fsic (>1) |
|---|---|---|---|---|---|---|---|
| SISMA X/-Z | 7 | 0 | 30018 | oo | -3429302 | 0 | oo |
| SISMA Y/-Z | 8 | 454 | 29445 | 64,92 | -3363287 | 2010 | 1672,9 |
| SISMA X/+Z | 9 | 0 | 29351 | oo | -3363085 | 9638 | 348,9 |
| SISMA Y/+Z | 10 | 454 | 29358 | 64,73 | -3363085 | 11649 | 288,7 |

### 2.7.4 **Verifica a sifonamento**

Per evitare che possa verificarsi il fenomeno di sifonamento (heaving e piping), la velocità nel mezzo poroso deve essere in ogni punto, tale da non rimuovere le particelle più fini del terreno . Secondo questa impostazione si adotta il criterio semplificato di Bligh-Lane che impone lo sviluppo del contatto orizzontale e verticale, tra opera e terreno sia un multiplo adeguato del dislivello h da controllare.

Detti $L_0$ e $L_v$ gli sviluppi orizzontali (con il peso ridotto di 1/3 h , LANE) e verticali, definito il fattore di sicurezza F* si deve verificare che:

$$F = \frac{\frac{L_0}{3}+L_v}{h} \geq F^*$$

I valori di F* sono riportati di seguito e per argilla molto compatta risulta pari a 1.60.

| **Natura Terreno** | **F*** |
|---|---|
| Sabbia molto fine o limo | 8.5 |
| Sabbia fine | 7.0 |
| Sabbia media | 6.0 |
| Sabbia grossa | 5.0 |
| Ghiaia fine | 4.0 |
| Ghiaia media | 3.5 |
| Ghiaia grossa con ciottoli | 3.0 |
| Massi con ciottoli | 2.5 |
| Argilla molle | 3.0 |
| Argilla media | 2.0 |
| Argilla compatta | 1.8 |
| Argilla molto compatta | 1.6 |

***Regola di Lane; Fattore di sicurezza al variare della natura del terreno (Fonte: Manuale di ingegneria civile ambientale Zanichelli)***

Nel caso in esame si ottiene:

$$F = \frac{\frac{17}{3}+5.3}{6.15} = 1.78 \geq 1.60$$ VERIFICATO

### 2.7.5 **Verifica carico limite**

La verifica che il sistema terreno-struttura non collassi per rottura dell'elemento terreno avviene secondo quanto previsto dall' EC7.

Dove il carico limite del terreno è valutato mediante la seguente relazione nelle condizioni di STRU e GEO

$$q_{lim} = c' N_c b_c s_c i_c + q' N_q b_q s_q i_q + \frac{1}{2} \gamma' N_\gamma b_\gamma s_\gamma i_\gamma$$

I coefficienti $N_c$, $N_q$, $N_\gamma$, e i fattori b, s, i sono valutai alla Meyerhof e secondo quanto previsto dall'EC7.

I risultati della verifica nel caso STRU sono riportati nella seguenti tabelle per ciascuna combinazione di carico:

**COMBINAZIONE DI ESERCIZIO 1**

Sollecitazioni su terreno:

| | | | |
|---|---|---|---|
| Fz = | 186373 | [kN] | |
| Fx = | 5190 | [kN] | |
| Fy = | 0 | [kN] | |
| Mx = | 80276 | [kNm] | |
| My = | 339042 | [kNm] | |

Dimensione platea:

| | | | |
|---|---|---|---|
| Lx = | 16,23 | [m] | |
| Ly = | 85 | [m] | |

La capacità limite:

| | | | |
|---|---|---|---|
| $N\gamma$ = | 20,09 | | |
| Nq = | 18,40 | | |
| Nc = | 30,14 | | |

Dati geotecnici:

| | | | | | |
|---|---|---|---|---|---|
| $\gamma'$ = | 9 | [kN/m$^3$] | | peso di volume efficace di progetto del terreno | |
| $\Phi$ = | 30 | [°] | = | angolo di resistenza al taglio 0,524 | [rad] |
| c' = | 0 | [kN/m$^2$] | | coesione | |
| D = | 2,30 | [m] | | quota fondazione | |

Calcolo della tensione di esercizio sul terreno:

| | | | |
|---|---|---|---|
| ex = | 1,819 | [m] | |
| ey = | 0,431 | [m] | |
| B = | 12,5917 | [m] | larghezza efficace di progetto della fondazione |
| L = | 84,1385 | [m] | lunghezza efficace di progetto della fondazione |
| **q es =** | **175,9** | **[kN/m$^2$]** | |

Calcolo della tensione ammissibile sul terreno:

| | | | |
|---|---|---|---|
| H = | 5189,6 | [kN] | carico orizzontale |
| $\vartheta$ = | 1,57 | [rad] | 90 ° direzione carico orizzontale |
| q = | 20,7 | [kN/m$^2$] | pressione efficace litostatica totale di progetto agente sul piano di posa della fondazione |
| m = | 1,870 | | |

-fattori di forma della fondazione:

| | | |
|---|---|---|
| $s\gamma$ = | 0,96 | per forma rettangolare |
| sq = | 1,07 | per forma rettangolare |
| sc = | 1,08 | |

-fattori correttivi che tengono conto dell'inclinazione del carico:

| | |
|---|---|
| $i\gamma$ = | 0,922 |
| iq = | 0,949 |
| ic = | 0,946 |

-fattori correttivi che tengono conto dell'inclinazione della base della fondazione:

| | |
|---|---|
| $b\gamma$ = | 1 |
| bq = | 1 |
| bc = | 1,0 |

| | | | |
|---|---|---|---|
| q lim = | 1391 | [kN/m$^2$] | |
| **f =** | **7,91** | **>** | **2,3** |

**COMBINAZIONE DI ESERCIZIO 2**

Sollecitazioni su terreno:

| | | | |
|---|---|---|---|
| Fz = | 90271 | [kN] | |
| Fx = | 22516 | [kN] | |
| Fy = | 0 | [kN] | |
| Mx = | 80276 | [kNm] | |
| My = | 159709 | [kNm] | |

Dimensione platea:

| | | | |
|---|---|---|---|
| Lx = | 16,23 | [m] | |
| Ly = | 85 | [m] | |

La capacità limite:

| | | | |
|---|---|---|---|
| $N\gamma$ = | 20,09 | | |
| Nq = | 18,40 | | |
| Nc = | 30,14 | | |

Dati geotecnici:

| | | | | | |
|---|---|---|---|---|---|
| $\gamma'$ = | 9 | [kN/m$^3$] | | peso di volume efficace di progetto del terreno | |
| $\Phi$ = | 30 | [°] | = | angolo di resistenza al taglio 0,524 | [rad] |
| c' = | 0 | [kN/m$^2$] | | coesione | |
| D = | 2,30 | [m] | | quota fondazione | |

Calcolo della tensione di esercizio sul terreno:

| | | | |
|---|---|---|---|
| ex = | 1,769 | [m] | |
| ey = | 0,889 | [m] | |
| B = | 12,6916 | [m] | larghezza efficace di progetto della fondazione |
| L = | 83,2214 | [m] | lunghezza efficace di progetto della fondazione |
| **q es =** | **85,5** | **[kN/m$^2$]** | |

Calcolo della tensione ammissibile sul terreno:

| | | | |
|---|---|---|---|
| H = | 22516,0 | [kN] | carico orizzontale |
| $\vartheta$ = | 1,570796 | [rad] | 90 ° direzione carico orizzontale |
| q = | 20,7 | [kN/m$^2$] | pressione efficace litostatica totale di progetto agente sul piano di posa della fondazione |
| m = | 1,868 | | |

-fattori di forma della fondazione:

| | | |
|---|---|---|
| $s\gamma$ = | 0,95 | per forma rettangolare |
| sq = | 1,08 | per forma rettangolare |
| sc = | 1,08 | |

-fattori correttivi che tengono conto dell'inclinazione del carico:

| | |
|---|---|
| $i\gamma$ = | 0,439 |
| iq = | 0,585 |
| ic = | 0,561 |

-fattori correttivi che tengono conto dell'inclinazione della base della fondazione:

| | |
|---|---|
| $b\gamma$ = | 1 |
| bq = | 1 |
| bc = | 1,0 |

| | | | |
|---|---|---|---|
| q lim = | 721 | [kN/m$^2$] | |
| **f =** | **8,43** | **>** | **2,3** |

**COMBINAZIONE DI ESERCIZIO 3**

Sollecitazioni su terreno:

| | | | |
|---|---|---|---|
| Fz = | 186373 | [kN] | |
| Fx = | 22516 | [kN] | |
| Fy = | 0 | [kN] | |
| Mx = | 80276 | [kNm] | |
| My = | 235661 | [kNm] | |

Dimensione platea:

| | | | |
|---|---|---|---|
| Lx = | 16,23 | [m] | |
| Ly = | 85 | [m] | |

La capacità limite:

| | | | |
|---|---|---|---|
| $N\gamma$ = | 20,09 | | |
| Nq = | 18,40 | | |
| Nc = | 30,14 | | |

Dati geotecnici:

| | | | | | |
|---|---|---|---|---|---|
| $\gamma'$ = | 9 | [kN/m$^3$] | | peso di volume efficace di progetto del terreno | |
| $\Phi$ = | 30 | [°] | = | angolo di resistenza al taglio 0,524 | [rad] |
| c' = | 0 | [kN/m$^2$] | | coesione | |
| D = | 2,30 | [m] | | quota fondazione | |

Calcolo della tensione di esercizio sul terreno:

| | | | |
|---|---|---|---|
| ex = | 1,264 | [m] | |
| ey = | 0,431 | [m] | |
| B = | 13,7011 | [m] | larghezza efficace di progetto della fondazione |
| L = | 84,1385 | [m] | lunghezza efficace di progetto della fondazione |
| **q es =** | **161,7** | **[kN/m$^2$]** | |

Calcolo della tensione ammissibile sul terreno:

| | | | |
|---|---|---|---|
| H = | 22516,0 | [kN] | carico orizzontale |
| $\vartheta$ = | 1,570796 | [rad] | 90 ° direzione carico orizzontale |
| q = | 20,7 | [kN/m$^2$] | pressione efficace litostatica totale di progetto agente sul piano di posa della fondazione |
| m = | 1,860 | | |

-fattori di forma della fondazione:

| | | |
|---|---|---|
| $s\gamma$ = | 0,95 | per forma rettangolare |
| sq = | 1,08 | per forma rettangolare |
| sc = | 1,09 | |

-fattori correttivi che tengono conto dell'inclinazione del carico:

| | |
|---|---|
| $i\gamma$ = | 0,692 |
| iq = | 0,787 |
| ic = | 0,775 |

-fattori correttivi che tengono conto dell'inclinazione della base della fondazione:

| | |
|---|---|
| $b\gamma$ = | 1 |
| bq = | 1 |
| bc = | 1,0 |

| | | | |
|---|---|---|---|
| q lim = | 1140 | [kN/m$^2$] | |
| **f =** | **7,05** | **>** | **2,3** |

**COMBINAZIONE DI ESERCIZIO 4**

Sollecitazioni su terreno:

| | | | |
|---|---|---|---|
| Fz = | 188583 | [kN] | |
| Fx = | 22516 | [kN] | |
| Fy = | 0 | [kN] | |
| Mx = | 80276 | [kNm] | |
| My = | 250833 | [kNm] | |

Dimensione platea:

| | | | |
|---|---|---|---|
| Lx = | 16,23 | [m] | |
| Ly = | 85 | [m] | |

La capacità limite:

| | | | |
|---|---|---|---|
| Nγ = | 20,09 | | |
| Nq = | 18,40 | | |
| Nc = | 30,14 | | |

Dati geotecnici:

| | | | | | |
|---|---|---|---|---|---|
| γ' = | 9 | [kN/m$^3$] | | peso di volume efficace di progetto del terreno | |
| Φ = | 30 | [°] | = | angolo di resistenza al taglio 0,524 | [rad] |
| c' = | 0 | [kN/m$^2$] | | coesione | |
| D = | 2,30 | [m] | | quota fondazione | |

Calcolo della tensione di esercizio sul terreno:

| | | | |
|---|---|---|---|
| ex = | 1,330 | [m] | |
| ey = | 0,426 | [m] | |
| B = | 13,5698 | [m] | larghezza efficace di progetto della fondazione |
| L = | 84,1486 | [m] | lunghezza efficace di progetto della fondazione |
| **q es =** | **165,2** | **[kN/m$^2$]** | |

Calcolo della tensione ammissibile sul terreno:

| | | | |
|---|---|---|---|
| H = | 22516,0 | [kN] | carico orizzontale |
| ϑ = | 1,570796 | [rad] | 90 ° direzione carico orizzontale |
| q = | 20,7 | [kN/m$^2$] | pressione efficace litostatica totale di progetto agente sul piano di posa della fondazione |
| m = | 1,861 | | |

-fattori di forma della fondazione:

| | | |
|---|---|---|
| sγ = | 0,95 | per forma rettangolare |
| sq = | 1,08 | per forma rettangolare |
| sc = | 1,09 | |

-fattori correttivi che tengono conto dell'inclinazione del carico:

| | |
|---|---|
| iγ = | 0,695 |
| iq = | 0,789 |
| ic = | 0,777 |

-fattori correttivi che tengono conto dell'inclinazione della base della fondazione:

| | |
|---|---|
| bγ = | 1 |
| bq = | 1 |
| bc = | 1,0 |

| | | | |
|---|---|---|---|
| q lim = | 1136 | [kN/m$^2$] | |
| **f =** | **6,88** | **>** | **2,3** |

**COMBINAZIONE DI ESERCIZIO 5**

Sollecitazioni su terreno:

| | | | |
|---|---|---|---|
| Fz = | 188583 | [kN] | |
| Fx = | 22516 | [kN] | |
| Fy = | 0 | [kN] | |
| Mx = | 80276 | [kNm] | |
| My = | 250833 | [kNm] | |

Dimensione platea:

| | | | |
|---|---|---|---|
| Lx = | 16,23 | [m] | |
| Ly = | 85 | [m] | |

La capacità limite:

| | | | |
|---|---|---|---|
| Nγ = | 20,09 | | |
| Nq = | 18,40 | | |
| Nc = | 30,14 | | |

Dati geotecnici:

| | | | | |
|---|---|---|---|---|
| γ' = | 9 | [kN/m$^3$] | | peso di volume efficace di progetto del terreno |
| Φ = | 30 | [°] | = | angolo di resistenza al taglio 0,524 [rad] |
| c' = | 0 | [kN/m$^2$] | | coesione |
| D = | 2,30 | [m] | | quota fondazione |

Calcolo della tensione di esercizio sul terreno:

| | | | |
|---|---|---|---|
| ex = | 1,330 | [m] | |
| ey = | 0,426 | [m] | |
| B = | 13,5698 | [m] | larghezza efficace di progetto della fondazione |
| L = | 84,1486 | [m] | lunghezza efficace di progetto della fondazione |
| **q es =** | **165,2** | **[kN/m$^2$]** | |

Calcolo della tensione ammissibile sul terreno:

| | | | |
|---|---|---|---|
| H = | 22516,0 | [kN] | carico orizzontale |
| ϑ = | 1,570796 | [rad] | 90 ° direzione carico orizzontale |
| q = | 20,7 | [kN/m$^2$] | pressione efficace litostatica totale di progetto agente sul piano di posa della fondazione |
| m = | 1,861 | | |

-fattori di forma della fondazione:

| | | |
|---|---|---|
| sγ = | 0,95 | per forma rettangolare |
| sq = | 1,08 | per forma rettangolare |
| sc = | 1,09 | |

-fattori correttivi che tengono conto dell'inclinazione del carico:

| | |
|---|---|
| iγ = | 0,695 |
| iq = | 0,789 |
| ic = | 0,777 |

-fattori correttivi che tengono conto dell'inclinazione della base della fondazione:

| | |
|---|---|
| bγ = | 1 |
| bq = | 1 |
| bc = | 1,0 |

| | | | |
|---|---|---|---|
| q lim = | 1136 | [kN/m$^2$] | |
| **f =** | **6,88** | **>** | **2,3** |

**COMBINAZIONE DI ESERCIZIO 6**

Sollecitazioni su terreno:

| | | |
|---|---|---|
| Fz = | 186373 | [kN] |
| Fx = | 30313 | [kN] |
| Fy = | 0 | [kN] |
| Mx = | 80276 | [kNm] |
| My = | 189140 | [kNm] |

Dimensione platea:

| | | |
|---|---|---|
| Lx = | 16,23 | [m] |
| Ly = | 85 | [m] |

La capacità limite:

| | |
|---|---|
| Nγ = | 20,09 |
| Nq = | 18,40 |
| Nc = | 30,14 |

Dati geotecnici:

| | | | |
|---|---|---|---|
| γ' = | 9 | [kN/m$^3$] | peso di volume efficace di progetto del terreno |
| Φ = | 30 | [°] = | angolo di resistenza al taglio 0,524 [rad] |
| c' = | 0 | [kN/m$^2$] | coesione |
| D = | 2,30 | [m] | quota fondazione |

Calcolo della tensione di esercizio sul terreno:

| | | | |
|---|---|---|---|
| ex = | 1,015 | [m] | |
| ey = | 0,431 | [m] | |
| B = | 14,2003 | [m] | larghezza efficace di progetto della fondazione |
| L = | 84,1385 | [m] | lunghezza efficace di progetto della fondazione |
| **q es =** | **156,0** | **[kN/m$^2$]** | |

Calcolo della tensione ammissibile sul terreno:

| | | | |
|---|---|---|---|
| H = | 30312,8 | [kN] | carico orizzontale |
| ϑ = | 1,570796 | [rad] | 90 ° direzione carico orizzontale |
| q = | 20,7 | [kN/m$^2$] | pressione efficace litostatica totale di progetto agente sul piano di posa della fondazione |
| m = | 1,856 | | |

-fattori di forma della fondazione:

| | | |
|---|---|---|
| sγ = | 0,95 | per forma rettangolare |
| sq = | 1,08 | per forma rettangolare |
| sc = | 1,09 | |

-fattori correttivi che tengono conto dell'inclinazione del carico:

| | |
|---|---|
| iγ = | 0,602 |
| iq = | 0,719 |
| ic = | 0,703 |

-fattori correttivi che tengono conto dell'inclinazione della base della fondazione:

| | |
|---|---|
| bγ = | 1 |
| bq = | 1 |
| bc = | 1,0 |

| | | | |
|---|---|---|---|
| q lim = | 1031 | [kN/m$^2$] | |
| **f =** | **6,61** | **>** | **2,3** |

**COMBINAZIONE SISMICA 7 SLD**

Sollecitazioni su terreno:

| | | | |
|---|---|---|---|
| Fz = | 82163 | [kN] | |
| Fx = | 17838 | [kN] | |
| Fy = | 0 | [kN] | |
| Mx = | 62634 | [kNm] | |
| My = | 136803 | [kNm] | |

Dimensione platea:

| | | | |
|---|---|---|---|
| Lx = | 16,23 | [m] | |
| Ly = | 85 | [m] | |

La capacità limite:

| | | | |
|---|---|---|---|
| $N\gamma$ = | 8,71 | | |
| Nq = | 10,43 | | |
| Nc = | 20,42 | | |

Dati geotecnici:

| | | | |
|---|---|---|---|
| $\gamma'$ = | 9 | [kN/m$^3$] | peso di volume efficace di progetto del terreno |
| $\Phi$ rid = | 24,8 | [°] = | angolo di resistenza al taglio - si applica un coefficiente pari a 1.25 al valore tg$\phi$ |
| c' = | 0 | [kN/m$^2$] | coesione |
| D = | 2,30 | [m] | quota fondazione |

Calcolo della tensione di esercizio sul terreno:

| | | | |
|---|---|---|---|
| ex = | 1,665 | [m] | |
| ey = | 0,762 | [m] | |
| B = | 12,9000 | [m] | larghezza efficace di progetto della fondazione |
| L = | 83,4754 | [m] | lunghezza efficace di progetto della fondazione |
| **q sd =** | **76,3** | **[kN/m$^2$]** | |

Calcolo della tensione ammissibile sul terreno:

| | | | |
|---|---|---|---|
| H = | 17837,7 | [kN] | carico orizzontale |
| $\vartheta$ = | 1,570796 | [rad] | 90 ° direzione carico orizzontale |
| q = | 20,7 | [kN/m$^2$] | pressione efficace litostatica totale di progetto agente sul piano di posa della fondazione |
| m = | 1,866 | | |

-fattori di forma della fondazione:

| | | |
|---|---|---|
| $s\gamma$ = | 0,95 | per forma rettangolare |
| sq = | 1,06 | per forma rettangolare |
| sc = | 1,07 | |

-fattori correttivi che tengono conto dell'inclinazione del carico:

| | |
|---|---|
| $i\gamma$ = | 0,496 |
| iq = | 0,633 |
| ic = | 0,594 |

-fattori correttivi che tengono conto dell'inclinazione della base della fondazione:

| | |
|---|---|
| $b\gamma$ = | 1 |
| bq = | 1 |
| bc = | 1,0 |

| | | | |
|---|---|---|---|
| q lim = | 385 | [kN/m$^2$] | |
| **f =** | **5,04** | **>** | **2,3** |

**COMBINAZIONE SISMICA 8 SLD**

Sollecitazioni su terreno:

| | | | |
|---|---|---|---|
| Fz = | 80591 | [kN] | |
| Fx = | 3998 | [kN] | |
| Fy = | 454 | [kN] | |
| Mx = | 63852 | [kNm] | |
| My = | 206925 | [kNm] | |

Dimensione platea:

| | | | |
|---|---|---|---|
| Lx = | 16,23 | [m] | |
| Ly = | 85 | [m] | |

La capacità limite:

| | | | |
|---|---|---|---|
| Nγ = | 8,71 | | |
| Nq = | 10,43 | | |
| Nc = | 20,42 | | |

Dati geotecnici:

| | | | |
|---|---|---|---|
| γ' = | 9 | [kN/m$^3$] | peso di volume efficace di progetto del terreno |
| Φ rid = | 24,8 | [°] = | angolo di resistenza al taglio - si applica un coefficiente pari a 1.25 al valore tgϕ |
| c' = | 0 | [kN/m$^2$] | coesione |
| D = | 2,30 | [m] | quota fondazione |

Calcolo della tensione di esercizio sul terreno:

| | | | |
|---|---|---|---|
| ex = | 2,568 | [m] | |
| ey = | 0,792 | [m] | |
| B = | 11,0948 | [m] | larghezza efficace di progetto della fondazione |
| L = | 83,4154 | [m] | lunghezza efficace di progetto della fondazione |
| **q sd =** | **87,1** | **[kN/m$^2$]** | |

Calcolo della tensione ammissibile sul terreno:

| | | | |
|---|---|---|---|
| H = | 4023,5 | [kN] | carico orizzontale |
| ϑ = | 1,457825 | [rad] | 83,52721 ° direzione carico orizzontale |
| q = | 20,7 | [kN/m$^2$] | pressione efficace litostatica totale di progetto agente sul piano di posa della fondazione |
| m = | 1,872 | | |

-fattori di forma della fondazione:

| | | |
|---|---|---|
| sγ = | 0,96 | per forma rettangolare |
| sq = | 1,06 | per forma rettangolare |
| sc = | 1,06 | |

-fattori correttivi che tengono conto dell'inclinazione del carico:

| | |
|---|---|
| iγ = | 0,863 |
| iq = | 0,909 |
| ic = | 0,899 |

-fattori correttivi che tengono conto dell'inclinazione della base della fondazione:

| | |
|---|---|
| bγ = | 1 |
| bq = | 1 |
| bc = | 1,0 |

| | | | |
|---|---|---|---|
| q lim = | 568 | [kN/m$^2$] | |
| **f =** | **6,52** | **>** | **2,3** |

**COMBINAZIONE SISMICA 9 SLD**

Sollecitazioni su terreno:

| | | | |
|---|---|---|---|
| Fz = | 80337 | [kN] | |
| Fx = | 4498 | [kN] | |
| Fy = | 0 | [kN] | |
| Mx = | 60869 | [kNm] | |
| My = | 204650 | [kNm] | |

Dimensione platea:

| | | | |
|---|---|---|---|
| Lx = | 16,23 | [m] | |
| Ly = | 85 | [m] | |

La capacità limite:

| | | | |
|---|---|---|---|
| Nγ = | 8,71 | | |
| Nq = | 10,43 | | |
| Nc = | 20,42 | | |

Dati geotecnici:

| | | | |
|---|---|---|---|
| γ' = | 9 | [kN/m$^3$] | peso di volume efficace di progetto del terreno |
| Φ rid = | 24,8 | [°] = | angolo di resistenza al taglio - si applica un coefficiente pari a 1.25 al valore tgϕ |
| c' = | 0 | [kN/m$^2$] | coesione |
| D = | 2,30 | [m] | quota fondazione |

Calcolo della tensione di esercizio sul terreno:

| | | | |
|---|---|---|---|
| ex = | 2,547 | [m] | |
| ey = | 0,758 | [m] | |
| B = | 11,1352 | [m] | larghezza efficace di progetto della fondazione |
| L = | 83,4846 | [m] | lunghezza efficace di progetto della fondazione |
| **q sd =** | **86,4** | **[kN/m$^2$]** | |

Calcolo della tensione ammissibile sul terreno:

| | | | |
|---|---|---|---|
| H = | 4497,8 | [kN] | carico orizzontale |
| ϑ = | 1,570796 | [rad] | 90 ° direzione carico orizzontale |
| q = | 20,7 | [kN/m$^2$] | pressione efficace litostatica totale di progetto agente sul piano di posa della fondazione |
| m = | 1,882 | | |

-fattori di forma della fondazione:

| | | |
|---|---|---|
| sγ = | 0,96 | per forma rettangolare |
| sq = | 1,06 | per forma rettangolare |
| sc = | 1,06 | |

-fattori correttivi che tengono conto dell'inclinazione del carico:

| | |
|---|---|
| iγ = | 0,847 |
| iq = | 0,897 |
| ic = | 0,886 |

-fattori correttivi che tengono conto dell'inclinazione della base della fondazione:

| | |
|---|---|
| bγ = | 1 |
| bq = | 1 |
| bc = | 1,0 |

| | | | |
|---|---|---|---|
| q lim = | 560 | [kN/m$^2$] | |
| **f =** | **6,47** | **>** | **2,3** |

**COMBINAZIONE DI ESERCIZIO 10 SLD**

Sollecitazioni su terreno:

| | | | |
|---|---|---|---|
| Fz = | 80355 | [kN] | |
| Fx = | 3986 | [kN] | |
| Fy = | 454 | [kN] | |
| Mx = | 63671 | [kNm] | |
| My = | 206319 | [kNm] | |

Dimensione platea:

| | | | |
|---|---|---|---|
| Lx = | 16,23 | [m] | |
| Ly = | 85 | [m] | |

La capacità limite:

| | | | |
|---|---|---|---|
| Nγ = | 8,71 | | |
| Nq = | 10,43 | | |
| Nc = | 20,42 | | |

Dati geotecnici:

| | | | |
|---|---|---|---|
| γ' = | 9 | [kN/m$^3$] | peso di volume efficace di progetto del terreno |
| Φ rid = | 24,8 | [°] = | angolo di resistenza al taglio - si applica un coefficiente pari a 1.25 al valore tgϕ |
| c' = | 0 | [kN/m$^2$] | coesione |
| D = | 2,30 | [m] | quota fondazione |

Calcolo della tensione di esercizio sul terreno:

| | | | |
|---|---|---|---|
| ex = | 2,568 | [m] | |
| ey = | 0,792 | [m] | |
| B = | 11,0948 | [m] | larghezza efficace di progetto della fondazione |
| L = | 83,4153 | [m] | lunghezza efficace di progetto della fondazione |
| **q sd =** | **86,8** | **[kN/m$^2$]** | |

Calcolo della tensione ammissibile sul terreno:

| | | | |
|---|---|---|---|
| H = | 4011,8 | [kN] | carico orizzontale |
| ϑ = | 1,457495 | [rad] | 83,50834 ° direzione carico orizzontale |
| q = | 20,7 | [kN/m$^2$] | pressione efficace litostatica totale di progetto agente sul piano di posa della fondazione |
| m = | 1,872 | | |

-fattori di forma della fondazione:

| | | |
|---|---|---|
| sγ = | 0,96 | per forma rettangolare |
| sq = | 1,06 | per forma rettangolare |
| sc = | 1,06 | |

-fattori correttivi che tengono conto dell'inclinazione del carico:

| | |
|---|---|
| iγ = | 0,863 |
| iq = | 0,909 |
| ic = | 0,899 |

-fattori correttivi che tengono conto dell'inclinazione della base della fondazione:

| | |
|---|---|
| bγ = | 1 |
| bq = | 1 |
| bc = | 1,0 |

| | | | |
|---|---|---|---|
| q lim = | 568 | [kN/m$^2$] | |
| **f =** | **6,54** | **>** | **2,3** |

**COMBINAZIONE SISMICA 11 SLV**

Sollecitazioni su terreno:

| | | |
|---|---|---|
| Fz = | 64345 | [kN] |
| Fx = | 18791 | [kN] |
| Fy = | 0 | [kN] |
| Mx = | 70041 | [kNm] |
| My = | 204644 | [kNm] |

Dimensione platea:

| | | |
|---|---|---|
| Lx = | 16,23 | [m] |
| Ly = | 85,00 | [m] |

La capacità limite:

| | |
|---|---|
| Nγ = | 8,71 |
| Nq = | 10,43 |
| Nc = | 20,42 |

Dati geotecnici:

| | | | |
|---|---|---|---|
| γ' = | 9 | [kN/m$^3$] | peso di volume efficace di progetto del terreno |
| Φ rid = | 24,8 | [°] = | angolo di resistenza al taglio - si applica un coefficiente pari a 1.25 al valore tgϕ |
| c' = | 0 | [kN/m$^2$] | coesione |
| D = | 1,50 | [m] | quota fondazione |

Calcolo della tensione di esercizio sul terreno:

| | | | |
|---|---|---|---|
| ex = | 3,180 | [m] | |
| ey = | 1,089 | [m] | |
| B = | 9,8691 | [m] | larghezza efficace di progetto della fondazione |
| L = | 82,8230 | [m] | lunghezza efficace di progetto della fondazione |
| **q sd =** | **78,7** | **[kN/m$^2$]** | |

Calcolo della tensione ammissibile sul terreno:

| | | | |
|---|---|---|---|
| H = | 18791,2 | [kN] | carico orizzontale |
| ϑ = | 1,570796 | [rad] | 90 ° direzione carico orizzontale |
| q = | 13,5 | [kN/m$^2$] | pressione efficace litostatica totale di progetto agente sul piano di posa della fondazione |
| m = | 1,894 | | |

-fattori di forma della fondazione:

| | | |
|---|---|---|
| sγ = | 0,96 | per forma rettangolare |
| sq = | 1,05 | per forma rettangolare |
| sc = | 1,06 | |

-fattori correttivi che tengono conto dell'inclinazione del carico:

| | |
|---|---|
| iγ = | 0,368 |
| iq = | 0,520 |
| ic = | 0,469 |

-fattori correttivi che tengono conto dell'inclinazione della base della fondazione:

| | |
|---|---|
| bγ = | 1 |
| bq = | 1 |
| bc = | 1,0 |

| | | | |
|---|---|---|---|
| q lim = | 214 | [kN/m$^2$] | |
| **f=** | **3** | **>** | **2,3** |

**COMBINAZIONE SISMICA 12 SLV**

Sollecitazioni su terreno:

| | | | |
|---|---|---|---|
| Fz = | 63083 | [kN] | |
| Fx = | 3719 | [kN] | |
| Fy = | 1569 | [kN] | |
| Mx = | 74051 | [kNm] | |
| My = | 280212 | [kNm] | |

Dimensione platea:

| | | | |
|---|---|---|---|
| Lx = | 16,23 | [m] | |
| Ly = | 85,00 | [m] | |

La capacità limite:

| | | | |
|---|---|---|---|
| Nγ = | 8,71 | | |
| Nq = | 10,43 | | |
| Nc = | 20,42 | | |

Dati geotecnici:

| | | | |
|---|---|---|---|
| γ' = | 9 | [kN/m$^3$] | peso di volume efficace di progetto del terreno |
| Φ rid = | 24,8 | [°] = | angolo di resistenza al taglio - si applica un coefficiente pari a 1.25 al valore tgϕ |
| c' = | 0 | [kN/m$^2$] | coesione |
| D = | 1,50 | [m] | quota fondazione |

Calcolo della tensione di esercizio sul terreno:

| | | | |
|---|---|---|---|
| ex = | 4,442 | [m] | |
| ey = | 1,174 | [m] | |
| B = | 7,3461 | [m] | larghezza efficace di progetto della fondazione |
| L = | 82,6523 | [m] | lunghezza efficace di progetto della fondazione |
| **q sd =** | **103,9** | **[kN/m$^2$]** | |

Calcolo della tensione ammissibile sul terreno:

| | | | |
|---|---|---|---|
| H = | 4036,6 | [kN] | carico orizzontale |
| ϑ = | 1,171689 | [rad] | 67,13285 ° direzione carico orizzontale |
| q = | 13,5 | [kN/m$^2$] | pressione efficace litostatica totale di progetto agente sul piano di posa della fondazione |
| m = | 1,800 | | |

-fattori di forma della fondazione:

| | | |
|---|---|---|
| sγ = | 0,97 | per forma rettangolare |
| sq = | 1,04 | per forma rettangolare |
| sc = | 1,04 | |

-fattori correttivi che tengono conto dell'inclinazione del carico:

| | |
|---|---|
| iγ = | 0,831 |
| iq = | 0,888 |
| ic = | 0,876 |

-fattori correttivi che tengono conto dell'inclinazione della base della fondazione:

| | |
|---|---|
| bγ = | 1 |
| bq = | 1 |
| bc = | 1,0 |

| | | | |
|---|---|---|---|
| q lim = | 363 | [kN/m$^2$] | |
| **f=** | **3** | **>** | **2,3** |

**COMBINAZIONE SISMICA 13 SLV**

| | | | |
|---|---|---|---|
| Sollecitazioni su terreno: | | | |
| Fz = | 62382 | [kN] | |
| Fx = | 5424 | [kN] | |
| Fy = | 0 | [kN] | |
| Mx = | 63507 | [kNm] | |
| My = | 271814 | [kNm] | |
| Dimensione platea: | | | |
| Lx = | 16,23 | [m] | |
| Ly = | 85,00 | [m] | |
| La capacità limite: | | | |
| Nγ = | 8,71 | | |
| Nq = | 10,43 | | |
| Nc = | 20,42 | | |
| Dati geotecnici: | | | |
| γ' = | 9 | [kN/m$^3$] | peso di volume efficace di progetto del terreno |
| Φ rid = | 24,8 | [°] = | angolo di resistenza al taglio - si applica un coefficiente pari a 1.25 al valore tgϕ |
| c' = | 0 | [kN/m$^2$] | coesione |
| D = | 2.30 | [m] | quota fondazione |
| Calcolo della tensione di esercizio sul terreno: | | | |
| ex = | 4,357 | [m] | |
| ey = | 1,018 | [m] | |
| B = | 7,5155 | [m] | larghezza efficace di progetto della fondazione |
| L = | 82,9639 | [m] | lunghezza efficace di progetto della fondazione |
| **q sd =** | **100,0** | **[kN/m$^2$]** | |
| Calcolo della tensione ammissibile sul terreno: | | | |
| H = | 5423,9 | [kN] | carico orizzontale |
| ϑ = | 1,570796 | [rad] | 90 ° direzione carico orizzontale |
| q = | 13,5 | [kN/m$^2$] | pressione efficace litostatica totale di progetto agente sul piano di posa della fondazione |
| m = | 1,917 | | |
| -fattori di forma della fondazione: | | | |
| sγ = | 0,97 | per forma rettangolare | |
| sq = | 1,04 | per forma rettangolare | |
| sc = | 1,04 | | |
| -fattori correttivi che tengono conto dell'inclinazione del carico: | | | |
| iγ = | 0,767 | | |
| iq = | 0,840 | | |
| ic = | 0,823 | | |
| -fattori correttivi che tengono conto dell'inclinazione della base della fondazione: | | | |
| bγ = | 1 | | |
| bq = | 1 | | |
| bc = | 1,0 | | |
| q lim = | 343 | [kN/m$^2$] | |
| **f=** | **3** | **>** | **2,3** |

**COMBINAZIONE DI ESERCIZIO 14 SLV**

| | | | |
|---|---|---|---|
| Sollecitazioni su terreno: | | | |
| Fz = | 62451 | [kN] | |
| Fx = | 3682 | [kN] | |
| Fy = | 1569 | [kN] | |
| Mx = | 73373 | [kNm] | |
| My = | 277391 | [kNm] | |
| Dimensione platea: | | | |
| Lx = | 16,23 | [m] | |
| Ly = | 85,00 | [m] | |
| La capacità limite: | | | |
| $N\gamma$ = | 8,71 | | |
| Nq = | 10,43 | | |
| Nc = | 20,42 | | |
| Dati geotecnici: | | | |
| $\gamma'$ = | 9 | [kN/m$^3$] | peso di volume efficace di progetto del terreno |
| $\Phi$ rid = | 24,8 | [°] = | angolo di resistenza al taglio - si applica un coefficiente pari a 1.25 al valore tg$\phi$ |
| c' = | 0 | [kN/m$^2$] | coesione |
| D = | 2.30 | [m] | quota fondazione |
| Calcolo della tensione di esercizio sul terreno: | | | |
| ex = | 4,442 | [m] | |
| ey = | 1,175 | [m] | |
| B = | 7,3465 | [m] | larghezza efficace di progetto della fondazione |
| L = | 82,6502 | [m] | lunghezza efficace di progetto della fondazione |
| **q sd =** | **102,9** | **[kN/m$^2$]** | |
| Calcolo della tensione ammissibile sul terreno: | | | |
| H = | 4002,0 | [kN] | carico orizzontale |
| $\vartheta$ = | 1,168041 | [rad] | 66,92382 ° direzione carico orizzontale |
| q = | 13,5 | [kN/m$^2$] | pressione efficace litostatica totale di progetto agente sul piano di posa della fondazione |
| m = | 1,798 | | |
| -fattori di forma della fondazione: | | | |
| $s\gamma$ = | 0,97 | per forma rettangolare | |
| sq = | 1,04 | per forma rettangolare | |
| sc = | 1,04 | | |
| -fattori correttivi che tengono conto dell'inclinazione del carico: | | | |
| $i\gamma$ = | 0,831 | | |
| iq = | 0,888 | | |
| ic = | 0,876 | | |
| -fattori correttivi che tengono conto dell'inclinazione della base della fondazione: | | | |
| $b\gamma$ = | 1 | | |
| bq = | 1 | | |
| bc = | 1,0 | | |
| q lim = | 363 | [kN/m$^2$] | |
| **f=** | **4** | **>** | **2,3** |

L’approccio 2 mostra come la verifica sia soddisfatta.

# 3 VERIFICA STRUTTURALE DELLA VENTOLA

La presente relazione contiene i calcoli e le verifiche delle strutture portanti in acciaio e legno della ventola di ritenuta dell'impianto idroelettrico di Barbaresco.
Tutti i calcoli e le verifiche sono stati eseguiti secondo le prescrizioni delle vigenti Norme Tecniche (D.M. 14 gennaio 2008), applicando il metodo semi-probabilistico agli Stati Limite.
La struttura è stata verificata a favore di sicurezza nella condizione di massima sollecitazione, considerando la ventola completamente abbattuta soggetta al carico idrostatico di piena duecentennale.

## 3.1 Documenti di riferimento

- **Legge 5 novembre 1971, n° 1086:** "Norme tecniche per la disciplina delle opere di conglomerato cementizio armato, normale e precompresso ed a struttura metallica" e successivi decreti applicativi;

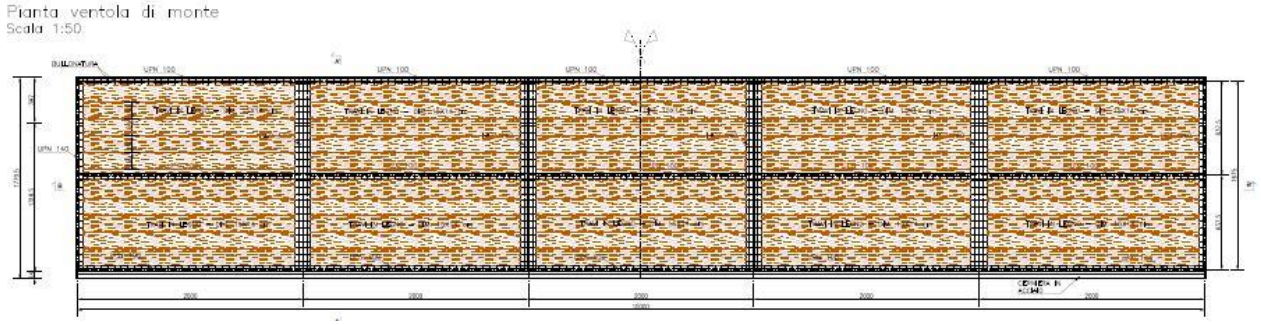
Classificazione sismica del territorio secondo:

- **Ordinanza n. 3274 del Presidente del Consiglio dei Ministri:** "Primi elementi in materia di criteri per la classificazione sismica del territorio nazionale e di normative tecniche per le costruzioni in zona sismica" e s.m.i.
- **D.M. 14 gennaio 2008:** "Norme tecniche per le costruzioni";
- **Consiglio superiore dei lavori pubblici, Circolare 2 febbraio 2009 n.617:** "Istruzioni per l'applicazione delle norme tecniche per le costruzioni di cui al D.M. 14 Gennaio 2008;

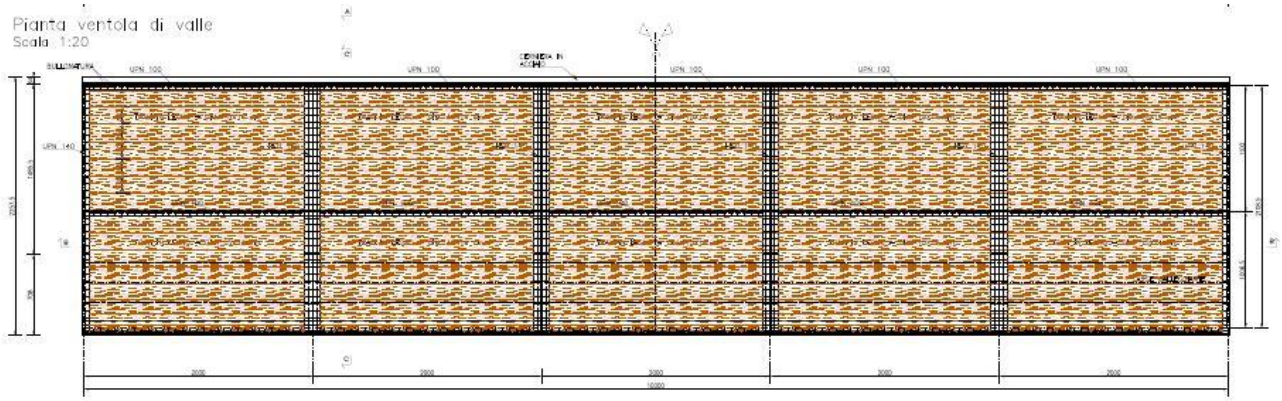
## 3.2 Descrizione dell'opera

Le opere consistono in strutture in acciaio-legno destinate all'opera di ritenuta dell'impianto idroelettrico nel Comune di Barbaresco.

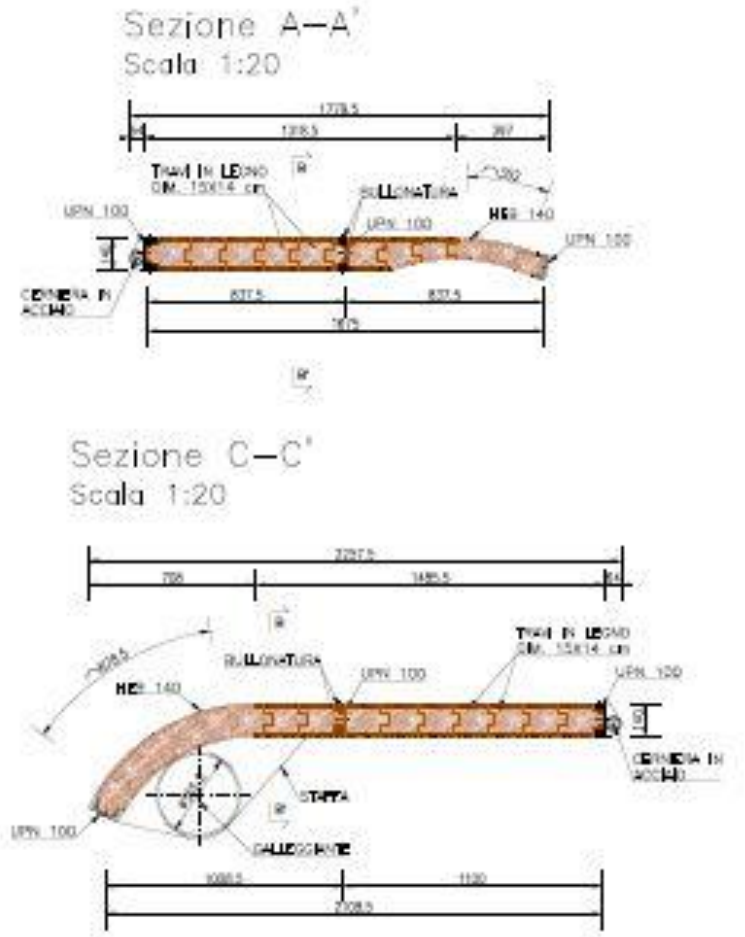
Nelle immagini seguenti vengono raffigurate la pianta e le sezioni trasversali e longitudinali dell'opera, dalle quali si riconoscono gli elementi strutturali preminenti:




*Pianta ventola di monte*




Pianta ventola di valle




Sezione trasversale

Nei capitoli seguenti vengono riportate le descrizioni dei calcoli eseguiti per la verifica strutturale delle strutture nella loro globalità e dei singoli elementi di dettaglio.

## 3.3 Tabella dati materiali

I dati riportati di seguito vengono utilizzati per la modellazione dello schema statico e per la determinazione dei carichi inerziali

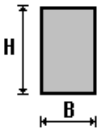
| Id | Tipo / Note | | Young | Poisson | G | Gamma | Alfa |
|---|---|---|---|---|---|---|---|
| | | daN/cm2 | daN/cm2 | | daN/cm2 | daN/cm3 | |
| 11 | acciaio Fe430 - S275 | | 2.100e+06 | 0.30 | 8.077e+05 | 7.85e-03 | 1.00e-05 |
| | ft | 4300.0 | | | | | |
| | fy | 2750.0 | | | | | |
| | fd | 2750.0 | | | | | |
| | fdt | 2500.0 | | | | | |
| | sadm | 1900.0 | | | | | |
| | sadmt | 1700.0 | | | | | |
| 42 | legno E = 1.200e+05 | | 1.200e+05 | 0.0 | 7500.0 | 4.00e-04 | 0.0 |
| | Modulo E0,05 | | 8.072e+04 | | | | |
| | Lamellare =No | | | | | | |
| | Resist. fc0k | 210.0 | | | | | |
| | Resist. ft0k | 140.0 | | | | | |
| | Resist. fmk | 240.0 | | | | | |
| | Resist. fvk | 25.0 | | | | | |

## 3.4 Modellazione delle sezioni

Le sezioni utilizzate nella modellazione sono caratterizzate dai seguenti dati:

| | |
|---|---|
| Area | area della sezione |
| A V2 | area della sezione/fattore di taglio (per il taglio in direzione 2) |
| A V3 | area della sezione/fattore di taglio (per il taglio in direzione 3) |
| Jt | fattore torsionale di rigidezza |
| J2-2 | momento d'inerzia della sezione riferito all'asse 2 |
| J3-3 | momento d'inerzia della sezione riferito all'asse 3 |
| W2-2 | modulo di resistenza della sezione riferito all'asse 2 |
| W3-3 | modulo di resistenza della sezione riferito all'asse 3 |
| Wp2-2 | modulo di resistenza plastico della sezione riferito all'asse 2 |
| Wp3-3 | modulo di resistenza plastico della sezione riferito all'asse 3 |

Con i seguenti riferimenti per la sezione rettangolare:




Mentre per i profilati metallici semplici l'asse 2 corrisponde con l'asse x riportati nei profilari.

Si riportano le caratteristiche delle sezioni utilizzate nel modello:

| Id | Tipo | Area | A V2 | A V3 | Jt | J 2-2 | J 3-3 | W 2-2 | W 3-3 | Wp 2-2 | Wp 3-3 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | cm2 | cm2 | cm2 | cm4 | cm4 | cm4 | cm3 | cm3 | cm3 | cm3 |
| 1 | UPN 140 | 20.40 | 0.0 | 0.0 | 5.68 | 62.50 | 605.00 | 14.70 | 86.40 | 28.30 | 103.00 |
| 2 | UPN 140 | 20.40 | 0.0 | 0.0 | 5.68 | 62.50 | 605.00 | 14.70 | 86.40 | 28.30 | 103.00 |
| 3 | HEB 140 | 43.00 | 0.0 | 0.0 | 20.10 | 550.00 | 1509.00 | 78.50 | 215.60 | 119.80 | 245.40 |
| 4 | Rettangolare: b=15.00 h =14.00 | 210.00 | 175.00 | 175.00 | 6172.50 | 3937.50 | 3430.00 | 525.00 | 490.00 | 787.50 | 735.00 |
| 5 | TUBO 355.6x8.0 | 87.36 | 0.0 | 0.0 | 2.640e+04 | 1.320e+04 | 1.320e+04 | 742.48 | 742.48 | 966.78 | 966.78 |
| 6 | UPN 100 | 13.50 | 0.0 | 0.0 | 2.81 | 29.10 | 205.00 | 8.40 | 41.10 | 16.20 | 49.00 |

## 3.5 Modellazione della struttura

### 3.5.1 Software di Calcolo

Per la modellazione agli elementi finiti e per le verifiche degli elementi in c.a. è stato utilizzato il programma di calcolo *PRO_SAP* versione 13.0.0. Luglio 2014 2S.I. Software e Servizi per l'Ingegneria S.r.l.- licenza dsi4666.
Via Garibaldi, 90 Ferrara FE.

### 3.5.2 Affidabilità dei codici di calcolo

2S.I. ha verificato l'affidabilità e la robustezza del codice di calcolo attraverso un numero significativo di casi prova in cui i risultati dell'analisi numerica sono stati confrontati con soluzioni teoriche.

E' possibile reperire la documentazione contenente alcuni dei più significativi casi trattati al seguente link: http://www.2si.it/Software/Affidabilità.htm

### 3.5.3 Tabella dati nodi

Il programma utilizza per la modellazione nodi strutturali.

Ogni nodo è individuato dalle coordinate cartesiane nel sistema di riferimento globale (X Y Z).

Per il dimensionamento della struttura è stato utilizzato un modello tridimensionale, composto da 192 nodi e 331 elementi beam.

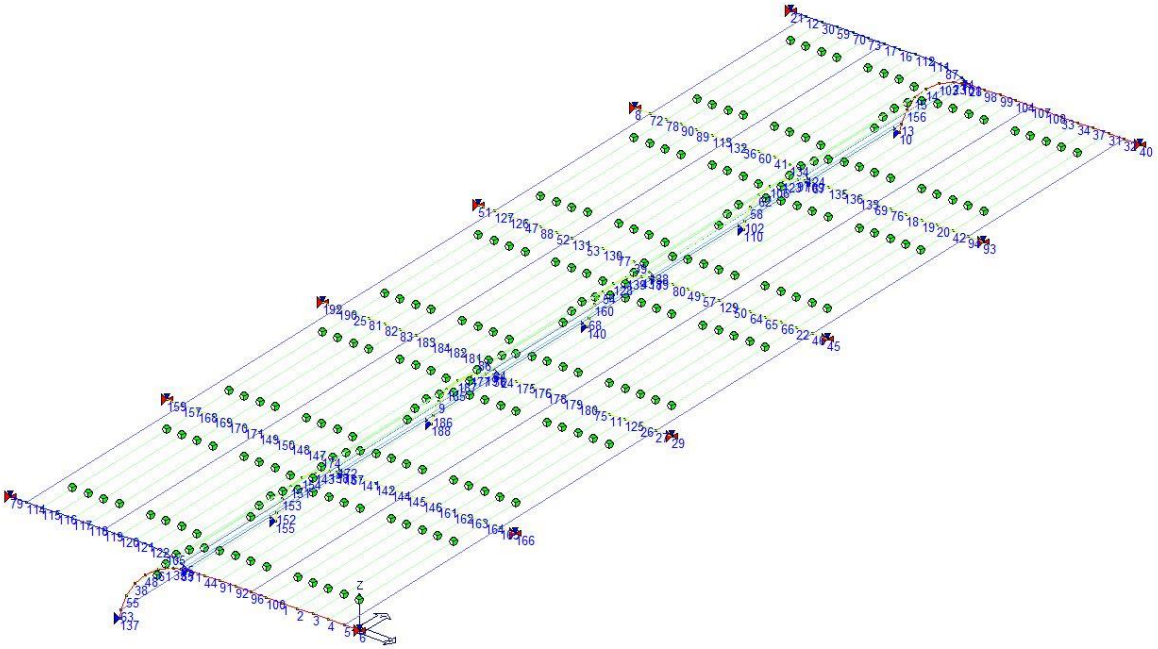
***Nodi elementi acciaio***

| Nodo | X | Y | Z | Nodo | X | Y | Z | Nodo | X | Y | Z |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | cm | cm | cm | | cm | cm | cm | | cm | cm | cm |
| 1 | -75.0 | 0.0 | 0.0 | 2 | -60.0 | 0.0 | 0.0 | 3 | -45.0 | 0.0 | 0.0 |
| 4 | -30.0 | 0.0 | 0.0 | 5 | -15.0 | 0.0 | 0.0 | 9 | -225.4 | 400.0 | -41.6 |
| 11 | -60.0 | 400.0 | 0.0 | 12 | -322.1 | 1000.0 | 9.2 | 13 | -230.6 | 1000.0 | -56.0 |
| 14 | -206.7 | 1000.0 | -17.6 | 15 | -217.3 | 1000.0 | -28.6 | 16 | -232.1 | 1000.0 | 9.2 |
| 17 | -247.1 | 1000.0 | 9.2 | 18 | -75.0 | 800.0 | 0.0 | 19 | -60.0 | 800.0 | 0.0 |
| 20 | -45.0 | 800.0 | 0.0 | 22 | -30.0 | 600.0 | 0.0 | 23 | -180.0 | 1000.0 | -2.9 |
| 25 | -307.1 | 400.0 | 9.2 | 26 | -30.0 | 400.0 | 0.0 | 27 | -15.0 | 400.0 | 0.0 |
| 30 | -307.1 | 1000.0 | 9.2 | 31 | -30.0 | 1000.0 | 0.0 | 32 | -15.0 | 1000.0 | 0.0 |
| 33 | -75.0 | 1000.0 | 0.0 | 34 | -60.0 | 1000.0 | 0.0 | 35 | -180.0 | 0.0 | -2.9 |
| 36 | -232.1 | 800.0 | 9.2 | 37 | -45.0 | 1000.0 | 0.0 | 38 | -217.3 | 0.0 | -28.6 |
| 39 | -187.1 | 600.0 | 7.5 | 41 | -202.1 | 800.0 | 9.2 | 42 | -30.0 | 800.0 | 0.0 |
| 43 | -180.0 | 600.0 | -2.9 | 44 | -150.0 | 0.0 | 0.0 | 46 | -15.0 | 600.0 | 0.0 |
| 47 | -292.1 | 600.0 | 9.2 | 48 | -206.7 | 0.0 | -17.6 | 49 | -135.0 | 600.0 | 0.0 |
| 50 | -90.0 | 600.0 | 0.0 | 52 | -262.1 | 600.0 | 9.2 | 53 | -232.1 | 600.0 | 9.2 |
| 54 | -217.3 | 600.0 | -28.6 | 55 | -225.4 | 0.0 | -41.6 | 56 | -172.5 | 400.0 | -1.6 |
| 57 | -120.0 | 600.0 | 0.0 | 58 | -225.4 | 800.0 | -41.6 | 59 | -292.1 | 1000.0 | 9.2 |
| 60 | -217.1 | 800.0 | 9.2 | 61 | -194.1 | 0.0 | -8.9 | 62 | -217.3 | 800.0 | -28.6 |
| 63 | -230.6 | 0.0 | -56.0 | 64 | -75.0 | 600.0 | 0.0 | 65 | -60.0 | 600.0 | 0.0 |
| 66 | -45.0 | 600.0 | 0.0 | 68 | -230.6 | 600.0 | -56.0 | 69 | -105.0 | 800.0 | 0.0 |
| 70 | -277.1 | 1000.0 | 9.2 | 72 | -322.1 | 800.0 | 9.2 | 73 | -262.1 | 1000.0 | 9.2 |
| 74 | -172.1 | 1000.0 | 3.0 | 75 | -75.0 | 400.0 | 0.0 | 76 | -90.0 | 800.0 | 0.0 |
| 77 | -202.1 | 600.0 | 9.2 | 78 | -307.1 | 800.0 | 9.2 | 80 | -150.0 | 600.0 | 0.0 |
| 81 | -292.1 | 400.0 | 9.2 | 82 | -277.1 | 400.0 | 9.2 | 83 | -262.1 | 400.0 | 9.2 |
| 84 | -172.1 | 400.0 | 3.0 | 85 | -172.5 | 0.0 | -1.6 | 86 | -187.1 | 400.0 | 7.5 |
| 87 | -187.1 | 1000.0 | 7.5 | 88 | -277.1 | 600.0 | 9.2 | 89 | -277.1 | 800.0 | 9.2 |
| 90 | -292.1 | 800.0 | 9.2 | 91 | -135.0 | 0.0 | 0.0 | 92 | -120.0 | 0.0 | 0.0 |
| 94 | -15.0 | 800.0 | 0.0 | 95 | -172.1 | 0.0 | 3.0 | 96 | -105.0 | 0.0 | 0.0 |
| 97 | -180.0 | 800.0 | -2.9 | 98 | -150.0 | 1000.0 | 0.0 | 99 | -135.0 | 1000.0 | 0.0 |
| 100 | -90.0 | 0.0 | 0.0 | 101 | -172.5 | 1000.0 | -1.6 | 102 | -230.6 | 800.0 | -56.0 |
| 103 | -194.1 | 1000.0 | -8.9 | 104 | -120.0 | 1000.0 | 0.0 | 105 | -187.1 | 0.0 | 7.5 |
| 106 | -206.7 | 800.0 | -17.6 | 107 | -105.0 | 1000.0 | 0.0 | 108 | -90.0 | 1000.0 | 0.0 |
| 109 | -172.5 | 800.0 | -1.6 | 111 | -202.1 | 1000.0 | 9.2 | 112 | -217.1 | 1000.0 | 9.2 |
| 113 | -262.1 | 800.0 | 9.2 | 114 | -322.1 | 0.0 | 9.2 | 115 | -307.1 | 0.0 | 9.2 |
| 116 | -292.1 | 0.0 | 9.2 | 117 | -277.1 | 0.0 | 9.2 | 118 | -262.1 | 0.0 | 9.2 |
| 119 | -247.1 | 0.0 | 9.2 | 120 | -232.1 | 0.0 | 9.2 | 121 | -217.1 | 0.0 | 9.2 |
| 122 | -202.1 | 0.0 | 9.2 | 123 | -194.1 | 800.0 | -8.9 | 124 | -172.1 | 800.0 | 3.0 |
| 125 | -45.0 | 400.0 | 0.0 | 126 | -307.1 | 600.0 | 9.2 | 127 | -322.1 | 600.0 | 9.2 |
| 128 | -206.7 | 600.0 | -17.6 | 129 | -105.0 | 600.0 | 0.0 | 130 | -217.1 | 600.0 | 9.2 |
| 131 | -247.1 | 600.0 | 9.2 | 132 | -247.1 | 800.0 | 9.2 | 133 | -120.0 | 800.0 | 0.0 |
| 134 | -187.1 | 800.0 | 7.5 | 135 | -150.0 | 800.0 | 0.0 | 136 | -135.0 | 800.0 | 0.0 |

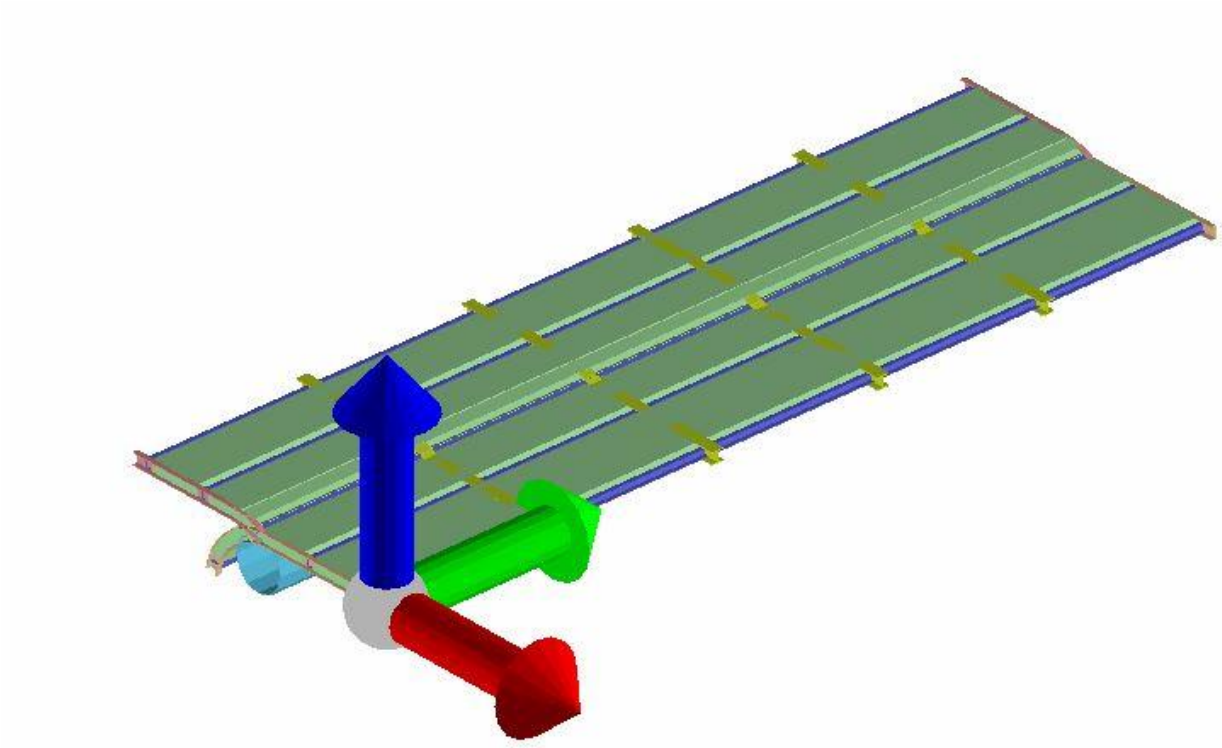
| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 138 | -172.1 | 600.0 | 3.0 | 139 | -194.1 | 600.0 | -8.9 | 141 | -150.0 | 200.0 | 0.0 |
| 142 | -135.0 | 200.0 | 0.0 | 143 | -194.1 | 200.0 | -8.9 | 144 | -120.0 | 200.0 | 0.0 |
| 145 | -105.0 | 200.0 | 0.0 | 146 | -90.0 | 200.0 | 0.0 | 147 | -202.1 | 200.0 | 9.2 |
| 148 | -217.1 | 200.0 | 9.2 | 149 | -247.1 | 200.0 | 9.2 | 150 | -232.1 | 200.0 | 9.2 |
| 151 | -217.3 | 200.0 | -28.6 | 152 | -230.6 | 200.0 | -56.0 | 153 | -225.4 | 200.0 | -41.6 |
| 154 | -206.7 | 200.0 | -17.6 | 156 | -225.4 | 1000.0 | -41.6 | 157 | -322.1 | 200.0 | 9.2 |
| 158 | -180.0 | 200.0 | -2.9 | 160 | -225.4 | 600.0 | -41.6 | 161 | -75.0 | 200.0 | 0.0 |
| 162 | -60.0 | 200.0 | 0.0 | 163 | -45.0 | 200.0 | 0.0 | 164 | -30.0 | 200.0 | 0.0 |
| 165 | -15.0 | 200.0 | 0.0 | 168 | -307.1 | 200.0 | 9.2 | 169 | -292.1 | 200.0 | 9.2 |
| 170 | -277.1 | 200.0 | 9.2 | 171 | -262.1 | 200.0 | 9.2 | 172 | -172.1 | 200.0 | 3.0 |
| 173 | -172.5 | 200.0 | -1.6 | 174 | -187.1 | 200.0 | 7.5 | 175 | -150.0 | 400.0 | 0.0 |
| 176 | -135.0 | 400.0 | 0.0 | 177 | -194.1 | 400.0 | -8.9 | 178 | -120.0 | 400.0 | 0.0 |
| 179 | -105.0 | 400.0 | 0.0 | 180 | -90.0 | 400.0 | 0.0 | 181 | -202.1 | 400.0 | 9.2 |
| 182 | -217.1 | 400.0 | 9.2 | 183 | -247.1 | 400.0 | 9.2 | 184 | -232.1 | 400.0 | 9.2 |
| 185 | -217.3 | 400.0 | -28.6 | 186 | -230.6 | 400.0 | -56.0 | 187 | -206.7 | 400.0 | -17.6 |
| 189 | -172.5 | 600.0 | -1.6 | 190 | -322.1 | 400.0 | 9.2 | 191 | -180.0 | 400.0 | -2.9 |

## *Nodi elementi in legno*

| **Nodo** | **X** | **Y** | **Z** | **Note** |
|---|---|---|---|---|
| | cm | cm | cm | |
| 6 | 0.0 | 0.0 | 0.0 | v=111101 |
| 7 | -165.0 | 600.0 | -0.3 | v=001000 |
| 8 | -337.1 | 800.0 | 9.2 | v=111101 |
| 10 | -232.1 | 1000.0 | -63.5 | v=001000 |
| 21 | -337.1 | 1000.0 | 9.2 | v=111101 |
| 24 | -165.0 | 400.0 | -0.3 | v=001000 |
| 28 | -165.0 | 1000.0 | -0.3 | v=001000 |
| 29 | 0.0 | 400.0 | 0.0 | v=111101 |
| 40 | 0.0 | 1000.0 | 0.0 | v=111101 |
| 45 | 0.0 | 600. 0 | 0.0 | v=111101 |
| 51 | -337.1 | 600.0 | 9.2 | v=111101 |
| 67 | -165.0 | 800.0 | -0.3 | v=001000 |
| 71 | -165.0 | 0.0 | -0.3 | v=001000 |
| 79 | -337.1 | 0.0 | 9.2 | v=111101 |
| 93 | 0.0 | 800.0 | 0.0 | v=111101 |
| 110 | -232.1 | 800.0 | -63.5 | v=001000 |
| 137 | -232.1 | 0.0 | -63.5 | v=001000 |
| 140 | -232.1 | 600.0 | -63.5 | v=001000 |
| 155 | -232.1 | 200.0 | -63.5 | v=001000 |
| 159 | -337.1 | 200.0 | 9.2 | v=111101 |
| 166 | 0.0 | 200.0 | 0.0 | v=111101 |
| 167 | -165.0 | 200.0 | -0.3 | v=001000 |
| 188 | -232.1 | 400.0 | -63.5 | v=001000 |
| 192 | -337.1 | 400.0 | 9.2 | v=111101 |



*Numerazione nodi*



*Modello di calcolo – vista assonometrica*
*(con visualizzazione degli ingombri dei profili)*

### 3.5.4 Informazioni principali sul modello di calcolo

Nei paragrafi seguenti sono riassunte le informazioni principali relative ai modelli di calcolo.

***Unità di misura***

Tutte le grandezze del modello, se non altrimenti specificato, sono espresse nelle seguenti unità di misura:

| Grandezza | Unità |
|---|---|
| Massa | kg |
| Lunghezza | m |
| Forza | kN |
| Momento | kNm |
| Pressione/tensione | MPa |
| Temperatura | °C |

***Sistema di riferimento***

Gli assi del sistema di riferimento, evidenziati nell'immagine precedente, sono disposti come segue:

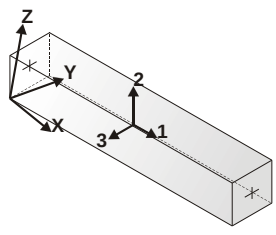
- asse X: orizzontale, con direzione parallela al lato minore della ventola;
- asse Y: orizzontale, con direzione parallela al lato maggiore della ventola;
- asse Z: verticale, con verso positivo verso l'alto.
-

### 3.5.5 Tabella dati travi

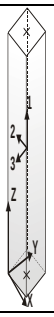
Il programma utilizza per la modellazione elementi a due nodi denominati in generale travi.

Ogni elemento trave è individuato dal nodo iniziale e dal nodo finale.

Ogni elemento è caratterizzato da un insieme di proprietà riportate in tabella che ne completano la modellazione.




orientamento elementi 2D non verticali




orientamento elementi 2D verticali

In particolare per ogni elemento viene indicato in tabella:

| | |
|---|---|
| Elem. | numero dell'elemento |
| Note | codice di comportamento: trave, trave di fondazione, pilastro, asta, asta tesa, asta compressa |
| Nodo I (J) | numero del nodo iniziale (finale) |
| Mat. | codice del materiale assegnato all'elemento |
| Sez. | codice della sezione assegnata all'elemento |
| Rotaz. | valore della rotazione dell'elemento, attorno al proprio asse, nel caso in cui l'orientamento di default non sia adottabile; l'orientamento di default prevede per gli elementi non verticali l'asse 2 contenuto nel piano verticale e l'asse 3 orizzontale, per gli elementi verticali l'asse 2 diretto secondo X negativo e l'asse 3 diretto secondo Y negativo |
| Svincolo I (J) | codici di svincolo per le azioni interne; i primi sei codici si riferiscono al nodo iniziale, i restanti sei al nodo finale (il valore 1 indica che la relativa azione interna non è attiva) |
| Wink V | costante di sottofondo (coefficiente di Winkler) per la modellazione della trave su suolo elastico |
| Wink O | costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico orizzontale |

in particolare per ogni elemento viene indicato in tabella:

| Elem. | Note | Nodo I | Nodo J | Mat. | Sez. | Rotaz. | Svincolo I | Svincolo J | Wink V | Wink O |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | gradi | | | daN/cm3 | daN/cm3 |
| 1 | Trave | 92 | 96 | 11 | 2 | | | | | |
| 2 | Trave | 48 | 154 | 42 | 4 | 135.00 | 000011 | 000011 | | |
| 3 | Trave | 100 | 1 | 11 | 2 | | | | | |
| 4 | Trave | 1 | 2 | 11 | 2 | | | | | |
| 5 | Trave | 2 | 3 | 11 | 2 | | | | | |
| 6 | Trave | 3 | 4 | 11 | 2 | | | | | |
| 7 | Trave | 4 | 5 | 11 | 2 | | | | | |
| 8 | Trave | 5 | 6 | 11 | 2 | | | | | |
| 9 | Trave | 42 | 94 | 11 | 3 | | | | | |
| 10 | Trave | 46 | 94 | 11 | 6 | | | | | |
| 11 | Trave | 52 | 113 | 42 | 4 | | 000011 | 000011 | | |
| 12 | Trave | 69 | 76 | 11 | 3 | | | | | |
| 13 | Trave | 76 | 18 | 11 | 3 | | | | | |
| 14 | Trave | 67 | 135 | 11 | 3 | | | | | |
| 15 | Trave | 135 | 136 | 11 | 3 | | | | | |
| 16 | Trave | 90 | 89 | 11 | 3 | | | | | |
| 17 | Trave | 160 | 58 | 42 | 4 | 115.00 | 000011 | 000011 | | |
| 18 | Trave | 106 | 123 | 11 | 3 | | | | | |
| 19 | Trave | 24 | 7 | 42 | 4 | | 000011 | 000011 | | |
| 20 | Trave | 139 | 123 | 42 | 4 | 140.00 | | | | |
| 21 | Trave | 18 | 19 | 11 | 3 | | | | | |

| Elem. | Note | Nodo I | Nodo J | Mat. | Sez. | Rotaz. | Svincolo I | Svincolo J | Wink V | Wink O |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | gradi | | | daN/cm3 | daN/cm3 |
| 22 | Trave | 19 | 20 | 11 | 3 | | | | | |
| 23 | Trave | 111 | 87 | 11 | 1 | | | | | |
| 24 | Trave | 73 | 17 | 11 | 1 | | | | | |
| 25 | Trave | 136 | 133 | 11 | 3 | | | | | |
| 26 | Trave | 133 | 69 | 11 | 3 | | | | | |
| 27 | Trave | 38 | 151 | 42 | 4 | 125.00 | 000011 | 000011 | | |
| 28 | Trave | 97 | 109 | 11 | 3 | | | | | |
| 29 | Trave | 191 | 43 | 42 | 4 | 160.00 | 000011 | 000011 | | |
| 30 | Trave | 32 | 40 | 11 | 2 | | | | | |
| 31 | Trave | 70 | 73 | 11 | 1 | | | | | |
| 32 | Trave | 37 | 31 | 11 | 2 | | | | | |
| 33 | Trave | 31 | 32 | 11 | 2 | | | | | |
| 34 | Trave | 17 | 16 | 11 | 1 | | | | | |
| 35 | Trave | 83 | 183 | 11 | 3 | | | | | |
| 36 | Trave | 183 | 184 | 11 | 3 | | | | | |
| 37 | Trave | 125 | 26 | 11 | 3 | | | | | |
| 38 | Trave | 26 | 27 | 11 | 3 | | | | | |
| 39 | Trave | 35 | 158 | 42 | 4 | 160.00 | 000011 | 000011 | | |
| 40 | Trave | 94 | 32 | 11 | 6 | | | | | |
| 41 | Trave | 113 | 73 | 42 | 4 | | 000011 | 000011 | | |
| 42 | Trave | 64 | 18 | 42 | 4 | | 000011 | 000011 | | |
| 43 | Trave | 16 | 112 | 11 | 1 | | | | | |
| 44 | Trave | 74 | 28 | 11 | 1 | | | | | |
| 45 | Trave | 184 | 182 | 11 | 3 | | | | | |
| 46 | Trave | 84 | 24 | 11 | 3 | | | | | |
| 47 | Trave | 86 | 84 | 11 | 3 | | | | | |
| 48 | Trave | 27 | 29 | 11 | 3 | | | | | |
| 49 | Trave | 61 | 35 | 11 | 2 | | | | | |
| 50 | Trave | 82 | 83 | 11 | 3 | | | | | |
| 51 | Trave | 71 | 167 | 42 | 4 | | 000011 | 000011 | | |
| 52 | Trave | 50 | 64 | 11 | 3 | | | | | |
| 53 | Trave | 123 | 103 | 42 | 4 | 140.00 | 000011 | 000011 | | |
| 54 | Trave | 18 | 33 | 42 | 4 | | 000011 | 000011 | | |
| 55 | Trave | 72 | 12 | 11 | 6 | | | | | |
| 56 | Trave | 49 | 136 | 42 | 4 | | 000011 | 000011 | | |
| 57 | Trave | 108 | 33 | 11 | 2 | | | | | |
| 58 | Trave | 176 | 178 | 11 | 3 | | | | | |
| 59 | Trave | 77 | 41 | 42 | 4 | | 000011 | 000011 | | |
| 60 | Trave | 150 | 148 | 11 | 3 | | | | | |
| 61 | Trave | 55 | 38 | 11 | 2 | | | | | |
| 62 | Trave | 163 | 164 | 11 | 3 | | | | | |
| 63 | Trave | 172 | 167 | 11 | 3 | | | | | |
| 64 | Trave | 164 | 26 | 42 | 4 | | 000011 | 000011 | | |
| 65 | Trave | 4 | 164 | 42 | 4 | | 000011 | 000011 | | |
| 66 | Trave | 42 | 31 | 42 | 4 | | 000011 | 000011 | | |
| 67 | Trave | 28 | 98 | 11 | 2 | | | | | |
| 68 | Trave | 43 | 189 | 11 | 3 | | | | | |
| 69 | Trave | 174 | 172 | 11 | 3 | | | | | |
| 70 | Trave | 178 | 179 | 11 | 3 | | | | | |
| 71 | Trave | 161 | 162 | 11 | 3 | | | | | |
| 72 | Trave | 179 | 180 | 11 | 3 | | | | | |
| 73 | Trave | 180 | 75 | 11 | 3 | | | | | |
| 74 | Trave | 190 | 25 | 11 | 3 | | | | | |
| 75 | Trave | 146 | 161 | 11 | 3 | | | | | |
| 76 | Trave | 24 | 175 | 11 | 3 | | | | | |
| 77 | Trave | 109 | 101 | 11 | 5 | | | | | |
| 78 | Trave | 165 | 166 | 11 | 3 | | | | | |
| 79 | Trave | 71 | 44 | 11 | 2 | | | | | |
| 80 | Trave | 75 | 64 | 42 | 4 | | 000011 | 000011 | | |
| 81 | Trave | 144 | 145 | 11 | 3 | | | | | |
| 82 | Trave | 186 | 9 | 11 | 3 | | | | | |
| 83 | Trave | 63 | 55 | 11 | 2 | | | | | |
| 84 | Trave | 192 | 190 | 11 | 3 | | | | | |
| 85 | Trave | 167 | 141 | 11 | 3 | | | | | |
| 86 | Trave | 171 | 149 | 11 | 3 | | | | | |
| 87 | Trave | 7 | 80 | 11 | 3 | | | | | |
| 88 | Trave | 48 | 61 | 11 | 2 | | | | | |

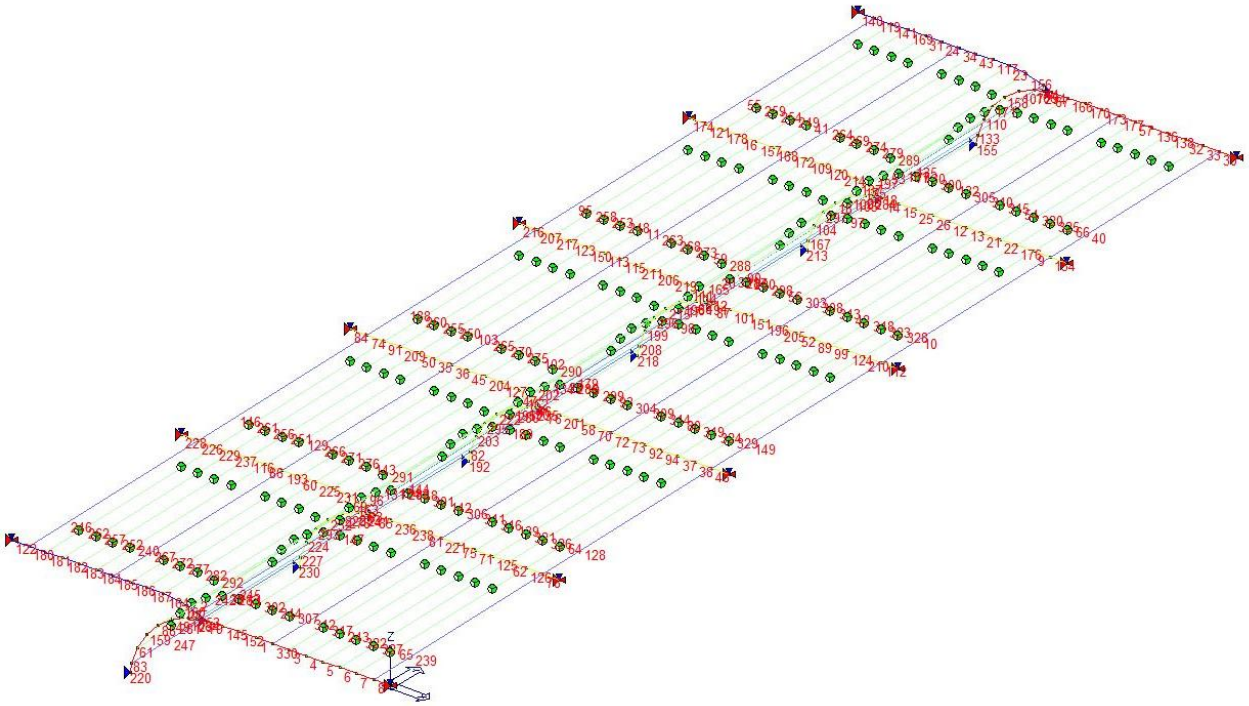
| Elem. | Note | Nodo I | Nodo J | Mat. | Sez. | Rotaz. | Svincolo I | Svincolo J | Wink V | Wink O |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | gradi | | | daN/cm3 | daN/cm3 |
| 89 | Trave | 64 | 65 | 11 | 3 | | | | | |
| 90 | Trave | 138 | 124 | 11 | 6 | 20.00 | | | | |
| 91 | Trave | 25 | 81 | 11 | 3 | | | | | |
| 92 | Trave | 75 | 11 | 11 | 3 | | | | | |
| 93 | Trave | 176 | 49 | 42 | 4 | | 000011 | 000011 | | |
| 94 | Trave | 11 | 125 | 11 | 3 | | | | | |
| 95 | Trave | 127 | 72 | 11 | 6 | | | | | |
| 96 | Trave | 154 | 187 | 42 | 4 | 135.00 | 000011 | 000011 | | |
| 97 | Trave | 102 | 13 | 11 | 6 | 110.00 | | | | |
| 98 | Trave | 68 | 102 | 11 | 6 | 110.00 | | | | |
| 99 | Trave | 65 | 66 | 11 | 3 | | | | | |
| 100 | Trave | 123 | 97 | 11 | 3 | | | | | |
| 101 | Trave | 80 | 49 | 11 | 3 | | | | | |
| 102 | Trave | 181 | 77 | 42 | 4 | | 000011 | 000011 | | |
| 103 | Trave | 83 | 52 | 42 | 4 | | 000011 | 000011 | | |
| 104 | Trave | 58 | 62 | 11 | 3 | | | | | |
| 105 | Trave | 58 | 156 | 42 | 4 | 115.00 | 000011 | 000011 | | |
| 106 | Trave | 23 | 101 | 11 | 2 | | | | | |
| 107 | Trave | 103 | 23 | 11 | 2 | | | | | |
| 108 | Trave | 35 | 85 | 11 | 2 | | | | | |
| 109 | Trave | 36 | 60 | 11 | 3 | | | | | |
| 110 | Trave | 156 | 15 | 11 | 2 | | | | | |
| 111 | Trave | 39 | 138 | 11 | 3 | | | | | |
| 112 | Trave | 46 | 45 | 11 | 3 | | | | | |
| 113 | Trave | 52 | 131 | 11 | 3 | | | | | |
| 114 | Trave | 54 | 62 | 42 | 4 | 125.00 | 000011 | 000011 | | |
| 115 | Trave | 131 | 53 | 11 | 3 | | | | | |
| 116 | Trave | 170 | 171 | 11 | 3 | | | | | |
| 117 | Trave | 112 | 111 | 11 | 1 | | | | | |
| 118 | Trave | 124 | 67 | 11 | 3 | | | | | |
| 119 | Trave | 12 | 30 | 11 | 1 | | | | | |
| 120 | Trave | 60 | 41 | 11 | 3 | | | | | |
| 121 | Trave | 72 | 78 | 11 | 3 | | | | | |
| 122 | Trave | 79 | 114 | 11 | 1 | | | | | |
| 123 | Trave | 47 | 88 | 11 | 3 | | | | | |
| 124 | Trave | 66 | 22 | 11 | 3 | | | | | |
| 125 | Trave | 162 | 163 | 11 | 3 | | | | | |
| 126 | Trave | 164 | 165 | 11 | 3 | | | | | |
| 127 | Trave | 181 | 86 | 11 | 3 | | | | | |
| 128 | Trave | 165 | 27 | 11 | 6 | | | | | |
| 129 | Trave | 171 | 83 | 42 | 4 | | 000011 | 000011 | | |
| 130 | Trave | 67 | 28 | 42 | 4 | | 000011 | 000011 | | |
| 131 | Trave | 143 | 177 | 42 | 4 | 140.00 | 000011 | 000011 | | |
| 132 | Trave | 136 | 99 | 42 | 4 | | 000011 | 000011 | | |
| 133 | Trave | 13 | 156 | 11 | 2 | | | | | |
| 134 | Trave | 177 | 139 | 42 | 4 | 140.00 | 000011 | 000011 | | |
| 135 | Trave | 124 | 74 | 11 | 6 | 20.00 | | | | |
| 136 | Trave | 33 | 34 | 11 | 2 | | | | | |
| 137 | Trave | 134 | 124 | 11 | 3 | | | | | |
| 138 | Trave | 34 | 37 | 11 | 2 | | | | | |
| 139 | Trave | 161 | 75 | 42 | 4 | | 000011 | 000011 | | |
| 140 | Trave | 21 | 12 | 11 | 1 | | | | | |
| 141 | Trave | 30 | 59 | 11 | 1 | | | | | |
| 142 | Trave | 142 | 176 | 42 | 4 | | 000011 | 000011 | | |
| 143 | Trave | 147 | 181 | 42 | 4 | | 000011 | 000011 | | |
| 144 | Trave | 172 | 84 | 11 | 6 | 20.00 | | | | |
| 145 | Trave | 44 | 91 | 11 | 2 | | | | | |
| 146 | Trave | 157 | 190 | 11 | 6 | | | | | |
| 147 | Trave | 152 | 186 | 11 | 6 | 110.00 | | | | |
| 148 | Trave | 167 | 24 | 42 | 4 | | 000011 | 000011 | | |
| 149 | Trave | 27 | 46 | 11 | 6 | | | | | |
| 150 | Trave | 88 | 52 | 11 | 3 | | | | | |
| 151 | Trave | 49 | 57 | 11 | 3 | | | | | |
| 152 | Trave | 91 | 92 | 11 | 2 | | | | | |
| 153 | Trave | 95 | 71 | 11 | 1 | | | | | |
| 154 | Trave | 94 | 93 | 11 | 3 | | | | | |
| 155 | Trave | 10 | 13 | 11 | 2 | | | | | |

| Elem. | Note | Nodo I | Nodo J | Mat. | Sez. | Rotaz. | Svincolo I | Svincolo J | Wink V | Wink O |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | gradi | | | daN/cm3 | daN/cm3 |
| 156 | Trave | 87 | 74 | 11 | 1 | | | | | |
| 157 | Trave | 89 | 113 | 11 | 3 | | | | | |
| 158 | Trave | 14 | 103 | 11 | 2 | | | | | |
| 159 | Trave | 38 | 48 | 11 | 2 | | | | | |
| 160 | Trave | 105 | 95 | 11 | 1 | | | | | |
| 161 | Trave | 97 | 23 | 42 | 4 | 160.00 | 000011 | 000011 | | |
| 162 | Trave | 185 | 54 | 42 | 4 | 125.00 | 000011 | 000011 | | |
| 163 | Trave | 151 | 185 | 42 | 4 | 125.00 | 000011 | 000011 | | |
| 164 | Trave | 122 | 105 | 11 | 1 | | | | | |
| 165 | Trave | 128 | 106 | 42 | 4 | 135.00 | 000011 | 000011 | | |
| 166 | Trave | 98 | 99 | 11 | 2 | | | | | |
| 167 | Trave | 102 | 58 | 11 | 3 | | | | | |
| 168 | Trave | 113 | 132 | 11 | 3 | | | | | |
| 169 | Trave | 59 | 70 | 11 | 1 | | | | | |
| 170 | Trave | 99 | 104 | 11 | 2 | | | | | |
| 171 | Trave | 15 | 14 | 11 | 2 | | | | | |
| 172 | Trave | 132 | 36 | 11 | 3 | | | | | |
| 173 | Trave | 104 | 107 | 11 | 2 | | | | | |
| 174 | Trave | 8 | 72 | 11 | 3 | | | | | |
| 175 | Trave | 62 | 15 | 42 | 4 | 125.00 | 000011 | 000011 | | |
| 176 | Trave | 20 | 42 | 11 | 3 | | | | | |
| 177 | Trave | 107 | 108 | 11 | 2 | | | | | |
| 178 | Trave | 78 | 90 | 11 | 3 | | | | | |
| 179 | Trave | 84 | 138 | 11 | 6 | 20.00 | | | | |
| 180 | Trave | 114 | 115 | 11 | 1 | | | | | |
| 181 | Trave | 115 | 116 | 11 | 1 | | | | | |
| 182 | Trave | 116 | 117 | 11 | 1 | | | | | |
| 183 | Trave | 117 | 118 | 11 | 1 | | | | | |
| 184 | Trave | 118 | 119 | 11 | 1 | | | | | |
| 185 | Trave | 119 | 120 | 11 | 1 | | | | | |
| 186 | Trave | 120 | 121 | 11 | 1 | | | | | |
| 187 | Trave | 121 | 122 | 11 | 1 | | | | | |
| 188 | Trave | 190 | 127 | 11 | 6 | | | | | |
| 189 | Trave | 186 | 68 | 11 | 6 | 110.00 | | | | |
| 190 | Trave | 191 | 56 | 11 | 3 | | | | | |
| 191 | Trave | 189 | 7 | 11 | 3 | | | | | |
| 192 | Trave | 188 | 186 | 11 | 3 | | | | | |
| 193 | Trave | 149 | 150 | 11 | 3 | | | | | |
| 194 | Trave | 158 | 191 | 42 | 4 | 160.00 | 000011 | 000011 | | |
| 195 | Trave | 177 | 191 | 11 | 3 | | | | | |
| 196 | Trave | 57 | 129 | 11 | 3 | | | | | |
| 197 | Trave | 106 | 14 | 42 | 4 | 135.00 | 000011 | 000011 | | |
| 198 | Trave | 139 | 43 | 11 | 3 | | | | | |
| 199 | Trave | 160 | 54 | 11 | 3 | | | | | |
| 200 | Trave | 7 | 67 | 42 | 4 | | 000011 | 000011 | | |
| 201 | Trave | 175 | 176 | 11 | 3 | | | | | |
| 202 | Trave | 187 | 128 | 42 | 4 | 135.00 | 000011 | 000011 | | |
| 203 | Trave | 9 | 185 | 11 | 3 | | | | | |
| 204 | Trave | 182 | 181 | 11 | 3 | | | | | |
| 205 | Trave | 129 | 50 | 11 | 3 | | | | | |
| 206 | Trave | 130 | 77 | 11 | 3 | | | | | |
| 207 | Trave | 127 | 126 | 11 | 3 | | | | | |
| 208 | Trave | 68 | 160 | 11 | 3 | | | | | |
| 209 | Trave | 81 | 82 | 11 | 3 | | | | | |
| 210 | Trave | 22 | 46 | 11 | 3 | | | | | |
| 211 | Trave | 53 | 130 | 11 | 3 | | | | | |
| 212 | Trave | 138 | 7 | 11 | 3 | | | | | |
| 213 | Trave | 110 | 102 | 11 | 3 | | | | | |
| 214 | Trave | 41 | 134 | 11 | 3 | | | | | |
| 215 | Trave | 128 | 139 | 11 | 3 | | | | | |
| 216 | Trave | 51 | 127 | 11 | 3 | | | | | |
| 217 | Trave | 126 | 47 | 11 | 3 | | | | | |
| 218 | Trave | 140 | 68 | 11 | 3 | | | | | |
| 219 | Trave | 77 | 39 | 11 | 3 | | | | | |
| 220 | Trave | 137 | 63 | 11 | 2 | | | | | |
| 221 | Trave | 145 | 146 | 11 | 3 | | | | | |
| 222 | Trave | 187 | 177 | 11 | 3 | | | | | |

| Elem. | Note | Nodo I | Nodo J | Mat. | Sez. | Rotaz. | Svincolo I | Svincolo J | Wink V | Wink O |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | gradi | | | daN/cm3 | daN/cm3 |
| 223 | Trave | 143 | 158 | 11 | 3 | | | | | |
| 224 | Trave | 153 | 151 | 11 | 3 | | | | | |
| 225 | Trave | 148 | 147 | 11 | 3 | | | | | |
| 226 | Trave | 157 | 168 | 11 | 3 | | | | | |
| 227 | Trave | 152 | 153 | 11 | 3 | | | | | |
| 228 | Trave | 159 | 157 | 11 | 3 | | | | | |
| 229 | Trave | 168 | 169 | 11 | 3 | | | | | |
| 230 | Trave | 155 | 152 | 11 | 3 | | | | | |
| 231 | Trave | 147 | 174 | 11 | 3 | | | | | |
| 232 | Trave | 154 | 143 | 11 | 3 | | | | | |
| 233 | Trave | 158 | 173 | 11 | 3 | | | | | |
| 234 | Trave | 85 | 71 | 11 | 2 | | | | | |
| 235 | Trave | 56 | 24 | 11 | 3 | | | | | |
| 236 | Trave | 141 | 142 | 11 | 3 | | | | | |
| 237 | Trave | 169 | 170 | 11 | 3 | | | | | |
| 238 | Trave | 142 | 144 | 11 | 3 | | | | | |
| 239 | Trave | 5 | 165 | 11 | 6 | | | | | |
| 240 | Trave | 118 | 171 | 42 | 4 | | 000011 | 000011 | | |
| 241 | Trave | 173 | 167 | 11 | 3 | | | | | |
| 242 | Trave | 61 | 143 | 42 | 4 | 140.00 | 000011 | 000011 | | |
| 243 | Trave | 1 | 161 | 42 | 4 | | 000011 | 000011 | | |
| 244 | Trave | 91 | 142 | 42 | 4 | | 000011 | 000011 | | |
| 245 | Trave | 95 | 172 | 11 | 6 | 20.00 | | | | |
| 246 | Trave | 114 | 157 | 11 | 6 | | | | | |
| 247 | Trave | 63 | 152 | 11 | 6 | 110.00 | | | | |
| 248 | Trave | 88 | 89 | 42 | 4 | | 000011 | 000011 | | |
| 249 | Trave | 89 | 70 | 42 | 4 | | 000011 | 000011 | | |
| 250 | Trave | 82 | 88 | 42 | 4 | | 000011 | 000011 | | |
| 251 | Trave | 170 | 82 | 42 | 4 | | 000011 | 000011 | | |
| 252 | Trave | 117 | 170 | 42 | 4 | | 000011 | 000011 | | |
| 253 | Trave | 47 | 90 | 42 | 4 | | 000011 | 000011 | | |
| 254 | Trave | 90 | 59 | 42 | 4 | | 000011 | 000011 | | |
| 255 | Trave | 81 | 47 | 42 | 4 | | 000011 | 000011 | | |
| 256 | Trave | 169 | 81 | 42 | 4 | | 000011 | 000011 | | |
| 257 | Trave | 116 | 169 | 42 | 4 | | 000011 | 000011 | | |
| 258 | Trave | 126 | 78 | 42 | 4 | | 000011 | 000011 | | |
| 259 | Trave | 78 | 30 | 42 | 4 | | 000011 | 000011 | | |
| 260 | Trave | 25 | 126 | 42 | 4 | | 000011 | 000011 | | |
| 261 | Trave | 168 | 25 | 42 | 4 | | 000011 | 000011 | | |
| 262 | Trave | 115 | 168 | 42 | 4 | | 000011 | 000011 | | |
| 263 | Trave | 131 | 132 | 11 | 6 | | | | | |
| 264 | Trave | 132 | 17 | 11 | 6 | | | | | |
| 265 | Trave | 183 | 131 | 11 | 6 | | | | | |
| 266 | Trave | 149 | 183 | 11 | 6 | | | | | |
| 267 | Trave | 119 | 149 | 11 | 6 | | | | | |
| 268 | Trave | 53 | 36 | 42 | 4 | | 000011 | 000011 | | |
| 269 | Trave | 36 | 16 | 42 | 4 | | 000011 | 000011 | | |
| 270 | Trave | 184 | 53 | 42 | 4 | | 000011 | 000011 | | |
| 271 | Trave | 150 | 184 | 42 | 4 | | 000011 | 000011 | | |
| 272 | Trave | 120 | 150 | 42 | 4 | | 000011 | 000011 | | |
| 273 | Trave | 130 | 60 | 42 | 4 | | 000011 | 000011 | | |
| 274 | Trave | 60 | 112 | 42 | 4 | | 000011 | 000011 | | |
| 275 | Trave | 182 | 130 | 42 | 4 | | 000011 | 000011 | | |
| 276 | Trave | 148 | 182 | 42 | 4 | | 000011 | 000011 | | |
| 277 | Trave | 121 | 148 | 42 | 4 | | 000011 | 000011 | | |
| 278 | Trave | 153 | 9 | 42 | 4 | 115.00 | 000011 | 000011 | | |
| 279 | Trave | 41 | 111 | 42 | 4 | | 000011 | 000011 | | |
| 280 | Trave | 9 | 160 | 42 | 4 | 115.00 | 000011 | 000011 | | |
| 281 | Trave | 55 | 153 | 42 | 4 | 115.00 | 000011 | 000011 | | |
| 282 | Trave | 122 | 147 | 42 | 4 | | 000011 | 000011 | | |
| 283 | Trave | 85 | 173 | 11 | 5 | | | | | |
| 284 | Trave | 109 | 67 | 11 | 3 | | | | | |
| 285 | Trave | 173 | 56 | 11 | 5 | | | | | |
| 286 | Trave | 56 | 189 | 11 | 5 | | | | | |
| 287 | Trave | 189 | 109 | 11 | 5 | | | | | |
| 288 | Trave | 39 | 134 | 42 | 4 | 10.00 | 000011 | 000011 | | |
| 289 | Trave | 134 | 87 | 42 | 4 | 10.00 | 000011 | 000011 | | |

| Elem. | Note | Nodo I | Nodo J | Mat. | Sez. | Rotaz. | Svincolo I | Svincolo J | Wink V | Wink O |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | gradi | | | daN/cm3 | daN/cm3 |
| 290 | Trave | 86 | 39 | 42 | 4 | 10.00 | 000011 | 000011 | | |
| 291 | Trave | 174 | 86 | 42 | 4 | 10.00 | 000011 | 000011 | | |
| 292 | Trave | 105 | 174 | 42 | 4 | 10.00 | 000011 | 000011 | | |
| 293 | Trave | 151 | 154 | 11 | 3 | | | | | |
| 294 | Trave | 101 | 28 | 11 | 2 | | | | | |
| 295 | Trave | 185 | 187 | 11 | 3 | | | | | |
| 296 | Trave | 54 | 128 | 11 | 3 | | | | | |
| 297 | Trave | 62 | 106 | 11 | 3 | | | | | |
| 298 | Trave | 80 | 135 | 42 | 4 | | 000011 | 000011 | | |
| 299 | Trave | 175 | 80 | 42 | 4 | | 000011 | 000011 | | |
| 300 | Trave | 135 | 98 | 42 | 4 | | 000011 | 000011 | | |
| 301 | Trave | 141 | 175 | 42 | 4 | | 000011 | 000011 | | |
| 302 | Trave | 44 | 141 | 42 | 4 | | 000011 | 000011 | | |
| 303 | Trave | 57 | 133 | 42 | 4 | | 000011 | 000011 | | |
| 304 | Trave | 178 | 57 | 42 | 4 | | 000011 | 000011 | | |
| 305 | Trave | 133 | 104 | 42 | 4 | | 000011 | 000011 | | |
| 306 | Trave | 144 | 178 | 42 | 4 | | 000011 | 000011 | | |
| 307 | Trave | 92 | 144 | 42 | 4 | | 000011 | 000011 | | |
| 308 | Trave | 129 | 69 | 11 | 6 | | | | | |
| 309 | Trave | 179 | 129 | 11 | 6 | | | | | |
| 310 | Trave | 69 | 107 | 11 | 6 | | | | | |
| 311 | Trave | 145 | 179 | 11 | 6 | | | | | |
| 312 | Trave | 96 | 145 | 11 | 6 | | | | | |
| 313 | Trave | 50 | 76 | 42 | 4 | | 000011 | 000011 | | |
| 314 | Trave | 180 | 50 | 42 | 4 | | 000011 | 000011 | | |
| 315 | Trave | 76 | 108 | 42 | 4 | | 000011 | 000011 | | |
| 316 | Trave | 146 | 180 | 42 | 4 | | 000011 | 000011 | | |
| 317 | Trave | 100 | 146 | 42 | 4 | | 000011 | 000011 | | |
| 318 | Trave | 65 | 19 | 42 | 4 | | 000011 | 000011 | | |
| 319 | Trave | 11 | 65 | 42 | 4 | | 000011 | 000011 | | |
| 320 | Trave | 19 | 34 | 42 | 4 | | 000011 | 000011 | | |
| 321 | Trave | 162 | 11 | 42 | 4 | | 000011 | 000011 | | |
| 322 | Trave | 2 | 162 | 42 | 4 | | 000011 | 000011 | | |
| 323 | Trave | 66 | 20 | 42 | 4 | | 000011 | 000011 | | |
| 324 | Trave | 125 | 66 | 42 | 4 | | 000011 | 000011 | | |
| 325 | Trave | 20 | 37 | 42 | 4 | | 000011 | 000011 | | |
| 326 | Trave | 163 | 125 | 42 | 4 | | 000011 | 000011 | | |
| 327 | Trave | 3 | 163 | 42 | 4 | | 000011 | 000011 | | |
| 328 | Trave | 22 | 42 | 42 | 4 | | 000011 | 000011 | | |
| 329 | Trave | 26 | 22 | 42 | 4 | | 000011 | 000011 | | |
| 330 | Trave | 96 | 100 | 11 | 2 | | | | | |
| 331 | Trave | 43 | 97 | 42 | 4 | 160.00 | 000011 | 000011 | | |

Segue la numerazione degli elementi travi utile per una migliore comprensione dei risultati:



*Numerazione elementi modello*

### 3.5.6 Schematizzazione dei casi di carico

Il programma consente l'applicazione di diverse tipologie di casi di carico.
Sono previsti i seguenti 11 tipi di casi di carico:

| | *Sigla* | *Tipo* | *Descrizione* |
|---|---|---|---|
| **1** | **Ggk** | A | caso di carico comprensivo del peso proprio struttura |
| **2** | **Gk** | NA | caso di carico con azioni permanenti |
| **3** | **Qk** | NA | caso di carico con azioni variabili |
| **4** | **Gsk** | A | caso di carico comprensivo dei carichi permanenti sui solai e sulle coperture |
| **5** | **Qsk** | A | caso di carico comprensivo dei carichi variabili sui solai |
| **6** | **Qnk** | A | caso di carico comprensivo dei carichi di neve sulle coperture |
| **7** | **Qtk** | SA | caso di carico comprensivo di una variazione termica agente sulla struttura |
| **8** | **Qvk** | NA | caso di carico comprensivo di azioni da vento sulla struttura |
| **9** | **Esk** | SA | caso di carico sismico con analisi statica equivalente |
| **10** | **Edk** | SA | caso di carico sismico con analisi dinamica |
| **11** | **Pk** | NA | caso di carico comprensivo di azioni derivanti da coazioni, cedimenti e precompressioni |

I carichi utilizzati nel calcolo sono riassunti nella tabella seguente in cui viene riportato l'elenco degli elementi direttamente caricati ed illustrati nei paragrafi successivi:

| CDC | Tipo | Sigla Id | Note |
|---|---|---|---|
| 1 | Ggk | CDC=Ggk (peso proprio della struttura) | |
| 2 | Gk | CDC=G1k (carico idrostatico) | D2 :da 10 a 11 Azione : DG:Fzi=-4.95 Fzf=-4.95 |
| | | | D2 : 19 Azione : DG:Fzi=-2.48 Fzf=-2.48 |
| | | | D2 :da 40 a 42 Azione : DG:Fzi=-4.95 Fzf=-4.95 |
| | | | D2 : 51 Azione : DG:Fzi=-2.48 Fzf=-2.48 |
| | | | D2 :da 54 a 56 Azione : DG:Fzi=-4.95 Fzf=-4.95 |
| | | | D2 : 59 Azione : DG:Fzi=-4.95 Fzf=-4.95 |
| | | | D2 :da 64 a 66 Azione : DG:Fzi=-4.95 Fzf=-4.95 |
| | | | D2 : 80 Azione : DG:Fzi=-4.95 Fzf=-4.95 |
| | | | D2 : 90 Azione : DG:Fzi=-4.95 Fzf=-4.95 |
| | | | D2 : 93 Azione : DG:Fzi=-4.95 Fzf=-4.95 |
| | | | D2 : 95 Azione : DG:Fzi=-4.95 Fzf=-4.95 |
| | | | D2 :da 102 a 103 Azione : DG:Fzi=-4.95 Fzf=-4.95 |
| | | | D2 :da 128 a 129 Azione : DG:Fzi=-4.95 Fzf=-4.95 |
| | | | D2 : 130 Azione : DG:Fzi=-2.48 Fzf=-2.48 |
| | | | D2 : 132 Azione : DG:Fzi=-4.95 Fzf=-4.95 |
| | | | D2 : 135 Azione : DG:Fzi=-4.95 Fzf=-4.95 |
| | | | D2 : 139 Azione : DG:Fzi=-4.95 Fzf=-4.95 |
| | | | D2 :da 142 a 144 Azione : DG:Fzi=-4.95 Fzf=-4.95 |
| | | | D2 : 146 Azione : DG:Fzi=-4.95 Fzf=-4.95 |
| | | | D2 : 148 Azione : DG:Fzi=-2.48 Fzf=-2.48 |
| | | | D2 : 149 Azione : DG:Fzi=-4.95 Fzf=-4.95 |
| | | | D2 : 179 Azione : DG:Fzi=-4.95 Fzf=-4.95 |
| | | | D2 : 188 Azione : DG:Fzi=-4.95 Fzf=-4.95 |
| | | | D2 : 200 Azione : DG:Fzi=-2.48 Fzf=-2.48 |
| | | | D2 : 220 Azione : DG:Fzi=-4.95 Fzf=-4.95 |
| | | | D2 :da 239 a 240 Azione : DG:Fzi=-4.95 Fzf=-4.95 |
| | | | D2 :da 243 a 246 Azione : DG:Fzi=-4.95 Fzf=-4.95 |
| | | | D2 :da 248 a 277 Azione : DG:Fzi=-4.95 Fzf=-4.95 |
| | | | D2 : 279 Azione : DG:Fzi=-4.95 Fzf=-4.95 |
| | | | D2 : 282 Azione : DG:Fzi=-4.95 Fzf=-4.95 |
| | | | D2 :da 288 a 292 Azione : DG:Fzi=-4.95 Fzf=-4.95 |
| | | | D2 :da 298 a 329 Azione : DG:Fzi=-4.95 Fzf=-4.95 |

### 3.5.7 **Pesi Propri ($G_{gk}$)**

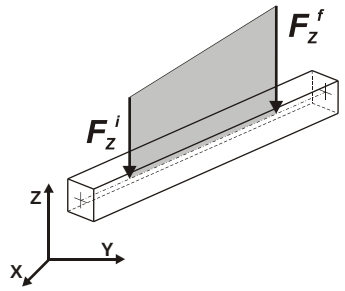
I valori del peso proprio della struttura è stato ricavato moltiplicando il volume dei singoli elementi per il peso specifico dei singoli materiali:

- Strutture in acciaio 78.50 kN/m$^3$
- Legno 4.00 kN/m$^3$
- Acqua 10.00 kN/m$^3$

### 3.5.8 **Carico Idrostatico ($Q_k$)**

Sulle vantole si è considerato un carico idrostatico distribuito pari alla condizione di massima piena $Q_{200}$ per tenere conto della colonna di acqua pari a 3.31m.

| Tipo | Carico distribuito globale |
|---|---|




| Id | Tipo | Pos. | fx | fy | fz | mx | my | mz |
|---|---|---|---|---|---|---|---|---|
| | | m | kN/ m | kN/ m | kN/ m | kN | kN | kN |
| 1 | DG:Fzi=-4.95 Fzf=-4.95 | 0.0 | 0.0 | 0.0 | -4.95 | 0.0 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.0 | -4.95 | 0.0 | 0.0 | 0.0 |
| 2 | DG:Fzi=-2.48 Fzf=-2.48 | 0.0 | 0.0 | 0.0 | -2.48 | 0.0 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.0 | -2.48 | 0.0 | 0.0 | 0.0 |

### 3.5.9 **Combinazioni delle Azioni**

Il programma combina i diversi tipi di casi di carico (CDC) secondo le regole previste dalla normativa vigente.

Le combinazioni previste sono destinate al controllo di sicurezza della struttura ed alla verifica degli spostamenti e delle sollecitazioni.

La prima tabella delle combinazioni riportata di seguito comprende le seguenti informazioni: Numero, Tipo, Sigla identificativa. Una seconda tabella riporta il peso nella combinazione, assunto per ogni caso di carico.

Ai fini delle verifiche degli stati limite si definiscono le seguenti combinazioni delle azioni:

*Combinazione fondamentale SLU*

$$\gamma G1 \cdot G1 + \gamma G2 \cdot G2 + \gamma P \cdot P + \gamma Q1 \cdot Qk1 + \gamma Q2 \cdot \psi 02 \cdot Qk2 + \gamma Q3 \cdot \psi 03 \cdot Qk3 + \ldots$$

*Combinazione caratteristica (rara) SLE*

$$G1 + G2 + P + Qk1 + \psi 02 \cdot Qk2 + \psi 03 \cdot Qk3 + \ldots$$

*Combinazione frequente SLE*

$$G1 + G2 + P + \psi 11 \cdot Qk1 + \psi 22 \cdot Qk2 + \psi 23 \cdot Qk3 + \ldots$$

*Combinazione quasi permanente SLE*

$$G1 + G2 + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \psi 23 \cdot Qk3 + \ldots$$

*Combinazione sismica*

$$E + G1 + G2 + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \ldots$$

*Combinazione eccezionale*

$$G1 + G2 + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 +$$

*Dove:*

NTC 2008 Tabella 2.5.I

| Destinazione d'uso/azione | ψ0 | ψ1 | ψ2 |
|---|---|---|---|
| Categoria A residenziali | 0,70 | 0,50 | 0,30 |
| Categoria B uffici | 0,70 | 0,50 | 0,30 |
| Categoria C ambienti suscettibili di affollamento | 0,70 | 0,70 | 0,60 |
| Categoria D ambienti ad uso commerciale | 0,70 | 0,70 | 0,60 |
| Categoria E biblioteche, archivi, magazzini,… | 1,00 | 0,90 | 0,80 |
| Categoria F Rimesse e parcheggi (autoveicoli <= 30kN) | 0,70 | 0,70 | 0,60 |
| Categoria G Rimesse e parcheggi (autoveicoli > 30kN) | 0,70 | 0,50 | 0,30 |
| Categoria H Coperture | 0,00 | 0,00 | 0,00 |
| Vento | 0,60 | 0,20 | 0,00 |
| Neve a quota <= 1000 m | 0,50 | 0,20 | 0,00 |
| Neve a quota > 1000 m | 0,70 | 0,50 | 0,20 |
| Variazioni Termiche | 0,60 | 0,50 | 0,00 |

Nelle verifiche possono essere adottati in alternativa, due diversi approcci progettuali:

- per l'approccio 1 si considerano due diverse combinazioni di gruppi di coefficienti di sicurezza parziali per le azioni, per i materiali e per la resistenza globale (combinazione 1 con coefficienti A1 e combinazione 2 con coefficienti A2),
- per l'approccio 2 si definisce un'unica combinazione per le azioni, per la resistenza dei materiali e per la resistenza globale (con coefficienti A1).

NTC 2008 Tabella 2.6.I

| | | Coefficiente γf | **EQU** | **A1** | **A2** |
|---|---|---|---|---|---|
| Carichi permanenti | Favorevoli | γG1 | 0,9 | 1,0 | 1,0 |
| | Sfavorevoli | | 1,1 | 1,3 | 1,0 |
| Carichi permanenti non strutturali (Non compiutamente definiti) | Favorevoli | γG2 | 0,0 | 0,0 | 0,0 |
| | Sfavorevoli | | 1,5 | 1,5 | 1,3 |
| Carichi variabili | Favorevoli | γQi | 0,0 | 0,0 | 0,0 |
| | Sfavorevoli | | 1,5 | 1,5 | 1,3 |

### 3.5.10 Coefficienti combinazioni di carico

I casi di carico elementari sono stati combinati secondo le combinazioni descritte nel paragrafo precedente, generando un totale di 5 combinazioni di carico.

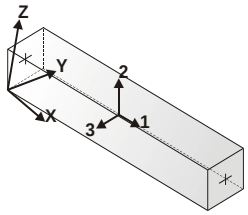
| Cmb | Tipo | Sigla Id | effetto P-delta |
|---|---|---|---|
| 1 | SLE(p) | Comb. SLE(perm.) 1 | |
| 2 | SLE(f) | Comb. SLE(freq.) 2 | |
| 3 | SLE(r) | Comb. SLE(rara) 3 | |
| 4 | SLU | Comb. SLU A1 4 | |
| 5 | SLU | Comb. SLU A1 5 | |

## 3.6 Risultati elementi tipo trave

Per ogni elemento, e per ogni combinazione (o caso di carico) vengono riportati i risultati più significativi.

Per gli elementi tipo *trave* sono riportati in tabella i seguenti valori:

| | |
|---|---|
| trave. | numero dell'elemento trave |
| Cmb | combinazione in cui si verificano i valori riportati |
| M3 mx/mn | momento flettente in campata M3 max (prima riga) / min (seconda riga) |
| M2 mx/mn | momento flettente in campata M2 max (prima riga) / min (seconda riga) |
| D2/D3 | freccia massima in direzione 2 (prima riga) / direzione 3 (seconda riga) |
| Q2/Q3 | carico totale in direzione 2 (prima riga) / direzione 3 (seconda riga) |
| Pos. | ascissa del punto iniziale e finale dell'elemento |
| N, V2, ecc.. | sei componenti di sollecitazione al piede ed in sommità dell'elemento |




orientamento elementi 2D non verticali

### *Elementi in acciai*

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| 1 | 1 | 3.13 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 16.06 | 0.00 | 0.00 | 0.00 | 0.73 |
| | | 0.73 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 16.04 | 0.00 | 0.00 | 0.00 | 3.13 |
| 1 | 2 | 3.13 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 16.06 | 0.00 | 0.00 | 0.00 | 0.73 |
| | | 0.73 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 16.04 | 0.00 | 0.00 | 0.00 | 3.13 |
| 1 | 3 | 3.13 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 16.06 | 0.00 | 0.00 | 0.00 | 0.73 |
| | | 0.73 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 16.04 | 0.00 | 0.00 | 0.00 | 3.13 |
| 1 | 4 | 4.07 | 0.00 | 0.00 | -0.03 | 0.0 | -13.94 | 20.88 | 0.00 | 0.00 | 0.00 | 0.94 |
| | | 0.94 | 0.00 | 0.00 | 0.0 | 15.0 | -13.94 | 20.85 | 0.00 | 0.00 | 0.00 | 4.07 |
| 1 | 5 | 3.13 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 16.06 | 0.00 | 0.00 | 0.00 | 0.73 |
| | | 0.73 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 16.04 | 0.00 | 0.00 | 0.00 | 3.13 |
| 3 | 1 | 5.98 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 6.99 | 0.00 | 0.00 | 0.00 | 4.93 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | 4.93 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 6.97 | 0.00 | 0.00 | 0.00 | 5.98 |
| 3 | 2 | 5.98 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 6.99 | 0.00 | 0.00 | 0.00 | 4.93 |
| | | 4.93 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 6.97 | 0.00 | 0.00 | 0.00 | 5.98 |
| 3 | 3 | 5.98 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 6.99 | 0.00 | 0.00 | 0.00 | 4.93 |
| | | 4.93 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 6.97 | 0.00 | 0.00 | 0.00 | 5.98 |
| 3 | 4 | 7.78 | 0.00 | 0.00 | -0.03 | 0.0 | -13.94 | 9.09 | 0.00 | 0.00 | 0.00 | 6.41 |
| | | 6.41 | 0.00 | 0.00 | 0.0 | 15.0 | -13.94 | 9.06 | 0.00 | 0.00 | 0.00 | 7.78 |
| 3 | 5 | 5.98 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 6.99 | 0.00 | 0.00 | 0.00 | 4.93 |
| | | 4.93 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 6.97 | 0.00 | 0.00 | 0.00 | 5.98 |
| 4 | 1 | 6.27 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 1.93 | 0.00 | 0.00 | 0.00 | 5.98 |
| | | 5.98 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 1.91 | 0.00 | 0.00 | 0.00 | 6.27 |
| 4 | 2 | 6.27 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 1.93 | 0.00 | 0.00 | 0.00 | 5.98 |
| | | 5.98 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 1.91 | 0.00 | 0.00 | 0.00 | 6.27 |
| 4 | 3 | 6.27 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 1.93 | 0.00 | 0.00 | 0.00 | 5.98 |
| | | 5.98 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 1.91 | 0.00 | 0.00 | 0.00 | 6.27 |
| 4 | 4 | 8.15 | 0.00 | 0.00 | -0.03 | 0.0 | -13.94 | 2.51 | 0.00 | 0.00 | 0.00 | 7.77 |
| | | 7.77 | 0.00 | 0.00 | 0.0 | 15.0 | -13.94 | 2.48 | 0.00 | 0.00 | 0.00 | 8.15 |
| 4 | 5 | 6.27 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 1.93 | 0.00 | 0.00 | 0.00 | 5.98 |
| | | 5.98 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 1.91 | 0.00 | 0.00 | 0.00 | 6.27 |
| 5 | 1 | 6.27 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -3.12 | 0.00 | 0.00 | 0.00 | 6.27 |
| | | 5.80 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -3.15 | 0.00 | 0.00 | 0.00 | 5.80 |
| 5 | 2 | 6.27 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -3.12 | 0.00 | 0.00 | 0.00 | 6.27 |
| | | 5.80 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -3.15 | 0.00 | 0.00 | 0.00 | 5.80 |
| 5 | 3 | 6.27 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -3.12 | 0.00 | 0.00 | 0.00 | 6.27 |
| | | 5.80 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -3.15 | 0.00 | 0.00 | 0.00 | 5.80 |
| 5 | 4 | 8.15 | 0.00 | 0.00 | -0.03 | 0.0 | -13.94 | -4.06 | 0.00 | 0.00 | 0.00 | 8.15 |
| | | 7.54 | 0.00 | 0.00 | 0.0 | 15.0 | -13.94 | -4.09 | 0.00 | 0.00 | 0.00 | 7.54 |
| 5 | 5 | 6.27 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -3.12 | 0.00 | 0.00 | 0.00 | 6.27 |
| | | 5.80 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -3.15 | 0.00 | 0.00 | 0.00 | 5.80 |
| 6 | 1 | 5.80 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -8.18 | 0.00 | 0.00 | 0.00 | 5.80 |
| | | 4.57 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -8.21 | 0.00 | 0.00 | 0.00 | 4.57 |
| 6 | 2 | 5.80 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -8.18 | 0.00 | 0.00 | 0.00 | 5.80 |
| | | 4.57 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -8.21 | 0.00 | 0.00 | 0.00 | 4.57 |
| 6 | 3 | 5.80 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -8.18 | 0.00 | 0.00 | 0.00 | 5.80 |
| | | 4.57 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -8.21 | 0.00 | 0.00 | 0.00 | 4.57 |
| 6 | 4 | 7.55 | 0.00 | 0.00 | -0.03 | 0.0 | -13.94 | -10.64 | 0.00 | 0.00 | 0.00 | 7.55 |
| | | 5.95 | 0.00 | 0.00 | 0.0 | 15.0 | -13.94 | -10.67 | 0.00 | 0.00 | 0.00 | 5.95 |
| 6 | 5 | 5.80 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -8.18 | 0.00 | 0.00 | 0.00 | 5.80 |
| | | 4.57 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -8.21 | 0.00 | 0.00 | 0.00 | 4.57 |
| 7 | 1 | 4.58 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -13.24 | 0.00 | 0.00 | 0.00 | 4.58 |
| | | 2.59 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -13.26 | 0.00 | 0.00 | 0.00 | 2.59 |
| 7 | 2 | 4.58 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -13.24 | 0.00 | 0.00 | 0.00 | 4.58 |
| | | 2.59 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -13.26 | 0.00 | 0.00 | 0.00 | 2.59 |
| 7 | 3 | 4.58 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -13.24 | 0.00 | 0.00 | 0.00 | 4.58 |
| | | 2.59 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -13.26 | 0.00 | 0.00 | 0.00 | 2.59 |
| 7 | 4 | 5.96 | 0.00 | 0.00 | -0.03 | 0.0 | -13.94 | -17.21 | 0.00 | 0.00 | 0.00 | 5.96 |
| | | 3.37 | 0.00 | 0.00 | 0.0 | 15.0 | -13.94 | -17.24 | 0.00 | 0.00 | 0.00 | 3.37 |
| 7 | 5 | 4.58 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -13.24 | 0.00 | 0.00 | 0.00 | 4.58 |
| | | 2.59 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -13.26 | 0.00 | 0.00 | 0.00 | 2.59 |
| 8 | 1 | 2.59 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -17.28 | 0.00 | 0.00 | 0.00 | 2.59 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -17.30 | 0.00 | 0.00 | 0.00 | 0.0 |
| 8 | 2 | 2.59 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -17.28 | 0.00 | 0.00 | 0.00 | 2.59 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -17.30 | 0.00 | 0.00 | 0.00 | 0.0 |
| 8 | 3 | 2.59 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -17.28 | 0.00 | 0.00 | 0.00 | 2.59 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -17.30 | 0.00 | 0.00 | 0.00 | 0.0 |
| 8 | 4 | 3.37 | 0.00 | 0.00 | -0.03 | 0.0 | -13.94 | -22.46 | 0.00 | 0.00 | 0.00 | 3.37 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -13.94 | -22.49 | 0.00 | 0.00 | 0.00 | 0.0 |
| 8 | 5 | 2.59 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -17.28 | 0.00 | 0.00 | 0.00 | 2.59 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -17.30 | 0.00 | 0.00 | 0.00 | 0.0 |
| 9 | 1 | 9.70 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -26.58 | 0.00 | 0.00 | 0.00 | 9.70 |
| | | 5.71 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -26.63 | 0.00 | 0.00 | 0.00 | 5.71 |
| 9 | 2 | 9.70 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -26.58 | 0.00 | 0.00 | 0.00 | 9.70 |
| | | 5.71 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -26.63 | 0.00 | 0.00 | 0.00 | 5.71 |
| 9 | 3 | 9.70 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -26.58 | 0.00 | 0.00 | 0.00 | 9.70 |
| | | 5.71 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -26.63 | 0.00 | 0.00 | 0.00 | 5.71 |
| 9 | 4 | 12.61 | 0.00 | 0.00 | -0.07 | 0.0 | -25.18 | -34.56 | 0.00 | 0.00 | 0.00 | 12.61 |
| | | 7.42 | 0.00 | 0.00 | 0.0 | 15.0 | -25.18 | -34.62 | 0.00 | 0.00 | 0.00 | 7.42 |
| 9 | 5 | 9.70 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -26.58 | 0.00 | 0.00 | 0.00 | 9.70 |
| | | 5.71 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -26.63 | 0.00 | 0.00 | 0.00 | 5.71 |
| 10 | 1 | 0.69 | 0.00 | 0.00 | -10.11 | 0.0 | 0.00 | 4.81 | 0.00 | 0.00 | 0.00 | -1.59 |
| | | -2.09 | 0.00 | 0.00 | 0.0 | 200.0 | 0.00 | -5.30 | 0.00 | 0.00 | 0.00 | -2.09 |
| 10 | 2 | 0.69 | 0.00 | 0.00 | -10.11 | 0.0 | 0.00 | 4.81 | 0.00 | 0.00 | 0.00 | -1.59 |
| | | -2.09 | 0.00 | 0.00 | 0.0 | 200.0 | 0.00 | -5.30 | 0.00 | 0.00 | 0.00 | -2.09 |
| 10 | 3 | 0.69 | 0.00 | 0.00 | -10.11 | 0.0 | 0.00 | 4.81 | 0.00 | 0.00 | 0.00 | -1.59 |
| | | -2.09 | 0.00 | 0.00 | 0.0 | 200.0 | 0.00 | -5.30 | 0.00 | 0.00 | 0.00 | -2.09 |
| 10 | 4 | 0.89 | 0.00 | 0.00 | -13.15 | 0.0 | 0.00 | 6.25 | 0.00 | 0.00 | 0.00 | -2.07 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | -2.72 | 0.00 | 0.00 | 0.0 | 200.0 | 0.00 | -6.90 | 0.00 | 0.00 | 0.00 | -2.72 |
| 10 | 5 | 0.69 | 0.00 | 0.00 | -10.11 | 0.0 | 0.00 | 4.81 | 0.00 | 0.00 | 0.00 | -1.59 |
| | | -2.09 | 0.00 | 0.00 | 0.0 | 200.0 | 0.00 | -5.30 | 0.00 | 0.00 | 0.00 | -2.09 |
| 12 | 1 | 10.49 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 24.01 | 0.00 | 0.00 | 0.00 | 6.90 |
| | | 6.90 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 23.96 | 0.00 | 0.00 | 0.00 | 10.49 |
| 12 | 2 | 10.49 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 24.01 | 0.00 | 0.00 | 0.00 | 6.90 |
| | | 6.90 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 23.96 | 0.00 | 0.00 | 0.00 | 10.49 |
| 12 | 3 | 10.49 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 24.01 | 0.00 | 0.00 | 0.00 | 6.90 |
| | | 6.90 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 23.96 | 0.00 | 0.00 | 0.00 | 10.49 |
| 12 | 4 | 13.64 | 0.00 | 0.00 | -0.07 | 0.0 | -25.18 | 31.21 | 0.00 | 0.00 | 0.00 | 8.97 |
| | | 8.97 | 0.00 | 0.00 | 0.0 | 15.0 | -25.18 | 31.15 | 0.00 | 0.00 | 0.00 | 13.64 |
| 12 | 5 | 10.49 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 24.01 | 0.00 | 0.00 | 0.00 | 6.90 |
| | | 6.90 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 23.96 | 0.00 | 0.00 | 0.00 | 10.49 |
| 13 | 1 | 12.58 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 13.89 | 0.00 | 0.00 | 0.00 | 10.50 |
| | | 10.50 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 13.84 | 0.00 | 0.00 | 0.00 | 12.58 |
| 13 | 2 | 12.58 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 13.89 | 0.00 | 0.00 | 0.00 | 10.50 |
| | | 10.50 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 13.84 | 0.00 | 0.00 | 0.00 | 12.58 |
| 13 | 3 | 12.58 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 13.89 | 0.00 | 0.00 | 0.00 | 10.50 |
| | | 10.50 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 13.84 | 0.00 | 0.00 | 0.00 | 12.58 |
| 13 | 4 | 16.35 | 0.00 | 0.00 | -0.07 | 0.0 | -25.18 | 18.06 | 0.00 | 0.00 | 0.00 | 13.65 |
| | | 13.65 | 0.00 | 0.00 | 0.0 | 15.0 | -25.18 | 17.99 | 0.00 | 0.00 | 0.00 | 16.35 |
| 13 | 5 | 12.58 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 13.89 | 0.00 | 0.00 | 0.00 | 10.50 |
| | | 10.50 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 13.84 | 0.00 | 0.00 | 0.00 | 12.58 |
| 14 | 1 | -13.64 | 0.00 | 0.00 | -0.05 | 0.0 | -20.57 | 65.50 | 0.00 | 0.00 | 0.00 | -23.46 |
| | | -23.46 | 0.00 | 0.00 | 0.0 | 15.0 | -20.57 | 65.45 | 0.00 | 0.00 | 0.00 | -13.64 |
| 14 | 2 | -13.64 | 0.00 | 0.00 | -0.05 | 0.0 | -20.57 | 65.50 | 0.00 | 0.00 | 0.00 | -23.46 |
| | | -23.46 | 0.00 | 0.00 | 0.0 | 15.0 | -20.57 | 65.45 | 0.00 | 0.00 | 0.00 | -13.64 |
| 14 | 3 | -13.64 | 0.00 | 0.00 | -0.05 | 0.0 | -20.57 | 65.50 | 0.00 | 0.00 | 0.00 | -23.46 |
| | | -23.46 | 0.00 | 0.00 | 0.0 | 15.0 | -20.57 | 65.45 | 0.00 | 0.00 | 0.00 | -13.64 |
| 14 | 4 | -17.73 | 0.00 | 0.00 | -0.07 | 0.0 | -26.74 | 85.15 | 0.00 | 0.00 | 0.00 | -30.49 |
| | | -30.49 | 0.00 | 0.00 | 0.0 | 15.0 | -26.74 | 85.09 | 0.00 | 0.00 | 0.00 | -17.73 |
| 14 | 5 | -13.64 | 0.00 | 0.00 | -0.05 | 0.0 | -20.57 | 65.50 | 0.00 | 0.00 | 0.00 | -23.46 |
| | | -23.46 | 0.00 | 0.00 | 0.0 | 15.0 | -20.57 | 65.45 | 0.00 | 0.00 | 0.00 | -13.64 |
| 15 | 1 | -5.28 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 55.75 | 0.00 | 0.00 | 0.00 | -13.63 |
| | | -13.63 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 55.70 | 0.00 | 0.00 | 0.00 | -5.28 |
| 15 | 2 | -5.28 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 55.75 | 0.00 | 0.00 | 0.00 | -13.63 |
| | | -13.63 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 55.70 | 0.00 | 0.00 | 0.00 | -5.28 |
| 15 | 3 | -5.28 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 55.75 | 0.00 | 0.00 | 0.00 | -13.63 |
| | | -13.63 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 55.70 | 0.00 | 0.00 | 0.00 | -5.28 |
| 15 | 4 | -6.86 | 0.00 | 0.00 | -0.07 | 0.0 | -25.18 | 72.47 | 0.00 | 0.00 | 0.00 | -17.72 |
| | | -17.72 | 0.00 | 0.00 | 0.0 | 15.0 | -25.18 | 72.41 | 0.00 | 0.00 | 0.00 | -6.86 |
| 15 | 5 | -5.28 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 55.75 | 0.00 | 0.00 | 0.00 | -13.63 |
| | | -13.63 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 55.70 | 0.00 | 0.00 | 0.00 | -5.28 |
| 16 | 1 | 14.47 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 8.61 | 0.00 | 0.00 | 0.00 | 13.18 |
| | | 13.18 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 8.56 | 0.00 | 0.00 | 0.00 | 14.47 |
| 16 | 2 | 14.47 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 8.61 | 0.00 | 0.00 | 0.00 | 13.18 |
| | | 13.18 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 8.56 | 0.00 | 0.00 | 0.00 | 14.47 |
| 16 | 3 | 14.47 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 8.61 | 0.00 | 0.00 | 0.00 | 13.18 |
| | | 13.18 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 8.56 | 0.00 | 0.00 | 0.00 | 14.47 |
| 16 | 4 | 18.81 | 0.00 | 0.00 | -0.07 | 0.0 | -25.14 | 11.20 | 0.00 | 0.00 | 0.00 | 17.13 |
| | | 17.13 | 0.00 | 0.00 | 0.0 | 15.0 | -25.14 | 11.13 | 0.00 | 0.00 | 0.00 | 18.81 |
| 16 | 5 | 14.47 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 8.61 | 0.00 | 0.00 | 0.00 | 13.18 |
| | | 13.18 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 8.56 | 0.00 | 0.00 | 0.00 | 14.47 |
| 18 | 1 | 0.30 | 0.00 | 0.00 | -0.04 | 0.0 | -0.32 | 0.45 | 0.00 | 0.00 | 0.00 | 0.24 |
| | | 0.24 | 0.00 | 0.00 | 0.0 | 15.3 | -0.29 | 0.40 | 0.00 | 0.00 | 0.00 | 0.30 |
| 18 | 2 | 0.30 | 0.00 | 0.00 | -0.04 | 0.0 | -0.32 | 0.45 | 0.00 | 0.00 | 0.00 | 0.24 |
| | | 0.24 | 0.00 | 0.00 | 0.0 | 15.3 | -0.29 | 0.40 | 0.00 | 0.00 | 0.00 | 0.30 |
| 18 | 3 | 0.30 | 0.00 | 0.00 | -0.04 | 0.0 | -0.32 | 0.45 | 0.00 | 0.00 | 0.00 | 0.24 |
| | | 0.24 | 0.00 | 0.00 | 0.0 | 15.3 | -0.29 | 0.40 | 0.00 | 0.00 | 0.00 | 0.30 |
| 18 | 4 | 0.39 | 0.00 | 0.00 | -0.06 | 0.0 | -0.41 | 0.58 | 0.00 | 0.00 | 0.00 | 0.31 |
| | | 0.31 | 0.00 | 0.00 | 0.0 | 15.3 | -0.38 | 0.52 | 0.00 | 0.00 | 0.00 | 0.39 |
| 18 | 5 | 0.30 | 0.00 | 0.00 | -0.04 | 0.0 | -0.32 | 0.45 | 0.00 | 0.00 | 0.00 | 0.24 |
| | | 0.24 | 0.00 | 0.00 | 0.0 | 15.3 | -0.29 | 0.40 | 0.00 | 0.00 | 0.00 | 0.30 |
| 21 | 1 | 13.14 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 3.77 | 0.00 | 0.00 | 0.00 | 12.58 |
| | | 12.58 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 3.72 | 0.00 | 0.00 | 0.00 | 13.14 |
| 21 | 2 | 13.14 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 3.77 | 0.00 | 0.00 | 0.00 | 12.58 |
| | | 12.58 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 3.72 | 0.00 | 0.00 | 0.00 | 13.14 |
| 21 | 3 | 13.14 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 3.77 | 0.00 | 0.00 | 0.00 | 12.58 |
| | | 12.58 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 3.72 | 0.00 | 0.00 | 0.00 | 13.14 |
| 21 | 4 | 17.08 | 0.00 | 0.00 | -0.07 | 0.0 | -25.18 | 4.90 | 0.00 | 0.00 | 0.00 | 16.35 |
| | | 16.35 | 0.00 | 0.00 | 0.0 | 15.0 | -25.18 | 4.84 | 0.00 | 0.00 | 0.00 | 17.08 |
| 21 | 5 | 13.14 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 3.77 | 0.00 | 0.00 | 0.00 | 12.58 |
| | | 12.58 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 3.72 | 0.00 | 0.00 | 0.00 | 13.14 |
| 22 | 1 | 13.14 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -6.35 | 0.00 | 0.00 | 0.00 | 13.14 |
| | | 12.18 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -6.40 | 0.00 | 0.00 | 0.00 | 12.18 |
| 22 | 2 | 13.14 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -6.35 | 0.00 | 0.00 | 0.00 | 13.14 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | 12.18 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -6.40 | 0.00 | 0.00 | 0.00 | 12.18 |
| 22 | 3 | 13.14 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -6.35 | 0.00 | 0.00 | 0.00 | 13.14 |
| | | 12.18 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -6.40 | 0.00 | 0.00 | 0.00 | 12.18 |
| 22 | 4 | 17.08 | 0.00 | 0.00 | -0.07 | 0.0 | -25.18 | -8.25 | 0.00 | 0.00 | 0.00 | 17.08 |
| | | 15.84 | 0.00 | 0.00 | 0.0 | 15.0 | -25.18 | -8.32 | 0.00 | 0.00 | 0.00 | 15.84 |
| 22 | 5 | 13.14 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -6.35 | 0.00 | 0.00 | 0.00 | 13.14 |
| | | 12.18 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -6.40 | 0.00 | 0.00 | 0.00 | 12.18 |
| 23 | 1 | -1.14 | 0.00 | 0.00 | -0.02 | 0.0 | -13.41 | -23.97 | 0.00 | 0.00 | 0.00 | -1.14 |
| | | -4.76 | 0.00 | 0.00 | 0.0 | 15.1 | -13.41 | -23.99 | 0.00 | 0.00 | 0.00 | -4.76 |
| 23 | 2 | -1.14 | 0.00 | 0.00 | -0.02 | 0.0 | -13.41 | -23.97 | 0.00 | 0.00 | 0.00 | -1.14 |
| | | -4.76 | 0.00 | 0.00 | 0.0 | 15.1 | -13.41 | -23.99 | 0.00 | 0.00 | 0.00 | -4.76 |
| 23 | 3 | -1.14 | 0.00 | 0.00 | -0.02 | 0.0 | -13.41 | -23.97 | 0.00 | 0.00 | 0.00 | -1.14 |
| | | -4.76 | 0.00 | 0.00 | 0.0 | 15.1 | -13.41 | -23.99 | 0.00 | 0.00 | 0.00 | -4.76 |
| 23 | 4 | -1.49 | 0.00 | 0.00 | -0.03 | 0.0 | -17.43 | -31.16 | 0.00 | 0.00 | 0.00 | -1.49 |
| | | -6.19 | 0.00 | 0.00 | 0.0 | 15.1 | -17.43 | -31.19 | 0.00 | 0.00 | 0.00 | -6.19 |
| 23 | 5 | -1.14 | 0.00 | 0.00 | -0.02 | 0.0 | -13.41 | -23.97 | 0.00 | 0.00 | 0.00 | -1.14 |
| | | -4.76 | 0.00 | 0.00 | 0.0 | 15.1 | -13.41 | -23.99 | 0.00 | 0.00 | 0.00 | -4.76 |
| 24 | 1 | 6.61 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -6.13 | 0.00 | 0.00 | 0.00 | 6.61 |
| | | 5.69 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -6.16 | 0.00 | 0.00 | 0.00 | 5.69 |
| 24 | 2 | 6.61 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -6.13 | 0.00 | 0.00 | 0.00 | 6.61 |
| | | 5.69 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -6.16 | 0.00 | 0.00 | 0.00 | 5.69 |
| 24 | 3 | 6.61 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -6.13 | 0.00 | 0.00 | 0.00 | 6.61 |
| | | 5.69 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -6.16 | 0.00 | 0.00 | 0.00 | 5.69 |
| 24 | 4 | 8.59 | 0.00 | 0.00 | -0.03 | 0.0 | -13.84 | -7.97 | 0.00 | 0.00 | 0.00 | 8.59 |
| | | 7.39 | 0.00 | 0.00 | 0.0 | 15.0 | -13.84 | -8.00 | 0.00 | 0.00 | 0.00 | 7.39 |
| 24 | 5 | 6.61 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -6.13 | 0.00 | 0.00 | 0.00 | 6.61 |
| | | 5.69 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -6.16 | 0.00 | 0.00 | 0.00 | 5.69 |
| 25 | 1 | 1.57 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 45.63 | 0.00 | 0.00 | 0.00 | -5.27 |
| | | -5.27 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 45.58 | 0.00 | 0.00 | 0.00 | 1.57 |
| 25 | 2 | 1.57 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 45.63 | 0.00 | 0.00 | 0.00 | -5.27 |
| | | -5.27 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 45.58 | 0.00 | 0.00 | 0.00 | 1.57 |
| 25 | 3 | 1.57 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 45.63 | 0.00 | 0.00 | 0.00 | -5.27 |
| | | -5.27 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 45.58 | 0.00 | 0.00 | 0.00 | 1.57 |
| 25 | 4 | 2.04 | 0.00 | 0.00 | -0.07 | 0.0 | -25.18 | 59.32 | 0.00 | 0.00 | 0.00 | -6.85 |
| | | -6.85 | 0.00 | 0.00 | 0.0 | 15.0 | -25.18 | 59.25 | 0.00 | 0.00 | 0.00 | 2.04 |
| 25 | 5 | 1.57 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 45.63 | 0.00 | 0.00 | 0.00 | -5.27 |
| | | -5.27 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 45.58 | 0.00 | 0.00 | 0.00 | 1.57 |
| 26 | 1 | 6.90 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 35.51 | 0.00 | 0.00 | 0.00 | 1.57 |
| | | 1.57 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 35.46 | 0.00 | 0.00 | 0.00 | 6.90 |
| 26 | 2 | 6.90 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 35.51 | 0.00 | 0.00 | 0.00 | 1.57 |
| | | 1.57 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 35.46 | 0.00 | 0.00 | 0.00 | 6.90 |
| 26 | 3 | 6.90 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 35.51 | 0.00 | 0.00 | 0.00 | 1.57 |
| | | 1.57 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 35.46 | 0.00 | 0.00 | 0.00 | 6.90 |
| 26 | 4 | 8.97 | 0.00 | 0.00 | -0.07 | 0.0 | -25.18 | 46.16 | 0.00 | 0.00 | 0.00 | 2.05 |
| | | 2.05 | 0.00 | 0.00 | 0.0 | 15.0 | -25.18 | 46.10 | 0.00 | 0.00 | 0.00 | 8.97 |
| 26 | 5 | 6.90 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 35.51 | 0.00 | 0.00 | 0.00 | 1.57 |
| | | 1.57 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 35.46 | 0.00 | 0.00 | 0.00 | 6.90 |
| 28 | 1 | 0.35 | 0.00 | 0.00 | -0.03 | 0.0 | -0.03 | 0.10 | 0.00 | 0.00 | 0.00 | 0.34 |
| | | 0.34 | 0.00 | 0.00 | 0.0 | 7.6 | -0.02 | 0.08 | 0.00 | 0.00 | 0.00 | 0.35 |
| 28 | 2 | 0.35 | 0.00 | 0.00 | -0.03 | 0.0 | -0.03 | 0.10 | 0.00 | 0.00 | 0.00 | 0.34 |
| | | 0.34 | 0.00 | 0.00 | 0.0 | 7.6 | -0.02 | 0.08 | 0.00 | 0.00 | 0.00 | 0.35 |
| 28 | 3 | 0.35 | 0.00 | 0.00 | -0.03 | 0.0 | -0.03 | 0.10 | 0.00 | 0.00 | 0.00 | 0.34 |
| | | 0.34 | 0.00 | 0.00 | 0.0 | 7.6 | -0.02 | 0.08 | 0.00 | 0.00 | 0.00 | 0.35 |
| 28 | 4 | 0.45 | 0.00 | 0.00 | -0.03 | 0.0 | -0.03 | 0.13 | 0.00 | 0.00 | 0.00 | 0.45 |
| | | 0.45 | 0.00 | 0.00 | 0.0 | 7.6 | -0.03 | 0.10 | 0.00 | 0.00 | 0.00 | 0.45 |
| 28 | 5 | 0.35 | 0.00 | 0.00 | -0.03 | 0.0 | -0.03 | 0.10 | 0.00 | 0.00 | 0.00 | 0.34 |
| | | 0.34 | 0.00 | 0.00 | 0.0 | 7.6 | -0.02 | 0.08 | 0.00 | 0.00 | 0.00 | 0.35 |
| 30 | 1 | 2.59 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -17.28 | 0.00 | 0.00 | 0.00 | 2.59 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -17.30 | 0.00 | 0.00 | 0.00 | 0.0 |
| 30 | 2 | 2.59 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -17.28 | 0.00 | 0.00 | 0.00 | 2.59 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -17.30 | 0.00 | 0.00 | 0.00 | 0.0 |
| 30 | 3 | 2.59 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -17.28 | 0.00 | 0.00 | 0.00 | 2.59 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -17.30 | 0.00 | 0.00 | 0.00 | 0.0 |
| 30 | 4 | 3.37 | 0.00 | 0.00 | -0.03 | 0.0 | -13.93 | -22.46 | 0.00 | 0.00 | 0.00 | 3.37 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -13.93 | -22.49 | 0.00 | 0.00 | 0.00 | 0.0 |
| 30 | 5 | 2.59 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -17.28 | 0.00 | 0.00 | 0.00 | 2.59 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -17.30 | 0.00 | 0.00 | 0.00 | 0.0 |
| 31 | 1 | 6.77 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -1.07 | 0.00 | 0.00 | 0.00 | 6.77 |
| | | 6.61 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -1.10 | 0.00 | 0.00 | 0.00 | 6.61 |
| 31 | 2 | 6.77 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -1.07 | 0.00 | 0.00 | 0.00 | 6.77 |
| | | 6.61 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -1.10 | 0.00 | 0.00 | 0.00 | 6.61 |
| 31 | 3 | 6.77 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -1.07 | 0.00 | 0.00 | 0.00 | 6.77 |
| | | 6.61 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -1.10 | 0.00 | 0.00 | 0.00 | 6.61 |
| 31 | 4 | 8.80 | 0.00 | 0.00 | -0.03 | 0.0 | -13.84 | -1.40 | 0.00 | 0.00 | 0.00 | 8.80 |
| | | 8.59 | 0.00 | 0.00 | 0.0 | 15.0 | -13.84 | -1.43 | 0.00 | 0.00 | 0.00 | 8.59 |
| 31 | 5 | 6.77 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -1.07 | 0.00 | 0.00 | 0.00 | 6.77 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | 6.61 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -1.10 | 0.00 | 0.00 | 0.00 | 6.61 |
| 32 | 1 | 5.80 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -8.18 | 0.00 | 0.00 | 0.00 | 5.80 |
| | | 4.57 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -8.21 | 0.00 | 0.00 | 0.00 | 4.57 |
| 32 | 2 | 5.80 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -8.18 | 0.00 | 0.00 | 0.00 | 5.80 |
| | | 4.57 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -8.21 | 0.00 | 0.00 | 0.00 | 4.57 |
| 32 | 3 | 5.80 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -8.18 | 0.00 | 0.00 | 0.00 | 5.80 |
| | | 4.57 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -8.21 | 0.00 | 0.00 | 0.00 | 4.57 |
| 32 | 4 | 7.55 | 0.00 | 0.00 | -0.03 | 0.0 | -13.93 | -10.64 | 0.00 | 0.00 | 0.00 | 7.55 |
| | | 5.95 | 0.00 | 0.00 | 0.0 | 15.0 | -13.93 | -10.67 | 0.00 | 0.00 | 0.00 | 5.95 |
| 32 | 5 | 5.80 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -8.18 | 0.00 | 0.00 | 0.00 | 5.80 |
| | | 4.57 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -8.21 | 0.00 | 0.00 | 0.00 | 4.57 |
| 33 | 1 | 4.58 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -13.24 | 0.00 | 0.00 | 0.00 | 4.58 |
| | | 2.59 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -13.26 | 0.00 | 0.00 | 0.00 | 2.59 |
| 33 | 2 | 4.58 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -13.24 | 0.00 | 0.00 | 0.00 | 4.58 |
| | | 2.59 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -13.26 | 0.00 | 0.00 | 0.00 | 2.59 |
| 33 | 3 | 4.58 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -13.24 | 0.00 | 0.00 | 0.00 | 4.58 |
| | | 2.59 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -13.26 | 0.00 | 0.00 | 0.00 | 2.59 |
| 33 | 4 | 5.96 | 0.00 | 0.00 | -0.03 | 0.0 | -13.93 | -17.21 | 0.00 | 0.00 | 0.00 | 5.96 |
| | | 3.37 | 0.00 | 0.00 | 0.0 | 15.0 | -13.93 | -17.24 | 0.00 | 0.00 | 0.00 | 3.37 |
| 33 | 5 | 4.58 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -13.24 | 0.00 | 0.00 | 0.00 | 4.58 |
| | | 2.59 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -13.26 | 0.00 | 0.00 | 0.00 | 2.59 |
| 34 | 1 | 5.69 | 0.00 | 0.00 | -0.02 | 0.0 | -10.65 | -10.14 | 0.00 | 0.00 | 0.00 | 5.69 |
| | | 4.16 | 0.00 | 0.00 | 0.0 | 15.0 | -10.65 | -10.16 | 0.00 | 0.00 | 0.00 | 4.16 |
| 34 | 2 | 5.69 | 0.00 | 0.00 | -0.02 | 0.0 | -10.65 | -10.14 | 0.00 | 0.00 | 0.00 | 5.69 |
| | | 4.16 | 0.00 | 0.00 | 0.0 | 15.0 | -10.65 | -10.16 | 0.00 | 0.00 | 0.00 | 4.16 |
| 34 | 3 | 5.69 | 0.00 | 0.00 | -0.02 | 0.0 | -10.65 | -10.14 | 0.00 | 0.00 | 0.00 | 5.69 |
| | | 4.16 | 0.00 | 0.00 | 0.0 | 15.0 | -10.65 | -10.16 | 0.00 | 0.00 | 0.00 | 4.16 |
| 34 | 4 | 7.39 | 0.00 | 0.00 | -0.03 | 0.0 | -13.84 | -13.18 | 0.00 | 0.00 | 0.00 | 7.39 |
| | | 5.41 | 0.00 | 0.00 | 0.0 | 15.0 | -13.84 | -13.21 | 0.00 | 0.00 | 0.00 | 5.41 |
| 34 | 5 | 5.69 | 0.00 | 0.00 | -0.02 | 0.0 | -10.65 | -10.14 | 0.00 | 0.00 | 0.00 | 5.69 |
| | | 4.16 | 0.00 | 0.00 | 0.0 | 15.0 | -10.65 | -10.16 | 0.00 | 0.00 | 0.00 | 4.16 |
| 35 | 1 | 13.80 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | -11.89 | 0.00 | 0.00 | 0.00 | 13.80 |
| | | 12.01 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | -11.94 | 0.00 | 0.00 | 0.00 | 12.01 |
| 35 | 2 | 13.80 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | -11.89 | 0.00 | 0.00 | 0.00 | 13.80 |
| | | 12.01 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | -11.94 | 0.00 | 0.00 | 0.00 | 12.01 |
| 35 | 3 | 13.80 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | -11.89 | 0.00 | 0.00 | 0.00 | 13.80 |
| | | 12.01 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | -11.94 | 0.00 | 0.00 | 0.00 | 12.01 |
| 35 | 4 | 17.94 | 0.00 | 0.00 | -0.07 | 0.0 | -24.49 | -15.46 | 0.00 | 0.00 | 0.00 | 17.94 |
| | | 15.62 | 0.00 | 0.00 | 0.0 | 15.0 | -24.49 | -15.53 | 0.00 | 0.00 | 0.00 | 15.62 |
| 35 | 5 | 13.80 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | -11.89 | 0.00 | 0.00 | 0.00 | 13.80 |
| | | 12.01 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | -11.94 | 0.00 | 0.00 | 0.00 | 12.01 |
| 36 | 1 | 12.01 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | -21.79 | 0.00 | 0.00 | 0.00 | 12.01 |
| | | 8.74 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | -21.84 | 0.00 | 0.00 | 0.00 | 8.74 |
| 36 | 2 | 12.01 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | -21.79 | 0.00 | 0.00 | 0.00 | 12.01 |
| | | 8.74 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | -21.84 | 0.00 | 0.00 | 0.00 | 8.74 |
| 36 | 3 | 12.01 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | -21.79 | 0.00 | 0.00 | 0.00 | 12.01 |
| | | 8.74 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | -21.84 | 0.00 | 0.00 | 0.00 | 8.74 |
| 36 | 4 | 15.62 | 0.00 | 0.00 | -0.07 | 0.0 | -24.49 | -28.32 | 0.00 | 0.00 | 0.00 | 15.62 |
| | | 11.36 | 0.00 | 0.00 | 0.0 | 15.0 | -24.49 | -28.39 | 0.00 | 0.00 | 0.00 | 11.36 |
| 36 | 5 | 12.01 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | -21.79 | 0.00 | 0.00 | 0.00 | 12.01 |
| | | 8.74 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | -21.84 | 0.00 | 0.00 | 0.00 | 8.74 |
| 37 | 1 | 11.92 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -16.40 | 0.00 | 0.00 | 0.00 | 11.92 |
| | | 9.45 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -16.45 | 0.00 | 0.00 | 0.00 | 9.45 |
| 37 | 2 | 11.92 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -16.40 | 0.00 | 0.00 | 0.00 | 11.92 |
| | | 9.45 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -16.45 | 0.00 | 0.00 | 0.00 | 9.45 |
| 37 | 3 | 11.92 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -16.40 | 0.00 | 0.00 | 0.00 | 11.92 |
| | | 9.45 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -16.45 | 0.00 | 0.00 | 0.00 | 9.45 |
| 37 | 4 | 15.49 | 0.00 | 0.00 | -0.07 | 0.0 | -24.35 | -21.32 | 0.00 | 0.00 | 0.00 | 15.49 |
| | | 12.29 | 0.00 | 0.00 | 0.0 | 15.0 | -24.35 | -21.39 | 0.00 | 0.00 | 0.00 | 12.29 |
| 37 | 5 | 11.92 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -16.40 | 0.00 | 0.00 | 0.00 | 11.92 |
| | | 9.45 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -16.45 | 0.00 | 0.00 | 0.00 | 9.45 |
| 38 | 1 | 9.45 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -26.52 | 0.00 | 0.00 | 0.00 | 9.45 |
| | | 5.47 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -26.57 | 0.00 | 0.00 | 0.00 | 5.47 |
| 38 | 2 | 9.45 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -26.52 | 0.00 | 0.00 | 0.00 | 9.45 |
| | | 5.47 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -26.57 | 0.00 | 0.00 | 0.00 | 5.47 |
| 38 | 3 | 9.45 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -26.52 | 0.00 | 0.00 | 0.00 | 9.45 |
| | | 5.47 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -26.57 | 0.00 | 0.00 | 0.00 | 5.47 |
| 38 | 4 | 12.29 | 0.00 | 0.00 | -0.07 | 0.0 | -24.35 | -34.47 | 0.00 | 0.00 | 0.00 | 12.29 |
| | | 7.11 | 0.00 | 0.00 | 0.0 | 15.0 | -24.35 | -34.54 | 0.00 | 0.00 | 0.00 | 7.11 |
| 38 | 5 | 9.45 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -26.52 | 0.00 | 0.00 | 0.00 | 9.45 |
| | | 5.47 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -26.57 | 0.00 | 0.00 | 0.00 | 5.47 |
| 40 | 1 | 1.52 | 0.00 | 0.00 | -10.11 | 0.0 | 0.00 | 6.10 | 0.00 | 0.00 | 0.00 | -2.15 |
| | | -2.15 | 0.00 | 0.00 | 0.0 | 200.0 | 0.00 | -4.01 | 0.00 | 0.00 | 0.00 | -0.06 |
| 40 | 2 | 1.52 | 0.00 | 0.00 | -10.11 | 0.0 | 0.00 | 6.10 | 0.00 | 0.00 | 0.00 | -2.15 |
| | | -2.15 | 0.00 | 0.00 | 0.0 | 200.0 | 0.00 | -4.01 | 0.00 | 0.00 | 0.00 | -0.06 |
| 40 | 3 | 1.52 | 0.00 | 0.00 | -10.11 | 0.0 | 0.00 | 6.10 | 0.00 | 0.00 | 0.00 | -2.15 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | -2.15 | 0.00 | 0.00 | 0.0 | 200.0 | 0.00 | -4.01 | 0.00 | 0.00 | 0.00 | -0.06 |
| 40 | 4 | 1.98 | 0.00 | 0.00 | -13.15 | 0.0 | 0.00 | 7.93 | 0.00 | 0.00 | 0.00 | -2.80 |
| | | -2.80 | 0.00 | 0.00 | 0.0 | 200.0 | 0.00 | -5.22 | 0.00 | 0.00 | 0.00 | -0.08 |
| 40 | 5 | 1.52 | 0.00 | 0.00 | -10.11 | 0.0 | 0.00 | 6.10 | 0.00 | 0.00 | 0.00 | -2.15 |
| | | -2.15 | 0.00 | 0.00 | 0.0 | 200.0 | 0.00 | -4.01 | 0.00 | 0.00 | 0.00 | -0.06 |
| 43 | 1 | 4.17 | 0.00 | 0.00 | -0.02 | 0.0 | -10.65 | -15.20 | 0.00 | 0.00 | 0.00 | 4.17 |
| | | 1.89 | 0.00 | 0.00 | 0.0 | 15.0 | -10.65 | -15.22 | 0.00 | 0.00 | 0.00 | 1.89 |
| 43 | 2 | 4.17 | 0.00 | 0.00 | -0.02 | 0.0 | -10.65 | -15.20 | 0.00 | 0.00 | 0.00 | 4.17 |
| | | 1.89 | 0.00 | 0.00 | 0.0 | 15.0 | -10.65 | -15.22 | 0.00 | 0.00 | 0.00 | 1.89 |
| 43 | 3 | 4.17 | 0.00 | 0.00 | -0.02 | 0.0 | -10.65 | -15.20 | 0.00 | 0.00 | 0.00 | 4.17 |
| | | 1.89 | 0.00 | 0.00 | 0.0 | 15.0 | -10.65 | -15.22 | 0.00 | 0.00 | 0.00 | 1.89 |
| 43 | 4 | 5.42 | 0.00 | 0.00 | -0.03 | 0.0 | -13.84 | -19.76 | 0.00 | 0.00 | 0.00 | 5.42 |
| | | 2.45 | 0.00 | 0.00 | 0.0 | 15.0 | -13.84 | -19.79 | 0.00 | 0.00 | 0.00 | 2.45 |
| 43 | 5 | 4.17 | 0.00 | 0.00 | -0.02 | 0.0 | -10.65 | -15.20 | 0.00 | 0.00 | 0.00 | 4.17 |
| | | 1.89 | 0.00 | 0.00 | 0.0 | 15.0 | -10.65 | -15.22 | 0.00 | 0.00 | 0.00 | 1.89 |
| 44 | 1 | -8.84 | 0.00 | 0.00 | -0.01 | 0.0 | -24.29 | -26.89 | 0.00 | 0.00 | 0.00 | -8.84 |
| | | -10.95 | 0.00 | 0.00 | 0.0 | 7.8 | -24.30 | -26.90 | 0.00 | 0.00 | 0.00 | -10.95 |
| 44 | 2 | -8.84 | 0.00 | 0.00 | -0.01 | 0.0 | -24.29 | -26.89 | 0.00 | 0.00 | 0.00 | -8.84 |
| | | -10.95 | 0.00 | 0.00 | 0.0 | 7.8 | -24.30 | -26.90 | 0.00 | 0.00 | 0.00 | -10.95 |
| 44 | 3 | -8.84 | 0.00 | 0.00 | -0.01 | 0.0 | -24.29 | -26.89 | 0.00 | 0.00 | 0.00 | -8.84 |
| | | -10.95 | 0.00 | 0.00 | 0.0 | 7.8 | -24.30 | -26.90 | 0.00 | 0.00 | 0.00 | -10.95 |
| 44 | 4 | -11.49 | 0.00 | 0.00 | -0.01 | 0.0 | -31.58 | -34.96 | 0.00 | 0.00 | 0.00 | -11.49 |
| | | -14.23 | 0.00 | 0.00 | 0.0 | 7.8 | -31.58 | -34.97 | 0.00 | 0.00 | 0.00 | -14.23 |
| 44 | 5 | -8.84 | 0.00 | 0.00 | -0.01 | 0.0 | -24.29 | -26.89 | 0.00 | 0.00 | 0.00 | -8.84 |
| | | -10.95 | 0.00 | 0.00 | 0.0 | 7.8 | -24.30 | -26.90 | 0.00 | 0.00 | 0.00 | -10.95 |
| 45 | 1 | 8.74 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | -31.91 | 0.00 | 0.00 | 0.00 | 8.74 |
| | | 3.95 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | -31.96 | 0.00 | 0.00 | 0.00 | 3.95 |
| 45 | 2 | 8.74 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | -31.91 | 0.00 | 0.00 | 0.00 | 8.74 |
| | | 3.95 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | -31.96 | 0.00 | 0.00 | 0.00 | 3.95 |
| 45 | 3 | 8.74 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | -31.91 | 0.00 | 0.00 | 0.00 | 8.74 |
| | | 3.95 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | -31.96 | 0.00 | 0.00 | 0.00 | 3.95 |
| 45 | 4 | 11.36 | 0.00 | 0.00 | -0.07 | 0.0 | -24.49 | -41.48 | 0.00 | 0.00 | 0.00 | 11.36 |
| | | 5.14 | 0.00 | 0.00 | 0.0 | 15.0 | -24.49 | -41.54 | 0.00 | 0.00 | 0.00 | 5.14 |
| 45 | 5 | 8.74 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | -31.91 | 0.00 | 0.00 | 0.00 | 8.74 |
| | | 3.95 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | -31.96 | 0.00 | 0.00 | 0.00 | 3.95 |
| 46 | 1 | -18.37 | 0.00 | 0.00 | -0.02 | 0.0 | -47.16 | -57.90 | 0.00 | 0.00 | 0.00 | -18.37 |
| | | -22.90 | 0.00 | 0.00 | 0.0 | 7.8 | -47.17 | -57.93 | 0.00 | 0.00 | 0.00 | -22.90 |
| 46 | 2 | -18.37 | 0.00 | 0.00 | -0.02 | 0.0 | -47.16 | -57.90 | 0.00 | 0.00 | 0.00 | -18.37 |
| | | -22.90 | 0.00 | 0.00 | 0.0 | 7.8 | -47.17 | -57.93 | 0.00 | 0.00 | 0.00 | -22.90 |
| 46 | 3 | -18.37 | 0.00 | 0.00 | -0.02 | 0.0 | -47.16 | -57.90 | 0.00 | 0.00 | 0.00 | -18.37 |
| | | -22.90 | 0.00 | 0.00 | 0.0 | 7.8 | -47.17 | -57.93 | 0.00 | 0.00 | 0.00 | -22.90 |
| 46 | 4 | -23.87 | 0.00 | 0.00 | -0.03 | 0.0 | -61.31 | -75.27 | 0.00 | 0.00 | 0.00 | -23.87 |
| | | -29.77 | 0.00 | 0.00 | 0.0 | 7.8 | -61.32 | -75.30 | 0.00 | 0.00 | 0.00 | -29.77 |
| 46 | 5 | -18.37 | 0.00 | 0.00 | -0.02 | 0.0 | -47.16 | -57.90 | 0.00 | 0.00 | 0.00 | -18.37 |
| | | -22.90 | 0.00 | 0.00 | 0.0 | 7.8 | -47.17 | -57.93 | 0.00 | 0.00 | 0.00 | -22.90 |
| 47 | 1 | -9.87 | 0.00 | 0.00 | -0.05 | 0.0 | -35.90 | -54.24 | 0.00 | 0.00 | 0.00 | -9.87 |
| | | -18.37 | 0.00 | 0.00 | 0.0 | 15.7 | -35.92 | -54.29 | 0.00 | 0.00 | 0.00 | -18.37 |
| 47 | 2 | -9.87 | 0.00 | 0.00 | -0.05 | 0.0 | -35.90 | -54.24 | 0.00 | 0.00 | 0.00 | -9.87 |
| | | -18.37 | 0.00 | 0.00 | 0.0 | 15.7 | -35.92 | -54.29 | 0.00 | 0.00 | 0.00 | -18.37 |
| 47 | 3 | -9.87 | 0.00 | 0.00 | -0.05 | 0.0 | -35.90 | -54.24 | 0.00 | 0.00 | 0.00 | -9.87 |
| | | -18.37 | 0.00 | 0.00 | 0.0 | 15.7 | -35.92 | -54.29 | 0.00 | 0.00 | 0.00 | -18.37 |
| 47 | 4 | -12.83 | 0.00 | 0.00 | -0.07 | 0.0 | -46.67 | -70.52 | 0.00 | 0.00 | 0.00 | -12.83 |
| | | -23.87 | 0.00 | 0.00 | 0.0 | 15.7 | -46.69 | -70.58 | 0.00 | 0.00 | 0.00 | -23.87 |
| 47 | 5 | -9.87 | 0.00 | 0.00 | -0.05 | 0.0 | -35.90 | -54.24 | 0.00 | 0.00 | 0.00 | -9.87 |
| | | -18.37 | 0.00 | 0.00 | 0.0 | 15.7 | -35.92 | -54.29 | 0.00 | 0.00 | 0.00 | -18.37 |
| 48 | 1 | 5.47 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -36.43 | 0.00 | 0.00 | 0.00 | 5.47 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -36.48 | 0.00 | 0.00 | 0.00 | 0.0 |
| 48 | 2 | 5.47 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -36.43 | 0.00 | 0.00 | 0.00 | 5.47 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -36.48 | 0.00 | 0.00 | 0.00 | 0.0 |
| 48 | 3 | 5.47 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -36.43 | 0.00 | 0.00 | 0.00 | 5.47 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -36.48 | 0.00 | 0.00 | 0.00 | 0.0 |
| 48 | 4 | 7.11 | 0.00 | 0.00 | -0.07 | 0.0 | -24.35 | -47.36 | 0.00 | 0.00 | 0.00 | 7.11 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -24.35 | -47.43 | 0.00 | 0.00 | 0.00 | 0.0 |
| 48 | 5 | 5.47 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -36.43 | 0.00 | 0.00 | 0.00 | 5.47 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -36.48 | 0.00 | 0.00 | 0.00 | 0.0 |
| 49 | 1 | 0.12 | 0.00 | 0.00 | -0.02 | 0.0 | -0.01 | 0.05 | 0.00 | 0.00 | 0.00 | 0.12 |
| | | 0.12 | 0.00 | 0.00 | 0.0 | 15.3 | -5.39e-03 | 0.03 | 0.00 | 0.00 | 0.00 | 0.12 |
| 49 | 2 | 0.12 | 0.00 | 0.00 | -0.02 | 0.0 | -0.01 | 0.05 | 0.00 | 0.00 | 0.00 | 0.12 |
| | | 0.12 | 0.00 | 0.00 | 0.0 | 15.3 | -5.39e-03 | 0.03 | 0.00 | 0.00 | 0.00 | 0.12 |
| 49 | 3 | 0.12 | 0.00 | 0.00 | -0.02 | 0.0 | -0.01 | 0.05 | 0.00 | 0.00 | 0.00 | 0.12 |
| | | 0.12 | 0.00 | 0.00 | 0.0 | 15.3 | -5.39e-03 | 0.03 | 0.00 | 0.00 | 0.00 | 0.12 |
| 49 | 4 | 0.16 | 0.00 | 0.00 | -0.03 | 0.0 | -0.02 | 0.07 | 0.00 | 0.00 | 0.00 | 0.15 |
| | | 0.15 | 0.00 | 0.00 | 0.0 | 15.3 | -7.01e-03 | 0.04 | 0.00 | 0.00 | 0.00 | 0.16 |
| 49 | 5 | 0.12 | 0.00 | 0.00 | -0.02 | 0.0 | -0.01 | 0.05 | 0.00 | 0.00 | 0.00 | 0.12 |
| | | 0.12 | 0.00 | 0.00 | 0.0 | 15.3 | -5.39e-03 | 0.03 | 0.00 | 0.00 | 0.00 | 0.12 |
| 50 | 1 | 14.07 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | -1.77 | 0.00 | 0.00 | 0.00 | 14.07 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | 13.80 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | -1.82 | 0.00 | 0.00 | 0.00 | 13.80 |
| 50 | 2 | 14.07 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | -1.77 | 0.00 | 0.00 | 0.00 | 14.07 |
| | | 13.80 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | -1.82 | 0.00 | 0.00 | 0.00 | 13.80 |
| 50 | 3 | 14.07 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | -1.77 | 0.00 | 0.00 | 0.00 | 14.07 |
| | | 13.80 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | -1.82 | 0.00 | 0.00 | 0.00 | 13.80 |
| 50 | 4 | 18.29 | 0.00 | 0.00 | -0.07 | 0.0 | -24.49 | -2.31 | 0.00 | 0.00 | 0.00 | 18.29 |
| | | 17.94 | 0.00 | 0.00 | 0.0 | 15.0 | -24.49 | -2.37 | 0.00 | 0.00 | 0.00 | 17.94 |
| 50 | 5 | 14.07 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | -1.77 | 0.00 | 0.00 | 0.00 | 14.07 |
| | | 13.80 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | -1.82 | 0.00 | 0.00 | 0.00 | 13.80 |
| 52 | 1 | 12.29 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 13.96 | 0.00 | 0.00 | 0.00 | 10.20 |
| | | 10.20 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 13.90 | 0.00 | 0.00 | 0.00 | 12.29 |
| 52 | 2 | 12.29 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 13.96 | 0.00 | 0.00 | 0.00 | 10.20 |
| | | 10.20 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 13.90 | 0.00 | 0.00 | 0.00 | 12.29 |
| 52 | 3 | 12.29 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 13.96 | 0.00 | 0.00 | 0.00 | 10.20 |
| | | 10.20 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 13.90 | 0.00 | 0.00 | 0.00 | 12.29 |
| 52 | 4 | 15.98 | 0.00 | 0.00 | -0.07 | 0.0 | -24.35 | 18.14 | 0.00 | 0.00 | 0.00 | 13.26 |
| | | 13.26 | 0.00 | 0.00 | 0.0 | 15.0 | -24.35 | 18.08 | 0.00 | 0.00 | 0.00 | 15.98 |
| 52 | 5 | 12.29 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 13.96 | 0.00 | 0.00 | 0.00 | 10.20 |
| | | 10.20 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 13.90 | 0.00 | 0.00 | 0.00 | 12.29 |
| 55 | 1 | 1.52 | 0.00 | 0.00 | -10.11 | 0.0 | 8.27e-04 | 6.10 | 0.00 | 0.00 | 0.00 | -2.15 |
| | | -2.15 | 0.00 | 0.00 | 0.0 | 200.0 | 8.27e-04 | -4.01 | 0.00 | 0.00 | 0.00 | -0.06 |
| 55 | 2 | 1.52 | 0.00 | 0.00 | -10.11 | 0.0 | 8.27e-04 | 6.10 | 0.00 | 0.00 | 0.00 | -2.15 |
| | | -2.15 | 0.00 | 0.00 | 0.0 | 200.0 | 8.27e-04 | -4.01 | 0.00 | 0.00 | 0.00 | -0.06 |
| 55 | 3 | 1.52 | 0.00 | 0.00 | -10.11 | 0.0 | 8.27e-04 | 6.10 | 0.00 | 0.00 | 0.00 | -2.15 |
| | | -2.15 | 0.00 | 0.00 | 0.0 | 200.0 | 8.27e-04 | -4.01 | 0.00 | 0.00 | 0.00 | -0.06 |
| 55 | 4 | 1.98 | 0.00 | 0.00 | -13.15 | 0.0 | 1.08e-03 | 7.93 | 0.00 | 0.00 | 0.00 | -2.79 |
| | | -2.79 | 0.00 | 0.00 | 0.0 | 200.0 | 1.08e-03 | -5.22 | 0.00 | 0.00 | 0.00 | -0.08 |
| 55 | 5 | 1.52 | 0.00 | 0.00 | -10.11 | 0.0 | 8.27e-04 | 6.10 | 0.00 | 0.00 | 0.00 | -2.15 |
| | | -2.15 | 0.00 | 0.00 | 0.0 | 200.0 | 8.27e-04 | -4.01 | 0.00 | 0.00 | 0.00 | -0.06 |
| 57 | 1 | 5.98 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 6.99 | 0.00 | 0.00 | 0.00 | 4.93 |
| | | 4.93 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 6.97 | 0.00 | 0.00 | 0.00 | 5.98 |
| 57 | 2 | 5.98 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 6.99 | 0.00 | 0.00 | 0.00 | 4.93 |
| | | 4.93 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 6.97 | 0.00 | 0.00 | 0.00 | 5.98 |
| 57 | 3 | 5.98 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 6.99 | 0.00 | 0.00 | 0.00 | 4.93 |
| | | 4.93 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 6.97 | 0.00 | 0.00 | 0.00 | 5.98 |
| 57 | 4 | 7.78 | 0.00 | 0.00 | -0.03 | 0.0 | -13.93 | 9.09 | 0.00 | 0.00 | 0.00 | 6.42 |
| | | 6.42 | 0.00 | 0.00 | 0.0 | 15.0 | -13.93 | 9.06 | 0.00 | 0.00 | 0.00 | 7.78 |
| 57 | 5 | 5.98 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 6.99 | 0.00 | 0.00 | 0.00 | 4.93 |
| | | 4.93 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 6.97 | 0.00 | 0.00 | 0.00 | 5.98 |
| 58 | 1 | 1.50 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 44.09 | 0.00 | 0.00 | 0.00 | -5.11 |
| | | -5.11 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 44.04 | 0.00 | 0.00 | 0.00 | 1.50 |
| 58 | 2 | 1.50 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 44.09 | 0.00 | 0.00 | 0.00 | -5.11 |
| | | -5.11 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 44.04 | 0.00 | 0.00 | 0.00 | 1.50 |
| 58 | 3 | 1.50 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 44.09 | 0.00 | 0.00 | 0.00 | -5.11 |
| | | -5.11 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 44.04 | 0.00 | 0.00 | 0.00 | 1.50 |
| 58 | 4 | 1.95 | 0.00 | 0.00 | -0.07 | 0.0 | -24.35 | 57.31 | 0.00 | 0.00 | 0.00 | -6.64 |
| | | -6.64 | 0.00 | 0.00 | 0.0 | 15.0 | -24.35 | 57.25 | 0.00 | 0.00 | 0.00 | 1.95 |
| 58 | 5 | 1.50 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 44.09 | 0.00 | 0.00 | 0.00 | -5.11 |
| | | -5.11 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 44.04 | 0.00 | 0.00 | 0.00 | 1.50 |
| 60 | 1 | 9.02 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -33.25 | 0.00 | 0.00 | 0.00 | 9.02 |
| | | 4.03 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -33.30 | 0.00 | 0.00 | 0.00 | 4.03 |
| 60 | 2 | 9.02 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -33.25 | 0.00 | 0.00 | 0.00 | 9.02 |
| | | 4.03 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -33.30 | 0.00 | 0.00 | 0.00 | 4.03 |
| 60 | 3 | 9.02 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -33.25 | 0.00 | 0.00 | 0.00 | 9.02 |
| | | 4.03 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -33.30 | 0.00 | 0.00 | 0.00 | 4.03 |
| 60 | 4 | 11.72 | 0.00 | 0.00 | -0.07 | 0.0 | -25.14 | -43.22 | 0.00 | 0.00 | 0.00 | 11.72 |
| | | 5.23 | 0.00 | 0.00 | 0.0 | 15.0 | -25.14 | -43.29 | 0.00 | 0.00 | 0.00 | 5.23 |
| 60 | 5 | 9.02 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -33.25 | 0.00 | 0.00 | 0.00 | 9.02 |
| | | 4.03 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -33.30 | 0.00 | 0.00 | 0.00 | 4.03 |
| 61 | 1 | 0.07 | 0.00 | 0.00 | -0.01 | 0.0 | -0.32 | 0.21 | 0.00 | 0.00 | 0.00 | 0.04 |
| | | 0.04 | 0.00 | 0.00 | 0.0 | 15.3 | -0.30 | 0.19 | 0.00 | 0.00 | 0.00 | 0.07 |
| 61 | 2 | 0.07 | 0.00 | 0.00 | -0.01 | 0.0 | -0.32 | 0.21 | 0.00 | 0.00 | 0.00 | 0.04 |
| | | 0.04 | 0.00 | 0.00 | 0.0 | 15.3 | -0.30 | 0.19 | 0.00 | 0.00 | 0.00 | 0.07 |
| 61 | 3 | 0.07 | 0.00 | 0.00 | -0.01 | 0.0 | -0.32 | 0.21 | 0.00 | 0.00 | 0.00 | 0.04 |
| | | 0.04 | 0.00 | 0.00 | 0.0 | 15.3 | -0.30 | 0.19 | 0.00 | 0.00 | 0.00 | 0.07 |
| 61 | 4 | 0.09 | 0.00 | 0.00 | -0.02 | 0.0 | -0.42 | 0.27 | 0.00 | 0.00 | 0.00 | 0.05 |
| | | 0.05 | 0.00 | 0.00 | 0.0 | 15.3 | -0.39 | 0.25 | 0.00 | 0.00 | 0.00 | 0.09 |
| 61 | 5 | 0.07 | 0.00 | 0.00 | -0.01 | 0.0 | -0.32 | 0.21 | 0.00 | 0.00 | 0.00 | 0.04 |
| | | 0.04 | 0.00 | 0.00 | 0.0 | 15.3 | -0.30 | 0.19 | 0.00 | 0.00 | 0.00 | 0.07 |
| 62 | 1 | 12.18 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -16.46 | 0.00 | 0.00 | 0.00 | 12.18 |
| | | 9.71 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -16.52 | 0.00 | 0.00 | 0.00 | 9.71 |
| 62 | 2 | 12.18 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -16.46 | 0.00 | 0.00 | 0.00 | 12.18 |
| | | 9.71 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -16.52 | 0.00 | 0.00 | 0.00 | 9.71 |
| 62 | 3 | 12.18 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -16.46 | 0.00 | 0.00 | 0.00 | 12.18 |
| | | 9.71 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -16.52 | 0.00 | 0.00 | 0.00 | 9.71 |
| 62 | 4 | 15.83 | 0.00 | 0.00 | -0.07 | 0.0 | -25.18 | -21.40 | 0.00 | 0.00 | 0.00 | 15.83 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | 12.62 | 0.00 | 0.00 | 0.0 | 15.0 | -25.18 | -21.47 | 0.00 | 0.00 | 0.00 | 12.62 |
| 62 | 5 | 12.18 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -16.46 | 0.00 | 0.00 | 0.00 | 12.18 |
| | | 9.71 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -16.52 | 0.00 | 0.00 | 0.00 | 9.71 |
| 63 | 1 | -18.87 | 0.00 | 0.00 | -0.02 | 0.0 | -48.29 | -60.26 | 0.00 | 0.00 | 0.00 | -18.87 |
| | | -23.60 | 0.00 | 0.00 | 0.0 | 7.8 | -48.30 | -60.28 | 0.00 | 0.00 | 0.00 | -23.60 |
| 63 | 2 | -18.87 | 0.00 | 0.00 | -0.02 | 0.0 | -48.29 | -60.26 | 0.00 | 0.00 | 0.00 | -18.87 |
| | | -23.60 | 0.00 | 0.00 | 0.0 | 7.8 | -48.30 | -60.28 | 0.00 | 0.00 | 0.00 | -23.60 |
| 63 | 3 | -18.87 | 0.00 | 0.00 | -0.02 | 0.0 | -48.29 | -60.26 | 0.00 | 0.00 | 0.00 | -18.87 |
| | | -23.60 | 0.00 | 0.00 | 0.0 | 7.8 | -48.30 | -60.28 | 0.00 | 0.00 | 0.00 | -23.60 |
| 63 | 4 | -24.53 | 0.00 | 0.00 | -0.03 | 0.0 | -62.78 | -78.34 | 0.00 | 0.00 | 0.00 | -24.53 |
| | | -30.67 | 0.00 | 0.00 | 0.0 | 7.8 | -62.80 | -78.37 | 0.00 | 0.00 | 0.00 | -30.67 |
| 63 | 5 | -18.87 | 0.00 | 0.00 | -0.02 | 0.0 | -48.29 | -60.26 | 0.00 | 0.00 | 0.00 | -18.87 |
| | | -23.60 | 0.00 | 0.00 | 0.0 | 7.8 | -48.30 | -60.28 | 0.00 | 0.00 | 0.00 | -23.60 |
| 67 | 1 | -6.35 | 0.00 | 0.00 | -0.02 | 0.0 | -11.29 | 31.03 | 0.00 | 0.00 | 0.00 | -11.00 |
| | | -11.00 | 0.00 | 0.00 | 0.0 | 15.0 | -11.29 | 31.01 | 0.00 | 0.00 | 0.00 | -6.35 |
| 67 | 2 | -6.35 | 0.00 | 0.00 | -0.02 | 0.0 | -11.29 | 31.03 | 0.00 | 0.00 | 0.00 | -11.00 |
| | | -11.00 | 0.00 | 0.00 | 0.0 | 15.0 | -11.29 | 31.01 | 0.00 | 0.00 | 0.00 | -6.35 |
| 67 | 3 | -6.35 | 0.00 | 0.00 | -0.02 | 0.0 | -11.29 | 31.03 | 0.00 | 0.00 | 0.00 | -11.00 |
| | | -11.00 | 0.00 | 0.00 | 0.0 | 15.0 | -11.29 | 31.01 | 0.00 | 0.00 | 0.00 | -6.35 |
| 67 | 4 | -8.26 | 0.00 | 0.00 | -0.03 | 0.0 | -14.67 | 40.34 | 0.00 | 0.00 | 0.00 | -14.30 |
| | | -14.30 | 0.00 | 0.00 | 0.0 | 15.0 | -14.67 | 40.31 | 0.00 | 0.00 | 0.00 | -8.26 |
| 67 | 5 | -6.35 | 0.00 | 0.00 | -0.02 | 0.0 | -11.29 | 31.03 | 0.00 | 0.00 | 0.00 | -11.00 |
| | | -11.00 | 0.00 | 0.00 | 0.0 | 15.0 | -11.29 | 31.01 | 0.00 | 0.00 | 0.00 | -6.35 |
| 68 | 1 | 0.34 | 0.00 | 0.00 | -0.03 | 0.0 | -0.01 | 0.08 | 0.00 | 0.00 | 0.00 | 0.34 |
| | | 0.34 | 0.00 | 0.00 | 0.0 | 7.6 | -9.68e-03 | 0.06 | 0.00 | 0.00 | 0.00 | 0.34 |
| 68 | 2 | 0.34 | 0.00 | 0.00 | -0.03 | 0.0 | -0.01 | 0.08 | 0.00 | 0.00 | 0.00 | 0.34 |
| | | 0.34 | 0.00 | 0.00 | 0.0 | 7.6 | -9.68e-03 | 0.06 | 0.00 | 0.00 | 0.00 | 0.34 |
| 68 | 3 | 0.34 | 0.00 | 0.00 | -0.03 | 0.0 | -0.01 | 0.08 | 0.00 | 0.00 | 0.00 | 0.34 |
| | | 0.34 | 0.00 | 0.00 | 0.0 | 7.6 | -9.68e-03 | 0.06 | 0.00 | 0.00 | 0.00 | 0.34 |
| 68 | 4 | 0.44 | 0.00 | 0.00 | -0.03 | 0.0 | -0.02 | 0.11 | 0.00 | 0.00 | 0.00 | 0.44 |
| | | 0.44 | 0.00 | 0.00 | 0.0 | 7.6 | -0.01 | 0.08 | 0.00 | 0.00 | 0.00 | 0.44 |
| 68 | 5 | 0.34 | 0.00 | 0.00 | -0.03 | 0.0 | -0.01 | 0.08 | 0.00 | 0.00 | 0.00 | 0.34 |
| | | 0.34 | 0.00 | 0.00 | 0.0 | 7.6 | -9.68e-03 | 0.06 | 0.00 | 0.00 | 0.00 | 0.34 |
| 69 | 1 | -10.20 | 0.00 | 0.00 | -0.05 | 0.0 | -36.77 | -55.38 | 0.00 | 0.00 | 0.00 | -10.20 |
| | | -18.87 | 0.00 | 0.00 | 0.0 | 15.7 | -36.78 | -55.43 | 0.00 | 0.00 | 0.00 | -18.87 |
| 69 | 2 | -10.20 | 0.00 | 0.00 | -0.05 | 0.0 | -36.77 | -55.38 | 0.00 | 0.00 | 0.00 | -10.20 |
| | | -18.87 | 0.00 | 0.00 | 0.0 | 15.7 | -36.78 | -55.43 | 0.00 | 0.00 | 0.00 | -18.87 |
| 69 | 3 | -10.20 | 0.00 | 0.00 | -0.05 | 0.0 | -36.77 | -55.38 | 0.00 | 0.00 | 0.00 | -10.20 |
| | | -18.87 | 0.00 | 0.00 | 0.0 | 15.7 | -36.78 | -55.43 | 0.00 | 0.00 | 0.00 | -18.87 |
| 69 | 4 | -13.25 | 0.00 | 0.00 | -0.07 | 0.0 | -47.80 | -72.00 | 0.00 | 0.00 | 0.00 | -13.25 |
| | | -24.53 | 0.00 | 0.00 | 0.0 | 15.7 | -47.82 | -72.07 | 0.00 | 0.00 | 0.00 | -24.53 |
| 69 | 5 | -10.20 | 0.00 | 0.00 | -0.05 | 0.0 | -36.77 | -55.38 | 0.00 | 0.00 | 0.00 | -10.20 |
| | | -18.87 | 0.00 | 0.00 | 0.0 | 15.7 | -36.78 | -55.43 | 0.00 | 0.00 | 0.00 | -18.87 |
| 70 | 1 | 6.59 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 33.97 | 0.00 | 0.00 | 0.00 | 1.50 |
| | | 1.50 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 33.92 | 0.00 | 0.00 | 0.00 | 6.59 |
| 70 | 2 | 6.59 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 33.97 | 0.00 | 0.00 | 0.00 | 1.50 |
| | | 1.50 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 33.92 | 0.00 | 0.00 | 0.00 | 6.59 |
| 70 | 3 | 6.59 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 33.97 | 0.00 | 0.00 | 0.00 | 1.50 |
| | | 1.50 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 33.92 | 0.00 | 0.00 | 0.00 | 6.59 |
| 70 | 4 | 8.57 | 0.00 | 0.00 | -0.07 | 0.0 | -24.35 | 44.16 | 0.00 | 0.00 | 0.00 | 1.95 |
| | | 1.95 | 0.00 | 0.00 | 0.0 | 15.0 | -24.35 | 44.09 | 0.00 | 0.00 | 0.00 | 8.57 |
| 70 | 5 | 6.59 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 33.97 | 0.00 | 0.00 | 0.00 | 1.50 |
| | | 1.50 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 33.92 | 0.00 | 0.00 | 0.00 | 6.59 |
| 71 | 1 | 13.14 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 3.77 | 0.00 | 0.00 | 0.00 | 12.58 |
| | | 12.58 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 3.72 | 0.00 | 0.00 | 0.00 | 13.14 |
| 71 | 2 | 13.14 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 3.77 | 0.00 | 0.00 | 0.00 | 12.58 |
| | | 12.58 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 3.72 | 0.00 | 0.00 | 0.00 | 13.14 |
| 71 | 3 | 13.14 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 3.77 | 0.00 | 0.00 | 0.00 | 12.58 |
| | | 12.58 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 3.72 | 0.00 | 0.00 | 0.00 | 13.14 |
| 71 | 4 | 17.08 | 0.00 | 0.00 | -0.07 | 0.0 | -25.18 | 4.90 | 0.00 | 0.00 | 0.00 | 16.35 |
| | | 16.35 | 0.00 | 0.00 | 0.0 | 15.0 | -25.18 | 4.84 | 0.00 | 0.00 | 0.00 | 17.08 |
| 71 | 5 | 13.14 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 3.77 | 0.00 | 0.00 | 0.00 | 12.58 |
| | | 12.58 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 3.72 | 0.00 | 0.00 | 0.00 | 13.14 |
| 72 | 1 | 10.20 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 24.07 | 0.00 | 0.00 | 0.00 | 6.59 |
| | | 6.59 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 24.02 | 0.00 | 0.00 | 0.00 | 10.20 |
| 72 | 2 | 10.20 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 24.07 | 0.00 | 0.00 | 0.00 | 6.59 |
| | | 6.59 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 24.02 | 0.00 | 0.00 | 0.00 | 10.20 |
| 72 | 3 | 10.20 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 24.07 | 0.00 | 0.00 | 0.00 | 6.59 |
| | | 6.59 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 24.02 | 0.00 | 0.00 | 0.00 | 10.20 |
| 72 | 4 | 13.26 | 0.00 | 0.00 | -0.07 | 0.0 | -24.35 | 31.30 | 0.00 | 0.00 | 0.00 | 8.57 |
| | | 8.57 | 0.00 | 0.00 | 0.0 | 15.0 | -24.35 | 31.23 | 0.00 | 0.00 | 0.00 | 13.26 |
| 72 | 5 | 10.20 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 24.07 | 0.00 | 0.00 | 0.00 | 6.59 |
| | | 6.59 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 24.02 | 0.00 | 0.00 | 0.00 | 10.20 |
| 73 | 1 | 12.29 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 13.96 | 0.00 | 0.00 | 0.00 | 10.20 |
| | | 10.20 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 13.90 | 0.00 | 0.00 | 0.00 | 12.29 |
| 73 | 2 | 12.29 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 13.96 | 0.00 | 0.00 | 0.00 | 10.20 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | 10.20 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 13.90 | 0.00 | 0.00 | 0.00 | 12.29 |
| 73 | 3 | 12.29 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 13.96 | 0.00 | 0.00 | 0.00 | 10.20 |
| | | 10.20 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 13.90 | 0.00 | 0.00 | 0.00 | 12.29 |
| 73 | 4 | 15.98 | 0.00 | 0.00 | -0.07 | 0.0 | -24.35 | 18.14 | 0.00 | 0.00 | 0.00 | 13.26 |
| | | 13.26 | 0.00 | 0.00 | 0.0 | 15.0 | -24.35 | 18.08 | 0.00 | 0.00 | 0.00 | 15.98 |
| 73 | 5 | 12.29 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 13.96 | 0.00 | 0.00 | 0.00 | 10.20 |
| | | 10.20 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 13.90 | 0.00 | 0.00 | 0.00 | 12.29 |
| 74 | 1 | 10.05 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | 28.58 | 0.00 | 0.00 | 0.00 | 5.77 |
| | | 5.77 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | 28.53 | 0.00 | 0.00 | 0.00 | 10.05 |
| 74 | 2 | 10.05 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | 28.58 | 0.00 | 0.00 | 0.00 | 5.77 |
| | | 5.77 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | 28.53 | 0.00 | 0.00 | 0.00 | 10.05 |
| 74 | 3 | 10.05 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | 28.58 | 0.00 | 0.00 | 0.00 | 5.77 |
| | | 5.77 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | 28.53 | 0.00 | 0.00 | 0.00 | 10.05 |
| 74 | 4 | 13.07 | 0.00 | 0.00 | -0.07 | 0.0 | -24.49 | 37.16 | 0.00 | 0.00 | 0.00 | 7.50 |
| | | 7.50 | 0.00 | 0.00 | 0.0 | 15.0 | -24.49 | 37.09 | 0.00 | 0.00 | 0.00 | 13.07 |
| 74 | 5 | 10.05 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | 28.58 | 0.00 | 0.00 | 0.00 | 5.77 |
| | | 5.77 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | 28.53 | 0.00 | 0.00 | 0.00 | 10.05 |
| 75 | 1 | 12.58 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 13.89 | 0.00 | 0.00 | 0.00 | 10.50 |
| | | 10.50 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 13.84 | 0.00 | 0.00 | 0.00 | 12.58 |
| 75 | 2 | 12.58 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 13.89 | 0.00 | 0.00 | 0.00 | 10.50 |
| | | 10.50 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 13.84 | 0.00 | 0.00 | 0.00 | 12.58 |
| 75 | 3 | 12.58 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 13.89 | 0.00 | 0.00 | 0.00 | 10.50 |
| | | 10.50 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 13.84 | 0.00 | 0.00 | 0.00 | 12.58 |
| 75 | 4 | 16.35 | 0.00 | 0.00 | -0.07 | 0.0 | -25.18 | 18.06 | 0.00 | 0.00 | 0.00 | 13.65 |
| | | 13.65 | 0.00 | 0.00 | 0.0 | 15.0 | -25.18 | 17.99 | 0.00 | 0.00 | 0.00 | 16.35 |
| 75 | 5 | 12.58 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 13.89 | 0.00 | 0.00 | 0.00 | 10.50 |
| | | 10.50 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 13.84 | 0.00 | 0.00 | 0.00 | 12.58 |
| 76 | 1 | -13.24 | 0.00 | 0.00 | -0.05 | 0.0 | -19.90 | 63.97 | 0.00 | 0.00 | 0.00 | -22.83 |
| | | -22.83 | 0.00 | 0.00 | 0.0 | 15.0 | -19.90 | 63.92 | 0.00 | 0.00 | 0.00 | -13.24 |
| 76 | 2 | -13.24 | 0.00 | 0.00 | -0.05 | 0.0 | -19.90 | 63.97 | 0.00 | 0.00 | 0.00 | -22.83 |
| | | -22.83 | 0.00 | 0.00 | 0.0 | 15.0 | -19.90 | 63.92 | 0.00 | 0.00 | 0.00 | -13.24 |
| 76 | 3 | -13.24 | 0.00 | 0.00 | -0.05 | 0.0 | -19.90 | 63.97 | 0.00 | 0.00 | 0.00 | -22.83 |
| | | -22.83 | 0.00 | 0.00 | 0.0 | 15.0 | -19.90 | 63.92 | 0.00 | 0.00 | 0.00 | -13.24 |
| 76 | 4 | -17.21 | 0.00 | 0.00 | -0.07 | 0.0 | -25.87 | 83.16 | 0.00 | 0.00 | 0.00 | -29.68 |
| | | -29.68 | 0.00 | 0.00 | 0.0 | 15.0 | -25.87 | 83.10 | 0.00 | 0.00 | 0.00 | -17.21 |
| 76 | 5 | -13.24 | 0.00 | 0.00 | -0.05 | 0.0 | -19.90 | 63.97 | 0.00 | 0.00 | 0.00 | -22.83 |
| | | -22.83 | 0.00 | 0.00 | 0.0 | 15.0 | -19.90 | 63.92 | 0.00 | 0.00 | 0.00 | -13.24 |
| 77 | 1 | -0.09 | 0.00 | 0.00 | -3.50 | 0.0 | 3.79 | 1.59 | 0.00 | 0.00 | 0.00 | -0.81 |
| | | -1.13 | 0.00 | 0.00 | 0.0 | 200.0 | 3.79 | -1.91 | 0.00 | 0.00 | 0.00 | -1.13 |
| 77 | 2 | -0.09 | 0.00 | 0.00 | -3.50 | 0.0 | 3.79 | 1.59 | 0.00 | 0.00 | 0.00 | -0.81 |
| | | -1.13 | 0.00 | 0.00 | 0.0 | 200.0 | 3.79 | -1.91 | 0.00 | 0.00 | 0.00 | -1.13 |
| 77 | 3 | -0.09 | 0.00 | 0.00 | -3.50 | 0.0 | 3.79 | 1.59 | 0.00 | 0.00 | 0.00 | -0.81 |
| | | -1.13 | 0.00 | 0.00 | 0.0 | 200.0 | 3.79 | -1.91 | 0.00 | 0.00 | 0.00 | -1.13 |
| 77 | 4 | -0.12 | 0.00 | 0.00 | -4.55 | 0.0 | 4.92 | 2.07 | 0.00 | 0.00 | 0.00 | -1.06 |
| | | -1.47 | 0.00 | 0.00 | 0.0 | 200.0 | 4.92 | -2.48 | 0.00 | 0.00 | 0.00 | -1.47 |
| 77 | 5 | -0.09 | 0.00 | 0.00 | -3.50 | 0.0 | 3.79 | 1.59 | 0.00 | 0.00 | 0.00 | -0.81 |
| | | -1.13 | 0.00 | 0.00 | 0.0 | 200.0 | 3.79 | -1.91 | 0.00 | 0.00 | 0.00 | -1.13 |
| 78 | 1 | 5.71 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -38.04 | 0.00 | 0.00 | 0.00 | 5.71 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -38.09 | 0.00 | 0.00 | 0.00 | 0.0 |
| 78 | 2 | 5.71 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -38.04 | 0.00 | 0.00 | 0.00 | 5.71 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -38.09 | 0.00 | 0.00 | 0.00 | 0.0 |
| 78 | 3 | 5.71 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -38.04 | 0.00 | 0.00 | 0.00 | 5.71 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -38.09 | 0.00 | 0.00 | 0.00 | 0.0 |
| 78 | 4 | 7.42 | 0.00 | 0.00 | -0.07 | 0.0 | -25.18 | -49.45 | 0.00 | 0.00 | 0.00 | 7.42 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -25.18 | -49.51 | 0.00 | 0.00 | 0.00 | 0.0 |
| 78 | 5 | 5.71 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -38.04 | 0.00 | 0.00 | 0.00 | 5.71 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -38.09 | 0.00 | 0.00 | 0.00 | 0.0 |
| 79 | 1 | -6.35 | 0.00 | 0.00 | -0.02 | 0.0 | -11.29 | 31.03 | 0.00 | 0.00 | 0.00 | -11.00 |
| | | -11.00 | 0.00 | 0.00 | 0.0 | 15.0 | -11.29 | 31.01 | 0.00 | 0.00 | 0.00 | -6.35 |
| 79 | 2 | -6.35 | 0.00 | 0.00 | -0.02 | 0.0 | -11.29 | 31.03 | 0.00 | 0.00 | 0.00 | -11.00 |
| | | -11.00 | 0.00 | 0.00 | 0.0 | 15.0 | -11.29 | 31.01 | 0.00 | 0.00 | 0.00 | -6.35 |
| 79 | 3 | -6.35 | 0.00 | 0.00 | -0.02 | 0.0 | -11.29 | 31.03 | 0.00 | 0.00 | 0.00 | -11.00 |
| | | -11.00 | 0.00 | 0.00 | 0.0 | 15.0 | -11.29 | 31.01 | 0.00 | 0.00 | 0.00 | -6.35 |
| 79 | 4 | -8.26 | 0.00 | 0.00 | -0.03 | 0.0 | -14.68 | 40.34 | 0.00 | 0.00 | 0.00 | -14.30 |
| | | -14.30 | 0.00 | 0.00 | 0.0 | 15.0 | -14.67 | 40.31 | 0.00 | 0.00 | 0.00 | -8.26 |
| 79 | 5 | -6.35 | 0.00 | 0.00 | -0.02 | 0.0 | -11.29 | 31.03 | 0.00 | 0.00 | 0.00 | -11.00 |
| | | -11.00 | 0.00 | 0.00 | 0.0 | 15.0 | -11.29 | 31.01 | 0.00 | 0.00 | 0.00 | -6.35 |
| 81 | 1 | 6.90 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 35.51 | 0.00 | 0.00 | 0.00 | 1.57 |
| | | 1.57 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 35.46 | 0.00 | 0.00 | 0.00 | 6.90 |
| 81 | 2 | 6.90 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 35.51 | 0.00 | 0.00 | 0.00 | 1.57 |
| | | 1.57 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 35.46 | 0.00 | 0.00 | 0.00 | 6.90 |
| 81 | 3 | 6.90 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 35.51 | 0.00 | 0.00 | 0.00 | 1.57 |
| | | 1.57 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 35.46 | 0.00 | 0.00 | 0.00 | 6.90 |
| 81 | 4 | 8.97 | 0.00 | 0.00 | -0.07 | 0.0 | -25.18 | 46.16 | 0.00 | 0.00 | 0.00 | 2.05 |
| | | 2.05 | 0.00 | 0.00 | 0.0 | 15.0 | -25.18 | 46.10 | 0.00 | 0.00 | 0.00 | 8.97 |
| 81 | 5 | 6.90 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 35.51 | 0.00 | 0.00 | 0.00 | 1.57 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | 1.57 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 35.46 | 0.00 | 0.00 | 0.00 | 6.90 |
| 82 | 1 | 0.08 | 0.00 | 0.00 | -0.02 | 0.0 | -1.11 | 0.41 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | 0.02 | 0.00 | 0.00 | 0.0 | 15.3 | -1.06 | 0.39 | 0.00 | 0.00 | 0.00 | 0.08 |
| 82 | 2 | 0.08 | 0.00 | 0.00 | -0.02 | 0.0 | -1.11 | 0.41 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | 0.02 | 0.00 | 0.00 | 0.0 | 15.3 | -1.06 | 0.39 | 0.00 | 0.00 | 0.00 | 0.08 |
| 82 | 3 | 0.08 | 0.00 | 0.00 | -0.02 | 0.0 | -1.11 | 0.41 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | 0.02 | 0.00 | 0.00 | 0.0 | 15.3 | -1.06 | 0.39 | 0.00 | 0.00 | 0.00 | 0.08 |
| 82 | 4 | 0.11 | 0.00 | 0.00 | -0.02 | 0.0 | -1.44 | 0.53 | 0.00 | 0.00 | 0.00 | 0.03 |
| | | 0.03 | 0.00 | 0.00 | 0.0 | 15.3 | -1.38 | 0.51 | 0.00 | 0.00 | 0.00 | 0.11 |
| 82 | 5 | 0.08 | 0.00 | 0.00 | -0.02 | 0.0 | -1.11 | 0.41 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | 0.02 | 0.00 | 0.00 | 0.0 | 15.3 | -1.06 | 0.39 | 0.00 | 0.00 | 0.00 | 0.08 |
| 83 | 1 | 0.04 | 0.00 | 0.00 | -8.41e-03 | 0.0 | -0.46 | 0.17 | 0.00 | 0.00 | 0.00 | 0.01 |
| | | 0.01 | 0.00 | 0.00 | 0.0 | 15.3 | -0.43 | 0.17 | 0.00 | 0.00 | 0.00 | 0.04 |
| 83 | 2 | 0.04 | 0.00 | 0.00 | -8.41e-03 | 0.0 | -0.46 | 0.17 | 0.00 | 0.00 | 0.00 | 0.01 |
| | | 0.01 | 0.00 | 0.00 | 0.0 | 15.3 | -0.43 | 0.17 | 0.00 | 0.00 | 0.00 | 0.04 |
| 83 | 3 | 0.04 | 0.00 | 0.00 | -8.41e-03 | 0.0 | -0.46 | 0.17 | 0.00 | 0.00 | 0.00 | 0.01 |
| | | 0.01 | 0.00 | 0.00 | 0.0 | 15.3 | -0.43 | 0.17 | 0.00 | 0.00 | 0.00 | 0.04 |
| 83 | 4 | 0.05 | 0.00 | 0.00 | -0.01 | 0.0 | -0.60 | 0.23 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | 0.02 | 0.00 | 0.00 | 0.0 | 15.3 | -0.57 | 0.22 | 0.00 | 0.00 | 0.00 | 0.05 |
| 83 | 5 | 0.04 | 0.00 | 0.00 | -8.41e-03 | 0.0 | -0.46 | 0.17 | 0.00 | 0.00 | 0.00 | 0.01 |
| | | 0.01 | 0.00 | 0.00 | 0.0 | 15.3 | -0.43 | 0.17 | 0.00 | 0.00 | 0.00 | 0.04 |
| 84 | 1 | 5.77 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | 38.50 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | 38.45 | 0.00 | 0.00 | 0.00 | 5.77 |
| 84 | 2 | 5.77 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | 38.50 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | 38.45 | 0.00 | 0.00 | 0.00 | 5.77 |
| 84 | 3 | 5.77 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | 38.50 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | 38.45 | 0.00 | 0.00 | 0.00 | 5.77 |
| 84 | 4 | 7.50 | 0.00 | 0.00 | -0.07 | 0.0 | -24.49 | 50.05 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -24.49 | 49.98 | 0.00 | 0.00 | 0.00 | 7.50 |
| 84 | 5 | 5.77 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | 38.50 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | 38.45 | 0.00 | 0.00 | 0.00 | 5.77 |
| 85 | 1 | -13.64 | 0.00 | 0.00 | -0.05 | 0.0 | -20.57 | 65.50 | 0.00 | 0.00 | 0.00 | -23.46 |
| | | -23.46 | 0.00 | 0.00 | 0.0 | 15.0 | -20.57 | 65.45 | 0.00 | 0.00 | 0.00 | -13.64 |
| 85 | 2 | -13.64 | 0.00 | 0.00 | -0.05 | 0.0 | -20.57 | 65.50 | 0.00 | 0.00 | 0.00 | -23.46 |
| | | -23.46 | 0.00 | 0.00 | 0.0 | 15.0 | -20.57 | 65.45 | 0.00 | 0.00 | 0.00 | -13.64 |
| 85 | 3 | -13.64 | 0.00 | 0.00 | -0.05 | 0.0 | -20.57 | 65.50 | 0.00 | 0.00 | 0.00 | -23.46 |
| | | -23.46 | 0.00 | 0.00 | 0.0 | 15.0 | -20.57 | 65.45 | 0.00 | 0.00 | 0.00 | -13.64 |
| 85 | 4 | -17.73 | 0.00 | 0.00 | -0.07 | 0.0 | -26.74 | 85.15 | 0.00 | 0.00 | 0.00 | -30.49 |
| | | -30.49 | 0.00 | 0.00 | 0.0 | 15.0 | -26.74 | 85.09 | 0.00 | 0.00 | 0.00 | -17.73 |
| 85 | 5 | -13.64 | 0.00 | 0.00 | -0.05 | 0.0 | -20.57 | 65.50 | 0.00 | 0.00 | 0.00 | -23.46 |
| | | -23.46 | 0.00 | 0.00 | 0.0 | 15.0 | -20.57 | 65.45 | 0.00 | 0.00 | 0.00 | -13.64 |
| 86 | 1 | 14.24 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -11.62 | 0.00 | 0.00 | 0.00 | 14.24 |
| | | 12.49 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -11.67 | 0.00 | 0.00 | 0.00 | 12.49 |
| 86 | 2 | 14.24 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -11.62 | 0.00 | 0.00 | 0.00 | 14.24 |
| | | 12.49 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -11.67 | 0.00 | 0.00 | 0.00 | 12.49 |
| 86 | 3 | 14.24 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -11.62 | 0.00 | 0.00 | 0.00 | 14.24 |
| | | 12.49 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -11.67 | 0.00 | 0.00 | 0.00 | 12.49 |
| 86 | 4 | 18.51 | 0.00 | 0.00 | -0.07 | 0.0 | -25.14 | -15.11 | 0.00 | 0.00 | 0.00 | 18.51 |
| | | 16.24 | 0.00 | 0.00 | 0.0 | 15.0 | -25.14 | -15.18 | 0.00 | 0.00 | 0.00 | 16.24 |
| 86 | 5 | 14.24 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -11.62 | 0.00 | 0.00 | 0.00 | 14.24 |
| | | 12.49 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -11.67 | 0.00 | 0.00 | 0.00 | 12.49 |
| 87 | 1 | -13.24 | 0.00 | 0.00 | -0.05 | 0.0 | -19.91 | 63.97 | 0.00 | 0.00 | 0.00 | -22.83 |
| | | -22.83 | 0.00 | 0.00 | 0.0 | 15.0 | -19.90 | 63.92 | 0.00 | 0.00 | 0.00 | -13.24 |
| 87 | 2 | -13.24 | 0.00 | 0.00 | -0.05 | 0.0 | -19.91 | 63.97 | 0.00 | 0.00 | 0.00 | -22.83 |
| | | -22.83 | 0.00 | 0.00 | 0.0 | 15.0 | -19.90 | 63.92 | 0.00 | 0.00 | 0.00 | -13.24 |
| 87 | 3 | -13.24 | 0.00 | 0.00 | -0.05 | 0.0 | -19.91 | 63.97 | 0.00 | 0.00 | 0.00 | -22.83 |
| | | -22.83 | 0.00 | 0.00 | 0.0 | 15.0 | -19.90 | 63.92 | 0.00 | 0.00 | 0.00 | -13.24 |
| 87 | 4 | -17.21 | 0.00 | 0.00 | -0.07 | 0.0 | -25.88 | 83.16 | 0.00 | 0.00 | 0.00 | -29.68 |
| | | -29.68 | 0.00 | 0.00 | 0.0 | 15.0 | -25.88 | 83.10 | 0.00 | 0.00 | 0.00 | -17.21 |
| 87 | 5 | -13.24 | 0.00 | 0.00 | -0.05 | 0.0 | -19.91 | 63.97 | 0.00 | 0.00 | 0.00 | -22.83 |
| | | -22.83 | 0.00 | 0.00 | 0.0 | 15.0 | -19.90 | 63.92 | 0.00 | 0.00 | 0.00 | -13.24 |
| 88 | 1 | 0.12 | 0.00 | 0.00 | -0.02 | 0.0 | -0.09 | 0.14 | 0.00 | 0.00 | 0.00 | 0.10 |
| | | 0.10 | 0.00 | 0.00 | 0.0 | 15.3 | -0.07 | 0.12 | 0.00 | 0.00 | 0.00 | 0.12 |
| 88 | 2 | 0.12 | 0.00 | 0.00 | -0.02 | 0.0 | -0.09 | 0.14 | 0.00 | 0.00 | 0.00 | 0.10 |
| | | 0.10 | 0.00 | 0.00 | 0.0 | 15.3 | -0.07 | 0.12 | 0.00 | 0.00 | 0.00 | 0.12 |
| 88 | 3 | 0.12 | 0.00 | 0.00 | -0.02 | 0.0 | -0.09 | 0.14 | 0.00 | 0.00 | 0.00 | 0.10 |
| | | 0.10 | 0.00 | 0.00 | 0.0 | 15.3 | -0.07 | 0.12 | 0.00 | 0.00 | 0.00 | 0.12 |
| 88 | 4 | 0.15 | 0.00 | 0.00 | -0.03 | 0.0 | -0.11 | 0.18 | 0.00 | 0.00 | 0.00 | 0.13 |
| | | 0.13 | 0.00 | 0.00 | 0.0 | 15.3 | -0.10 | 0.16 | 0.00 | 0.00 | 0.00 | 0.15 |
| 88 | 5 | 0.12 | 0.00 | 0.00 | -0.02 | 0.0 | -0.09 | 0.14 | 0.00 | 0.00 | 0.00 | 0.10 |
| | | 0.10 | 0.00 | 0.00 | 0.0 | 15.3 | -0.07 | 0.12 | 0.00 | 0.00 | 0.00 | 0.12 |
| 89 | 1 | 12.86 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 3.84 | 0.00 | 0.00 | 0.00 | 12.29 |
| | | 12.29 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 3.79 | 0.00 | 0.00 | 0.00 | 12.86 |
| 89 | 2 | 12.86 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 3.84 | 0.00 | 0.00 | 0.00 | 12.29 |
| | | 12.29 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 3.79 | 0.00 | 0.00 | 0.00 | 12.86 |
| 89 | 3 | 12.86 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 3.84 | 0.00 | 0.00 | 0.00 | 12.29 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | 12.29 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 3.79 | 0.00 | 0.00 | 0.00 | 12.86 |
| 89 | 4 | 16.72 | 0.00 | 0.00 | -0.07 | 0.0 | -24.35 | 4.99 | 0.00 | 0.00 | 0.00 | 15.98 |
| | | 15.98 | 0.00 | 0.00 | 0.0 | 15.0 | -24.35 | 4.92 | 0.00 | 0.00 | 0.00 | 16.72 |
| 89 | 5 | 12.86 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 3.84 | 0.00 | 0.00 | 0.00 | 12.29 |
| | | 12.29 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 3.79 | 0.00 | 0.00 | 0.00 | 12.86 |
| 90 | 1 | 0.68 | 0.00 | 0.00 | -9.50 | 0.0 | 0.21 | 4.56 | 0.00 | 0.00 | 0.00 | -1.51 |
| | | -1.89 | 0.00 | 0.00 | 3.46 | 200.0 | 0.21 | -4.94 | 0.00 | 0.00 | 0.00 | -1.89 |
| 90 | 2 | 0.68 | 0.00 | 0.00 | -9.50 | 0.0 | 0.21 | 4.56 | 0.00 | 0.00 | 0.00 | -1.51 |
| | | -1.89 | 0.00 | 0.00 | 3.46 | 200.0 | 0.21 | -4.94 | 0.00 | 0.00 | 0.00 | -1.89 |
| 90 | 3 | 0.68 | 0.00 | 0.00 | -9.50 | 0.0 | 0.21 | 4.56 | 0.00 | 0.00 | 0.00 | -1.51 |
| | | -1.89 | 0.00 | 0.00 | 3.46 | 200.0 | 0.21 | -4.94 | 0.00 | 0.00 | 0.00 | -1.89 |
| 90 | 4 | 0.88 | 0.00 | 0.00 | -12.35 | 0.0 | 0.28 | 5.92 | 0.00 | 0.00 | 0.00 | -1.96 |
| | | -2.46 | 0.00 | 0.00 | 4.50 | 200.0 | 0.28 | -6.43 | 0.00 | 0.00 | 0.00 | -2.46 |
| 90 | 5 | 0.68 | 0.00 | 0.00 | -9.50 | 0.0 | 0.21 | 4.56 | 0.00 | 0.00 | 0.00 | -1.51 |
| | | -1.89 | 0.00 | 0.00 | 3.46 | 200.0 | 0.21 | -4.94 | 0.00 | 0.00 | 0.00 | -1.89 |
| 91 | 1 | 12.82 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | 18.46 | 0.00 | 0.00 | 0.00 | 10.06 |
| | | 10.06 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | 18.41 | 0.00 | 0.00 | 0.00 | 12.82 |
| 91 | 2 | 12.82 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | 18.46 | 0.00 | 0.00 | 0.00 | 10.06 |
| | | 10.06 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | 18.41 | 0.00 | 0.00 | 0.00 | 12.82 |
| 91 | 3 | 12.82 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | 18.46 | 0.00 | 0.00 | 0.00 | 10.06 |
| | | 10.06 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | 18.41 | 0.00 | 0.00 | 0.00 | 12.82 |
| 91 | 4 | 16.67 | 0.00 | 0.00 | -0.07 | 0.0 | -24.49 | 24.00 | 0.00 | 0.00 | 0.00 | 13.07 |
| | | 13.07 | 0.00 | 0.00 | 0.0 | 15.0 | -24.49 | 23.94 | 0.00 | 0.00 | 0.00 | 16.67 |
| 91 | 5 | 12.82 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | 18.46 | 0.00 | 0.00 | 0.00 | 10.06 |
| | | 10.06 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | 18.41 | 0.00 | 0.00 | 0.00 | 12.82 |
| 92 | 1 | 12.86 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 3.84 | 0.00 | 0.00 | 0.00 | 12.29 |
| | | 12.29 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 3.79 | 0.00 | 0.00 | 0.00 | 12.86 |
| 92 | 2 | 12.86 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 3.84 | 0.00 | 0.00 | 0.00 | 12.29 |
| | | 12.29 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 3.79 | 0.00 | 0.00 | 0.00 | 12.86 |
| 92 | 3 | 12.86 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 3.84 | 0.00 | 0.00 | 0.00 | 12.29 |
| | | 12.29 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 3.79 | 0.00 | 0.00 | 0.00 | 12.86 |
| 92 | 4 | 16.72 | 0.00 | 0.00 | -0.07 | 0.0 | -24.35 | 4.99 | 0.00 | 0.00 | 0.00 | 15.98 |
| | | 15.98 | 0.00 | 0.00 | 0.0 | 15.0 | -24.35 | 4.92 | 0.00 | 0.00 | 0.00 | 16.72 |
| 92 | 5 | 12.86 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 3.84 | 0.00 | 0.00 | 0.00 | 12.29 |
| | | 12.29 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 3.79 | 0.00 | 0.00 | 0.00 | 12.86 |
| 94 | 1 | 12.86 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -6.28 | 0.00 | 0.00 | 0.00 | 12.86 |
| | | 11.92 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -6.33 | 0.00 | 0.00 | 0.00 | 11.92 |
| 94 | 2 | 12.86 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -6.28 | 0.00 | 0.00 | 0.00 | 12.86 |
| | | 11.92 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -6.33 | 0.00 | 0.00 | 0.00 | 11.92 |
| 94 | 3 | 12.86 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -6.28 | 0.00 | 0.00 | 0.00 | 12.86 |
| | | 11.92 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -6.33 | 0.00 | 0.00 | 0.00 | 11.92 |
| 94 | 4 | 16.72 | 0.00 | 0.00 | -0.07 | 0.0 | -24.35 | -8.17 | 0.00 | 0.00 | 0.00 | 16.72 |
| | | 15.49 | 0.00 | 0.00 | 0.0 | 15.0 | -24.35 | -8.23 | 0.00 | 0.00 | 0.00 | 15.49 |
| 94 | 5 | 12.86 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -6.28 | 0.00 | 0.00 | 0.00 | 12.86 |
| | | 11.92 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -6.33 | 0.00 | 0.00 | 0.00 | 11.92 |
| 95 | 1 | 0.69 | 0.00 | 0.00 | -10.11 | 0.0 | 3.76e-03 | 4.81 | 0.00 | 0.00 | 0.00 | -1.60 |
| | | -2.09 | 0.00 | 0.00 | 0.0 | 200.0 | 3.76e-03 | -5.30 | 0.00 | 0.00 | 0.00 | -2.09 |
| 95 | 2 | 0.69 | 0.00 | 0.00 | -10.11 | 0.0 | 3.76e-03 | 4.81 | 0.00 | 0.00 | 0.00 | -1.60 |
| | | -2.09 | 0.00 | 0.00 | 0.0 | 200.0 | 3.76e-03 | -5.30 | 0.00 | 0.00 | 0.00 | -2.09 |
| 95 | 3 | 0.69 | 0.00 | 0.00 | -10.11 | 0.0 | 3.76e-03 | 4.81 | 0.00 | 0.00 | 0.00 | -1.60 |
| | | -2.09 | 0.00 | 0.00 | 0.0 | 200.0 | 3.76e-03 | -5.30 | 0.00 | 0.00 | 0.00 | -2.09 |
| 95 | 4 | 0.89 | 0.00 | 0.00 | -13.15 | 0.0 | 4.89e-03 | 6.25 | 0.00 | 0.00 | 0.00 | -2.07 |
| | | -2.72 | 0.00 | 0.00 | 0.0 | 200.0 | 4.89e-03 | -6.89 | 0.00 | 0.00 | 0.00 | -2.72 |
| 95 | 5 | 0.69 | 0.00 | 0.00 | -10.11 | 0.0 | 3.76e-03 | 4.81 | 0.00 | 0.00 | 0.00 | -1.60 |
| | | -2.09 | 0.00 | 0.00 | 0.0 | 200.0 | 3.76e-03 | -5.30 | 0.00 | 0.00 | 0.00 | -2.09 |
| 97 | 1 | 0.02 | 0.00 | 0.00 | 0.07 | 0.0 | 0.15 | -0.05 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | -0.01 | 0.00 | 0.00 | 0.20 | 200.0 | 0.15 | 0.03 | 0.00 | 0.00 | 0.00 | -6.83e-04 |
| 97 | 2 | 0.02 | 0.00 | 0.00 | 0.07 | 0.0 | 0.15 | -0.05 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | -0.01 | 0.00 | 0.00 | 0.20 | 200.0 | 0.15 | 0.03 | 0.00 | 0.00 | 0.00 | -6.83e-04 |
| 97 | 3 | 0.02 | 0.00 | 0.00 | 0.07 | 0.0 | 0.15 | -0.05 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | -0.01 | 0.00 | 0.00 | 0.20 | 200.0 | 0.15 | 0.03 | 0.00 | 0.00 | 0.00 | -6.83e-04 |
| 97 | 4 | 0.02 | 0.00 | 0.00 | 0.09 | 0.0 | 0.20 | -0.06 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | -0.01 | 0.00 | 0.00 | 0.26 | 200.0 | 0.20 | 0.04 | 0.00 | 0.00 | 0.00 | -8.87e-04 |
| 97 | 5 | 0.02 | 0.00 | 0.00 | 0.07 | 0.0 | 0.15 | -0.05 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | -0.01 | 0.00 | 0.00 | 0.20 | 200.0 | 0.15 | 0.03 | 0.00 | 0.00 | 0.00 | -6.83e-04 |
| 98 | 1 | 0.02 | 0.00 | 0.00 | 0.07 | 0.0 | 0.08 | -0.03 | 0.00 | 0.00 | 0.00 | 0.01 |
| | | -4.66e-03 | 0.00 | 0.00 | 0.20 | 200.0 | 0.08 | 0.04 | 0.00 | 0.00 | 0.00 | 0.02 |
| 98 | 2 | 0.02 | 0.00 | 0.00 | 0.07 | 0.0 | 0.08 | -0.03 | 0.00 | 0.00 | 0.00 | 0.01 |
| | | -4.66e-03 | 0.00 | 0.00 | 0.20 | 200.0 | 0.08 | 0.04 | 0.00 | 0.00 | 0.00 | 0.02 |
| 98 | 3 | 0.02 | 0.00 | 0.00 | 0.07 | 0.0 | 0.08 | -0.03 | 0.00 | 0.00 | 0.00 | 0.01 |
| | | -4.66e-03 | 0.00 | 0.00 | 0.20 | 200.0 | 0.08 | 0.04 | 0.00 | 0.00 | 0.00 | 0.02 |
| 98 | 4 | 0.02 | 0.00 | 0.00 | 0.09 | 0.0 | 0.10 | -0.04 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | -6.06e-03 | 0.00 | 0.00 | 0.26 | 200.0 | 0.10 | 0.05 | 0.00 | 0.00 | 0.00 | 0.02 |
| 98 | 5 | 0.02 | 0.00 | 0.00 | 0.07 | 0.0 | 0.08 | -0.03 | 0.00 | 0.00 | 0.00 | 0.01 |
| | | -4.66e-03 | 0.00 | 0.00 | 0.20 | 200.0 | 0.08 | 0.04 | 0.00 | 0.00 | 0.00 | 0.02 |
| 99 | 1 | 12.86 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -6.28 | 0.00 | 0.00 | 0.00 | 12.86 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | 11.92 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -6.33 | 0.00 | 0.00 | 0.00 | 11.92 |
| 99 | 2 | 12.86 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -6.28 | 0.00 | 0.00 | 0.00 | 12.86 |
| | | 11.92 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -6.33 | 0.00 | 0.00 | 0.00 | 11.92 |
| 99 | 3 | 12.86 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -6.28 | 0.00 | 0.00 | 0.00 | 12.86 |
| | | 11.92 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -6.33 | 0.00 | 0.00 | 0.00 | 11.92 |
| 99 | 4 | 16.72 | 0.00 | 0.00 | -0.07 | 0.0 | -24.35 | -8.17 | 0.00 | 0.00 | 0.00 | 16.72 |
| | | 15.49 | 0.00 | 0.00 | 0.0 | 15.0 | -24.35 | -8.23 | 0.00 | 0.00 | 0.00 | 15.49 |
| 99 | 5 | 12.86 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -6.28 | 0.00 | 0.00 | 0.00 | 12.86 |
| | | 11.92 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -6.33 | 0.00 | 0.00 | 0.00 | 11.92 |
| 100 | 1 | 0.34 | 0.00 | 0.00 | -0.05 | 0.0 | -0.13 | 0.30 | 0.00 | 0.00 | 0.00 | 0.30 |
| | | 0.30 | 0.00 | 0.00 | 0.0 | 15.3 | -0.11 | 0.25 | 0.00 | 0.00 | 0.00 | 0.34 |
| 100 | 2 | 0.34 | 0.00 | 0.00 | -0.05 | 0.0 | -0.13 | 0.30 | 0.00 | 0.00 | 0.00 | 0.30 |
| | | 0.30 | 0.00 | 0.00 | 0.0 | 15.3 | -0.11 | 0.25 | 0.00 | 0.00 | 0.00 | 0.34 |
| 100 | 3 | 0.34 | 0.00 | 0.00 | -0.05 | 0.0 | -0.13 | 0.30 | 0.00 | 0.00 | 0.00 | 0.30 |
| | | 0.30 | 0.00 | 0.00 | 0.0 | 15.3 | -0.11 | 0.25 | 0.00 | 0.00 | 0.00 | 0.34 |
| 100 | 4 | 0.45 | 0.00 | 0.00 | -0.06 | 0.0 | -0.17 | 0.39 | 0.00 | 0.00 | 0.00 | 0.39 |
| | | 0.39 | 0.00 | 0.00 | 0.0 | 15.3 | -0.15 | 0.32 | 0.00 | 0.00 | 0.00 | 0.45 |
| 100 | 5 | 0.34 | 0.00 | 0.00 | -0.05 | 0.0 | -0.13 | 0.30 | 0.00 | 0.00 | 0.00 | 0.30 |
| | | 0.30 | 0.00 | 0.00 | 0.0 | 15.3 | -0.11 | 0.25 | 0.00 | 0.00 | 0.00 | 0.34 |
| 101 | 1 | -5.11 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 54.21 | 0.00 | 0.00 | 0.00 | -13.24 |
| | | -13.24 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 54.15 | 0.00 | 0.00 | 0.00 | -5.11 |
| 101 | 2 | -5.11 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 54.21 | 0.00 | 0.00 | 0.00 | -13.24 |
| | | -13.24 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 54.15 | 0.00 | 0.00 | 0.00 | -5.11 |
| 101 | 3 | -5.11 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 54.21 | 0.00 | 0.00 | 0.00 | -13.24 |
| | | -13.24 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 54.15 | 0.00 | 0.00 | 0.00 | -5.11 |
| 101 | 4 | -6.64 | 0.00 | 0.00 | -0.07 | 0.0 | -24.35 | 70.47 | 0.00 | 0.00 | 0.00 | -17.21 |
| | | -17.21 | 0.00 | 0.00 | 0.0 | 15.0 | -24.35 | 70.40 | 0.00 | 0.00 | 0.00 | -6.64 |
| 101 | 5 | -5.11 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 54.21 | 0.00 | 0.00 | 0.00 | -13.24 |
| | | -13.24 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 54.15 | 0.00 | 0.00 | 0.00 | -5.11 |
| 104 | 1 | 0.16 | 0.00 | 0.00 | -0.03 | 0.0 | -0.84 | 0.51 | 0.00 | 0.00 | 0.00 | 0.08 |
| | | 0.08 | 0.00 | 0.00 | 0.0 | 15.3 | -0.80 | 0.49 | 0.00 | 0.00 | 0.00 | 0.16 |
| 104 | 2 | 0.16 | 0.00 | 0.00 | -0.03 | 0.0 | -0.84 | 0.51 | 0.00 | 0.00 | 0.00 | 0.08 |
| | | 0.08 | 0.00 | 0.00 | 0.0 | 15.3 | -0.80 | 0.49 | 0.00 | 0.00 | 0.00 | 0.16 |
| 104 | 3 | 0.16 | 0.00 | 0.00 | -0.03 | 0.0 | -0.84 | 0.51 | 0.00 | 0.00 | 0.00 | 0.08 |
| | | 0.08 | 0.00 | 0.00 | 0.0 | 15.3 | -0.80 | 0.49 | 0.00 | 0.00 | 0.00 | 0.16 |
| 104 | 4 | 0.21 | 0.00 | 0.00 | -0.04 | 0.0 | -1.10 | 0.67 | 0.00 | 0.00 | 0.00 | 0.11 |
| | | 0.11 | 0.00 | 0.00 | 0.0 | 15.3 | -1.04 | 0.63 | 0.00 | 0.00 | 0.00 | 0.21 |
| 104 | 5 | 0.16 | 0.00 | 0.00 | -0.03 | 0.0 | -0.84 | 0.51 | 0.00 | 0.00 | 0.00 | 0.08 |
| | | 0.08 | 0.00 | 0.00 | 0.0 | 15.3 | -0.80 | 0.49 | 0.00 | 0.00 | 0.00 | 0.16 |
| 106 | 1 | 0.12 | 0.00 | 0.00 | -0.01 | 0.0 | 0.01 | -0.04 | 0.00 | 0.00 | 0.00 | 0.12 |
| | | 0.12 | 0.00 | 0.00 | 0.0 | 7.6 | 0.02 | -0.06 | 0.00 | 0.00 | 0.00 | 0.12 |
| 106 | 2 | 0.12 | 0.00 | 0.00 | -0.01 | 0.0 | 0.01 | -0.04 | 0.00 | 0.00 | 0.00 | 0.12 |
| | | 0.12 | 0.00 | 0.00 | 0.0 | 7.6 | 0.02 | -0.06 | 0.00 | 0.00 | 0.00 | 0.12 |
| 106 | 3 | 0.12 | 0.00 | 0.00 | -0.01 | 0.0 | 0.01 | -0.04 | 0.00 | 0.00 | 0.00 | 0.12 |
| | | 0.12 | 0.00 | 0.00 | 0.0 | 7.6 | 0.02 | -0.06 | 0.00 | 0.00 | 0.00 | 0.12 |
| 106 | 4 | 0.16 | 0.00 | 0.00 | -0.02 | 0.0 | 0.02 | -0.06 | 0.00 | 0.00 | 0.00 | 0.16 |
| | | 0.16 | 0.00 | 0.00 | 0.0 | 7.6 | 0.02 | -0.07 | 0.00 | 0.00 | 0.00 | 0.16 |
| 106 | 5 | 0.12 | 0.00 | 0.00 | -0.01 | 0.0 | 0.01 | -0.04 | 0.00 | 0.00 | 0.00 | 0.12 |
| | | 0.12 | 0.00 | 0.00 | 0.0 | 7.6 | 0.02 | -0.06 | 0.00 | 0.00 | 0.00 | 0.12 |
| 107 | 1 | 0.12 | 0.00 | 0.00 | -0.02 | 0.0 | -0.02 | 0.06 | 0.00 | 0.00 | 0.00 | 0.12 |
| | | 0.12 | 0.00 | 0.00 | 0.0 | 15.3 | -8.46e-03 | 0.04 | 0.00 | 0.00 | 0.00 | 0.12 |
| 107 | 2 | 0.12 | 0.00 | 0.00 | -0.02 | 0.0 | -0.02 | 0.06 | 0.00 | 0.00 | 0.00 | 0.12 |
| | | 0.12 | 0.00 | 0.00 | 0.0 | 15.3 | -8.46e-03 | 0.04 | 0.00 | 0.00 | 0.00 | 0.12 |
| 107 | 3 | 0.12 | 0.00 | 0.00 | -0.02 | 0.0 | -0.02 | 0.06 | 0.00 | 0.00 | 0.00 | 0.12 |
| | | 0.12 | 0.00 | 0.00 | 0.0 | 15.3 | -8.46e-03 | 0.04 | 0.00 | 0.00 | 0.00 | 0.12 |
| 107 | 4 | 0.16 | 0.00 | 0.00 | -0.03 | 0.0 | -0.02 | 0.08 | 0.00 | 0.00 | 0.00 | 0.15 |
| | | 0.15 | 0.00 | 0.00 | 0.0 | 15.3 | -0.01 | 0.05 | 0.00 | 0.00 | 0.00 | 0.16 |
| 107 | 5 | 0.12 | 0.00 | 0.00 | -0.02 | 0.0 | -0.02 | 0.06 | 0.00 | 0.00 | 0.00 | 0.12 |
| | | 0.12 | 0.00 | 0.00 | 0.0 | 15.3 | -8.46e-03 | 0.04 | 0.00 | 0.00 | 0.00 | 0.12 |
| 108 | 1 | 0.12 | 0.00 | 0.00 | -0.01 | 0.0 | 0.02 | -0.05 | 0.00 | 0.00 | 0.00 | 0.12 |
| | | 0.12 | 0.00 | 0.00 | 0.0 | 7.6 | 0.02 | -0.06 | 0.00 | 0.00 | 0.00 | 0.12 |
| 108 | 2 | 0.12 | 0.00 | 0.00 | -0.01 | 0.0 | 0.02 | -0.05 | 0.00 | 0.00 | 0.00 | 0.12 |
| | | 0.12 | 0.00 | 0.00 | 0.0 | 7.6 | 0.02 | -0.06 | 0.00 | 0.00 | 0.00 | 0.12 |
| 108 | 3 | 0.12 | 0.00 | 0.00 | -0.01 | 0.0 | 0.02 | -0.05 | 0.00 | 0.00 | 0.00 | 0.12 |
| | | 0.12 | 0.00 | 0.00 | 0.0 | 7.6 | 0.02 | -0.06 | 0.00 | 0.00 | 0.00 | 0.12 |
| 108 | 4 | 0.16 | 0.00 | 0.00 | -0.02 | 0.0 | 0.02 | -0.07 | 0.00 | 0.00 | 0.00 | 0.16 |
| | | 0.15 | 0.00 | 0.00 | 0.0 | 7.6 | 0.02 | -0.08 | 0.00 | 0.00 | 0.00 | 0.15 |
| 108 | 5 | 0.12 | 0.00 | 0.00 | -0.01 | 0.0 | 0.02 | -0.05 | 0.00 | 0.00 | 0.00 | 0.12 |
| | | 0.12 | 0.00 | 0.00 | 0.0 | 7.6 | 0.02 | -0.06 | 0.00 | 0.00 | 0.00 | 0.12 |
| 109 | 1 | 9.02 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -33.25 | 0.00 | 0.00 | 0.00 | 9.02 |
| | | 4.03 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -33.30 | 0.00 | 0.00 | 0.00 | 4.03 |
| 109 | 2 | 9.02 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -33.25 | 0.00 | 0.00 | 0.00 | 9.02 |
| | | 4.03 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -33.30 | 0.00 | 0.00 | 0.00 | 4.03 |
| 109 | 3 | 9.02 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -33.25 | 0.00 | 0.00 | 0.00 | 9.02 |
| | | 4.03 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -33.30 | 0.00 | 0.00 | 0.00 | 4.03 |
| 109 | 4 | 11.72 | 0.00 | 0.00 | -0.07 | 0.0 | -25.14 | -43.22 | 0.00 | 0.00 | 0.00 | 11.72 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | 5.23 | 0.00 | 0.00 | 0.0 | 15.0 | -25.14 | -43.29 | 0.00 | 0.00 | 0.00 | 5.23 |
| 109 | 5 | 9.02 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -33.25 | 0.00 | 0.00 | 0.00 | 9.02 |
| | | 4.03 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -33.30 | 0.00 | 0.00 | 0.00 | 4.03 |
| 110 | 1 | 0.07 | 0.00 | 0.00 | -0.01 | 0.0 | -0.33 | 0.21 | 0.00 | 0.00 | 0.00 | 0.04 |
| | | 0.04 | 0.00 | 0.00 | 0.0 | 15.3 | -0.31 | 0.20 | 0.00 | 0.00 | 0.00 | 0.07 |
| 110 | 2 | 0.07 | 0.00 | 0.00 | -0.01 | 0.0 | -0.33 | 0.21 | 0.00 | 0.00 | 0.00 | 0.04 |
| | | 0.04 | 0.00 | 0.00 | 0.0 | 15.3 | -0.31 | 0.20 | 0.00 | 0.00 | 0.00 | 0.07 |
| 110 | 3 | 0.07 | 0.00 | 0.00 | -0.01 | 0.0 | -0.33 | 0.21 | 0.00 | 0.00 | 0.00 | 0.04 |
| | | 0.04 | 0.00 | 0.00 | 0.0 | 15.3 | -0.31 | 0.20 | 0.00 | 0.00 | 0.00 | 0.07 |
| 110 | 4 | 0.09 | 0.00 | 0.00 | -0.02 | 0.0 | -0.42 | 0.27 | 0.00 | 0.00 | 0.00 | 0.05 |
| | | 0.05 | 0.00 | 0.00 | 0.0 | 15.3 | -0.40 | 0.26 | 0.00 | 0.00 | 0.00 | 0.09 |
| 110 | 5 | 0.07 | 0.00 | 0.00 | -0.01 | 0.0 | -0.33 | 0.21 | 0.00 | 0.00 | 0.00 | 0.04 |
| | | 0.04 | 0.00 | 0.00 | 0.0 | 15.3 | -0.31 | 0.20 | 0.00 | 0.00 | 0.00 | 0.07 |
| 111 | 1 | -9.87 | 0.00 | 0.00 | -0.05 | 0.0 | -35.90 | -54.24 | 0.00 | 0.00 | 0.00 | -9.87 |
| | | -18.37 | 0.00 | 0.00 | 0.0 | 15.7 | -35.91 | -54.30 | 0.00 | 0.00 | 0.00 | -18.37 |
| 111 | 2 | -9.87 | 0.00 | 0.00 | -0.05 | 0.0 | -35.90 | -54.24 | 0.00 | 0.00 | 0.00 | -9.87 |
| | | -18.37 | 0.00 | 0.00 | 0.0 | 15.7 | -35.91 | -54.30 | 0.00 | 0.00 | 0.00 | -18.37 |
| 111 | 3 | -9.87 | 0.00 | 0.00 | -0.05 | 0.0 | -35.90 | -54.24 | 0.00 | 0.00 | 0.00 | -9.87 |
| | | -18.37 | 0.00 | 0.00 | 0.0 | 15.7 | -35.91 | -54.30 | 0.00 | 0.00 | 0.00 | -18.37 |
| 111 | 4 | -12.83 | 0.00 | 0.00 | -0.07 | 0.0 | -46.67 | -70.52 | 0.00 | 0.00 | 0.00 | -12.83 |
| | | -23.87 | 0.00 | 0.00 | 0.0 | 15.7 | -46.69 | -70.58 | 0.00 | 0.00 | 0.00 | -23.87 |
| 111 | 5 | -9.87 | 0.00 | 0.00 | -0.05 | 0.0 | -35.90 | -54.24 | 0.00 | 0.00 | 0.00 | -9.87 |
| | | -18.37 | 0.00 | 0.00 | 0.0 | 15.7 | -35.91 | -54.30 | 0.00 | 0.00 | 0.00 | -18.37 |
| 112 | 1 | 5.47 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -36.43 | 0.00 | 0.00 | 0.00 | 5.47 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -36.48 | 0.00 | 0.00 | 0.00 | 0.0 |
| 112 | 2 | 5.47 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -36.43 | 0.00 | 0.00 | 0.00 | 5.47 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -36.48 | 0.00 | 0.00 | 0.00 | 0.0 |
| 112 | 3 | 5.47 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -36.43 | 0.00 | 0.00 | 0.00 | 5.47 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -36.48 | 0.00 | 0.00 | 0.00 | 0.0 |
| 112 | 4 | 7.11 | 0.00 | 0.00 | -0.07 | 0.0 | -24.35 | -47.36 | 0.00 | 0.00 | 0.00 | 7.11 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -24.35 | -47.43 | 0.00 | 0.00 | 0.00 | 0.0 |
| 112 | 5 | 5.47 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -36.43 | 0.00 | 0.00 | 0.00 | 5.47 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -36.48 | 0.00 | 0.00 | 0.00 | 0.0 |
| 113 | 1 | 13.80 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | -11.89 | 0.00 | 0.00 | 0.00 | 13.80 |
| | | 12.01 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | -11.94 | 0.00 | 0.00 | 0.00 | 12.01 |
| 113 | 2 | 13.80 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | -11.89 | 0.00 | 0.00 | 0.00 | 13.80 |
| | | 12.01 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | -11.94 | 0.00 | 0.00 | 0.00 | 12.01 |
| 113 | 3 | 13.80 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | -11.89 | 0.00 | 0.00 | 0.00 | 13.80 |
| | | 12.01 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | -11.94 | 0.00 | 0.00 | 0.00 | 12.01 |
| 113 | 4 | 17.94 | 0.00 | 0.00 | -0.07 | 0.0 | -24.48 | -15.46 | 0.00 | 0.00 | 0.00 | 17.94 |
| | | 15.62 | 0.00 | 0.00 | 0.0 | 15.0 | -24.48 | -15.53 | 0.00 | 0.00 | 0.00 | 15.62 |
| 113 | 5 | 13.80 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | -11.89 | 0.00 | 0.00 | 0.00 | 13.80 |
| | | 12.01 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | -11.94 | 0.00 | 0.00 | 0.00 | 12.01 |
| 115 | 1 | 12.01 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | -21.79 | 0.00 | 0.00 | 0.00 | 12.01 |
| | | 8.74 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | -21.84 | 0.00 | 0.00 | 0.00 | 8.74 |
| 115 | 2 | 12.01 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | -21.79 | 0.00 | 0.00 | 0.00 | 12.01 |
| | | 8.74 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | -21.84 | 0.00 | 0.00 | 0.00 | 8.74 |
| 115 | 3 | 12.01 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | -21.79 | 0.00 | 0.00 | 0.00 | 12.01 |
| | | 8.74 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | -21.84 | 0.00 | 0.00 | 0.00 | 8.74 |
| 115 | 4 | 15.62 | 0.00 | 0.00 | -0.07 | 0.0 | -24.48 | -28.32 | 0.00 | 0.00 | 0.00 | 15.62 |
| | | 11.36 | 0.00 | 0.00 | 0.0 | 15.0 | -24.48 | -28.39 | 0.00 | 0.00 | 0.00 | 11.36 |
| 115 | 5 | 12.01 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | -21.79 | 0.00 | 0.00 | 0.00 | 12.01 |
| | | 8.74 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | -21.84 | 0.00 | 0.00 | 0.00 | 8.74 |
| 116 | 1 | 14.47 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -1.51 | 0.00 | 0.00 | 0.00 | 14.47 |
| | | 14.24 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -1.56 | 0.00 | 0.00 | 0.00 | 14.24 |
| 116 | 2 | 14.47 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -1.51 | 0.00 | 0.00 | 0.00 | 14.47 |
| | | 14.24 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -1.56 | 0.00 | 0.00 | 0.00 | 14.24 |
| 116 | 3 | 14.47 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -1.51 | 0.00 | 0.00 | 0.00 | 14.47 |
| | | 14.24 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -1.56 | 0.00 | 0.00 | 0.00 | 14.24 |
| 116 | 4 | 18.81 | 0.00 | 0.00 | -0.07 | 0.0 | -25.14 | -1.96 | 0.00 | 0.00 | 0.00 | 18.81 |
| | | 18.51 | 0.00 | 0.00 | 0.0 | 15.0 | -25.14 | -2.02 | 0.00 | 0.00 | 0.00 | 18.51 |
| 116 | 5 | 14.47 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -1.51 | 0.00 | 0.00 | 0.00 | 14.47 |
| | | 14.24 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -1.56 | 0.00 | 0.00 | 0.00 | 14.24 |
| 117 | 1 | 1.89 | 0.00 | 0.00 | -0.02 | 0.0 | -10.65 | -20.26 | 0.00 | 0.00 | 0.00 | 1.89 |
| | | -1.15 | 0.00 | 0.00 | 0.0 | 15.0 | -10.65 | -20.28 | 0.00 | 0.00 | 0.00 | -1.15 |
| 117 | 2 | 1.89 | 0.00 | 0.00 | -0.02 | 0.0 | -10.65 | -20.26 | 0.00 | 0.00 | 0.00 | 1.89 |
| | | -1.15 | 0.00 | 0.00 | 0.0 | 15.0 | -10.65 | -20.28 | 0.00 | 0.00 | 0.00 | -1.15 |
| 117 | 3 | 1.89 | 0.00 | 0.00 | -0.02 | 0.0 | -10.65 | -20.26 | 0.00 | 0.00 | 0.00 | 1.89 |
| | | -1.15 | 0.00 | 0.00 | 0.0 | 15.0 | -10.65 | -20.28 | 0.00 | 0.00 | 0.00 | -1.15 |
| 117 | 4 | 2.46 | 0.00 | 0.00 | -0.03 | 0.0 | -13.84 | -26.33 | 0.00 | 0.00 | 0.00 | 2.46 |
| | | -1.49 | 0.00 | 0.00 | 0.0 | 15.0 | -13.84 | -26.36 | 0.00 | 0.00 | 0.00 | -1.49 |
| 117 | 5 | 1.89 | 0.00 | 0.00 | -0.02 | 0.0 | -10.65 | -20.26 | 0.00 | 0.00 | 0.00 | 1.89 |
| | | -1.15 | 0.00 | 0.00 | 0.0 | 15.0 | -10.65 | -20.28 | 0.00 | 0.00 | 0.00 | -1.15 |
| 118 | 1 | -18.87 | 0.00 | 0.00 | -0.02 | 0.0 | -48.29 | -60.26 | 0.00 | 0.00 | 0.00 | -18.87 |
| | | -23.60 | 0.00 | 0.00 | 0.0 | 7.8 | -48.30 | -60.28 | 0.00 | 0.00 | 0.00 | -23.60 |
| 118 | 2 | -18.87 | 0.00 | 0.00 | -0.02 | 0.0 | -48.29 | -60.26 | 0.00 | 0.00 | 0.00 | -18.87 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | -23.60 | 0.00 | 0.00 | 0.0 | 7.8 | -48.30 | -60.28 | 0.00 | 0.00 | 0.00 | -23.60 |
| 118 | 3 | -18.87 | 0.00 | 0.00 | -0.02 | 0.0 | -48.29 | -60.26 | 0.00 | 0.00 | 0.00 | -18.87 |
| | | -23.60 | 0.00 | 0.00 | 0.0 | 7.8 | -48.30 | -60.28 | 0.00 | 0.00 | 0.00 | -23.60 |
| 118 | 4 | -24.53 | 0.00 | 0.00 | -0.03 | 0.0 | -62.78 | -78.34 | 0.00 | 0.00 | 0.00 | -24.53 |
| | | -30.67 | 0.00 | 0.00 | 0.0 | 7.8 | -62.79 | -78.37 | 0.00 | 0.00 | 0.00 | -30.67 |
| 118 | 5 | -18.87 | 0.00 | 0.00 | -0.02 | 0.0 | -48.29 | -60.26 | 0.00 | 0.00 | 0.00 | -18.87 |
| | | -23.60 | 0.00 | 0.00 | 0.0 | 7.8 | -48.30 | -60.28 | 0.00 | 0.00 | 0.00 | -23.60 |
| 119 | 1 | 4.83 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 14.10 | 0.00 | 0.00 | 0.00 | 2.72 |
| | | 2.72 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 14.08 | 0.00 | 0.00 | 0.00 | 4.83 |
| 119 | 2 | 4.83 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 14.10 | 0.00 | 0.00 | 0.00 | 2.72 |
| | | 2.72 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 14.08 | 0.00 | 0.00 | 0.00 | 4.83 |
| 119 | 3 | 4.83 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 14.10 | 0.00 | 0.00 | 0.00 | 2.72 |
| | | 2.72 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 14.08 | 0.00 | 0.00 | 0.00 | 4.83 |
| 119 | 4 | 6.28 | 0.00 | 0.00 | -0.03 | 0.0 | -13.84 | 18.33 | 0.00 | 0.00 | 0.00 | 3.53 |
| | | 3.53 | 0.00 | 0.00 | 0.0 | 15.0 | -13.84 | 18.30 | 0.00 | 0.00 | 0.00 | 6.28 |
| 119 | 5 | 4.83 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 14.10 | 0.00 | 0.00 | 0.00 | 2.72 |
| | | 2.72 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 14.08 | 0.00 | 0.00 | 0.00 | 4.83 |
| 120 | 1 | 4.02 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -43.36 | 0.00 | 0.00 | 0.00 | 4.02 |
| | | -2.49 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -43.42 | 0.00 | 0.00 | 0.00 | -2.49 |
| 120 | 2 | 4.02 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -43.36 | 0.00 | 0.00 | 0.00 | 4.02 |
| | | -2.49 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -43.42 | 0.00 | 0.00 | 0.00 | -2.49 |
| 120 | 3 | 4.02 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -43.36 | 0.00 | 0.00 | 0.00 | 4.02 |
| | | -2.49 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -43.42 | 0.00 | 0.00 | 0.00 | -2.49 |
| 120 | 4 | 5.23 | 0.00 | 0.00 | -0.07 | 0.0 | -25.14 | -56.37 | 0.00 | 0.00 | 0.00 | 5.23 |
| | | -3.23 | 0.00 | 0.00 | 0.0 | 15.0 | -25.14 | -56.44 | 0.00 | 0.00 | 0.00 | -3.23 |
| 120 | 5 | 4.02 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -43.36 | 0.00 | 0.00 | 0.00 | 4.02 |
| | | -2.49 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -43.42 | 0.00 | 0.00 | 0.00 | -2.49 |
| 121 | 1 | 10.37 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 28.85 | 0.00 | 0.00 | 0.00 | 6.04 |
| | | 6.04 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 28.80 | 0.00 | 0.00 | 0.00 | 10.37 |
| 121 | 2 | 10.37 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 28.85 | 0.00 | 0.00 | 0.00 | 6.04 |
| | | 6.04 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 28.80 | 0.00 | 0.00 | 0.00 | 10.37 |
| 121 | 3 | 10.37 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 28.85 | 0.00 | 0.00 | 0.00 | 6.04 |
| | | 6.04 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 28.80 | 0.00 | 0.00 | 0.00 | 10.37 |
| 121 | 4 | 13.48 | 0.00 | 0.00 | -0.07 | 0.0 | -25.14 | 37.51 | 0.00 | 0.00 | 0.00 | 7.85 |
| | | 7.85 | 0.00 | 0.00 | 0.0 | 15.0 | -25.14 | 37.44 | 0.00 | 0.00 | 0.00 | 13.48 |
| 121 | 5 | 10.37 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 28.85 | 0.00 | 0.00 | 0.00 | 6.04 |
| | | 6.04 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 28.80 | 0.00 | 0.00 | 0.00 | 10.37 |
| 122 | 1 | 2.72 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 18.14 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 18.11 | 0.00 | 0.00 | 0.00 | 2.72 |
| 122 | 2 | 2.72 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 18.14 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 18.11 | 0.00 | 0.00 | 0.00 | 2.72 |
| 122 | 3 | 2.72 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 18.14 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 18.11 | 0.00 | 0.00 | 0.00 | 2.72 |
| 122 | 4 | 3.53 | 0.00 | 0.00 | -0.03 | 0.0 | -13.84 | 23.58 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -13.84 | 23.55 | 0.00 | 0.00 | 0.00 | 3.53 |
| 122 | 5 | 2.72 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 18.14 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 18.11 | 0.00 | 0.00 | 0.00 | 2.72 |
| 123 | 1 | 14.07 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | 8.34 | 0.00 | 0.00 | 0.00 | 12.82 |
| | | 12.82 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | 8.29 | 0.00 | 0.00 | 0.00 | 14.07 |
| 123 | 2 | 14.07 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | 8.34 | 0.00 | 0.00 | 0.00 | 12.82 |
| | | 12.82 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | 8.29 | 0.00 | 0.00 | 0.00 | 14.07 |
| 123 | 3 | 14.07 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | 8.34 | 0.00 | 0.00 | 0.00 | 12.82 |
| | | 12.82 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | 8.29 | 0.00 | 0.00 | 0.00 | 14.07 |
| 123 | 4 | 18.29 | 0.00 | 0.00 | -0.07 | 0.0 | -24.48 | 10.85 | 0.00 | 0.00 | 0.00 | 16.67 |
| | | 16.67 | 0.00 | 0.00 | 0.0 | 15.0 | -24.48 | 10.78 | 0.00 | 0.00 | 0.00 | 18.29 |
| 123 | 5 | 14.07 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | 8.34 | 0.00 | 0.00 | 0.00 | 12.82 |
| | | 12.82 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | 8.29 | 0.00 | 0.00 | 0.00 | 14.07 |
| 124 | 1 | 11.92 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -16.40 | 0.00 | 0.00 | 0.00 | 11.92 |
| | | 9.45 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -16.45 | 0.00 | 0.00 | 0.00 | 9.45 |
| 124 | 2 | 11.92 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -16.40 | 0.00 | 0.00 | 0.00 | 11.92 |
| | | 9.45 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -16.45 | 0.00 | 0.00 | 0.00 | 9.45 |
| 124 | 3 | 11.92 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -16.40 | 0.00 | 0.00 | 0.00 | 11.92 |
| | | 9.45 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -16.45 | 0.00 | 0.00 | 0.00 | 9.45 |
| 124 | 4 | 15.49 | 0.00 | 0.00 | -0.07 | 0.0 | -24.35 | -21.32 | 0.00 | 0.00 | 0.00 | 15.49 |
| | | 12.29 | 0.00 | 0.00 | 0.0 | 15.0 | -24.35 | -21.39 | 0.00 | 0.00 | 0.00 | 12.29 |
| 124 | 5 | 11.92 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -16.40 | 0.00 | 0.00 | 0.00 | 11.92 |
| | | 9.45 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -16.45 | 0.00 | 0.00 | 0.00 | 9.45 |
| 125 | 1 | 13.14 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -6.35 | 0.00 | 0.00 | 0.00 | 13.14 |
| | | 12.18 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -6.40 | 0.00 | 0.00 | 0.00 | 12.18 |
| 125 | 2 | 13.14 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -6.35 | 0.00 | 0.00 | 0.00 | 13.14 |
| | | 12.18 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -6.40 | 0.00 | 0.00 | 0.00 | 12.18 |
| 125 | 3 | 13.14 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -6.35 | 0.00 | 0.00 | 0.00 | 13.14 |
| | | 12.18 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -6.40 | 0.00 | 0.00 | 0.00 | 12.18 |
| 125 | 4 | 17.08 | 0.00 | 0.00 | -0.07 | 0.0 | -25.18 | -8.25 | 0.00 | 0.00 | 0.00 | 17.08 |
| | | 15.84 | 0.00 | 0.00 | 0.0 | 15.0 | -25.18 | -8.32 | 0.00 | 0.00 | 0.00 | 15.84 |
| 125 | 5 | 13.14 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -6.35 | 0.00 | 0.00 | 0.00 | 13.14 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | 12.18 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -6.40 | 0.00 | 0.00 | 0.00 | 12.18 |
| 126 | 1 | 9.70 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -26.58 | 0.00 | 0.00 | 0.00 | 9.70 |
| | | 5.71 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -26.63 | 0.00 | 0.00 | 0.00 | 5.71 |
| 126 | 2 | 9.70 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -26.58 | 0.00 | 0.00 | 0.00 | 9.70 |
| | | 5.71 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -26.63 | 0.00 | 0.00 | 0.00 | 5.71 |
| 126 | 3 | 9.70 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -26.58 | 0.00 | 0.00 | 0.00 | 9.70 |
| | | 5.71 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -26.63 | 0.00 | 0.00 | 0.00 | 5.71 |
| 126 | 4 | 12.61 | 0.00 | 0.00 | -0.07 | 0.0 | -25.18 | -34.56 | 0.00 | 0.00 | 0.00 | 12.61 |
| | | 7.42 | 0.00 | 0.00 | 0.0 | 15.0 | -25.18 | -34.62 | 0.00 | 0.00 | 0.00 | 7.42 |
| 126 | 5 | 9.70 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -26.58 | 0.00 | 0.00 | 0.00 | 9.70 |
| | | 5.71 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -26.63 | 0.00 | 0.00 | 0.00 | 5.71 |
| 127 | 1 | -2.36 | 0.00 | 0.00 | -0.05 | 0.0 | -24.54 | -49.71 | 0.00 | 0.00 | 0.00 | -2.36 |
| | | -9.87 | 0.00 | 0.00 | 0.0 | 15.1 | -24.55 | -49.76 | 0.00 | 0.00 | 0.00 | -9.87 |
| 127 | 2 | -2.36 | 0.00 | 0.00 | -0.05 | 0.0 | -24.54 | -49.71 | 0.00 | 0.00 | 0.00 | -2.36 |
| | | -9.87 | 0.00 | 0.00 | 0.0 | 15.1 | -24.55 | -49.76 | 0.00 | 0.00 | 0.00 | -9.87 |
| 127 | 3 | -2.36 | 0.00 | 0.00 | -0.05 | 0.0 | -24.54 | -49.71 | 0.00 | 0.00 | 0.00 | -2.36 |
| | | -9.87 | 0.00 | 0.00 | 0.0 | 15.1 | -24.55 | -49.76 | 0.00 | 0.00 | 0.00 | -9.87 |
| 127 | 4 | -3.07 | 0.00 | 0.00 | -0.07 | 0.0 | -31.91 | -64.63 | 0.00 | 0.00 | 0.00 | -3.07 |
| | | -12.83 | 0.00 | 0.00 | 0.0 | 15.1 | -31.91 | -64.69 | 0.00 | 0.00 | 0.00 | -12.83 |
| 127 | 5 | -2.36 | 0.00 | 0.00 | -0.05 | 0.0 | -24.54 | -49.71 | 0.00 | 0.00 | 0.00 | -2.36 |
| | | -9.87 | 0.00 | 0.00 | 0.0 | 15.1 | -24.55 | -49.76 | 0.00 | 0.00 | 0.00 | -9.87 |
| 128 | 1 | 0.69 | 0.00 | 0.00 | -10.11 | 0.0 | 0.00 | 5.30 | 0.00 | 0.00 | 0.00 | -2.09 |
| | | -2.09 | 0.00 | 0.00 | 0.0 | 200.0 | 0.00 | -4.81 | 0.00 | 0.00 | 0.00 | -1.59 |
| 128 | 2 | 0.69 | 0.00 | 0.00 | -10.11 | 0.0 | 0.00 | 5.30 | 0.00 | 0.00 | 0.00 | -2.09 |
| | | -2.09 | 0.00 | 0.00 | 0.0 | 200.0 | 0.00 | -4.81 | 0.00 | 0.00 | 0.00 | -1.59 |
| 128 | 3 | 0.69 | 0.00 | 0.00 | -10.11 | 0.0 | 0.00 | 5.30 | 0.00 | 0.00 | 0.00 | -2.09 |
| | | -2.09 | 0.00 | 0.00 | 0.0 | 200.0 | 0.00 | -4.81 | 0.00 | 0.00 | 0.00 | -1.59 |
| 128 | 4 | 0.89 | 0.00 | 0.00 | -13.15 | 0.0 | 0.00 | 6.90 | 0.00 | 0.00 | 0.00 | -2.72 |
| | | -2.72 | 0.00 | 0.00 | 0.0 | 200.0 | 0.00 | -6.25 | 0.00 | 0.00 | 0.00 | -2.07 |
| 128 | 5 | 0.69 | 0.00 | 0.00 | -10.11 | 0.0 | 0.00 | 5.30 | 0.00 | 0.00 | 0.00 | -2.09 |
| | | -2.09 | 0.00 | 0.00 | 0.0 | 200.0 | 0.00 | -4.81 | 0.00 | 0.00 | 0.00 | -1.59 |
| 133 | 1 | 0.04 | 0.00 | 0.00 | -8.41e-03 | 0.0 | -0.46 | 0.18 | 0.00 | 0.00 | 0.00 | 9.00e-03 |
| | | 9.00e-03 | 0.00 | 0.00 | 0.0 | 15.3 | -0.44 | 0.17 | 0.00 | 0.00 | 0.00 | 0.04 |
| 133 | 2 | 0.04 | 0.00 | 0.00 | -8.41e-03 | 0.0 | -0.46 | 0.18 | 0.00 | 0.00 | 0.00 | 9.00e-03 |
| | | 9.00e-03 | 0.00 | 0.00 | 0.0 | 15.3 | -0.44 | 0.17 | 0.00 | 0.00 | 0.00 | 0.04 |
| 133 | 3 | 0.04 | 0.00 | 0.00 | -8.41e-03 | 0.0 | -0.46 | 0.18 | 0.00 | 0.00 | 0.00 | 9.00e-03 |
| | | 9.00e-03 | 0.00 | 0.00 | 0.0 | 15.3 | -0.44 | 0.17 | 0.00 | 0.00 | 0.00 | 0.04 |
| 133 | 4 | 0.05 | 0.00 | 0.00 | -0.01 | 0.0 | -0.60 | 0.23 | 0.00 | 0.00 | 0.00 | 0.01 |
| | | 0.01 | 0.00 | 0.00 | 0.0 | 15.3 | -0.57 | 0.22 | 0.00 | 0.00 | 0.00 | 0.05 |
| 133 | 5 | 0.04 | 0.00 | 0.00 | -8.41e-03 | 0.0 | -0.46 | 0.18 | 0.00 | 0.00 | 0.00 | 9.00e-03 |
| | | 9.00e-03 | 0.00 | 0.00 | 0.0 | 15.3 | -0.44 | 0.17 | 0.00 | 0.00 | 0.00 | 0.04 |
| 135 | 1 | 1.38 | 0.00 | 0.00 | -9.50 | 0.0 | -2.83 | 5.71 | 0.00 | 0.00 | 0.00 | -2.04 |
| | | -2.04 | 0.00 | 0.00 | 3.46 | 200.0 | -2.83 | -3.79 | 0.00 | 0.00 | 0.00 | -0.12 |
| 135 | 2 | 1.38 | 0.00 | 0.00 | -9.50 | 0.0 | -2.83 | 5.71 | 0.00 | 0.00 | 0.00 | -2.04 |
| | | -2.04 | 0.00 | 0.00 | 3.46 | 200.0 | -2.83 | -3.79 | 0.00 | 0.00 | 0.00 | -0.12 |
| 135 | 3 | 1.38 | 0.00 | 0.00 | -9.50 | 0.0 | -2.83 | 5.71 | 0.00 | 0.00 | 0.00 | -2.04 |
| | | -2.04 | 0.00 | 0.00 | 3.46 | 200.0 | -2.83 | -3.79 | 0.00 | 0.00 | 0.00 | -0.12 |
| 135 | 4 | 1.80 | 0.00 | 0.00 | -12.35 | 0.0 | -3.68 | 7.43 | 0.00 | 0.00 | 0.00 | -2.66 |
| | | -2.66 | 0.00 | 0.00 | 4.50 | 200.0 | -3.68 | -4.93 | 0.00 | 0.00 | 0.00 | -0.16 |
| 135 | 5 | 1.38 | 0.00 | 0.00 | -9.50 | 0.0 | -2.83 | 5.71 | 0.00 | 0.00 | 0.00 | -2.04 |
| | | -2.04 | 0.00 | 0.00 | 3.46 | 200.0 | -2.83 | -3.79 | 0.00 | 0.00 | 0.00 | -0.12 |
| 136 | 1 | 6.27 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 1.93 | 0.00 | 0.00 | 0.00 | 5.98 |
| | | 5.98 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 1.91 | 0.00 | 0.00 | 0.00 | 6.27 |
| 136 | 2 | 6.27 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 1.93 | 0.00 | 0.00 | 0.00 | 5.98 |
| | | 5.98 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 1.91 | 0.00 | 0.00 | 0.00 | 6.27 |
| 136 | 3 | 6.27 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 1.93 | 0.00 | 0.00 | 0.00 | 5.98 |
| | | 5.98 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 1.91 | 0.00 | 0.00 | 0.00 | 6.27 |
| 136 | 4 | 8.15 | 0.00 | 0.00 | -0.03 | 0.0 | -13.93 | 2.51 | 0.00 | 0.00 | 0.00 | 7.77 |
| | | 7.77 | 0.00 | 0.00 | 0.0 | 15.0 | -13.93 | 2.48 | 0.00 | 0.00 | 0.00 | 8.15 |
| 136 | 5 | 6.27 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 1.93 | 0.00 | 0.00 | 0.00 | 5.98 |
| | | 5.98 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 1.91 | 0.00 | 0.00 | 0.00 | 6.27 |
| 137 | 1 | -10.20 | 0.00 | 0.00 | -0.05 | 0.0 | -36.77 | -55.38 | 0.00 | 0.00 | 0.00 | -10.20 |
| | | -18.87 | 0.00 | 0.00 | 0.0 | 15.7 | -36.78 | -55.44 | 0.00 | 0.00 | 0.00 | -18.87 |
| 137 | 2 | -10.20 | 0.00 | 0.00 | -0.05 | 0.0 | -36.77 | -55.38 | 0.00 | 0.00 | 0.00 | -10.20 |
| | | -18.87 | 0.00 | 0.00 | 0.0 | 15.7 | -36.78 | -55.44 | 0.00 | 0.00 | 0.00 | -18.87 |
| 137 | 3 | -10.20 | 0.00 | 0.00 | -0.05 | 0.0 | -36.77 | -55.38 | 0.00 | 0.00 | 0.00 | -10.20 |
| | | -18.87 | 0.00 | 0.00 | 0.0 | 15.7 | -36.78 | -55.44 | 0.00 | 0.00 | 0.00 | -18.87 |
| 137 | 4 | -13.25 | 0.00 | 0.00 | -0.07 | 0.0 | -47.80 | -72.00 | 0.00 | 0.00 | 0.00 | -13.25 |
| | | -24.53 | 0.00 | 0.00 | 0.0 | 15.7 | -47.82 | -72.07 | 0.00 | 0.00 | 0.00 | -24.53 |
| 137 | 5 | -10.20 | 0.00 | 0.00 | -0.05 | 0.0 | -36.77 | -55.38 | 0.00 | 0.00 | 0.00 | -10.20 |
| | | -18.87 | 0.00 | 0.00 | 0.0 | 15.7 | -36.78 | -55.44 | 0.00 | 0.00 | 0.00 | -18.87 |
| 138 | 1 | 6.27 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -3.12 | 0.00 | 0.00 | 0.00 | 6.27 |
| | | 5.80 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -3.15 | 0.00 | 0.00 | 0.00 | 5.80 |
| 138 | 2 | 6.27 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -3.12 | 0.00 | 0.00 | 0.00 | 6.27 |
| | | 5.80 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -3.15 | 0.00 | 0.00 | 0.00 | 5.80 |
| 138 | 3 | 6.27 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -3.12 | 0.00 | 0.00 | 0.00 | 6.27 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | 5.80 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -3.15 | 0.00 | 0.00 | 0.00 | 5.80 |
| 138 | 4 | 8.15 | 0.00 | 0.00 | -0.03 | 0.0 | -13.93 | -4.06 | 0.00 | 0.00 | 0.00 | 8.15 |
| | | 7.54 | 0.00 | 0.00 | 0.0 | 15.0 | -13.93 | -4.09 | 0.00 | 0.00 | 0.00 | 7.54 |
| 138 | 5 | 6.27 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | -3.12 | 0.00 | 0.00 | 0.00 | 6.27 |
| | | 5.80 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | -3.15 | 0.00 | 0.00 | 0.00 | 5.80 |
| 140 | 1 | 2.72 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 18.14 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 18.11 | 0.00 | 0.00 | 0.00 | 2.72 |
| 140 | 2 | 2.72 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 18.14 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 18.11 | 0.00 | 0.00 | 0.00 | 2.72 |
| 140 | 3 | 2.72 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 18.14 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 18.11 | 0.00 | 0.00 | 0.00 | 2.72 |
| 140 | 4 | 3.53 | 0.00 | 0.00 | -0.03 | 0.0 | -13.84 | 23.58 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -13.84 | 23.55 | 0.00 | 0.00 | 0.00 | 3.53 |
| 140 | 5 | 2.72 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 18.14 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 18.11 | 0.00 | 0.00 | 0.00 | 2.72 |
| 141 | 1 | 6.18 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 9.04 | 0.00 | 0.00 | 0.00 | 4.83 |
| | | 4.83 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 9.02 | 0.00 | 0.00 | 0.00 | 6.18 |
| 141 | 2 | 6.18 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 9.04 | 0.00 | 0.00 | 0.00 | 4.83 |
| | | 4.83 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 9.02 | 0.00 | 0.00 | 0.00 | 6.18 |
| 141 | 3 | 6.18 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 9.04 | 0.00 | 0.00 | 0.00 | 4.83 |
| | | 4.83 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 9.02 | 0.00 | 0.00 | 0.00 | 6.18 |
| 141 | 4 | 8.03 | 0.00 | 0.00 | -0.03 | 0.0 | -13.84 | 11.76 | 0.00 | 0.00 | 0.00 | 6.27 |
| | | 6.27 | 0.00 | 0.00 | 0.0 | 15.0 | -13.84 | 11.72 | 0.00 | 0.00 | 0.00 | 8.03 |
| 141 | 5 | 6.18 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 9.04 | 0.00 | 0.00 | 0.00 | 4.83 |
| | | 4.83 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 9.02 | 0.00 | 0.00 | 0.00 | 6.18 |
| 144 | 1 | 0.68 | 0.00 | 0.00 | -9.50 | 0.0 | 0.21 | 4.94 | 0.00 | 0.00 | 0.00 | -1.89 |
| | | -1.89 | 0.00 | 0.00 | 3.46 | 200.0 | 0.21 | -4.56 | 0.00 | 0.00 | 0.00 | -1.51 |
| 144 | 2 | 0.68 | 0.00 | 0.00 | -9.50 | 0.0 | 0.21 | 4.94 | 0.00 | 0.00 | 0.00 | -1.89 |
| | | -1.89 | 0.00 | 0.00 | 3.46 | 200.0 | 0.21 | -4.56 | 0.00 | 0.00 | 0.00 | -1.51 |
| 144 | 3 | 0.68 | 0.00 | 0.00 | -9.50 | 0.0 | 0.21 | 4.94 | 0.00 | 0.00 | 0.00 | -1.89 |
| | | -1.89 | 0.00 | 0.00 | 3.46 | 200.0 | 0.21 | -4.56 | 0.00 | 0.00 | 0.00 | -1.51 |
| 144 | 4 | 0.88 | 0.00 | 0.00 | -12.35 | 0.0 | 0.28 | 6.43 | 0.00 | 0.00 | 0.00 | -2.46 |
| | | -2.46 | 0.00 | 0.00 | 4.50 | 200.0 | 0.28 | -5.92 | 0.00 | 0.00 | 0.00 | -1.96 |
| 144 | 5 | 0.68 | 0.00 | 0.00 | -9.50 | 0.0 | 0.21 | 4.94 | 0.00 | 0.00 | 0.00 | -1.89 |
| | | -1.89 | 0.00 | 0.00 | 3.46 | 200.0 | 0.21 | -4.56 | 0.00 | 0.00 | 0.00 | -1.51 |
| 145 | 1 | -2.43 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 26.18 | 0.00 | 0.00 | 0.00 | -6.35 |
| | | -6.35 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 26.15 | 0.00 | 0.00 | 0.00 | -2.43 |
| 145 | 2 | -2.43 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 26.18 | 0.00 | 0.00 | 0.00 | -6.35 |
| | | -6.35 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 26.15 | 0.00 | 0.00 | 0.00 | -2.43 |
| 145 | 3 | -2.43 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 26.18 | 0.00 | 0.00 | 0.00 | -6.35 |
| | | -6.35 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 26.15 | 0.00 | 0.00 | 0.00 | -2.43 |
| 145 | 4 | -3.16 | 0.00 | 0.00 | -0.03 | 0.0 | -13.94 | 34.03 | 0.00 | 0.00 | 0.00 | -8.26 |
| | | -8.26 | 0.00 | 0.00 | 0.0 | 15.0 | -13.94 | 34.00 | 0.00 | 0.00 | 0.00 | -3.16 |
| 145 | 5 | -2.43 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 26.18 | 0.00 | 0.00 | 0.00 | -6.35 |
| | | -6.35 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 26.15 | 0.00 | 0.00 | 0.00 | -2.43 |
| 146 | 1 | 0.69 | 0.00 | 0.00 | -10.11 | 0.0 | 3.76e-03 | 5.30 | 0.00 | 0.00 | 0.00 | -2.09 |
| | | -2.09 | 0.00 | 0.00 | 0.0 | 200.0 | 3.76e-03 | -4.81 | 0.00 | 0.00 | 0.00 | -1.60 |
| 146 | 2 | 0.69 | 0.00 | 0.00 | -10.11 | 0.0 | 3.76e-03 | 5.30 | 0.00 | 0.00 | 0.00 | -2.09 |
| | | -2.09 | 0.00 | 0.00 | 0.0 | 200.0 | 3.76e-03 | -4.81 | 0.00 | 0.00 | 0.00 | -1.60 |
| 146 | 3 | 0.69 | 0.00 | 0.00 | -10.11 | 0.0 | 3.76e-03 | 5.30 | 0.00 | 0.00 | 0.00 | -2.09 |
| | | -2.09 | 0.00 | 0.00 | 0.0 | 200.0 | 3.76e-03 | -4.81 | 0.00 | 0.00 | 0.00 | -1.60 |
| 146 | 4 | 0.89 | 0.00 | 0.00 | -13.15 | 0.0 | 4.89e-03 | 6.89 | 0.00 | 0.00 | 0.00 | -2.72 |
| | | -2.72 | 0.00 | 0.00 | 0.0 | 200.0 | 4.89e-03 | -6.25 | 0.00 | 0.00 | 0.00 | -2.07 |
| 146 | 5 | 0.69 | 0.00 | 0.00 | -10.11 | 0.0 | 3.76e-03 | 5.30 | 0.00 | 0.00 | 0.00 | -2.09 |
| | | -2.09 | 0.00 | 0.00 | 0.0 | 200.0 | 3.76e-03 | -4.81 | 0.00 | 0.00 | 0.00 | -1.60 |
| 147 | 1 | 0.02 | 0.00 | 0.00 | 0.07 | 0.0 | 0.08 | -0.04 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | -4.70e-03 | 0.00 | 0.00 | 0.20 | 200.0 | 0.08 | 0.03 | 0.00 | 0.00 | 0.00 | 0.01 |
| 147 | 2 | 0.02 | 0.00 | 0.00 | 0.07 | 0.0 | 0.08 | -0.04 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | -4.70e-03 | 0.00 | 0.00 | 0.20 | 200.0 | 0.08 | 0.03 | 0.00 | 0.00 | 0.00 | 0.01 |
| 147 | 3 | 0.02 | 0.00 | 0.00 | 0.07 | 0.0 | 0.08 | -0.04 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | -4.70e-03 | 0.00 | 0.00 | 0.20 | 200.0 | 0.08 | 0.03 | 0.00 | 0.00 | 0.00 | 0.01 |
| 147 | 4 | 0.02 | 0.00 | 0.00 | 0.09 | 0.0 | 0.10 | -0.05 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | -6.11e-03 | 0.00 | 0.00 | 0.26 | 200.0 | 0.10 | 0.04 | 0.00 | 0.00 | 0.00 | 0.02 |
| 147 | 5 | 0.02 | 0.00 | 0.00 | 0.07 | 0.0 | 0.08 | -0.04 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | -4.70e-03 | 0.00 | 0.00 | 0.20 | 200.0 | 0.08 | 0.03 | 0.00 | 0.00 | 0.00 | 0.01 |
| 149 | 1 | 0.92 | 0.00 | 0.00 | -10.11 | 0.0 | -8.51e-04 | 5.06 | 0.00 | 0.00 | 0.00 | -1.61 |
| | | -1.61 | 0.00 | 0.00 | 0.0 | 200.0 | -8.51e-04 | -5.06 | 0.00 | 0.00 | 0.00 | -1.61 |
| 149 | 2 | 0.92 | 0.00 | 0.00 | -10.11 | 0.0 | -8.51e-04 | 5.06 | 0.00 | 0.00 | 0.00 | -1.61 |
| | | -1.61 | 0.00 | 0.00 | 0.0 | 200.0 | -8.51e-04 | -5.06 | 0.00 | 0.00 | 0.00 | -1.61 |
| 149 | 3 | 0.92 | 0.00 | 0.00 | -10.11 | 0.0 | -8.51e-04 | 5.06 | 0.00 | 0.00 | 0.00 | -1.61 |
| | | -1.61 | 0.00 | 0.00 | 0.0 | 200.0 | -8.51e-04 | -5.06 | 0.00 | 0.00 | 0.00 | -1.61 |
| 149 | 4 | 1.19 | 0.00 | 0.00 | -13.15 | 0.0 | -1.11e-03 | 6.57 | 0.00 | 0.00 | 0.00 | -2.10 |
| | | -2.10 | 0.00 | 0.00 | 0.0 | 200.0 | -1.11e-03 | -6.57 | 0.00 | 0.00 | 0.00 | -2.10 |
| 149 | 5 | 0.92 | 0.00 | 0.00 | -10.11 | 0.0 | -8.51e-04 | 5.06 | 0.00 | 0.00 | 0.00 | -1.61 |
| | | -1.61 | 0.00 | 0.00 | 0.0 | 200.0 | -8.51e-04 | -5.06 | 0.00 | 0.00 | 0.00 | -1.61 |
| 150 | 1 | 14.07 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | -1.77 | 0.00 | 0.00 | 0.00 | 14.07 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | 13.80 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | -1.82 | 0.00 | 0.00 | 0.00 | 13.80 |
| 150 | 2 | 14.07 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | -1.77 | 0.00 | 0.00 | 0.00 | 14.07 |
| | | 13.80 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | -1.82 | 0.00 | 0.00 | 0.00 | 13.80 |
| 150 | 3 | 14.07 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | -1.77 | 0.00 | 0.00 | 0.00 | 14.07 |
| | | 13.80 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | -1.82 | 0.00 | 0.00 | 0.00 | 13.80 |
| 150 | 4 | 18.29 | 0.00 | 0.00 | -0.07 | 0.0 | -24.48 | -2.31 | 0.00 | 0.00 | 0.00 | 18.29 |
| | | 17.94 | 0.00 | 0.00 | 0.0 | 15.0 | -24.48 | -2.37 | 0.00 | 0.00 | 0.00 | 17.94 |
| 150 | 5 | 14.07 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | -1.77 | 0.00 | 0.00 | 0.00 | 14.07 |
| | | 13.80 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | -1.82 | 0.00 | 0.00 | 0.00 | 13.80 |
| 151 | 1 | 1.50 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 44.09 | 0.00 | 0.00 | 0.00 | -5.11 |
| | | -5.11 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 44.04 | 0.00 | 0.00 | 0.00 | 1.50 |
| 151 | 2 | 1.50 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 44.09 | 0.00 | 0.00 | 0.00 | -5.11 |
| | | -5.11 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 44.04 | 0.00 | 0.00 | 0.00 | 1.50 |
| 151 | 3 | 1.50 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 44.09 | 0.00 | 0.00 | 0.00 | -5.11 |
| | | -5.11 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 44.04 | 0.00 | 0.00 | 0.00 | 1.50 |
| 151 | 4 | 1.95 | 0.00 | 0.00 | -0.07 | 0.0 | -24.35 | 57.31 | 0.00 | 0.00 | 0.00 | -6.64 |
| | | -6.64 | 0.00 | 0.00 | 0.0 | 15.0 | -24.35 | 57.25 | 0.00 | 0.00 | 0.00 | 1.95 |
| 151 | 5 | 1.50 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 44.09 | 0.00 | 0.00 | 0.00 | -5.11 |
| | | -5.11 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 44.04 | 0.00 | 0.00 | 0.00 | 1.50 |
| 152 | 1 | 0.73 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 21.12 | 0.00 | 0.00 | 0.00 | -2.44 |
| | | -2.44 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 21.09 | 0.00 | 0.00 | 0.00 | 0.73 |
| 152 | 2 | 0.73 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 21.12 | 0.00 | 0.00 | 0.00 | -2.44 |
| | | -2.44 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 21.09 | 0.00 | 0.00 | 0.00 | 0.73 |
| 152 | 3 | 0.73 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 21.12 | 0.00 | 0.00 | 0.00 | -2.44 |
| | | -2.44 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 21.09 | 0.00 | 0.00 | 0.00 | 0.73 |
| 152 | 4 | 0.95 | 0.00 | 0.00 | -0.03 | 0.0 | -13.94 | 27.45 | 0.00 | 0.00 | 0.00 | -3.17 |
| | | -3.17 | 0.00 | 0.00 | 0.0 | 15.0 | -13.94 | 27.42 | 0.00 | 0.00 | 0.00 | 0.95 |
| 152 | 5 | 0.73 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 21.12 | 0.00 | 0.00 | 0.00 | -2.44 |
| | | -2.44 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 21.09 | 0.00 | 0.00 | 0.00 | 0.73 |
| 153 | 1 | -8.84 | 0.00 | 0.00 | -0.01 | 0.0 | -24.29 | -26.89 | 0.00 | 0.00 | 0.00 | -8.84 |
| | | -10.95 | 0.00 | 0.00 | 0.0 | 7.8 | -24.29 | -26.90 | 0.00 | 0.00 | 0.00 | -10.95 |
| 153 | 2 | -8.84 | 0.00 | 0.00 | -0.01 | 0.0 | -24.29 | -26.89 | 0.00 | 0.00 | 0.00 | -8.84 |
| | | -10.95 | 0.00 | 0.00 | 0.0 | 7.8 | -24.29 | -26.90 | 0.00 | 0.00 | 0.00 | -10.95 |
| 153 | 3 | -8.84 | 0.00 | 0.00 | -0.01 | 0.0 | -24.29 | -26.89 | 0.00 | 0.00 | 0.00 | -8.84 |
| | | -10.95 | 0.00 | 0.00 | 0.0 | 7.8 | -24.29 | -26.90 | 0.00 | 0.00 | 0.00 | -10.95 |
| 153 | 4 | -11.49 | 0.00 | 0.00 | -0.01 | 0.0 | -31.58 | -34.96 | 0.00 | 0.00 | 0.00 | -11.49 |
| | | -14.23 | 0.00 | 0.00 | 0.0 | 7.8 | -31.58 | -34.97 | 0.00 | 0.00 | 0.00 | -14.23 |
| 153 | 5 | -8.84 | 0.00 | 0.00 | -0.01 | 0.0 | -24.29 | -26.89 | 0.00 | 0.00 | 0.00 | -8.84 |
| | | -10.95 | 0.00 | 0.00 | 0.0 | 7.8 | -24.29 | -26.90 | 0.00 | 0.00 | 0.00 | -10.95 |
| 154 | 1 | 5.71 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -38.04 | 0.00 | 0.00 | 0.00 | 5.71 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -38.09 | 0.00 | 0.00 | 0.00 | 0.0 |
| 154 | 2 | 5.71 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -38.04 | 0.00 | 0.00 | 0.00 | 5.71 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -38.09 | 0.00 | 0.00 | 0.00 | 0.0 |
| 154 | 3 | 5.71 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -38.04 | 0.00 | 0.00 | 0.00 | 5.71 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -38.09 | 0.00 | 0.00 | 0.00 | 0.0 |
| 154 | 4 | 7.42 | 0.00 | 0.00 | -0.07 | 0.0 | -25.18 | -49.45 | 0.00 | 0.00 | 0.00 | 7.42 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -25.18 | -49.51 | 0.00 | 0.00 | 0.00 | 0.0 |
| 154 | 5 | 5.71 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -38.04 | 0.00 | 0.00 | 0.00 | 5.71 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -38.09 | 0.00 | 0.00 | 0.00 | 0.0 |
| 155 | 1 | 9.00e-03 | 0.00 | 0.00 | -2.39e-03 | 0.0 | -0.60 | 0.12 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -0.59 | 0.12 | 0.00 | 0.00 | 0.00 | 9.00e-03 |
| 155 | 2 | 9.00e-03 | 0.00 | 0.00 | -2.39e-03 | 0.0 | -0.60 | 0.12 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -0.59 | 0.12 | 0.00 | 0.00 | 0.00 | 9.00e-03 |
| 155 | 3 | 9.00e-03 | 0.00 | 0.00 | -2.39e-03 | 0.0 | -0.60 | 0.12 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -0.59 | 0.12 | 0.00 | 0.00 | 0.00 | 9.00e-03 |
| 155 | 4 | 0.01 | 0.00 | 0.00 | -3.10e-03 | 0.0 | -0.78 | 0.15 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -0.76 | 0.15 | 0.00 | 0.00 | 0.00 | 0.01 |
| 155 | 5 | 9.00e-03 | 0.00 | 0.00 | -2.39e-03 | 0.0 | -0.60 | 0.12 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -0.59 | 0.12 | 0.00 | 0.00 | 0.00 | 9.00e-03 |
| 156 | 1 | -4.76 | 0.00 | 0.00 | -0.02 | 0.0 | -18.91 | -26.04 | 0.00 | 0.00 | 0.00 | -4.76 |
| | | -8.84 | 0.00 | 0.00 | 0.0 | 15.7 | -18.92 | -26.07 | 0.00 | 0.00 | 0.00 | -8.84 |
| 156 | 2 | -4.76 | 0.00 | 0.00 | -0.02 | 0.0 | -18.91 | -26.04 | 0.00 | 0.00 | 0.00 | -4.76 |
| | | -8.84 | 0.00 | 0.00 | 0.0 | 15.7 | -18.92 | -26.07 | 0.00 | 0.00 | 0.00 | -8.84 |
| 156 | 3 | -4.76 | 0.00 | 0.00 | -0.02 | 0.0 | -18.91 | -26.04 | 0.00 | 0.00 | 0.00 | -4.76 |
| | | -8.84 | 0.00 | 0.00 | 0.0 | 15.7 | -18.92 | -26.07 | 0.00 | 0.00 | 0.00 | -8.84 |
| 156 | 4 | -6.19 | 0.00 | 0.00 | -0.03 | 0.0 | -24.58 | -33.86 | 0.00 | 0.00 | 0.00 | -6.19 |
| | | -11.49 | 0.00 | 0.00 | 0.0 | 15.7 | -24.59 | -33.89 | 0.00 | 0.00 | 0.00 | -11.49 |
| 156 | 5 | -4.76 | 0.00 | 0.00 | -0.02 | 0.0 | -18.91 | -26.04 | 0.00 | 0.00 | 0.00 | -4.76 |
| | | -8.84 | 0.00 | 0.00 | 0.0 | 15.7 | -18.92 | -26.07 | 0.00 | 0.00 | 0.00 | -8.84 |
| 157 | 1 | 14.47 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -1.51 | 0.00 | 0.00 | 0.00 | 14.47 |
| | | 14.24 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -1.56 | 0.00 | 0.00 | 0.00 | 14.24 |
| 157 | 2 | 14.47 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -1.51 | 0.00 | 0.00 | 0.00 | 14.47 |
| | | 14.24 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -1.56 | 0.00 | 0.00 | 0.00 | 14.24 |
| 157 | 3 | 14.47 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -1.51 | 0.00 | 0.00 | 0.00 | 14.47 |
| | | 14.24 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -1.56 | 0.00 | 0.00 | 0.00 | 14.24 |
| 157 | 4 | 18.81 | 0.00 | 0.00 | -0.07 | 0.0 | -25.14 | -1.96 | 0.00 | 0.00 | 0.00 | 18.81 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | 18.51 | 0.00 | 0.00 | 0.0 | 15.0 | -25.14 | -2.02 | 0.00 | 0.00 | 0.00 | 18.51 |
| 157 | 5 | 14.47 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -1.51 | 0.00 | 0.00 | 0.00 | 14.47 |
| | | 14.24 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -1.56 | 0.00 | 0.00 | 0.00 | 14.24 |
| 158 | 1 | 0.12 | 0.00 | 0.00 | -0.02 | 0.0 | -0.09 | 0.15 | 0.00 | 0.00 | 0.00 | 0.10 |
| | | 0.10 | 0.00 | 0.00 | 0.0 | 15.3 | -0.08 | 0.13 | 0.00 | 0.00 | 0.00 | 0.12 |
| 158 | 2 | 0.12 | 0.00 | 0.00 | -0.02 | 0.0 | -0.09 | 0.15 | 0.00 | 0.00 | 0.00 | 0.10 |
| | | 0.10 | 0.00 | 0.00 | 0.0 | 15.3 | -0.08 | 0.13 | 0.00 | 0.00 | 0.00 | 0.12 |
| 158 | 3 | 0.12 | 0.00 | 0.00 | -0.02 | 0.0 | -0.09 | 0.15 | 0.00 | 0.00 | 0.00 | 0.10 |
| | | 0.10 | 0.00 | 0.00 | 0.0 | 15.3 | -0.08 | 0.13 | 0.00 | 0.00 | 0.00 | 0.12 |
| 158 | 4 | 0.15 | 0.00 | 0.00 | -0.03 | 0.0 | -0.12 | 0.19 | 0.00 | 0.00 | 0.00 | 0.12 |
| | | 0.12 | 0.00 | 0.00 | 0.0 | 15.3 | -0.10 | 0.16 | 0.00 | 0.00 | 0.00 | 0.15 |
| 158 | 5 | 0.12 | 0.00 | 0.00 | -0.02 | 0.0 | -0.09 | 0.15 | 0.00 | 0.00 | 0.00 | 0.10 |
| | | 0.10 | 0.00 | 0.00 | 0.0 | 15.3 | -0.08 | 0.13 | 0.00 | 0.00 | 0.00 | 0.12 |
| 159 | 1 | 0.10 | 0.00 | 0.00 | -0.02 | 0.0 | -0.19 | 0.19 | 0.00 | 0.00 | 0.00 | 0.07 |
| | | 0.07 | 0.00 | 0.00 | 0.0 | 15.3 | -0.17 | 0.18 | 0.00 | 0.00 | 0.00 | 0.10 |
| 159 | 2 | 0.10 | 0.00 | 0.00 | -0.02 | 0.0 | -0.19 | 0.19 | 0.00 | 0.00 | 0.00 | 0.07 |
| | | 0.07 | 0.00 | 0.00 | 0.0 | 15.3 | -0.17 | 0.18 | 0.00 | 0.00 | 0.00 | 0.10 |
| 159 | 3 | 0.10 | 0.00 | 0.00 | -0.02 | 0.0 | -0.19 | 0.19 | 0.00 | 0.00 | 0.00 | 0.07 |
| | | 0.07 | 0.00 | 0.00 | 0.0 | 15.3 | -0.17 | 0.18 | 0.00 | 0.00 | 0.00 | 0.10 |
| 159 | 4 | 0.13 | 0.00 | 0.00 | -0.02 | 0.0 | -0.25 | 0.25 | 0.00 | 0.00 | 0.00 | 0.09 |
| | | 0.09 | 0.00 | 0.00 | 0.0 | 15.3 | -0.23 | 0.23 | 0.00 | 0.00 | 0.00 | 0.13 |
| 159 | 5 | 0.10 | 0.00 | 0.00 | -0.02 | 0.0 | -0.19 | 0.19 | 0.00 | 0.00 | 0.00 | 0.07 |
| | | 0.07 | 0.00 | 0.00 | 0.0 | 15.3 | -0.17 | 0.18 | 0.00 | 0.00 | 0.00 | 0.10 |
| 160 | 1 | -4.76 | 0.00 | 0.00 | -0.02 | 0.0 | -18.91 | -26.04 | 0.00 | 0.00 | 0.00 | -4.76 |
| | | -8.84 | 0.00 | 0.00 | 0.0 | 15.7 | -18.91 | -26.07 | 0.00 | 0.00 | 0.00 | -8.84 |
| 160 | 2 | -4.76 | 0.00 | 0.00 | -0.02 | 0.0 | -18.91 | -26.04 | 0.00 | 0.00 | 0.00 | -4.76 |
| | | -8.84 | 0.00 | 0.00 | 0.0 | 15.7 | -18.91 | -26.07 | 0.00 | 0.00 | 0.00 | -8.84 |
| 160 | 3 | -4.76 | 0.00 | 0.00 | -0.02 | 0.0 | -18.91 | -26.04 | 0.00 | 0.00 | 0.00 | -4.76 |
| | | -8.84 | 0.00 | 0.00 | 0.0 | 15.7 | -18.91 | -26.07 | 0.00 | 0.00 | 0.00 | -8.84 |
| 160 | 4 | -6.19 | 0.00 | 0.00 | -0.03 | 0.0 | -24.58 | -33.86 | 0.00 | 0.00 | 0.00 | -6.19 |
| | | -11.49 | 0.00 | 0.00 | 0.0 | 15.7 | -24.59 | -33.89 | 0.00 | 0.00 | 0.00 | -11.49 |
| 160 | 5 | -4.76 | 0.00 | 0.00 | -0.02 | 0.0 | -18.91 | -26.04 | 0.00 | 0.00 | 0.00 | -4.76 |
| | | -8.84 | 0.00 | 0.00 | 0.0 | 15.7 | -18.91 | -26.07 | 0.00 | 0.00 | 0.00 | -8.84 |
| 164 | 1 | -1.14 | 0.00 | 0.00 | -0.02 | 0.0 | -13.40 | -23.97 | 0.00 | 0.00 | 0.00 | -1.14 |
| | | -4.76 | 0.00 | 0.00 | 0.0 | 15.1 | -13.41 | -23.99 | 0.00 | 0.00 | 0.00 | -4.76 |
| 164 | 2 | -1.14 | 0.00 | 0.00 | -0.02 | 0.0 | -13.40 | -23.97 | 0.00 | 0.00 | 0.00 | -1.14 |
| | | -4.76 | 0.00 | 0.00 | 0.0 | 15.1 | -13.41 | -23.99 | 0.00 | 0.00 | 0.00 | -4.76 |
| 164 | 3 | -1.14 | 0.00 | 0.00 | -0.02 | 0.0 | -13.40 | -23.97 | 0.00 | 0.00 | 0.00 | -1.14 |
| | | -4.76 | 0.00 | 0.00 | 0.0 | 15.1 | -13.41 | -23.99 | 0.00 | 0.00 | 0.00 | -4.76 |
| 164 | 4 | -1.49 | 0.00 | 0.00 | -0.03 | 0.0 | -17.43 | -31.16 | 0.00 | 0.00 | 0.00 | -1.49 |
| | | -6.19 | 0.00 | 0.00 | 0.0 | 15.1 | -17.43 | -31.19 | 0.00 | 0.00 | 0.00 | -6.19 |
| 164 | 5 | -1.14 | 0.00 | 0.00 | -0.02 | 0.0 | -13.40 | -23.97 | 0.00 | 0.00 | 0.00 | -1.14 |
| | | -4.76 | 0.00 | 0.00 | 0.0 | 15.1 | -13.41 | -23.99 | 0.00 | 0.00 | 0.00 | -4.76 |
| 166 | 1 | -2.43 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 26.18 | 0.00 | 0.00 | 0.00 | -6.35 |
| | | -6.35 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 26.15 | 0.00 | 0.00 | 0.00 | -2.43 |
| 166 | 2 | -2.43 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 26.18 | 0.00 | 0.00 | 0.00 | -6.35 |
| | | -6.35 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 26.15 | 0.00 | 0.00 | 0.00 | -2.43 |
| 166 | 3 | -2.43 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 26.18 | 0.00 | 0.00 | 0.00 | -6.35 |
| | | -6.35 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 26.15 | 0.00 | 0.00 | 0.00 | -2.43 |
| 166 | 4 | -3.16 | 0.00 | 0.00 | -0.03 | 0.0 | -13.93 | 34.03 | 0.00 | 0.00 | 0.00 | -8.26 |
| | | -8.26 | 0.00 | 0.00 | 0.0 | 15.0 | -13.93 | 34.00 | 0.00 | 0.00 | 0.00 | -3.16 |
| 166 | 5 | -2.43 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 26.18 | 0.00 | 0.00 | 0.00 | -6.35 |
| | | -6.35 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 26.15 | 0.00 | 0.00 | 0.00 | -2.43 |
| 167 | 1 | 0.08 | 0.00 | 0.00 | -0.02 | 0.0 | -1.14 | 0.41 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | 0.02 | 0.00 | 0.00 | 0.0 | 15.3 | -1.09 | 0.39 | 0.00 | 0.00 | 0.00 | 0.08 |
| 167 | 2 | 0.08 | 0.00 | 0.00 | -0.02 | 0.0 | -1.14 | 0.41 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | 0.02 | 0.00 | 0.00 | 0.0 | 15.3 | -1.09 | 0.39 | 0.00 | 0.00 | 0.00 | 0.08 |
| 167 | 3 | 0.08 | 0.00 | 0.00 | -0.02 | 0.0 | -1.14 | 0.41 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | 0.02 | 0.00 | 0.00 | 0.0 | 15.3 | -1.09 | 0.39 | 0.00 | 0.00 | 0.00 | 0.08 |
| 167 | 4 | 0.11 | 0.00 | 0.00 | -0.02 | 0.0 | -1.48 | 0.53 | 0.00 | 0.00 | 0.00 | 0.03 |
| | | 0.03 | 0.00 | 0.00 | 0.0 | 15.3 | -1.41 | 0.50 | 0.00 | 0.00 | 0.00 | 0.11 |
| 167 | 5 | 0.08 | 0.00 | 0.00 | -0.02 | 0.0 | -1.14 | 0.41 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | 0.02 | 0.00 | 0.00 | 0.0 | 15.3 | -1.09 | 0.39 | 0.00 | 0.00 | 0.00 | 0.08 |
| 168 | 1 | 14.24 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -11.62 | 0.00 | 0.00 | 0.00 | 14.24 |
| | | 12.49 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -11.67 | 0.00 | 0.00 | 0.00 | 12.49 |
| 168 | 2 | 14.24 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -11.62 | 0.00 | 0.00 | 0.00 | 14.24 |
| | | 12.49 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -11.67 | 0.00 | 0.00 | 0.00 | 12.49 |
| 168 | 3 | 14.24 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -11.62 | 0.00 | 0.00 | 0.00 | 14.24 |
| | | 12.49 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -11.67 | 0.00 | 0.00 | 0.00 | 12.49 |
| 168 | 4 | 18.51 | 0.00 | 0.00 | -0.07 | 0.0 | -25.14 | -15.11 | 0.00 | 0.00 | 0.00 | 18.51 |
| | | 16.24 | 0.00 | 0.00 | 0.0 | 15.0 | -25.14 | -15.18 | 0.00 | 0.00 | 0.00 | 16.24 |
| 168 | 5 | 14.24 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -11.62 | 0.00 | 0.00 | 0.00 | 14.24 |
| | | 12.49 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -11.67 | 0.00 | 0.00 | 0.00 | 12.49 |
| 169 | 1 | 6.77 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 3.98 | 0.00 | 0.00 | 0.00 | 6.18 |
| | | 6.18 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 3.96 | 0.00 | 0.00 | 0.00 | 6.77 |
| 169 | 2 | 6.77 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 3.98 | 0.00 | 0.00 | 0.00 | 6.18 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | 6.18 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 3.96 | 0.00 | 0.00 | 0.00 | 6.77 |
| 169 | 3 | 6.77 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 3.98 | 0.00 | 0.00 | 0.00 | 6.18 |
| | | 6.18 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 3.96 | 0.00 | 0.00 | 0.00 | 6.77 |
| 169 | 4 | 8.80 | 0.00 | 0.00 | -0.03 | 0.0 | -13.84 | 5.18 | 0.00 | 0.00 | 0.00 | 8.03 |
| | | 8.03 | 0.00 | 0.00 | 0.0 | 15.0 | -13.84 | 5.15 | 0.00 | 0.00 | 0.00 | 8.80 |
| 169 | 5 | 6.77 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 3.98 | 0.00 | 0.00 | 0.00 | 6.18 |
| | | 6.18 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 3.96 | 0.00 | 0.00 | 0.00 | 6.77 |
| 170 | 1 | 0.73 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 21.12 | 0.00 | 0.00 | 0.00 | -2.44 |
| | | -2.44 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 21.09 | 0.00 | 0.00 | 0.00 | 0.73 |
| 170 | 2 | 0.73 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 21.12 | 0.00 | 0.00 | 0.00 | -2.44 |
| | | -2.44 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 21.09 | 0.00 | 0.00 | 0.00 | 0.73 |
| 170 | 3 | 0.73 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 21.12 | 0.00 | 0.00 | 0.00 | -2.44 |
| | | -2.44 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 21.09 | 0.00 | 0.00 | 0.00 | 0.73 |
| 170 | 4 | 0.95 | 0.00 | 0.00 | -0.03 | 0.0 | -13.93 | 27.45 | 0.00 | 0.00 | 0.00 | -3.17 |
| | | -3.17 | 0.00 | 0.00 | 0.0 | 15.0 | -13.93 | 27.42 | 0.00 | 0.00 | 0.00 | 0.95 |
| 170 | 5 | 0.73 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 21.12 | 0.00 | 0.00 | 0.00 | -2.44 |
| | | -2.44 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 21.09 | 0.00 | 0.00 | 0.00 | 0.73 |
| 171 | 1 | 0.10 | 0.00 | 0.00 | -0.02 | 0.0 | -0.20 | 0.20 | 0.00 | 0.00 | 0.00 | 0.07 |
| | | 0.07 | 0.00 | 0.00 | 0.0 | 15.3 | -0.18 | 0.18 | 0.00 | 0.00 | 0.00 | 0.10 |
| 171 | 2 | 0.10 | 0.00 | 0.00 | -0.02 | 0.0 | -0.20 | 0.20 | 0.00 | 0.00 | 0.00 | 0.07 |
| | | 0.07 | 0.00 | 0.00 | 0.0 | 15.3 | -0.18 | 0.18 | 0.00 | 0.00 | 0.00 | 0.10 |
| 171 | 3 | 0.10 | 0.00 | 0.00 | -0.02 | 0.0 | -0.20 | 0.20 | 0.00 | 0.00 | 0.00 | 0.07 |
| | | 0.07 | 0.00 | 0.00 | 0.0 | 15.3 | -0.18 | 0.18 | 0.00 | 0.00 | 0.00 | 0.10 |
| 171 | 4 | 0.12 | 0.00 | 0.00 | -0.02 | 0.0 | -0.26 | 0.26 | 0.00 | 0.00 | 0.00 | 0.09 |
| | | 0.09 | 0.00 | 0.00 | 0.0 | 15.3 | -0.23 | 0.24 | 0.00 | 0.00 | 0.00 | 0.12 |
| 171 | 5 | 0.10 | 0.00 | 0.00 | -0.02 | 0.0 | -0.20 | 0.20 | 0.00 | 0.00 | 0.00 | 0.07 |
| | | 0.07 | 0.00 | 0.00 | 0.0 | 15.3 | -0.18 | 0.18 | 0.00 | 0.00 | 0.00 | 0.10 |
| 172 | 1 | 12.49 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -23.13 | 0.00 | 0.00 | 0.00 | 12.49 |
| | | 9.02 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -23.18 | 0.00 | 0.00 | 0.00 | 9.02 |
| 172 | 2 | 12.49 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -23.13 | 0.00 | 0.00 | 0.00 | 12.49 |
| | | 9.02 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -23.18 | 0.00 | 0.00 | 0.00 | 9.02 |
| 172 | 3 | 12.49 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -23.13 | 0.00 | 0.00 | 0.00 | 12.49 |
| | | 9.02 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -23.18 | 0.00 | 0.00 | 0.00 | 9.02 |
| 172 | 4 | 16.24 | 0.00 | 0.00 | -0.07 | 0.0 | -25.14 | -30.07 | 0.00 | 0.00 | 0.00 | 16.24 |
| | | 11.73 | 0.00 | 0.00 | 0.0 | 15.0 | -25.14 | -30.13 | 0.00 | 0.00 | 0.00 | 11.73 |
| 172 | 5 | 12.49 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -23.13 | 0.00 | 0.00 | 0.00 | 12.49 |
| | | 9.02 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -23.18 | 0.00 | 0.00 | 0.00 | 9.02 |
| 173 | 1 | 3.13 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 16.06 | 0.00 | 0.00 | 0.00 | 0.73 |
| | | 0.73 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 16.04 | 0.00 | 0.00 | 0.00 | 3.13 |
| 173 | 2 | 3.13 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 16.06 | 0.00 | 0.00 | 0.00 | 0.73 |
| | | 0.73 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 16.04 | 0.00 | 0.00 | 0.00 | 3.13 |
| 173 | 3 | 3.13 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 16.06 | 0.00 | 0.00 | 0.00 | 0.73 |
| | | 0.73 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 16.04 | 0.00 | 0.00 | 0.00 | 3.13 |
| 173 | 4 | 4.07 | 0.00 | 0.00 | -0.03 | 0.0 | -13.93 | 20.88 | 0.00 | 0.00 | 0.00 | 0.94 |
| | | 0.94 | 0.00 | 0.00 | 0.0 | 15.0 | -13.93 | 20.85 | 0.00 | 0.00 | 0.00 | 4.07 |
| 173 | 5 | 3.13 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 16.06 | 0.00 | 0.00 | 0.00 | 0.73 |
| | | 0.73 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 16.04 | 0.00 | 0.00 | 0.00 | 3.13 |
| 174 | 1 | 6.04 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 40.30 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 40.25 | 0.00 | 0.00 | 0.00 | 6.04 |
| 174 | 2 | 6.04 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 40.30 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 40.25 | 0.00 | 0.00 | 0.00 | 6.04 |
| 174 | 3 | 6.04 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 40.30 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 40.25 | 0.00 | 0.00 | 0.00 | 6.04 |
| 174 | 4 | 7.85 | 0.00 | 0.00 | -0.07 | 0.0 | -25.14 | 52.39 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -25.14 | 52.33 | 0.00 | 0.00 | 0.00 | 7.85 |
| 174 | 5 | 6.04 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 40.30 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 40.25 | 0.00 | 0.00 | 0.00 | 6.04 |
| 176 | 1 | 12.18 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -16.46 | 0.00 | 0.00 | 0.00 | 12.18 |
| | | 9.71 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -16.52 | 0.00 | 0.00 | 0.00 | 9.71 |
| 176 | 2 | 12.18 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -16.46 | 0.00 | 0.00 | 0.00 | 12.18 |
| | | 9.71 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -16.52 | 0.00 | 0.00 | 0.00 | 9.71 |
| 176 | 3 | 12.18 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -16.46 | 0.00 | 0.00 | 0.00 | 12.18 |
| | | 9.71 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -16.52 | 0.00 | 0.00 | 0.00 | 9.71 |
| 176 | 4 | 15.83 | 0.00 | 0.00 | -0.07 | 0.0 | -25.18 | -21.40 | 0.00 | 0.00 | 0.00 | 15.83 |
| | | 12.62 | 0.00 | 0.00 | 0.0 | 15.0 | -25.18 | -21.47 | 0.00 | 0.00 | 0.00 | 12.62 |
| 176 | 5 | 12.18 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | -16.46 | 0.00 | 0.00 | 0.00 | 12.18 |
| | | 9.71 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | -16.52 | 0.00 | 0.00 | 0.00 | 9.71 |
| 177 | 1 | 4.94 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 12.05 | 0.00 | 0.00 | 0.00 | 3.13 |
| | | 3.13 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 12.03 | 0.00 | 0.00 | 0.00 | 4.94 |
| 177 | 2 | 4.94 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 12.05 | 0.00 | 0.00 | 0.00 | 3.13 |
| | | 3.13 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 12.03 | 0.00 | 0.00 | 0.00 | 4.94 |
| 177 | 3 | 4.94 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 12.05 | 0.00 | 0.00 | 0.00 | 3.13 |
| | | 3.13 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 12.03 | 0.00 | 0.00 | 0.00 | 4.94 |
| 177 | 4 | 6.42 | 0.00 | 0.00 | -0.03 | 0.0 | -13.93 | 15.66 | 0.00 | 0.00 | 0.00 | 4.07 |
| | | 4.07 | 0.00 | 0.00 | 0.0 | 15.0 | -13.93 | 15.63 | 0.00 | 0.00 | 0.00 | 6.42 |
| 177 | 5 | 4.94 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 12.05 | 0.00 | 0.00 | 0.00 | 3.13 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | 3.13 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 12.03 | 0.00 | 0.00 | 0.00 | 4.94 |
| 178 | 1 | 13.18 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 18.73 | 0.00 | 0.00 | 0.00 | 10.37 |
| | | 10.37 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 18.68 | 0.00 | 0.00 | 0.00 | 13.18 |
| 178 | 2 | 13.18 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 18.73 | 0.00 | 0.00 | 0.00 | 10.37 |
| | | 10.37 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 18.68 | 0.00 | 0.00 | 0.00 | 13.18 |
| 178 | 3 | 13.18 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 18.73 | 0.00 | 0.00 | 0.00 | 10.37 |
| | | 10.37 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 18.68 | 0.00 | 0.00 | 0.00 | 13.18 |
| 178 | 4 | 17.13 | 0.00 | 0.00 | -0.07 | 0.0 | -25.14 | 24.35 | 0.00 | 0.00 | 0.00 | 13.48 |
| | | 13.48 | 0.00 | 0.00 | 0.0 | 15.0 | -25.14 | 24.29 | 0.00 | 0.00 | 0.00 | 17.13 |
| 178 | 5 | 13.18 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 18.73 | 0.00 | 0.00 | 0.00 | 10.37 |
| | | 10.37 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 18.68 | 0.00 | 0.00 | 0.00 | 13.18 |
| 179 | 1 | 0.84 | 0.00 | 0.00 | -9.50 | 0.0 | -0.33 | 4.75 | 0.00 | 0.00 | 0.00 | -1.53 |
| | | -1.53 | 0.00 | 0.00 | 3.46 | 200.0 | -0.33 | -4.75 | 0.00 | 0.00 | 0.00 | -1.53 |
| 179 | 2 | 0.84 | 0.00 | 0.00 | -9.50 | 0.0 | -0.33 | 4.75 | 0.00 | 0.00 | 0.00 | -1.53 |
| | | -1.53 | 0.00 | 0.00 | 3.46 | 200.0 | -0.33 | -4.75 | 0.00 | 0.00 | 0.00 | -1.53 |
| 179 | 3 | 0.84 | 0.00 | 0.00 | -9.50 | 0.0 | -0.33 | 4.75 | 0.00 | 0.00 | 0.00 | -1.53 |
| | | -1.53 | 0.00 | 0.00 | 3.46 | 200.0 | -0.33 | -4.75 | 0.00 | 0.00 | 0.00 | -1.53 |
| 179 | 4 | 1.10 | 0.00 | 0.00 | -12.35 | 0.0 | -0.43 | 6.18 | 0.00 | 0.00 | 0.00 | -1.99 |
| | | -1.99 | 0.00 | 0.00 | 4.50 | 200.0 | -0.43 | -6.18 | 0.00 | 0.00 | 0.00 | -1.99 |
| 179 | 5 | 0.84 | 0.00 | 0.00 | -9.50 | 0.0 | -0.33 | 4.75 | 0.00 | 0.00 | 0.00 | -1.53 |
| | | -1.53 | 0.00 | 0.00 | 3.46 | 200.0 | -0.33 | -4.75 | 0.00 | 0.00 | 0.00 | -1.53 |
| 180 | 1 | 4.83 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 14.10 | 0.00 | 0.00 | 0.00 | 2.72 |
| | | 2.72 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 14.08 | 0.00 | 0.00 | 0.00 | 4.83 |
| 180 | 2 | 4.83 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 14.10 | 0.00 | 0.00 | 0.00 | 2.72 |
| | | 2.72 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 14.08 | 0.00 | 0.00 | 0.00 | 4.83 |
| 180 | 3 | 4.83 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 14.10 | 0.00 | 0.00 | 0.00 | 2.72 |
| | | 2.72 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 14.08 | 0.00 | 0.00 | 0.00 | 4.83 |
| 180 | 4 | 6.28 | 0.00 | 0.00 | -0.03 | 0.0 | -13.84 | 18.33 | 0.00 | 0.00 | 0.00 | 3.53 |
| | | 3.53 | 0.00 | 0.00 | 0.0 | 15.0 | -13.84 | 18.30 | 0.00 | 0.00 | 0.00 | 6.28 |
| 180 | 5 | 4.83 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 14.10 | 0.00 | 0.00 | 0.00 | 2.72 |
| | | 2.72 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 14.08 | 0.00 | 0.00 | 0.00 | 4.83 |
| 181 | 1 | 6.18 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 9.04 | 0.00 | 0.00 | 0.00 | 4.83 |
| | | 4.83 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 9.02 | 0.00 | 0.00 | 0.00 | 6.18 |
| 181 | 2 | 6.18 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 9.04 | 0.00 | 0.00 | 0.00 | 4.83 |
| | | 4.83 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 9.02 | 0.00 | 0.00 | 0.00 | 6.18 |
| 181 | 3 | 6.18 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 9.04 | 0.00 | 0.00 | 0.00 | 4.83 |
| | | 4.83 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 9.02 | 0.00 | 0.00 | 0.00 | 6.18 |
| 181 | 4 | 8.03 | 0.00 | 0.00 | -0.03 | 0.0 | -13.84 | 11.76 | 0.00 | 0.00 | 0.00 | 6.27 |
| | | 6.27 | 0.00 | 0.00 | 0.0 | 15.0 | -13.84 | 11.72 | 0.00 | 0.00 | 0.00 | 8.03 |
| 181 | 5 | 6.18 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 9.04 | 0.00 | 0.00 | 0.00 | 4.83 |
| | | 4.83 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 9.02 | 0.00 | 0.00 | 0.00 | 6.18 |
| 182 | 1 | 6.77 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 3.98 | 0.00 | 0.00 | 0.00 | 6.18 |
| | | 6.18 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 3.96 | 0.00 | 0.00 | 0.00 | 6.77 |
| 182 | 2 | 6.77 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 3.98 | 0.00 | 0.00 | 0.00 | 6.18 |
| | | 6.18 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 3.96 | 0.00 | 0.00 | 0.00 | 6.77 |
| 182 | 3 | 6.77 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 3.98 | 0.00 | 0.00 | 0.00 | 6.18 |
| | | 6.18 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 3.96 | 0.00 | 0.00 | 0.00 | 6.77 |
| 182 | 4 | 8.80 | 0.00 | 0.00 | -0.03 | 0.0 | -13.84 | 5.18 | 0.00 | 0.00 | 0.00 | 8.03 |
| | | 8.03 | 0.00 | 0.00 | 0.0 | 15.0 | -13.84 | 5.15 | 0.00 | 0.00 | 0.00 | 8.80 |
| 182 | 5 | 6.77 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | 3.98 | 0.00 | 0.00 | 0.00 | 6.18 |
| | | 6.18 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | 3.96 | 0.00 | 0.00 | 0.00 | 6.77 |
| 183 | 1 | 6.77 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -1.07 | 0.00 | 0.00 | 0.00 | 6.77 |
| | | 6.61 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -1.10 | 0.00 | 0.00 | 0.00 | 6.61 |
| 183 | 2 | 6.77 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -1.07 | 0.00 | 0.00 | 0.00 | 6.77 |
| | | 6.61 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -1.10 | 0.00 | 0.00 | 0.00 | 6.61 |
| 183 | 3 | 6.77 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -1.07 | 0.00 | 0.00 | 0.00 | 6.77 |
| | | 6.61 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -1.10 | 0.00 | 0.00 | 0.00 | 6.61 |
| 183 | 4 | 8.80 | 0.00 | 0.00 | -0.03 | 0.0 | -13.84 | -1.40 | 0.00 | 0.00 | 0.00 | 8.80 |
| | | 8.59 | 0.00 | 0.00 | 0.0 | 15.0 | -13.84 | -1.43 | 0.00 | 0.00 | 0.00 | 8.59 |
| 183 | 5 | 6.77 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -1.07 | 0.00 | 0.00 | 0.00 | 6.77 |
| | | 6.61 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -1.10 | 0.00 | 0.00 | 0.00 | 6.61 |
| 184 | 1 | 6.61 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -6.13 | 0.00 | 0.00 | 0.00 | 6.61 |
| | | 5.69 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -6.16 | 0.00 | 0.00 | 0.00 | 5.69 |
| 184 | 2 | 6.61 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -6.13 | 0.00 | 0.00 | 0.00 | 6.61 |
| | | 5.69 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -6.16 | 0.00 | 0.00 | 0.00 | 5.69 |
| 184 | 3 | 6.61 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -6.13 | 0.00 | 0.00 | 0.00 | 6.61 |
| | | 5.69 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -6.16 | 0.00 | 0.00 | 0.00 | 5.69 |
| 184 | 4 | 8.59 | 0.00 | 0.00 | -0.03 | 0.0 | -13.84 | -7.97 | 0.00 | 0.00 | 0.00 | 8.59 |
| | | 7.39 | 0.00 | 0.00 | 0.0 | 15.0 | -13.84 | -8.00 | 0.00 | 0.00 | 0.00 | 7.39 |
| 184 | 5 | 6.61 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -6.13 | 0.00 | 0.00 | 0.00 | 6.61 |
| | | 5.69 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -6.16 | 0.00 | 0.00 | 0.00 | 5.69 |
| 185 | 1 | 5.69 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -10.14 | 0.00 | 0.00 | 0.00 | 5.69 |
| | | 4.16 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -10.16 | 0.00 | 0.00 | 0.00 | 4.16 |
| 185 | 2 | 5.69 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -10.14 | 0.00 | 0.00 | 0.00 | 5.69 |
| | | 4.16 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -10.16 | 0.00 | 0.00 | 0.00 | 4.16 |
| 185 | 3 | 5.69 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -10.14 | 0.00 | 0.00 | 0.00 | 5.69 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | 4.16 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -10.16 | 0.00 | 0.00 | 0.00 | 4.16 |
| 185 | 4 | 7.39 | 0.00 | 0.00 | -0.03 | 0.0 | -13.84 | -13.18 | 0.00 | 0.00 | 0.00 | 7.39 |
| | | 5.41 | 0.00 | 0.00 | 0.0 | 15.0 | -13.84 | -13.21 | 0.00 | 0.00 | 0.00 | 5.41 |
| 185 | 5 | 5.69 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -10.14 | 0.00 | 0.00 | 0.00 | 5.69 |
| | | 4.16 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -10.16 | 0.00 | 0.00 | 0.00 | 4.16 |
| 186 | 1 | 4.17 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -15.20 | 0.00 | 0.00 | 0.00 | 4.17 |
| | | 1.89 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -15.22 | 0.00 | 0.00 | 0.00 | 1.89 |
| 186 | 2 | 4.17 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -15.20 | 0.00 | 0.00 | 0.00 | 4.17 |
| | | 1.89 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -15.22 | 0.00 | 0.00 | 0.00 | 1.89 |
| 186 | 3 | 4.17 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -15.20 | 0.00 | 0.00 | 0.00 | 4.17 |
| | | 1.89 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -15.22 | 0.00 | 0.00 | 0.00 | 1.89 |
| 186 | 4 | 5.42 | 0.00 | 0.00 | -0.03 | 0.0 | -13.84 | -19.76 | 0.00 | 0.00 | 0.00 | 5.42 |
| | | 2.45 | 0.00 | 0.00 | 0.0 | 15.0 | -13.84 | -19.79 | 0.00 | 0.00 | 0.00 | 2.45 |
| 186 | 5 | 4.17 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -15.20 | 0.00 | 0.00 | 0.00 | 4.17 |
| | | 1.89 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -15.22 | 0.00 | 0.00 | 0.00 | 1.89 |
| 187 | 1 | 1.89 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -20.26 | 0.00 | 0.00 | 0.00 | 1.89 |
| | | -1.15 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -20.28 | 0.00 | 0.00 | 0.00 | -1.15 |
| 187 | 2 | 1.89 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -20.26 | 0.00 | 0.00 | 0.00 | 1.89 |
| | | -1.15 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -20.28 | 0.00 | 0.00 | 0.00 | -1.15 |
| 187 | 3 | 1.89 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -20.26 | 0.00 | 0.00 | 0.00 | 1.89 |
| | | -1.15 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -20.28 | 0.00 | 0.00 | 0.00 | -1.15 |
| 187 | 4 | 2.46 | 0.00 | 0.00 | -0.03 | 0.0 | -13.84 | -26.33 | 0.00 | 0.00 | 0.00 | 2.46 |
| | | -1.49 | 0.00 | 0.00 | 0.0 | 15.0 | -13.84 | -26.36 | 0.00 | 0.00 | 0.00 | -1.49 |
| 187 | 5 | 1.89 | 0.00 | 0.00 | -0.02 | 0.0 | -10.64 | -20.26 | 0.00 | 0.00 | 0.00 | 1.89 |
| | | -1.15 | 0.00 | 0.00 | 0.0 | 15.0 | -10.64 | -20.28 | 0.00 | 0.00 | 0.00 | -1.15 |
| 188 | 1 | 0.92 | 0.00 | 0.00 | -10.11 | 0.0 | 5.50e-03 | 5.06 | 0.00 | 0.00 | 0.00 | -1.61 |
| | | -1.61 | 0.00 | 0.00 | 0.0 | 200.0 | 5.50e-03 | -5.06 | 0.00 | 0.00 | 0.00 | -1.61 |
| 188 | 2 | 0.92 | 0.00 | 0.00 | -10.11 | 0.0 | 5.50e-03 | 5.06 | 0.00 | 0.00 | 0.00 | -1.61 |
| | | -1.61 | 0.00 | 0.00 | 0.0 | 200.0 | 5.50e-03 | -5.06 | 0.00 | 0.00 | 0.00 | -1.61 |
| 188 | 3 | 0.92 | 0.00 | 0.00 | -10.11 | 0.0 | 5.50e-03 | 5.06 | 0.00 | 0.00 | 0.00 | -1.61 |
| | | -1.61 | 0.00 | 0.00 | 0.0 | 200.0 | 5.50e-03 | -5.06 | 0.00 | 0.00 | 0.00 | -1.61 |
| 188 | 4 | 1.19 | 0.00 | 0.00 | -13.15 | 0.0 | 7.15e-03 | 6.57 | 0.00 | 0.00 | 0.00 | -2.10 |
| | | -2.10 | 0.00 | 0.00 | 0.0 | 200.0 | 7.15e-03 | -6.57 | 0.00 | 0.00 | 0.00 | -2.10 |
| 188 | 5 | 0.92 | 0.00 | 0.00 | -10.11 | 0.0 | 5.50e-03 | 5.06 | 0.00 | 0.00 | 0.00 | -1.61 |
| | | -1.61 | 0.00 | 0.00 | 0.0 | 200.0 | 5.50e-03 | -5.06 | 0.00 | 0.00 | 0.00 | -1.61 |
| 189 | 1 | 0.01 | 0.00 | 0.00 | 0.07 | 0.0 | 0.07 | -0.04 | 0.00 | 0.00 | 0.00 | 0.01 |
| | | -6.61e-03 | 0.00 | 0.00 | 0.20 | 200.0 | 0.07 | 0.04 | 0.00 | 0.00 | 0.00 | 0.01 |
| 189 | 2 | 0.01 | 0.00 | 0.00 | 0.07 | 0.0 | 0.07 | -0.04 | 0.00 | 0.00 | 0.00 | 0.01 |
| | | -6.61e-03 | 0.00 | 0.00 | 0.20 | 200.0 | 0.07 | 0.04 | 0.00 | 0.00 | 0.00 | 0.01 |
| 189 | 3 | 0.01 | 0.00 | 0.00 | 0.07 | 0.0 | 0.07 | -0.04 | 0.00 | 0.00 | 0.00 | 0.01 |
| | | -6.61e-03 | 0.00 | 0.00 | 0.20 | 200.0 | 0.07 | 0.04 | 0.00 | 0.00 | 0.00 | 0.01 |
| 189 | 4 | 0.02 | 0.00 | 0.00 | 0.09 | 0.0 | 0.09 | -0.05 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | -8.59e-03 | 0.00 | 0.00 | 0.26 | 200.0 | 0.09 | 0.05 | 0.00 | 0.00 | 0.00 | 0.01 |
| 189 | 5 | 0.01 | 0.00 | 0.00 | 0.07 | 0.0 | 0.07 | -0.04 | 0.00 | 0.00 | 0.00 | 0.01 |
| | | -6.61e-03 | 0.00 | 0.00 | 0.20 | 200.0 | 0.07 | 0.04 | 0.00 | 0.00 | 0.00 | 0.01 |
| 190 | 1 | 0.34 | 0.00 | 0.00 | -0.03 | 0.0 | -0.01 | 0.08 | 0.00 | 0.00 | 0.00 | 0.34 |
| | | 0.34 | 0.00 | 0.00 | 0.0 | 7.6 | -8.42e-03 | 0.06 | 0.00 | 0.00 | 0.00 | 0.34 |
| 190 | 2 | 0.34 | 0.00 | 0.00 | -0.03 | 0.0 | -0.01 | 0.08 | 0.00 | 0.00 | 0.00 | 0.34 |
| | | 0.34 | 0.00 | 0.00 | 0.0 | 7.6 | -8.42e-03 | 0.06 | 0.00 | 0.00 | 0.00 | 0.34 |
| 190 | 3 | 0.34 | 0.00 | 0.00 | -0.03 | 0.0 | -0.01 | 0.08 | 0.00 | 0.00 | 0.00 | 0.34 |
| | | 0.34 | 0.00 | 0.00 | 0.0 | 7.6 | -8.42e-03 | 0.06 | 0.00 | 0.00 | 0.00 | 0.34 |
| 190 | 4 | 0.44 | 0.00 | 0.00 | -0.03 | 0.0 | -0.02 | 0.11 | 0.00 | 0.00 | 0.00 | 0.44 |
| | | 0.44 | 0.00 | 0.00 | 0.0 | 7.6 | -0.01 | 0.08 | 0.00 | 0.00 | 0.00 | 0.44 |
| 190 | 5 | 0.34 | 0.00 | 0.00 | -0.03 | 0.0 | -0.01 | 0.08 | 0.00 | 0.00 | 0.00 | 0.34 |
| | | 0.34 | 0.00 | 0.00 | 0.0 | 7.6 | -8.42e-03 | 0.06 | 0.00 | 0.00 | 0.00 | 0.34 |
| 191 | 1 | 0.36 | 0.00 | 0.00 | -0.03 | 0.0 | 0.83 | -3.71 | 0.00 | 0.00 | 0.00 | 0.36 |
| | | 0.08 | 0.00 | 0.00 | 0.0 | 7.6 | 0.83 | -3.74 | 0.00 | 0.00 | 0.00 | 0.08 |
| 191 | 2 | 0.36 | 0.00 | 0.00 | -0.03 | 0.0 | 0.83 | -3.71 | 0.00 | 0.00 | 0.00 | 0.36 |
| | | 0.08 | 0.00 | 0.00 | 0.0 | 7.6 | 0.83 | -3.74 | 0.00 | 0.00 | 0.00 | 0.08 |
| 191 | 3 | 0.36 | 0.00 | 0.00 | -0.03 | 0.0 | 0.83 | -3.71 | 0.00 | 0.00 | 0.00 | 0.36 |
| | | 0.08 | 0.00 | 0.00 | 0.0 | 7.6 | 0.83 | -3.74 | 0.00 | 0.00 | 0.00 | 0.08 |
| 191 | 4 | 0.47 | 0.00 | 0.00 | -0.03 | 0.0 | 1.08 | -4.82 | 0.00 | 0.00 | 0.00 | 0.47 |
| | | 0.10 | 0.00 | 0.00 | 0.0 | 7.6 | 1.08 | -4.86 | 0.00 | 0.00 | 0.00 | 0.10 |
| 191 | 5 | 0.36 | 0.00 | 0.00 | -0.03 | 0.0 | 0.83 | -3.71 | 0.00 | 0.00 | 0.00 | 0.36 |
| | | 0.08 | 0.00 | 0.00 | 0.0 | 7.6 | 0.83 | -3.74 | 0.00 | 0.00 | 0.00 | 0.08 |
| 192 | 1 | 0.02 | 0.00 | 0.00 | -5.03e-03 | 0.0 | -1.39 | 0.28 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -1.37 | 0.27 | 0.00 | 0.00 | 0.00 | 0.02 |
| 192 | 2 | 0.02 | 0.00 | 0.00 | -5.03e-03 | 0.0 | -1.39 | 0.28 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -1.37 | 0.27 | 0.00 | 0.00 | 0.00 | 0.02 |
| 192 | 3 | 0.02 | 0.00 | 0.00 | -5.03e-03 | 0.0 | -1.39 | 0.28 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -1.37 | 0.27 | 0.00 | 0.00 | 0.00 | 0.02 |
| 192 | 4 | 0.03 | 0.00 | 0.00 | -6.54e-03 | 0.0 | -1.81 | 0.36 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -1.78 | 0.35 | 0.00 | 0.00 | 0.00 | 0.03 |
| 192 | 5 | 0.02 | 0.00 | 0.00 | -5.03e-03 | 0.0 | -1.39 | 0.28 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -1.37 | 0.27 | 0.00 | 0.00 | 0.00 | 0.02 |
| 193 | 1 | 12.49 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -23.13 | 0.00 | 0.00 | 0.00 | 12.49 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | 9.02 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -23.18 | 0.00 | 0.00 | 0.00 | 9.02 |
| 193 | 2 | 12.49 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -23.13 | 0.00 | 0.00 | 0.00 | 12.49 |
| | | 9.02 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -23.18 | 0.00 | 0.00 | 0.00 | 9.02 |
| 193 | 3 | 12.49 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -23.13 | 0.00 | 0.00 | 0.00 | 12.49 |
| | | 9.02 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -23.18 | 0.00 | 0.00 | 0.00 | 9.02 |
| 193 | 4 | 16.24 | 0.00 | 0.00 | -0.07 | 0.0 | -25.14 | -30.07 | 0.00 | 0.00 | 0.00 | 16.24 |
| | | 11.73 | 0.00 | 0.00 | 0.0 | 15.0 | -25.14 | -30.13 | 0.00 | 0.00 | 0.00 | 11.73 |
| 193 | 5 | 12.49 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -23.13 | 0.00 | 0.00 | 0.00 | 12.49 |
| | | 9.02 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -23.18 | 0.00 | 0.00 | 0.00 | 9.02 |
| 195 | 1 | 0.34 | 0.00 | 0.00 | -0.05 | 0.0 | -0.12 | 0.28 | 0.00 | 0.00 | 0.00 | 0.30 |
| | | 0.30 | 0.00 | 0.00 | 0.0 | 15.3 | -0.10 | 0.23 | 0.00 | 0.00 | 0.00 | 0.34 |
| 195 | 2 | 0.34 | 0.00 | 0.00 | -0.05 | 0.0 | -0.12 | 0.28 | 0.00 | 0.00 | 0.00 | 0.30 |
| | | 0.30 | 0.00 | 0.00 | 0.0 | 15.3 | -0.10 | 0.23 | 0.00 | 0.00 | 0.00 | 0.34 |
| 195 | 3 | 0.34 | 0.00 | 0.00 | -0.05 | 0.0 | -0.12 | 0.28 | 0.00 | 0.00 | 0.00 | 0.30 |
| | | 0.30 | 0.00 | 0.00 | 0.0 | 15.3 | -0.10 | 0.23 | 0.00 | 0.00 | 0.00 | 0.34 |
| 195 | 4 | 0.44 | 0.00 | 0.00 | -0.06 | 0.0 | -0.15 | 0.36 | 0.00 | 0.00 | 0.00 | 0.39 |
| | | 0.39 | 0.00 | 0.00 | 0.0 | 15.3 | -0.12 | 0.30 | 0.00 | 0.00 | 0.00 | 0.44 |
| 195 | 5 | 0.34 | 0.00 | 0.00 | -0.05 | 0.0 | -0.12 | 0.28 | 0.00 | 0.00 | 0.00 | 0.30 |
| | | 0.30 | 0.00 | 0.00 | 0.0 | 15.3 | -0.10 | 0.23 | 0.00 | 0.00 | 0.00 | 0.34 |
| 196 | 1 | 6.59 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 33.97 | 0.00 | 0.00 | 0.00 | 1.50 |
| | | 1.50 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 33.92 | 0.00 | 0.00 | 0.00 | 6.59 |
| 196 | 2 | 6.59 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 33.97 | 0.00 | 0.00 | 0.00 | 1.50 |
| | | 1.50 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 33.92 | 0.00 | 0.00 | 0.00 | 6.59 |
| 196 | 3 | 6.59 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 33.97 | 0.00 | 0.00 | 0.00 | 1.50 |
| | | 1.50 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 33.92 | 0.00 | 0.00 | 0.00 | 6.59 |
| 196 | 4 | 8.57 | 0.00 | 0.00 | -0.07 | 0.0 | -24.35 | 44.16 | 0.00 | 0.00 | 0.00 | 1.95 |
| | | 1.95 | 0.00 | 0.00 | 0.0 | 15.0 | -24.35 | 44.09 | 0.00 | 0.00 | 0.00 | 8.57 |
| 196 | 5 | 6.59 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 33.97 | 0.00 | 0.00 | 0.00 | 1.50 |
| | | 1.50 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 33.92 | 0.00 | 0.00 | 0.00 | 6.59 |
| 198 | 1 | 0.34 | 0.00 | 0.00 | -0.05 | 0.0 | -0.12 | 0.28 | 0.00 | 0.00 | 0.00 | 0.30 |
| | | 0.30 | 0.00 | 0.00 | 0.0 | 15.3 | -0.10 | 0.23 | 0.00 | 0.00 | 0.00 | 0.34 |
| 198 | 2 | 0.34 | 0.00 | 0.00 | -0.05 | 0.0 | -0.12 | 0.28 | 0.00 | 0.00 | 0.00 | 0.30 |
| | | 0.30 | 0.00 | 0.00 | 0.0 | 15.3 | -0.10 | 0.23 | 0.00 | 0.00 | 0.00 | 0.34 |
| 198 | 3 | 0.34 | 0.00 | 0.00 | -0.05 | 0.0 | -0.12 | 0.28 | 0.00 | 0.00 | 0.00 | 0.30 |
| | | 0.30 | 0.00 | 0.00 | 0.0 | 15.3 | -0.10 | 0.23 | 0.00 | 0.00 | 0.00 | 0.34 |
| 198 | 4 | 0.44 | 0.00 | 0.00 | -0.06 | 0.0 | -0.15 | 0.37 | 0.00 | 0.00 | 0.00 | 0.39 |
| | | 0.39 | 0.00 | 0.00 | 0.0 | 15.3 | -0.13 | 0.30 | 0.00 | 0.00 | 0.00 | 0.44 |
| 198 | 5 | 0.34 | 0.00 | 0.00 | -0.05 | 0.0 | -0.12 | 0.28 | 0.00 | 0.00 | 0.00 | 0.30 |
| | | 0.30 | 0.00 | 0.00 | 0.0 | 15.3 | -0.10 | 0.23 | 0.00 | 0.00 | 0.00 | 0.34 |
| 199 | 1 | 0.16 | 0.00 | 0.00 | -0.03 | 0.0 | -0.82 | 0.51 | 0.00 | 0.00 | 0.00 | 0.08 |
| | | 0.08 | 0.00 | 0.00 | 0.0 | 15.3 | -0.77 | 0.48 | 0.00 | 0.00 | 0.00 | 0.16 |
| 199 | 2 | 0.16 | 0.00 | 0.00 | -0.03 | 0.0 | -0.82 | 0.51 | 0.00 | 0.00 | 0.00 | 0.08 |
| | | 0.08 | 0.00 | 0.00 | 0.0 | 15.3 | -0.77 | 0.48 | 0.00 | 0.00 | 0.00 | 0.16 |
| 199 | 3 | 0.16 | 0.00 | 0.00 | -0.03 | 0.0 | -0.82 | 0.51 | 0.00 | 0.00 | 0.00 | 0.08 |
| | | 0.08 | 0.00 | 0.00 | 0.0 | 15.3 | -0.77 | 0.48 | 0.00 | 0.00 | 0.00 | 0.16 |
| 199 | 4 | 0.21 | 0.00 | 0.00 | -0.04 | 0.0 | -1.06 | 0.66 | 0.00 | 0.00 | 0.00 | 0.11 |
| | | 0.11 | 0.00 | 0.00 | 0.0 | 15.3 | -1.01 | 0.63 | 0.00 | 0.00 | 0.00 | 0.21 |
| 199 | 5 | 0.16 | 0.00 | 0.00 | -0.03 | 0.0 | -0.82 | 0.51 | 0.00 | 0.00 | 0.00 | 0.08 |
| | | 0.08 | 0.00 | 0.00 | 0.0 | 15.3 | -0.77 | 0.48 | 0.00 | 0.00 | 0.00 | 0.16 |
| 201 | 1 | -5.11 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 54.21 | 0.00 | 0.00 | 0.00 | -13.24 |
| | | -13.24 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 54.15 | 0.00 | 0.00 | 0.00 | -5.11 |
| 201 | 2 | -5.11 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 54.21 | 0.00 | 0.00 | 0.00 | -13.24 |
| | | -13.24 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 54.15 | 0.00 | 0.00 | 0.00 | -5.11 |
| 201 | 3 | -5.11 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 54.21 | 0.00 | 0.00 | 0.00 | -13.24 |
| | | -13.24 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 54.15 | 0.00 | 0.00 | 0.00 | -5.11 |
| 201 | 4 | -6.64 | 0.00 | 0.00 | -0.07 | 0.0 | -24.35 | 70.47 | 0.00 | 0.00 | 0.00 | -17.21 |
| | | -17.21 | 0.00 | 0.00 | 0.0 | 15.0 | -24.35 | 70.40 | 0.00 | 0.00 | 0.00 | -6.64 |
| 201 | 5 | -5.11 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 54.21 | 0.00 | 0.00 | 0.00 | -13.24 |
| | | -13.24 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 54.15 | 0.00 | 0.00 | 0.00 | -5.11 |
| 203 | 1 | 0.16 | 0.00 | 0.00 | -0.03 | 0.0 | -0.82 | 0.51 | 0.00 | 0.00 | 0.00 | 0.08 |
| | | 0.08 | 0.00 | 0.00 | 0.0 | 15.3 | -0.77 | 0.48 | 0.00 | 0.00 | 0.00 | 0.16 |
| 203 | 2 | 0.16 | 0.00 | 0.00 | -0.03 | 0.0 | -0.82 | 0.51 | 0.00 | 0.00 | 0.00 | 0.08 |
| | | 0.08 | 0.00 | 0.00 | 0.0 | 15.3 | -0.77 | 0.48 | 0.00 | 0.00 | 0.00 | 0.16 |
| 203 | 3 | 0.16 | 0.00 | 0.00 | -0.03 | 0.0 | -0.82 | 0.51 | 0.00 | 0.00 | 0.00 | 0.08 |
| | | 0.08 | 0.00 | 0.00 | 0.0 | 15.3 | -0.77 | 0.48 | 0.00 | 0.00 | 0.00 | 0.16 |
| 203 | 4 | 0.21 | 0.00 | 0.00 | -0.04 | 0.0 | -1.06 | 0.66 | 0.00 | 0.00 | 0.00 | 0.11 |
| | | 0.11 | 0.00 | 0.00 | 0.0 | 15.3 | -1.01 | 0.63 | 0.00 | 0.00 | 0.00 | 0.21 |
| 203 | 5 | 0.16 | 0.00 | 0.00 | -0.03 | 0.0 | -0.82 | 0.51 | 0.00 | 0.00 | 0.00 | 0.08 |
| | | 0.08 | 0.00 | 0.00 | 0.0 | 15.3 | -0.77 | 0.48 | 0.00 | 0.00 | 0.00 | 0.16 |
| 204 | 1 | 3.95 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | -42.02 | 0.00 | 0.00 | 0.00 | 3.95 |
| | | -2.36 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | -42.07 | 0.00 | 0.00 | 0.00 | -2.36 |
| 204 | 2 | 3.95 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | -42.02 | 0.00 | 0.00 | 0.00 | 3.95 |
| | | -2.36 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | -42.07 | 0.00 | 0.00 | 0.00 | -2.36 |
| 204 | 3 | 3.95 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | -42.02 | 0.00 | 0.00 | 0.00 | 3.95 |
| | | -2.36 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | -42.07 | 0.00 | 0.00 | 0.00 | -2.36 |
| 204 | 4 | 5.13 | 0.00 | 0.00 | -0.07 | 0.0 | -24.49 | -54.63 | 0.00 | 0.00 | 0.00 | 5.13 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | -3.07 | 0.00 | 0.00 | 0.0 | 15.0 | -24.49 | -54.70 | 0.00 | 0.00 | 0.00 | -3.07 |
| 204 | 5 | 3.95 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | -42.02 | 0.00 | 0.00 | 0.00 | 3.95 |
| | | -2.36 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | -42.07 | 0.00 | 0.00 | 0.00 | -2.36 |
| 205 | 1 | 10.20 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 24.07 | 0.00 | 0.00 | 0.00 | 6.59 |
| | | 6.59 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 24.02 | 0.00 | 0.00 | 0.00 | 10.20 |
| 205 | 2 | 10.20 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 24.07 | 0.00 | 0.00 | 0.00 | 6.59 |
| | | 6.59 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 24.02 | 0.00 | 0.00 | 0.00 | 10.20 |
| 205 | 3 | 10.20 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 24.07 | 0.00 | 0.00 | 0.00 | 6.59 |
| | | 6.59 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 24.02 | 0.00 | 0.00 | 0.00 | 10.20 |
| 205 | 4 | 13.26 | 0.00 | 0.00 | -0.07 | 0.0 | -24.35 | 31.30 | 0.00 | 0.00 | 0.00 | 8.57 |
| | | 8.57 | 0.00 | 0.00 | 0.0 | 15.0 | -24.35 | 31.23 | 0.00 | 0.00 | 0.00 | 13.26 |
| 205 | 5 | 10.20 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | 24.07 | 0.00 | 0.00 | 0.00 | 6.59 |
| | | 6.59 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | 24.02 | 0.00 | 0.00 | 0.00 | 10.20 |
| 206 | 1 | 3.95 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | -42.02 | 0.00 | 0.00 | 0.00 | 3.95 |
| | | -2.36 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | -42.07 | 0.00 | 0.00 | 0.00 | -2.36 |
| 206 | 2 | 3.95 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | -42.02 | 0.00 | 0.00 | 0.00 | 3.95 |
| | | -2.36 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | -42.07 | 0.00 | 0.00 | 0.00 | -2.36 |
| 206 | 3 | 3.95 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | -42.02 | 0.00 | 0.00 | 0.00 | 3.95 |
| | | -2.36 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | -42.07 | 0.00 | 0.00 | 0.00 | -2.36 |
| 206 | 4 | 5.13 | 0.00 | 0.00 | -0.07 | 0.0 | -24.48 | -54.63 | 0.00 | 0.00 | 0.00 | 5.13 |
| | | -3.07 | 0.00 | 0.00 | 0.0 | 15.0 | -24.48 | -54.70 | 0.00 | 0.00 | 0.00 | -3.07 |
| 206 | 5 | 3.95 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | -42.02 | 0.00 | 0.00 | 0.00 | 3.95 |
| | | -2.36 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | -42.07 | 0.00 | 0.00 | 0.00 | -2.36 |
| 207 | 1 | 10.05 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | 28.58 | 0.00 | 0.00 | 0.00 | 5.77 |
| | | 5.77 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | 28.53 | 0.00 | 0.00 | 0.00 | 10.05 |
| 207 | 2 | 10.05 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | 28.58 | 0.00 | 0.00 | 0.00 | 5.77 |
| | | 5.77 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | 28.53 | 0.00 | 0.00 | 0.00 | 10.05 |
| 207 | 3 | 10.05 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | 28.58 | 0.00 | 0.00 | 0.00 | 5.77 |
| | | 5.77 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | 28.53 | 0.00 | 0.00 | 0.00 | 10.05 |
| 207 | 4 | 13.07 | 0.00 | 0.00 | -0.07 | 0.0 | -24.48 | 37.16 | 0.00 | 0.00 | 0.00 | 7.50 |
| | | 7.50 | 0.00 | 0.00 | 0.0 | 15.0 | -24.48 | 37.09 | 0.00 | 0.00 | 0.00 | 13.07 |
| 207 | 5 | 10.05 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | 28.58 | 0.00 | 0.00 | 0.00 | 5.77 |
| | | 5.77 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | 28.53 | 0.00 | 0.00 | 0.00 | 10.05 |
| 208 | 1 | 0.08 | 0.00 | 0.00 | -0.02 | 0.0 | -1.11 | 0.41 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | 0.02 | 0.00 | 0.00 | 0.0 | 15.3 | -1.06 | 0.39 | 0.00 | 0.00 | 0.00 | 0.08 |
| 208 | 2 | 0.08 | 0.00 | 0.00 | -0.02 | 0.0 | -1.11 | 0.41 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | 0.02 | 0.00 | 0.00 | 0.0 | 15.3 | -1.06 | 0.39 | 0.00 | 0.00 | 0.00 | 0.08 |
| 208 | 3 | 0.08 | 0.00 | 0.00 | -0.02 | 0.0 | -1.11 | 0.41 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | 0.02 | 0.00 | 0.00 | 0.0 | 15.3 | -1.06 | 0.39 | 0.00 | 0.00 | 0.00 | 0.08 |
| 208 | 4 | 0.11 | 0.00 | 0.00 | -0.02 | 0.0 | -1.44 | 0.53 | 0.00 | 0.00 | 0.00 | 0.03 |
| | | 0.03 | 0.00 | 0.00 | 0.0 | 15.3 | -1.38 | 0.51 | 0.00 | 0.00 | 0.00 | 0.11 |
| 208 | 5 | 0.08 | 0.00 | 0.00 | -0.02 | 0.0 | -1.11 | 0.41 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | 0.02 | 0.00 | 0.00 | 0.0 | 15.3 | -1.06 | 0.39 | 0.00 | 0.00 | 0.00 | 0.08 |
| 209 | 1 | 14.07 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | 8.34 | 0.00 | 0.00 | 0.00 | 12.82 |
| | | 12.82 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | 8.29 | 0.00 | 0.00 | 0.00 | 14.07 |
| 209 | 2 | 14.07 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | 8.34 | 0.00 | 0.00 | 0.00 | 12.82 |
| | | 12.82 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | 8.29 | 0.00 | 0.00 | 0.00 | 14.07 |
| 209 | 3 | 14.07 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | 8.34 | 0.00 | 0.00 | 0.00 | 12.82 |
| | | 12.82 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | 8.29 | 0.00 | 0.00 | 0.00 | 14.07 |
| 209 | 4 | 18.29 | 0.00 | 0.00 | -0.07 | 0.0 | -24.49 | 10.85 | 0.00 | 0.00 | 0.00 | 16.67 |
| | | 16.67 | 0.00 | 0.00 | 0.0 | 15.0 | -24.49 | 10.78 | 0.00 | 0.00 | 0.00 | 18.29 |
| 209 | 5 | 14.07 | 0.00 | 0.00 | -0.05 | 0.0 | -18.84 | 8.34 | 0.00 | 0.00 | 0.00 | 12.82 |
| | | 12.82 | 0.00 | 0.00 | 0.0 | 15.0 | -18.84 | 8.29 | 0.00 | 0.00 | 0.00 | 14.07 |
| 210 | 1 | 9.45 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -26.52 | 0.00 | 0.00 | 0.00 | 9.45 |
| | | 5.47 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -26.57 | 0.00 | 0.00 | 0.00 | 5.47 |
| 210 | 2 | 9.45 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -26.52 | 0.00 | 0.00 | 0.00 | 9.45 |
| | | 5.47 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -26.57 | 0.00 | 0.00 | 0.00 | 5.47 |
| 210 | 3 | 9.45 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -26.52 | 0.00 | 0.00 | 0.00 | 9.45 |
| | | 5.47 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -26.57 | 0.00 | 0.00 | 0.00 | 5.47 |
| 210 | 4 | 12.29 | 0.00 | 0.00 | -0.07 | 0.0 | -24.35 | -34.47 | 0.00 | 0.00 | 0.00 | 12.29 |
| | | 7.11 | 0.00 | 0.00 | 0.0 | 15.0 | -24.35 | -34.54 | 0.00 | 0.00 | 0.00 | 7.11 |
| 210 | 5 | 9.45 | 0.00 | 0.00 | -0.05 | 0.0 | -18.73 | -26.52 | 0.00 | 0.00 | 0.00 | 9.45 |
| | | 5.47 | 0.00 | 0.00 | 0.0 | 15.0 | -18.73 | -26.57 | 0.00 | 0.00 | 0.00 | 5.47 |
| 211 | 1 | 8.74 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | -31.91 | 0.00 | 0.00 | 0.00 | 8.74 |
| | | 3.95 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | -31.96 | 0.00 | 0.00 | 0.00 | 3.95 |
| 211 | 2 | 8.74 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | -31.91 | 0.00 | 0.00 | 0.00 | 8.74 |
| | | 3.95 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | -31.96 | 0.00 | 0.00 | 0.00 | 3.95 |
| 211 | 3 | 8.74 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | -31.91 | 0.00 | 0.00 | 0.00 | 8.74 |
| | | 3.95 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | -31.96 | 0.00 | 0.00 | 0.00 | 3.95 |
| 211 | 4 | 11.36 | 0.00 | 0.00 | -0.07 | 0.0 | -24.48 | -41.48 | 0.00 | 0.00 | 0.00 | 11.36 |
| | | 5.14 | 0.00 | 0.00 | 0.0 | 15.0 | -24.48 | -41.54 | 0.00 | 0.00 | 0.00 | 5.14 |
| 211 | 5 | 8.74 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | -31.91 | 0.00 | 0.00 | 0.00 | 8.74 |
| | | 3.95 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | -31.96 | 0.00 | 0.00 | 0.00 | 3.95 |
| 212 | 1 | -18.37 | 0.00 | 0.00 | -0.02 | 0.0 | -47.16 | -57.90 | 0.00 | 0.00 | 0.00 | -18.37 |
| | | -22.90 | 0.00 | 0.00 | 0.0 | 7.8 | -47.17 | -57.93 | 0.00 | 0.00 | 0.00 | -22.90 |
| 212 | 2 | -18.37 | 0.00 | 0.00 | -0.02 | 0.0 | -47.16 | -57.90 | 0.00 | 0.00 | 0.00 | -18.37 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | -22.90 | 0.00 | 0.00 | 0.0 | 7.8 | -47.17 | -57.93 | 0.00 | 0.00 | 0.00 | -22.90 |
| 212 | 3 | -18.37 | 0.00 | 0.00 | -0.02 | 0.0 | -47.16 | -57.90 | 0.00 | 0.00 | 0.00 | -18.37 |
| | | -22.90 | 0.00 | 0.00 | 0.0 | 7.8 | -47.17 | -57.93 | 0.00 | 0.00 | 0.00 | -22.90 |
| 212 | 4 | -23.87 | 0.00 | 0.00 | -0.03 | 0.0 | -61.31 | -75.28 | 0.00 | 0.00 | 0.00 | -23.87 |
| | | -29.78 | 0.00 | 0.00 | 0.0 | 7.8 | -61.32 | -75.31 | 0.00 | 0.00 | 0.00 | -29.78 |
| 212 | 5 | -18.37 | 0.00 | 0.00 | -0.02 | 0.0 | -47.16 | -57.90 | 0.00 | 0.00 | 0.00 | -18.37 |
| | | -22.90 | 0.00 | 0.00 | 0.0 | 7.8 | -47.17 | -57.93 | 0.00 | 0.00 | 0.00 | -22.90 |
| 213 | 1 | 0.02 | 0.00 | 0.00 | -5.03e-03 | 0.0 | -1.42 | 0.28 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -1.40 | 0.28 | 0.00 | 0.00 | 0.00 | 0.02 |
| 213 | 2 | 0.02 | 0.00 | 0.00 | -5.03e-03 | 0.0 | -1.42 | 0.28 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -1.40 | 0.28 | 0.00 | 0.00 | 0.00 | 0.02 |
| 213 | 3 | 0.02 | 0.00 | 0.00 | -5.03e-03 | 0.0 | -1.42 | 0.28 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -1.40 | 0.28 | 0.00 | 0.00 | 0.00 | 0.02 |
| 213 | 4 | 0.03 | 0.00 | 0.00 | -6.54e-03 | 0.0 | -1.85 | 0.37 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -1.82 | 0.36 | 0.00 | 0.00 | 0.00 | 0.03 |
| 213 | 5 | 0.02 | 0.00 | 0.00 | -5.03e-03 | 0.0 | -1.42 | 0.28 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -1.40 | 0.28 | 0.00 | 0.00 | 0.00 | 0.02 |
| 214 | 1 | -2.49 | 0.00 | 0.00 | -0.05 | 0.0 | -25.19 | -50.99 | 0.00 | 0.00 | 0.00 | -2.49 |
| | | -10.19 | 0.00 | 0.00 | 0.0 | 15.1 | -25.20 | -51.04 | 0.00 | 0.00 | 0.00 | -10.19 |
| 214 | 2 | -2.49 | 0.00 | 0.00 | -0.05 | 0.0 | -25.19 | -50.99 | 0.00 | 0.00 | 0.00 | -2.49 |
| | | -10.19 | 0.00 | 0.00 | 0.0 | 15.1 | -25.20 | -51.04 | 0.00 | 0.00 | 0.00 | -10.19 |
| 214 | 3 | -2.49 | 0.00 | 0.00 | -0.05 | 0.0 | -25.19 | -50.99 | 0.00 | 0.00 | 0.00 | -2.49 |
| | | -10.19 | 0.00 | 0.00 | 0.0 | 15.1 | -25.20 | -51.04 | 0.00 | 0.00 | 0.00 | -10.19 |
| 214 | 4 | -3.24 | 0.00 | 0.00 | -0.07 | 0.0 | -32.75 | -66.29 | 0.00 | 0.00 | 0.00 | -3.24 |
| | | -13.25 | 0.00 | 0.00 | 0.0 | 15.1 | -32.75 | -66.35 | 0.00 | 0.00 | 0.00 | -13.25 |
| 214 | 5 | -2.49 | 0.00 | 0.00 | -0.05 | 0.0 | -25.19 | -50.99 | 0.00 | 0.00 | 0.00 | -2.49 |
| | | -10.19 | 0.00 | 0.00 | 0.0 | 15.1 | -25.20 | -51.04 | 0.00 | 0.00 | 0.00 | -10.19 |
| 215 | 1 | 0.30 | 0.00 | 0.00 | -0.04 | 0.0 | -0.30 | 0.43 | 0.00 | 0.00 | 0.00 | 0.23 |
| | | 0.23 | 0.00 | 0.00 | 0.0 | 15.3 | -0.27 | 0.39 | 0.00 | 0.00 | 0.00 | 0.30 |
| 215 | 2 | 0.30 | 0.00 | 0.00 | -0.04 | 0.0 | -0.30 | 0.43 | 0.00 | 0.00 | 0.00 | 0.23 |
| | | 0.23 | 0.00 | 0.00 | 0.0 | 15.3 | -0.27 | 0.39 | 0.00 | 0.00 | 0.00 | 0.30 |
| 215 | 3 | 0.30 | 0.00 | 0.00 | -0.04 | 0.0 | -0.30 | 0.43 | 0.00 | 0.00 | 0.00 | 0.23 |
| | | 0.23 | 0.00 | 0.00 | 0.0 | 15.3 | -0.27 | 0.39 | 0.00 | 0.00 | 0.00 | 0.30 |
| 215 | 4 | 0.39 | 0.00 | 0.00 | -0.06 | 0.0 | -0.38 | 0.56 | 0.00 | 0.00 | 0.00 | 0.30 |
| | | 0.30 | 0.00 | 0.00 | 0.0 | 15.3 | -0.35 | 0.51 | 0.00 | 0.00 | 0.00 | 0.39 |
| 215 | 5 | 0.30 | 0.00 | 0.00 | -0.04 | 0.0 | -0.30 | 0.43 | 0.00 | 0.00 | 0.00 | 0.23 |
| | | 0.23 | 0.00 | 0.00 | 0.0 | 15.3 | -0.27 | 0.39 | 0.00 | 0.00 | 0.00 | 0.30 |
| 216 | 1 | 5.77 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | 38.50 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | 38.45 | 0.00 | 0.00 | 0.00 | 5.77 |
| 216 | 2 | 5.77 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | 38.50 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | 38.45 | 0.00 | 0.00 | 0.00 | 5.77 |
| 216 | 3 | 5.77 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | 38.50 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | 38.45 | 0.00 | 0.00 | 0.00 | 5.77 |
| 216 | 4 | 7.50 | 0.00 | 0.00 | -0.07 | 0.0 | -24.48 | 50.05 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -24.48 | 49.98 | 0.00 | 0.00 | 0.00 | 7.50 |
| 216 | 5 | 5.77 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | 38.50 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | 38.45 | 0.00 | 0.00 | 0.00 | 5.77 |
| 217 | 1 | 12.82 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | 18.46 | 0.00 | 0.00 | 0.00 | 10.06 |
| | | 10.06 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | 18.41 | 0.00 | 0.00 | 0.00 | 12.82 |
| 217 | 2 | 12.82 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | 18.46 | 0.00 | 0.00 | 0.00 | 10.06 |
| | | 10.06 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | 18.41 | 0.00 | 0.00 | 0.00 | 12.82 |
| 217 | 3 | 12.82 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | 18.46 | 0.00 | 0.00 | 0.00 | 10.06 |
| | | 10.06 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | 18.41 | 0.00 | 0.00 | 0.00 | 12.82 |
| 217 | 4 | 16.67 | 0.00 | 0.00 | -0.07 | 0.0 | -24.48 | 24.00 | 0.00 | 0.00 | 0.00 | 13.07 |
| | | 13.07 | 0.00 | 0.00 | 0.0 | 15.0 | -24.48 | 23.94 | 0.00 | 0.00 | 0.00 | 16.67 |
| 217 | 5 | 12.82 | 0.00 | 0.00 | -0.05 | 0.0 | -18.83 | 18.46 | 0.00 | 0.00 | 0.00 | 10.06 |
| | | 10.06 | 0.00 | 0.00 | 0.0 | 15.0 | -18.83 | 18.41 | 0.00 | 0.00 | 0.00 | 12.82 |
| 218 | 1 | 0.02 | 0.00 | 0.00 | -5.03e-03 | 0.0 | -1.39 | 0.28 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -1.37 | 0.27 | 0.00 | 0.00 | 0.00 | 0.02 |
| 218 | 2 | 0.02 | 0.00 | 0.00 | -5.03e-03 | 0.0 | -1.39 | 0.28 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -1.37 | 0.27 | 0.00 | 0.00 | 0.00 | 0.02 |
| 218 | 3 | 0.02 | 0.00 | 0.00 | -5.03e-03 | 0.0 | -1.39 | 0.28 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -1.37 | 0.27 | 0.00 | 0.00 | 0.00 | 0.02 |
| 218 | 4 | 0.03 | 0.00 | 0.00 | -6.54e-03 | 0.0 | -1.81 | 0.36 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -1.78 | 0.35 | 0.00 | 0.00 | 0.00 | 0.03 |
| 218 | 5 | 0.02 | 0.00 | 0.00 | -5.03e-03 | 0.0 | -1.39 | 0.28 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -1.37 | 0.27 | 0.00 | 0.00 | 0.00 | 0.02 |
| 219 | 1 | -2.36 | 0.00 | 0.00 | -0.05 | 0.0 | -24.54 | -49.71 | 0.00 | 0.00 | 0.00 | -2.36 |
| | | -9.87 | 0.00 | 0.00 | 0.0 | 15.1 | -24.55 | -49.76 | 0.00 | 0.00 | 0.00 | -9.87 |
| 219 | 2 | -2.36 | 0.00 | 0.00 | -0.05 | 0.0 | -24.54 | -49.71 | 0.00 | 0.00 | 0.00 | -2.36 |
| | | -9.87 | 0.00 | 0.00 | 0.0 | 15.1 | -24.55 | -49.76 | 0.00 | 0.00 | 0.00 | -9.87 |
| 219 | 3 | -2.36 | 0.00 | 0.00 | -0.05 | 0.0 | -24.54 | -49.71 | 0.00 | 0.00 | 0.00 | -2.36 |
| | | -9.87 | 0.00 | 0.00 | 0.0 | 15.1 | -24.55 | -49.76 | 0.00 | 0.00 | 0.00 | -9.87 |
| 219 | 4 | -3.07 | 0.00 | 0.00 | -0.07 | 0.0 | -31.90 | -64.63 | 0.00 | 0.00 | 0.00 | -3.07 |
| | | -12.83 | 0.00 | 0.00 | 0.0 | 15.1 | -31.91 | -64.69 | 0.00 | 0.00 | 0.00 | -12.83 |
| 219 | 5 | -2.36 | 0.00 | 0.00 | -0.05 | 0.0 | -24.54 | -49.71 | 0.00 | 0.00 | 0.00 | -2.36 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | -9.87 | 0.00 | 0.00 | 0.0 | 15.1 | -24.55 | -49.76 | 0.00 | 0.00 | 0.00 | -9.87 |
| 220 | 1 | 0.01 | 0.00 | 0.00 | -0.08 | 0.0 | -0.96 | 0.19 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -0.58 | 0.11 | 0.00 | 0.00 | 0.00 | 0.01 |
| 220 | 2 | 0.01 | 0.00 | 0.00 | -0.08 | 0.0 | -0.96 | 0.19 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -0.58 | 0.11 | 0.00 | 0.00 | 0.00 | 0.01 |
| 220 | 3 | 0.01 | 0.00 | 0.00 | -0.08 | 0.0 | -0.96 | 0.19 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -0.58 | 0.11 | 0.00 | 0.00 | 0.00 | 0.01 |
| 220 | 4 | 0.02 | 0.00 | 0.00 | -0.10 | 0.0 | -1.25 | 0.25 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -0.75 | 0.15 | 0.00 | 0.00 | 0.00 | 0.02 |
| 220 | 5 | 0.01 | 0.00 | 0.00 | -0.08 | 0.0 | -0.96 | 0.19 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -0.58 | 0.11 | 0.00 | 0.00 | 0.00 | 0.01 |
| 221 | 1 | 10.49 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 24.01 | 0.00 | 0.00 | 0.00 | 6.90 |
| | | 6.90 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 23.96 | 0.00 | 0.00 | 0.00 | 10.49 |
| 221 | 2 | 10.49 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 24.01 | 0.00 | 0.00 | 0.00 | 6.90 |
| | | 6.90 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 23.96 | 0.00 | 0.00 | 0.00 | 10.49 |
| 221 | 3 | 10.49 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 24.01 | 0.00 | 0.00 | 0.00 | 6.90 |
| | | 6.90 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 23.96 | 0.00 | 0.00 | 0.00 | 10.49 |
| 221 | 4 | 13.64 | 0.00 | 0.00 | -0.07 | 0.0 | -25.18 | 31.21 | 0.00 | 0.00 | 0.00 | 8.97 |
| | | 8.97 | 0.00 | 0.00 | 0.0 | 15.0 | -25.18 | 31.15 | 0.00 | 0.00 | 0.00 | 13.64 |
| 221 | 5 | 10.49 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 24.01 | 0.00 | 0.00 | 0.00 | 6.90 |
| | | 6.90 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 23.96 | 0.00 | 0.00 | 0.00 | 10.49 |
| 222 | 1 | 0.30 | 0.00 | 0.00 | -0.04 | 0.0 | -0.30 | 0.43 | 0.00 | 0.00 | 0.00 | 0.23 |
| | | 0.23 | 0.00 | 0.00 | 0.0 | 15.3 | -0.27 | 0.39 | 0.00 | 0.00 | 0.00 | 0.30 |
| 222 | 2 | 0.30 | 0.00 | 0.00 | -0.04 | 0.0 | -0.30 | 0.43 | 0.00 | 0.00 | 0.00 | 0.23 |
| | | 0.23 | 0.00 | 0.00 | 0.0 | 15.3 | -0.27 | 0.39 | 0.00 | 0.00 | 0.00 | 0.30 |
| 222 | 3 | 0.30 | 0.00 | 0.00 | -0.04 | 0.0 | -0.30 | 0.43 | 0.00 | 0.00 | 0.00 | 0.23 |
| | | 0.23 | 0.00 | 0.00 | 0.0 | 15.3 | -0.27 | 0.39 | 0.00 | 0.00 | 0.00 | 0.30 |
| 222 | 4 | 0.39 | 0.00 | 0.00 | -0.06 | 0.0 | -0.38 | 0.56 | 0.00 | 0.00 | 0.00 | 0.30 |
| | | 0.30 | 0.00 | 0.00 | 0.0 | 15.3 | -0.35 | 0.51 | 0.00 | 0.00 | 0.00 | 0.39 |
| 222 | 5 | 0.30 | 0.00 | 0.00 | -0.04 | 0.0 | -0.30 | 0.43 | 0.00 | 0.00 | 0.00 | 0.23 |
| | | 0.23 | 0.00 | 0.00 | 0.0 | 15.3 | -0.27 | 0.39 | 0.00 | 0.00 | 0.00 | 0.30 |
| 223 | 1 | 0.34 | 0.00 | 0.00 | -0.05 | 0.0 | -0.14 | 0.30 | 0.00 | 0.00 | 0.00 | 0.30 |
| | | 0.30 | 0.00 | 0.00 | 0.0 | 15.3 | -0.12 | 0.25 | 0.00 | 0.00 | 0.00 | 0.34 |
| 223 | 2 | 0.34 | 0.00 | 0.00 | -0.05 | 0.0 | -0.14 | 0.30 | 0.00 | 0.00 | 0.00 | 0.30 |
| | | 0.30 | 0.00 | 0.00 | 0.0 | 15.3 | -0.12 | 0.25 | 0.00 | 0.00 | 0.00 | 0.34 |
| 223 | 3 | 0.34 | 0.00 | 0.00 | -0.05 | 0.0 | -0.14 | 0.30 | 0.00 | 0.00 | 0.00 | 0.30 |
| | | 0.30 | 0.00 | 0.00 | 0.0 | 15.3 | -0.12 | 0.25 | 0.00 | 0.00 | 0.00 | 0.34 |
| 223 | 4 | 0.45 | 0.00 | 0.00 | -0.06 | 0.0 | -0.18 | 0.39 | 0.00 | 0.00 | 0.00 | 0.39 |
| | | 0.39 | 0.00 | 0.00 | 0.0 | 15.3 | -0.15 | 0.33 | 0.00 | 0.00 | 0.00 | 0.45 |
| 223 | 5 | 0.34 | 0.00 | 0.00 | -0.05 | 0.0 | -0.14 | 0.30 | 0.00 | 0.00 | 0.00 | 0.30 |
| | | 0.30 | 0.00 | 0.00 | 0.0 | 15.3 | -0.12 | 0.25 | 0.00 | 0.00 | 0.00 | 0.34 |
| 224 | 1 | 0.16 | 0.00 | 0.00 | -0.03 | 0.0 | -0.84 | 0.51 | 0.00 | 0.00 | 0.00 | 0.08 |
| | | 0.08 | 0.00 | 0.00 | 0.0 | 15.3 | -0.80 | 0.49 | 0.00 | 0.00 | 0.00 | 0.16 |
| 224 | 2 | 0.16 | 0.00 | 0.00 | -0.03 | 0.0 | -0.84 | 0.51 | 0.00 | 0.00 | 0.00 | 0.08 |
| | | 0.08 | 0.00 | 0.00 | 0.0 | 15.3 | -0.80 | 0.49 | 0.00 | 0.00 | 0.00 | 0.16 |
| 224 | 3 | 0.16 | 0.00 | 0.00 | -0.03 | 0.0 | -0.84 | 0.51 | 0.00 | 0.00 | 0.00 | 0.08 |
| | | 0.08 | 0.00 | 0.00 | 0.0 | 15.3 | -0.80 | 0.49 | 0.00 | 0.00 | 0.00 | 0.16 |
| 224 | 4 | 0.21 | 0.00 | 0.00 | -0.04 | 0.0 | -1.10 | 0.67 | 0.00 | 0.00 | 0.00 | 0.11 |
| | | 0.11 | 0.00 | 0.00 | 0.0 | 15.3 | -1.04 | 0.63 | 0.00 | 0.00 | 0.00 | 0.21 |
| 224 | 5 | 0.16 | 0.00 | 0.00 | -0.03 | 0.0 | -0.84 | 0.51 | 0.00 | 0.00 | 0.00 | 0.08 |
| | | 0.08 | 0.00 | 0.00 | 0.0 | 15.3 | -0.80 | 0.49 | 0.00 | 0.00 | 0.00 | 0.16 |
| 225 | 1 | 4.02 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -43.36 | 0.00 | 0.00 | 0.00 | 4.02 |
| | | -2.49 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -43.42 | 0.00 | 0.00 | 0.00 | -2.49 |
| 225 | 2 | 4.02 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -43.36 | 0.00 | 0.00 | 0.00 | 4.02 |
| | | -2.49 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -43.42 | 0.00 | 0.00 | 0.00 | -2.49 |
| 225 | 3 | 4.02 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -43.36 | 0.00 | 0.00 | 0.00 | 4.02 |
| | | -2.49 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -43.42 | 0.00 | 0.00 | 0.00 | -2.49 |
| 225 | 4 | 5.23 | 0.00 | 0.00 | -0.07 | 0.0 | -25.14 | -56.37 | 0.00 | 0.00 | 0.00 | 5.23 |
| | | -3.23 | 0.00 | 0.00 | 0.0 | 15.0 | -25.14 | -56.44 | 0.00 | 0.00 | 0.00 | -3.23 |
| 225 | 5 | 4.02 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | -43.36 | 0.00 | 0.00 | 0.00 | 4.02 |
| | | -2.49 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | -43.42 | 0.00 | 0.00 | 0.00 | -2.49 |
| 226 | 1 | 10.37 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 28.85 | 0.00 | 0.00 | 0.00 | 6.04 |
| | | 6.04 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 28.80 | 0.00 | 0.00 | 0.00 | 10.37 |
| 226 | 2 | 10.37 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 28.85 | 0.00 | 0.00 | 0.00 | 6.04 |
| | | 6.04 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 28.80 | 0.00 | 0.00 | 0.00 | 10.37 |
| 226 | 3 | 10.37 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 28.85 | 0.00 | 0.00 | 0.00 | 6.04 |
| | | 6.04 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 28.80 | 0.00 | 0.00 | 0.00 | 10.37 |
| 226 | 4 | 13.48 | 0.00 | 0.00 | -0.07 | 0.0 | -25.14 | 37.51 | 0.00 | 0.00 | 0.00 | 7.85 |
| | | 7.85 | 0.00 | 0.00 | 0.0 | 15.0 | -25.14 | 37.44 | 0.00 | 0.00 | 0.00 | 13.48 |
| 226 | 5 | 10.37 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 28.85 | 0.00 | 0.00 | 0.00 | 6.04 |
| | | 6.04 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 28.80 | 0.00 | 0.00 | 0.00 | 10.37 |
| 227 | 1 | 0.08 | 0.00 | 0.00 | -0.02 | 0.0 | -1.14 | 0.41 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | 0.02 | 0.00 | 0.00 | 0.0 | 15.3 | -1.09 | 0.39 | 0.00 | 0.00 | 0.00 | 0.08 |
| 227 | 2 | 0.08 | 0.00 | 0.00 | -0.02 | 0.0 | -1.14 | 0.41 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | 0.02 | 0.00 | 0.00 | 0.0 | 15.3 | -1.09 | 0.39 | 0.00 | 0.00 | 0.00 | 0.08 |
| 227 | 3 | 0.08 | 0.00 | 0.00 | -0.02 | 0.0 | -1.14 | 0.41 | 0.00 | 0.00 | 0.00 | 0.02 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | 0.02 | 0.00 | 0.00 | 0.0 | 15.3 | -1.09 | 0.39 | 0.00 | 0.00 | 0.00 | 0.08 |
| 227 | 4 | 0.11 | 0.00 | 0.00 | -0.02 | 0.0 | -1.48 | 0.53 | 0.00 | 0.00 | 0.00 | 0.03 |
| | | 0.03 | 0.00 | 0.00 | 0.0 | 15.3 | -1.41 | 0.50 | 0.00 | 0.00 | 0.00 | 0.11 |
| 227 | 5 | 0.08 | 0.00 | 0.00 | -0.02 | 0.0 | -1.14 | 0.41 | 0.00 | 0.00 | 0.00 | 0.02 |
| | | 0.02 | 0.00 | 0.00 | 0.0 | 15.3 | -1.09 | 0.39 | 0.00 | 0.00 | 0.00 | 0.08 |
| 228 | 1 | 6.04 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 40.30 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 40.25 | 0.00 | 0.00 | 0.00 | 6.04 |
| 228 | 2 | 6.04 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 40.30 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 40.25 | 0.00 | 0.00 | 0.00 | 6.04 |
| 228 | 3 | 6.04 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 40.30 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 40.25 | 0.00 | 0.00 | 0.00 | 6.04 |
| 228 | 4 | 7.85 | 0.00 | 0.00 | -0.07 | 0.0 | -25.14 | 52.39 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -25.14 | 52.33 | 0.00 | 0.00 | 0.00 | 7.85 |
| 228 | 5 | 6.04 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 40.30 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 40.25 | 0.00 | 0.00 | 0.00 | 6.04 |
| 229 | 1 | 13.18 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 18.73 | 0.00 | 0.00 | 0.00 | 10.37 |
| | | 10.37 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 18.68 | 0.00 | 0.00 | 0.00 | 13.18 |
| 229 | 2 | 13.18 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 18.73 | 0.00 | 0.00 | 0.00 | 10.37 |
| | | 10.37 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 18.68 | 0.00 | 0.00 | 0.00 | 13.18 |
| 229 | 3 | 13.18 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 18.73 | 0.00 | 0.00 | 0.00 | 10.37 |
| | | 10.37 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 18.68 | 0.00 | 0.00 | 0.00 | 13.18 |
| 229 | 4 | 17.13 | 0.00 | 0.00 | -0.07 | 0.0 | -25.14 | 24.35 | 0.00 | 0.00 | 0.00 | 13.48 |
| | | 13.48 | 0.00 | 0.00 | 0.0 | 15.0 | -25.14 | 24.29 | 0.00 | 0.00 | 0.00 | 17.13 |
| 229 | 5 | 13.18 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 18.73 | 0.00 | 0.00 | 0.00 | 10.37 |
| | | 10.37 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 18.68 | 0.00 | 0.00 | 0.00 | 13.18 |
| 230 | 1 | 0.02 | 0.00 | 0.00 | -5.03e-03 | 0.0 | -1.42 | 0.28 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -1.40 | 0.28 | 0.00 | 0.00 | 0.00 | 0.02 |
| 230 | 2 | 0.02 | 0.00 | 0.00 | -5.03e-03 | 0.0 | -1.42 | 0.28 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -1.40 | 0.28 | 0.00 | 0.00 | 0.00 | 0.02 |
| 230 | 3 | 0.02 | 0.00 | 0.00 | -5.03e-03 | 0.0 | -1.42 | 0.28 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -1.40 | 0.28 | 0.00 | 0.00 | 0.00 | 0.02 |
| 230 | 4 | 0.03 | 0.00 | 0.00 | -6.54e-03 | 0.0 | -1.85 | 0.37 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -1.82 | 0.36 | 0.00 | 0.00 | 0.00 | 0.03 |
| 230 | 5 | 0.02 | 0.00 | 0.00 | -5.03e-03 | 0.0 | -1.42 | 0.28 | 0.00 | 0.00 | 0.00 | 0.0 |
| | | 0.0 | 0.00 | 0.00 | 0.0 | 7.7 | -1.40 | 0.28 | 0.00 | 0.00 | 0.00 | 0.02 |
| 231 | 1 | -2.49 | 0.00 | 0.00 | -0.05 | 0.0 | -25.19 | -50.99 | 0.00 | 0.00 | 0.00 | -2.49 |
| | | -10.19 | 0.00 | 0.00 | 0.0 | 15.1 | -25.20 | -51.04 | 0.00 | 0.00 | 0.00 | -10.19 |
| 231 | 2 | -2.49 | 0.00 | 0.00 | -0.05 | 0.0 | -25.19 | -50.99 | 0.00 | 0.00 | 0.00 | -2.49 |
| | | -10.19 | 0.00 | 0.00 | 0.0 | 15.1 | -25.20 | -51.04 | 0.00 | 0.00 | 0.00 | -10.19 |
| 231 | 3 | -2.49 | 0.00 | 0.00 | -0.05 | 0.0 | -25.19 | -50.99 | 0.00 | 0.00 | 0.00 | -2.49 |
| | | -10.19 | 0.00 | 0.00 | 0.0 | 15.1 | -25.20 | -51.04 | 0.00 | 0.00 | 0.00 | -10.19 |
| 231 | 4 | -3.24 | 0.00 | 0.00 | -0.07 | 0.0 | -32.75 | -66.29 | 0.00 | 0.00 | 0.00 | -3.24 |
| | | -13.25 | 0.00 | 0.00 | 0.0 | 15.1 | -32.76 | -66.35 | 0.00 | 0.00 | 0.00 | -13.25 |
| 231 | 5 | -2.49 | 0.00 | 0.00 | -0.05 | 0.0 | -25.19 | -50.99 | 0.00 | 0.00 | 0.00 | -2.49 |
| | | -10.19 | 0.00 | 0.00 | 0.0 | 15.1 | -25.20 | -51.04 | 0.00 | 0.00 | 0.00 | -10.19 |
| 232 | 1 | 0.30 | 0.00 | 0.00 | -0.04 | 0.0 | -0.32 | 0.45 | 0.00 | 0.00 | 0.00 | 0.24 |
| | | 0.24 | 0.00 | 0.00 | 0.0 | 15.3 | -0.29 | 0.40 | 0.00 | 0.00 | 0.00 | 0.30 |
| 232 | 2 | 0.30 | 0.00 | 0.00 | -0.04 | 0.0 | -0.32 | 0.45 | 0.00 | 0.00 | 0.00 | 0.24 |
| | | 0.24 | 0.00 | 0.00 | 0.0 | 15.3 | -0.29 | 0.40 | 0.00 | 0.00 | 0.00 | 0.30 |
| 232 | 3 | 0.30 | 0.00 | 0.00 | -0.04 | 0.0 | -0.32 | 0.45 | 0.00 | 0.00 | 0.00 | 0.24 |
| | | 0.24 | 0.00 | 0.00 | 0.0 | 15.3 | -0.29 | 0.40 | 0.00 | 0.00 | 0.00 | 0.30 |
| 232 | 4 | 0.39 | 0.00 | 0.00 | -0.06 | 0.0 | -0.41 | 0.58 | 0.00 | 0.00 | 0.00 | 0.31 |
| | | 0.31 | 0.00 | 0.00 | 0.0 | 15.3 | -0.38 | 0.52 | 0.00 | 0.00 | 0.00 | 0.39 |
| 232 | 5 | 0.30 | 0.00 | 0.00 | -0.04 | 0.0 | -0.32 | 0.45 | 0.00 | 0.00 | 0.00 | 0.24 |
| | | 0.24 | 0.00 | 0.00 | 0.0 | 15.3 | -0.29 | 0.40 | 0.00 | 0.00 | 0.00 | 0.30 |
| 233 | 1 | 0.35 | 0.00 | 0.00 | -0.03 | 0.0 | -0.03 | 0.10 | 0.00 | 0.00 | 0.00 | 0.34 |
| | | 0.34 | 0.00 | 0.00 | 0.0 | 7.6 | -0.02 | 0.08 | 0.00 | 0.00 | 0.00 | 0.35 |
| 233 | 2 | 0.35 | 0.00 | 0.00 | -0.03 | 0.0 | -0.03 | 0.10 | 0.00 | 0.00 | 0.00 | 0.34 |
| | | 0.34 | 0.00 | 0.00 | 0.0 | 7.6 | -0.02 | 0.08 | 0.00 | 0.00 | 0.00 | 0.35 |
| 233 | 3 | 0.35 | 0.00 | 0.00 | -0.03 | 0.0 | -0.03 | 0.10 | 0.00 | 0.00 | 0.00 | 0.34 |
| | | 0.34 | 0.00 | 0.00 | 0.0 | 7.6 | -0.02 | 0.08 | 0.00 | 0.00 | 0.00 | 0.35 |
| 233 | 4 | 0.45 | 0.00 | 0.00 | -0.03 | 0.0 | -0.04 | 0.14 | 0.00 | 0.00 | 0.00 | 0.45 |
| | | 0.45 | 0.00 | 0.00 | 0.0 | 7.6 | -0.03 | 0.10 | 0.00 | 0.00 | 0.00 | 0.45 |
| 233 | 5 | 0.35 | 0.00 | 0.00 | -0.03 | 0.0 | -0.03 | 0.10 | 0.00 | 0.00 | 0.00 | 0.34 |
| | | 0.34 | 0.00 | 0.00 | 0.0 | 7.6 | -0.02 | 0.08 | 0.00 | 0.00 | 0.00 | 0.35 |
| 234 | 1 | 0.09 | 0.00 | 0.00 | -0.01 | 0.0 | 0.57 | -1.90 | 0.00 | 0.00 | 0.00 | 0.09 |
| | | -0.06 | 0.00 | 0.00 | 0.0 | 7.6 | 0.57 | -1.92 | 0.00 | 0.00 | 0.00 | -0.06 |
| 234 | 2 | 0.09 | 0.00 | 0.00 | -0.01 | 0.0 | 0.57 | -1.90 | 0.00 | 0.00 | 0.00 | 0.09 |
| | | -0.06 | 0.00 | 0.00 | 0.0 | 7.6 | 0.57 | -1.92 | 0.00 | 0.00 | 0.00 | -0.06 |
| 234 | 3 | 0.09 | 0.00 | 0.00 | -0.01 | 0.0 | 0.57 | -1.90 | 0.00 | 0.00 | 0.00 | 0.09 |
| | | -0.06 | 0.00 | 0.00 | 0.0 | 7.6 | 0.57 | -1.92 | 0.00 | 0.00 | 0.00 | -0.06 |
| 234 | 4 | 0.11 | 0.00 | 0.00 | -0.02 | 0.0 | 0.74 | -2.47 | 0.00 | 0.00 | 0.00 | 0.11 |
| | | -0.08 | 0.00 | 0.00 | 0.0 | 7.6 | 0.75 | -2.49 | 0.00 | 0.00 | 0.00 | -0.08 |
| 234 | 5 | 0.09 | 0.00 | 0.00 | -0.01 | 0.0 | 0.57 | -1.90 | 0.00 | 0.00 | 0.00 | 0.09 |
| | | -0.06 | 0.00 | 0.00 | 0.0 | 7.6 | 0.57 | -1.92 | 0.00 | 0.00 | 0.00 | -0.06 |
| 235 | 1 | 0.36 | 0.00 | 0.00 | -0.03 | 0.0 | 0.84 | -3.72 | 0.00 | 0.00 | 0.00 | 0.36 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | 0.08 | 0.00 | 0.00 | 0.0 | 7.6 | 0.84 | -3.74 | 0.00 | 0.00 | 0.00 | 0.08 |
| 235 | 2 | 0.36 | 0.00 | 0.00 | -0.03 | 0.0 | 0.84 | -3.72 | 0.00 | 0.00 | 0.00 | 0.36 |
| | | 0.08 | 0.00 | 0.00 | 0.0 | 7.6 | 0.84 | -3.74 | 0.00 | 0.00 | 0.00 | 0.08 |
| 235 | 3 | 0.36 | 0.00 | 0.00 | -0.03 | 0.0 | 0.84 | -3.72 | 0.00 | 0.00 | 0.00 | 0.36 |
| | | 0.08 | 0.00 | 0.00 | 0.0 | 7.6 | 0.84 | -3.74 | 0.00 | 0.00 | 0.00 | 0.08 |
| 235 | 4 | 0.47 | 0.00 | 0.00 | -0.03 | 0.0 | 1.09 | -4.83 | 0.00 | 0.00 | 0.00 | 0.47 |
| | | 0.10 | 0.00 | 0.00 | 0.0 | 7.6 | 1.09 | -4.86 | 0.00 | 0.00 | 0.00 | 0.10 |
| 235 | 5 | 0.36 | 0.00 | 0.00 | -0.03 | 0.0 | 0.84 | -3.72 | 0.00 | 0.00 | 0.00 | 0.36 |
| | | 0.08 | 0.00 | 0.00 | 0.0 | 7.6 | 0.84 | -3.74 | 0.00 | 0.00 | 0.00 | 0.08 |
| 236 | 1 | -5.28 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 55.75 | 0.00 | 0.00 | 0.00 | -13.63 |
| | | -13.63 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 55.70 | 0.00 | 0.00 | 0.00 | -5.28 |
| 236 | 2 | -5.28 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 55.75 | 0.00 | 0.00 | 0.00 | -13.63 |
| | | -13.63 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 55.70 | 0.00 | 0.00 | 0.00 | -5.28 |
| 236 | 3 | -5.28 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 55.75 | 0.00 | 0.00 | 0.00 | -13.63 |
| | | -13.63 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 55.70 | 0.00 | 0.00 | 0.00 | -5.28 |
| 236 | 4 | -6.86 | 0.00 | 0.00 | -0.07 | 0.0 | -25.18 | 72.47 | 0.00 | 0.00 | 0.00 | -17.72 |
| | | -17.72 | 0.00 | 0.00 | 0.0 | 15.0 | -25.18 | 72.41 | 0.00 | 0.00 | 0.00 | -6.86 |
| 236 | 5 | -5.28 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 55.75 | 0.00 | 0.00 | 0.00 | -13.63 |
| | | -13.63 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 55.70 | 0.00 | 0.00 | 0.00 | -5.28 |
| 237 | 1 | 14.47 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 8.61 | 0.00 | 0.00 | 0.00 | 13.18 |
| | | 13.18 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 8.56 | 0.00 | 0.00 | 0.00 | 14.47 |
| 237 | 2 | 14.47 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 8.61 | 0.00 | 0.00 | 0.00 | 13.18 |
| | | 13.18 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 8.56 | 0.00 | 0.00 | 0.00 | 14.47 |
| 237 | 3 | 14.47 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 8.61 | 0.00 | 0.00 | 0.00 | 13.18 |
| | | 13.18 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 8.56 | 0.00 | 0.00 | 0.00 | 14.47 |
| 237 | 4 | 18.81 | 0.00 | 0.00 | -0.07 | 0.0 | -25.14 | 11.20 | 0.00 | 0.00 | 0.00 | 17.13 |
| | | 17.13 | 0.00 | 0.00 | 0.0 | 15.0 | -25.14 | 11.13 | 0.00 | 0.00 | 0.00 | 18.81 |
| 237 | 5 | 14.47 | 0.00 | 0.00 | -0.05 | 0.0 | -19.34 | 8.61 | 0.00 | 0.00 | 0.00 | 13.18 |
| | | 13.18 | 0.00 | 0.00 | 0.0 | 15.0 | -19.34 | 8.56 | 0.00 | 0.00 | 0.00 | 14.47 |
| 238 | 1 | 1.57 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 45.63 | 0.00 | 0.00 | 0.00 | -5.27 |
| | | -5.27 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 45.58 | 0.00 | 0.00 | 0.00 | 1.57 |
| 238 | 2 | 1.57 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 45.63 | 0.00 | 0.00 | 0.00 | -5.27 |
| | | -5.27 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 45.58 | 0.00 | 0.00 | 0.00 | 1.57 |
| 238 | 3 | 1.57 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 45.63 | 0.00 | 0.00 | 0.00 | -5.27 |
| | | -5.27 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 45.58 | 0.00 | 0.00 | 0.00 | 1.57 |
| 238 | 4 | 2.04 | 0.00 | 0.00 | -0.07 | 0.0 | -25.18 | 59.32 | 0.00 | 0.00 | 0.00 | -6.85 |
| | | -6.85 | 0.00 | 0.00 | 0.0 | 15.0 | -25.18 | 59.25 | 0.00 | 0.00 | 0.00 | 2.04 |
| 238 | 5 | 1.57 | 0.00 | 0.00 | -0.05 | 0.0 | -19.37 | 45.63 | 0.00 | 0.00 | 0.00 | -5.27 |
| | | -5.27 | 0.00 | 0.00 | 0.0 | 15.0 | -19.37 | 45.58 | 0.00 | 0.00 | 0.00 | 1.57 |
| 239 | 1 | 1.52 | 0.00 | 0.00 | -10.11 | 0.0 | 0.00 | 4.01 | 0.00 | 0.00 | 0.00 | -0.06 |
| | | -2.15 | 0.00 | 0.00 | 0.0 | 200.0 | 0.00 | -6.10 | 0.00 | 0.00 | 0.00 | -2.15 |
| 239 | 2 | 1.52 | 0.00 | 0.00 | -10.11 | 0.0 | 0.00 | 4.01 | 0.00 | 0.00 | 0.00 | -0.06 |
| | | -2.15 | 0.00 | 0.00 | 0.0 | 200.0 | 0.00 | -6.10 | 0.00 | 0.00 | 0.00 | -2.15 |
| 239 | 3 | 1.52 | 0.00 | 0.00 | -10.11 | 0.0 | 0.00 | 4.01 | 0.00 | 0.00 | 0.00 | -0.06 |
| | | -2.15 | 0.00 | 0.00 | 0.0 | 200.0 | 0.00 | -6.10 | 0.00 | 0.00 | 0.00 | -2.15 |
| 239 | 4 | 1.98 | 0.00 | 0.00 | -13.15 | 0.0 | 0.00 | 5.22 | 0.00 | 0.00 | 0.00 | -0.08 |
| | | -2.80 | 0.00 | 0.00 | 0.0 | 200.0 | 0.00 | -7.93 | 0.00 | 0.00 | 0.00 | -2.80 |
| 239 | 5 | 1.52 | 0.00 | 0.00 | -10.11 | 0.0 | 0.00 | 4.01 | 0.00 | 0.00 | 0.00 | -0.06 |
| | | -2.15 | 0.00 | 0.00 | 0.0 | 200.0 | 0.00 | -6.10 | 0.00 | 0.00 | 0.00 | -2.15 |
| 241 | 1 | 0.36 | 0.00 | 0.00 | -0.03 | 0.0 | 0.10 | -2.92 | 0.00 | 0.00 | 0.00 | 0.36 |
| | | 0.14 | 0.00 | 0.00 | 0.0 | 7.6 | 0.11 | -2.95 | 0.00 | 0.00 | 0.00 | 0.14 |
| 241 | 2 | 0.36 | 0.00 | 0.00 | -0.03 | 0.0 | 0.10 | -2.92 | 0.00 | 0.00 | 0.00 | 0.36 |
| | | 0.14 | 0.00 | 0.00 | 0.0 | 7.6 | 0.11 | -2.95 | 0.00 | 0.00 | 0.00 | 0.14 |
| 241 | 3 | 0.36 | 0.00 | 0.00 | -0.03 | 0.0 | 0.10 | -2.92 | 0.00 | 0.00 | 0.00 | 0.36 |
| | | 0.14 | 0.00 | 0.00 | 0.0 | 7.6 | 0.11 | -2.95 | 0.00 | 0.00 | 0.00 | 0.14 |
| 241 | 4 | 0.47 | 0.00 | 0.00 | -0.03 | 0.0 | 0.13 | -3.80 | 0.00 | 0.00 | 0.00 | 0.47 |
| | | 0.18 | 0.00 | 0.00 | 0.0 | 7.6 | 0.14 | -3.83 | 0.00 | 0.00 | 0.00 | 0.18 |
| 241 | 5 | 0.36 | 0.00 | 0.00 | -0.03 | 0.0 | 0.10 | -2.92 | 0.00 | 0.00 | 0.00 | 0.36 |
| | | 0.14 | 0.00 | 0.00 | 0.0 | 7.6 | 0.11 | -2.95 | 0.00 | 0.00 | 0.00 | 0.14 |
| 245 | 1 | 1.38 | 0.00 | 0.00 | -9.50 | 0.0 | -2.83 | 3.79 | 0.00 | 0.00 | 0.00 | -0.12 |
| | | -2.04 | 0.00 | 0.00 | 3.46 | 200.0 | -2.83 | -5.71 | 0.00 | 0.00 | 0.00 | -2.04 |
| 245 | 2 | 1.38 | 0.00 | 0.00 | -9.50 | 0.0 | -2.83 | 3.79 | 0.00 | 0.00 | 0.00 | -0.12 |
| | | -2.04 | 0.00 | 0.00 | 3.46 | 200.0 | -2.83 | -5.71 | 0.00 | 0.00 | 0.00 | -2.04 |
| 245 | 3 | 1.38 | 0.00 | 0.00 | -9.50 | 0.0 | -2.83 | 3.79 | 0.00 | 0.00 | 0.00 | -0.12 |
| | | -2.04 | 0.00 | 0.00 | 3.46 | 200.0 | -2.83 | -5.71 | 0.00 | 0.00 | 0.00 | -2.04 |
| 245 | 4 | 1.80 | 0.00 | 0.00 | -12.35 | 0.0 | -3.67 | 4.93 | 0.00 | 0.00 | 0.00 | -0.16 |
| | | -2.66 | 0.00 | 0.00 | 4.50 | 200.0 | -3.67 | -7.43 | 0.00 | 0.00 | 0.00 | -2.66 |
| 245 | 5 | 1.38 | 0.00 | 0.00 | -9.50 | 0.0 | -2.83 | 3.79 | 0.00 | 0.00 | 0.00 | -0.12 |
| | | -2.04 | 0.00 | 0.00 | 3.46 | 200.0 | -2.83 | -5.71 | 0.00 | 0.00 | 0.00 | -2.04 |
| 246 | 1 | 1.52 | 0.00 | 0.00 | -10.11 | 0.0 | 8.27e-04 | 4.01 | 0.00 | 0.00 | 0.00 | -0.06 |
| | | -2.15 | 0.00 | 0.00 | 0.0 | 200.0 | 8.27e-04 | -6.10 | 0.00 | 0.00 | 0.00 | -2.15 |
| 246 | 2 | 1.52 | 0.00 | 0.00 | -10.11 | 0.0 | 8.27e-04 | 4.01 | 0.00 | 0.00 | 0.00 | -0.06 |
| | | -2.15 | 0.00 | 0.00 | 0.0 | 200.0 | 8.27e-04 | -6.10 | 0.00 | 0.00 | 0.00 | -2.15 |
| 246 | 3 | 1.52 | 0.00 | 0.00 | -10.11 | 0.0 | 8.27e-04 | 4.01 | 0.00 | 0.00 | 0.00 | -0.06 |
| | | -2.15 | 0.00 | 0.00 | 0.0 | 200.0 | 8.27e-04 | -6.10 | 0.00 | 0.00 | 0.00 | -2.15 |
| 246 | 4 | 1.98 | 0.00 | 0.00 | -13.15 | 0.0 | 1.08e-03 | 5.22 | 0.00 | 0.00 | 0.00 | -0.08 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | -2.79 | 0.00 | 0.00 | 0.0 | 200.0 | 1.08e-03 | -7.93 | 0.00 | 0.00 | 0.00 | -2.79 |
| 246 | 5 | 1.52 | 0.00 | 0.00 | -10.11 | 0.0 | 8.27e-04 | 4.01 | 0.00 | 0.00 | 0.00 | -0.06 |
| | | -2.15 | 0.00 | 0.00 | 0.0 | 200.0 | 8.27e-04 | -6.10 | 0.00 | 0.00 | 0.00 | -2.15 |
| 247 | 1 | 0.02 | 0.00 | 0.00 | 0.07 | 0.0 | 0.15 | -0.03 | 0.00 | 0.00 | 0.00 | -7.57e-04 |
| | | -0.01 | 0.00 | 0.00 | 0.20 | 200.0 | 0.15 | 0.05 | 0.00 | 0.00 | 0.00 | 0.02 |
| 247 | 2 | 0.02 | 0.00 | 0.00 | 0.07 | 0.0 | 0.15 | -0.03 | 0.00 | 0.00 | 0.00 | -7.57e-04 |
| | | -0.01 | 0.00 | 0.00 | 0.20 | 200.0 | 0.15 | 0.05 | 0.00 | 0.00 | 0.00 | 0.02 |
| 247 | 3 | 0.02 | 0.00 | 0.00 | 0.07 | 0.0 | 0.15 | -0.03 | 0.00 | 0.00 | 0.00 | -7.57e-04 |
| | | -0.01 | 0.00 | 0.00 | 0.20 | 200.0 | 0.15 | 0.05 | 0.00 | 0.00 | 0.00 | 0.02 |
| 247 | 4 | 0.02 | 0.00 | 0.00 | 0.09 | 0.0 | 0.20 | -0.04 | 0.00 | 0.00 | 0.00 | -9.84e-04 |
| | | -0.01 | 0.00 | 0.00 | 0.26 | 200.0 | 0.20 | 0.06 | 0.00 | 0.00 | 0.00 | 0.02 |
| 247 | 5 | 0.02 | 0.00 | 0.00 | 0.07 | 0.0 | 0.15 | -0.03 | 0.00 | 0.00 | 0.00 | -7.57e-04 |
| | | -0.01 | 0.00 | 0.00 | 0.20 | 200.0 | 0.15 | 0.05 | 0.00 | 0.00 | 0.00 | 0.02 |
| 263 | 1 | 0.66 | 0.00 | 0.00 | -10.11 | 0.0 | -0.03 | 4.79 | 0.00 | 0.00 | 0.00 | -1.60 |
| | | -2.13 | 0.00 | 0.00 | 0.0 | 200.0 | -0.03 | -5.32 | 0.00 | 0.00 | 0.00 | -2.13 |
| 263 | 2 | 0.66 | 0.00 | 0.00 | -10.11 | 0.0 | -0.03 | 4.79 | 0.00 | 0.00 | 0.00 | -1.60 |
| | | -2.13 | 0.00 | 0.00 | 0.0 | 200.0 | -0.03 | -5.32 | 0.00 | 0.00 | 0.00 | -2.13 |
| 263 | 3 | 0.66 | 0.00 | 0.00 | -10.11 | 0.0 | -0.03 | 4.79 | 0.00 | 0.00 | 0.00 | -1.60 |
| | | -2.13 | 0.00 | 0.00 | 0.0 | 200.0 | -0.03 | -5.32 | 0.00 | 0.00 | 0.00 | -2.13 |
| 263 | 4 | 0.86 | 0.00 | 0.00 | -13.15 | 0.0 | -0.03 | 6.22 | 0.00 | 0.00 | 0.00 | -2.08 |
| | | -2.77 | 0.00 | 0.00 | 0.0 | 200.0 | -0.03 | -6.92 | 0.00 | 0.00 | 0.00 | -2.77 |
| 263 | 5 | 0.66 | 0.00 | 0.00 | -10.11 | 0.0 | -0.03 | 4.79 | 0.00 | 0.00 | 0.00 | -1.60 |
| | | -2.13 | 0.00 | 0.00 | 0.0 | 200.0 | -0.03 | -5.32 | 0.00 | 0.00 | 0.00 | -2.13 |
| 264 | 1 | 1.55 | 0.00 | 0.00 | -10.11 | 0.0 | 0.05 | 6.13 | 0.00 | 0.00 | 0.00 | -2.16 |
| | | -2.16 | 0.00 | 0.00 | 0.0 | 200.0 | 0.05 | -3.98 | 0.00 | 0.00 | 0.00 | -0.01 |
| 264 | 2 | 1.55 | 0.00 | 0.00 | -10.11 | 0.0 | 0.05 | 6.13 | 0.00 | 0.00 | 0.00 | -2.16 |
| | | -2.16 | 0.00 | 0.00 | 0.0 | 200.0 | 0.05 | -3.98 | 0.00 | 0.00 | 0.00 | -0.01 |
| 264 | 3 | 1.55 | 0.00 | 0.00 | -10.11 | 0.0 | 0.05 | 6.13 | 0.00 | 0.00 | 0.00 | -2.16 |
| | | -2.16 | 0.00 | 0.00 | 0.0 | 200.0 | 0.05 | -3.98 | 0.00 | 0.00 | 0.00 | -0.01 |
| 264 | 4 | 2.02 | 0.00 | 0.00 | -13.15 | 0.0 | 0.06 | 7.97 | 0.00 | 0.00 | 0.00 | -2.80 |
| | | -2.80 | 0.00 | 0.00 | 0.0 | 200.0 | 0.06 | -5.18 | 0.00 | 0.00 | 0.00 | -0.02 |
| 264 | 5 | 1.55 | 0.00 | 0.00 | -10.11 | 0.0 | 0.05 | 6.13 | 0.00 | 0.00 | 0.00 | -2.16 |
| | | -2.16 | 0.00 | 0.00 | 0.0 | 200.0 | 0.05 | -3.98 | 0.00 | 0.00 | 0.00 | -0.01 |
| 265 | 1 | 0.93 | 0.00 | 0.00 | -10.11 | 0.0 | -0.04 | 5.06 | 0.00 | 0.00 | 0.00 | -1.60 |
| | | -1.60 | 0.00 | 0.00 | 0.0 | 200.0 | -0.04 | -5.06 | 0.00 | 0.00 | 0.00 | -1.60 |
| 265 | 2 | 0.93 | 0.00 | 0.00 | -10.11 | 0.0 | -0.04 | 5.06 | 0.00 | 0.00 | 0.00 | -1.60 |
| | | -1.60 | 0.00 | 0.00 | 0.0 | 200.0 | -0.04 | -5.06 | 0.00 | 0.00 | 0.00 | -1.60 |
| 265 | 3 | 0.93 | 0.00 | 0.00 | -10.11 | 0.0 | -0.04 | 5.06 | 0.00 | 0.00 | 0.00 | -1.60 |
| | | -1.60 | 0.00 | 0.00 | 0.0 | 200.0 | -0.04 | -5.06 | 0.00 | 0.00 | 0.00 | -1.60 |
| 265 | 4 | 1.20 | 0.00 | 0.00 | -13.15 | 0.0 | -0.05 | 6.57 | 0.00 | 0.00 | 0.00 | -2.08 |
| | | -2.08 | 0.00 | 0.00 | 0.0 | 200.0 | -0.05 | -6.57 | 0.00 | 0.00 | 0.00 | -2.08 |
| 265 | 5 | 0.93 | 0.00 | 0.00 | -10.11 | 0.0 | -0.04 | 5.06 | 0.00 | 0.00 | 0.00 | -1.60 |
| | | -1.60 | 0.00 | 0.00 | 0.0 | 200.0 | -0.04 | -5.06 | 0.00 | 0.00 | 0.00 | -1.60 |
| 266 | 1 | 0.66 | 0.00 | 0.00 | -10.11 | 0.0 | -0.03 | 5.32 | 0.00 | 0.00 | 0.00 | -2.13 |
| | | -2.13 | 0.00 | 0.00 | 0.0 | 200.0 | -0.03 | -4.79 | 0.00 | 0.00 | 0.00 | -1.60 |
| 266 | 2 | 0.66 | 0.00 | 0.00 | -10.11 | 0.0 | -0.03 | 5.32 | 0.00 | 0.00 | 0.00 | -2.13 |
| | | -2.13 | 0.00 | 0.00 | 0.0 | 200.0 | -0.03 | -4.79 | 0.00 | 0.00 | 0.00 | -1.60 |
| 266 | 3 | 0.66 | 0.00 | 0.00 | -10.11 | 0.0 | -0.03 | 5.32 | 0.00 | 0.00 | 0.00 | -2.13 |
| | | -2.13 | 0.00 | 0.00 | 0.0 | 200.0 | -0.03 | -4.79 | 0.00 | 0.00 | 0.00 | -1.60 |
| 266 | 4 | 0.86 | 0.00 | 0.00 | -13.15 | 0.0 | -0.03 | 6.92 | 0.00 | 0.00 | 0.00 | -2.77 |
| | | -2.77 | 0.00 | 0.00 | 0.0 | 200.0 | -0.03 | -6.22 | 0.00 | 0.00 | 0.00 | -2.08 |
| 266 | 5 | 0.66 | 0.00 | 0.00 | -10.11 | 0.0 | -0.03 | 5.32 | 0.00 | 0.00 | 0.00 | -2.13 |
| | | -2.13 | 0.00 | 0.00 | 0.0 | 200.0 | -0.03 | -4.79 | 0.00 | 0.00 | 0.00 | -1.60 |
| 267 | 1 | 1.55 | 0.00 | 0.00 | -10.11 | 0.0 | 0.05 | 3.98 | 0.00 | 0.00 | 0.00 | -0.01 |
| | | -2.16 | 0.00 | 0.00 | 0.0 | 200.0 | 0.05 | -6.13 | 0.00 | 0.00 | 0.00 | -2.16 |
| 267 | 2 | 1.55 | 0.00 | 0.00 | -10.11 | 0.0 | 0.05 | 3.98 | 0.00 | 0.00 | 0.00 | -0.01 |
| | | -2.16 | 0.00 | 0.00 | 0.0 | 200.0 | 0.05 | -6.13 | 0.00 | 0.00 | 0.00 | -2.16 |
| 267 | 3 | 1.55 | 0.00 | 0.00 | -10.11 | 0.0 | 0.05 | 3.98 | 0.00 | 0.00 | 0.00 | -0.01 |
| | | -2.16 | 0.00 | 0.00 | 0.0 | 200.0 | 0.05 | -6.13 | 0.00 | 0.00 | 0.00 | -2.16 |
| 267 | 4 | 2.02 | 0.00 | 0.00 | -13.15 | 0.0 | 0.06 | 5.18 | 0.00 | 0.00 | 0.00 | -0.02 |
| | | -2.80 | 0.00 | 0.00 | 0.0 | 200.0 | 0.06 | -7.97 | 0.00 | 0.00 | 0.00 | -2.80 |
| 267 | 5 | 1.55 | 0.00 | 0.00 | -10.11 | 0.0 | 0.05 | 3.98 | 0.00 | 0.00 | 0.00 | -0.01 |
| | | -2.16 | 0.00 | 0.00 | 0.0 | 200.0 | 0.05 | -6.13 | 0.00 | 0.00 | 0.00 | -2.16 |
| 283 | 1 | -0.10 | 0.00 | 0.00 | -3.50 | 0.0 | 3.80 | 1.91 | 0.00 | 0.00 | 0.00 | -1.14 |
| | | -1.14 | 0.00 | 0.00 | 0.0 | 200.0 | 3.80 | -1.59 | 0.00 | 0.00 | 0.00 | -0.82 |
| 283 | 2 | -0.10 | 0.00 | 0.00 | -3.50 | 0.0 | 3.80 | 1.91 | 0.00 | 0.00 | 0.00 | -1.14 |
| | | -1.14 | 0.00 | 0.00 | 0.0 | 200.0 | 3.80 | -1.59 | 0.00 | 0.00 | 0.00 | -0.82 |
| 283 | 3 | -0.10 | 0.00 | 0.00 | -3.50 | 0.0 | 3.80 | 1.91 | 0.00 | 0.00 | 0.00 | -1.14 |
| | | -1.14 | 0.00 | 0.00 | 0.0 | 200.0 | 3.80 | -1.59 | 0.00 | 0.00 | 0.00 | -0.82 |
| 283 | 4 | -0.13 | 0.00 | 0.00 | -4.55 | 0.0 | 4.93 | 2.48 | 0.00 | 0.00 | 0.00 | -1.48 |
| | | -1.48 | 0.00 | 0.00 | 0.0 | 200.0 | 4.93 | -2.07 | 0.00 | 0.00 | 0.00 | -1.06 |
| 283 | 5 | -0.10 | 0.00 | 0.00 | -3.50 | 0.0 | 3.80 | 1.91 | 0.00 | 0.00 | 0.00 | -1.14 |
| | | -1.14 | 0.00 | 0.00 | 0.0 | 200.0 | 3.80 | -1.59 | 0.00 | 0.00 | 0.00 | -0.82 |
| 284 | 1 | 0.36 | 0.00 | 0.00 | -0.03 | 0.0 | 0.10 | -2.92 | 0.00 | 0.00 | 0.00 | 0.36 |
| | | 0.14 | 0.00 | 0.00 | 0.0 | 7.6 | 0.10 | -2.95 | 0.00 | 0.00 | 0.00 | 0.14 |
| 284 | 2 | 0.36 | 0.00 | 0.00 | -0.03 | 0.0 | 0.10 | -2.92 | 0.00 | 0.00 | 0.00 | 0.36 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | 0.14 | 0.00 | 0.00 | 0.0 | 7.6 | 0.10 | -2.95 | 0.00 | 0.00 | 0.00 | 0.14 |
| 284 | 3 | 0.36 | 0.00 | 0.00 | -0.03 | 0.0 | 0.10 | -2.92 | 0.00 | 0.00 | 0.00 | 0.36 |
| | | 0.14 | 0.00 | 0.00 | 0.0 | 7.6 | 0.10 | -2.95 | 0.00 | 0.00 | 0.00 | 0.14 |
| 284 | 4 | 0.47 | 0.00 | 0.00 | -0.03 | 0.0 | 0.13 | -3.80 | 0.00 | 0.00 | 0.00 | 0.47 |
| | | 0.18 | 0.00 | 0.00 | 0.0 | 7.6 | 0.13 | -3.83 | 0.00 | 0.00 | 0.00 | 0.18 |
| 284 | 5 | 0.36 | 0.00 | 0.00 | -0.03 | 0.0 | 0.10 | -2.92 | 0.00 | 0.00 | 0.00 | 0.36 |
| | | 0.14 | 0.00 | 0.00 | 0.0 | 7.6 | 0.10 | -2.95 | 0.00 | 0.00 | 0.00 | 0.14 |
| 285 | 1 | 0.58 | 0.00 | 0.00 | -3.50 | 0.0 | 0.99 | 1.39 | 0.00 | 0.00 | 0.00 | 0.03 |
| | | -0.70 | 0.00 | 0.00 | 0.0 | 200.0 | 0.99 | -2.11 | 0.00 | 0.00 | 0.00 | -0.70 |
| 285 | 2 | 0.58 | 0.00 | 0.00 | -3.50 | 0.0 | 0.99 | 1.39 | 0.00 | 0.00 | 0.00 | 0.03 |
| | | -0.70 | 0.00 | 0.00 | 0.0 | 200.0 | 0.99 | -2.11 | 0.00 | 0.00 | 0.00 | -0.70 |
| 285 | 3 | 0.58 | 0.00 | 0.00 | -3.50 | 0.0 | 0.99 | 1.39 | 0.00 | 0.00 | 0.00 | 0.03 |
| | | -0.70 | 0.00 | 0.00 | 0.0 | 200.0 | 0.99 | -2.11 | 0.00 | 0.00 | 0.00 | -0.70 |
| 285 | 4 | 0.75 | 0.00 | 0.00 | -4.55 | 0.0 | 1.29 | 1.80 | 0.00 | 0.00 | 0.00 | 0.04 |
| | | -0.90 | 0.00 | 0.00 | 0.0 | 200.0 | 1.29 | -2.75 | 0.00 | 0.00 | 0.00 | -0.90 |
| 285 | 5 | 0.58 | 0.00 | 0.00 | -3.50 | 0.0 | 0.99 | 1.39 | 0.00 | 0.00 | 0.00 | 0.03 |
| | | -0.70 | 0.00 | 0.00 | 0.0 | 200.0 | 0.99 | -2.11 | 0.00 | 0.00 | 0.00 | -0.70 |
| 286 | 1 | 0.16 | 0.00 | 0.00 | -3.50 | 0.0 | 1.10 | 1.75 | 0.00 | 0.00 | 0.00 | -0.72 |
| | | -0.72 | 0.00 | 0.00 | 0.0 | 200.0 | 1.10 | -1.75 | 0.00 | 0.00 | 0.00 | -0.71 |
| 286 | 2 | 0.16 | 0.00 | 0.00 | -3.50 | 0.0 | 1.10 | 1.75 | 0.00 | 0.00 | 0.00 | -0.72 |
| | | -0.72 | 0.00 | 0.00 | 0.0 | 200.0 | 1.10 | -1.75 | 0.00 | 0.00 | 0.00 | -0.71 |
| 286 | 3 | 0.16 | 0.00 | 0.00 | -3.50 | 0.0 | 1.10 | 1.75 | 0.00 | 0.00 | 0.00 | -0.72 |
| | | -0.72 | 0.00 | 0.00 | 0.0 | 200.0 | 1.10 | -1.75 | 0.00 | 0.00 | 0.00 | -0.71 |
| 286 | 4 | 0.21 | 0.00 | 0.00 | -4.55 | 0.0 | 1.42 | 2.28 | 0.00 | 0.00 | 0.00 | -0.93 |
| | | -0.93 | 0.00 | 0.00 | 0.0 | 200.0 | 1.42 | -2.27 | 0.00 | 0.00 | 0.00 | -0.93 |
| 286 | 5 | 0.16 | 0.00 | 0.00 | -3.50 | 0.0 | 1.10 | 1.75 | 0.00 | 0.00 | 0.00 | -0.72 |
| | | -0.72 | 0.00 | 0.00 | 0.0 | 200.0 | 1.10 | -1.75 | 0.00 | 0.00 | 0.00 | -0.71 |
| 287 | 1 | 0.58 | 0.00 | 0.00 | -3.50 | 0.0 | 0.99 | 2.11 | 0.00 | 0.00 | 0.00 | -0.70 |
| | | -0.70 | 0.00 | 0.00 | 0.0 | 200.0 | 0.99 | -1.39 | 0.00 | 0.00 | 0.00 | 0.03 |
| 287 | 2 | 0.58 | 0.00 | 0.00 | -3.50 | 0.0 | 0.99 | 2.11 | 0.00 | 0.00 | 0.00 | -0.70 |
| | | -0.70 | 0.00 | 0.00 | 0.0 | 200.0 | 0.99 | -1.39 | 0.00 | 0.00 | 0.00 | 0.03 |
| 287 | 3 | 0.58 | 0.00 | 0.00 | -3.50 | 0.0 | 0.99 | 2.11 | 0.00 | 0.00 | 0.00 | -0.70 |
| | | -0.70 | 0.00 | 0.00 | 0.0 | 200.0 | 0.99 | -1.39 | 0.00 | 0.00 | 0.00 | 0.03 |
| 287 | 4 | 0.75 | 0.00 | 0.00 | -4.55 | 0.0 | 1.29 | 2.74 | 0.00 | 0.00 | 0.00 | -0.90 |
| | | -0.90 | 0.00 | 0.00 | 0.0 | 200.0 | 1.29 | -1.80 | 0.00 | 0.00 | 0.00 | 0.03 |
| 287 | 5 | 0.58 | 0.00 | 0.00 | -3.50 | 0.0 | 0.99 | 2.11 | 0.00 | 0.00 | 0.00 | -0.70 |
| | | -0.70 | 0.00 | 0.00 | 0.0 | 200.0 | 0.99 | -1.39 | 0.00 | 0.00 | 0.00 | 0.03 |
| 293 | 1 | 0.24 | 0.00 | 0.00 | -0.04 | 0.0 | -0.56 | 0.52 | 0.00 | 0.00 | 0.00 | 0.16 |
| | | 0.16 | 0.00 | 0.00 | 0.0 | 15.3 | -0.52 | 0.49 | 0.00 | 0.00 | 0.00 | 0.24 |
| 293 | 2 | 0.24 | 0.00 | 0.00 | -0.04 | 0.0 | -0.56 | 0.52 | 0.00 | 0.00 | 0.00 | 0.16 |
| | | 0.16 | 0.00 | 0.00 | 0.0 | 15.3 | -0.52 | 0.49 | 0.00 | 0.00 | 0.00 | 0.24 |
| 293 | 3 | 0.24 | 0.00 | 0.00 | -0.04 | 0.0 | -0.56 | 0.52 | 0.00 | 0.00 | 0.00 | 0.16 |
| | | 0.16 | 0.00 | 0.00 | 0.0 | 15.3 | -0.52 | 0.49 | 0.00 | 0.00 | 0.00 | 0.24 |
| 293 | 4 | 0.31 | 0.00 | 0.00 | -0.05 | 0.0 | -0.73 | 0.68 | 0.00 | 0.00 | 0.00 | 0.21 |
| | | 0.21 | 0.00 | 0.00 | 0.0 | 15.3 | -0.68 | 0.63 | 0.00 | 0.00 | 0.00 | 0.31 |
| 293 | 5 | 0.24 | 0.00 | 0.00 | -0.04 | 0.0 | -0.56 | 0.52 | 0.00 | 0.00 | 0.00 | 0.16 |
| | | 0.16 | 0.00 | 0.00 | 0.0 | 15.3 | -0.52 | 0.49 | 0.00 | 0.00 | 0.00 | 0.24 |
| 294 | 1 | 0.09 | 0.00 | 0.00 | -0.01 | 0.0 | 0.57 | -1.90 | 0.00 | 0.00 | 0.00 | 0.09 |
| | | -0.06 | 0.00 | 0.00 | 0.0 | 7.6 | 0.58 | -1.91 | 0.00 | 0.00 | 0.00 | -0.06 |
| 294 | 2 | 0.09 | 0.00 | 0.00 | -0.01 | 0.0 | 0.57 | -1.90 | 0.00 | 0.00 | 0.00 | 0.09 |
| | | -0.06 | 0.00 | 0.00 | 0.0 | 7.6 | 0.58 | -1.91 | 0.00 | 0.00 | 0.00 | -0.06 |
| 294 | 3 | 0.09 | 0.00 | 0.00 | -0.01 | 0.0 | 0.57 | -1.90 | 0.00 | 0.00 | 0.00 | 0.09 |
| | | -0.06 | 0.00 | 0.00 | 0.0 | 7.6 | 0.58 | -1.91 | 0.00 | 0.00 | 0.00 | -0.06 |
| 294 | 4 | 0.11 | 0.00 | 0.00 | -0.02 | 0.0 | 0.75 | -2.46 | 0.00 | 0.00 | 0.00 | 0.11 |
| | | -0.08 | 0.00 | 0.00 | 0.0 | 7.6 | 0.75 | -2.48 | 0.00 | 0.00 | 0.00 | -0.08 |
| 294 | 5 | 0.09 | 0.00 | 0.00 | -0.01 | 0.0 | 0.57 | -1.90 | 0.00 | 0.00 | 0.00 | 0.09 |
| | | -0.06 | 0.00 | 0.00 | 0.0 | 7.6 | 0.58 | -1.91 | 0.00 | 0.00 | 0.00 | -0.06 |
| 295 | 1 | 0.23 | 0.00 | 0.00 | -0.04 | 0.0 | -0.54 | 0.51 | 0.00 | 0.00 | 0.00 | 0.16 |
| | | 0.16 | 0.00 | 0.00 | 0.0 | 15.3 | -0.50 | 0.48 | 0.00 | 0.00 | 0.00 | 0.23 |
| 295 | 2 | 0.23 | 0.00 | 0.00 | -0.04 | 0.0 | -0.54 | 0.51 | 0.00 | 0.00 | 0.00 | 0.16 |
| | | 0.16 | 0.00 | 0.00 | 0.0 | 15.3 | -0.50 | 0.48 | 0.00 | 0.00 | 0.00 | 0.23 |
| 295 | 3 | 0.23 | 0.00 | 0.00 | -0.04 | 0.0 | -0.54 | 0.51 | 0.00 | 0.00 | 0.00 | 0.16 |
| | | 0.16 | 0.00 | 0.00 | 0.0 | 15.3 | -0.50 | 0.48 | 0.00 | 0.00 | 0.00 | 0.23 |
| 295 | 4 | 0.30 | 0.00 | 0.00 | -0.05 | 0.0 | -0.70 | 0.67 | 0.00 | 0.00 | 0.00 | 0.21 |
| | | 0.21 | 0.00 | 0.00 | 0.0 | 15.3 | -0.65 | 0.62 | 0.00 | 0.00 | 0.00 | 0.30 |
| 295 | 5 | 0.23 | 0.00 | 0.00 | -0.04 | 0.0 | -0.54 | 0.51 | 0.00 | 0.00 | 0.00 | 0.16 |
| | | 0.16 | 0.00 | 0.00 | 0.0 | 15.3 | -0.50 | 0.48 | 0.00 | 0.00 | 0.00 | 0.23 |
| 296 | 1 | 0.23 | 0.00 | 0.00 | -0.04 | 0.0 | -0.54 | 0.51 | 0.00 | 0.00 | 0.00 | 0.16 |
| | | 0.16 | 0.00 | 0.00 | 0.0 | 15.3 | -0.50 | 0.48 | 0.00 | 0.00 | 0.00 | 0.23 |
| 296 | 2 | 0.23 | 0.00 | 0.00 | -0.04 | 0.0 | -0.54 | 0.51 | 0.00 | 0.00 | 0.00 | 0.16 |
| | | 0.16 | 0.00 | 0.00 | 0.0 | 15.3 | -0.50 | 0.48 | 0.00 | 0.00 | 0.00 | 0.23 |
| 296 | 3 | 0.23 | 0.00 | 0.00 | -0.04 | 0.0 | -0.54 | 0.51 | 0.00 | 0.00 | 0.00 | 0.16 |
| | | 0.16 | 0.00 | 0.00 | 0.0 | 15.3 | -0.50 | 0.48 | 0.00 | 0.00 | 0.00 | 0.23 |
| 296 | 4 | 0.30 | 0.00 | 0.00 | -0.05 | 0.0 | -0.70 | 0.67 | 0.00 | 0.00 | 0.00 | 0.21 |
| | | 0.21 | 0.00 | 0.00 | 0.0 | 15.3 | -0.65 | 0.62 | 0.00 | 0.00 | 0.00 | 0.30 |
| 296 | 5 | 0.23 | 0.00 | 0.00 | -0.04 | 0.0 | -0.54 | 0.51 | 0.00 | 0.00 | 0.00 | 0.16 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | 0.16 | 0.00 | 0.00 | 0.0 | 15.3 | -0.50 | 0.48 | 0.00 | 0.00 | 0.00 | 0.23 |
| 297 | 1 | 0.24 | 0.00 | 0.00 | -0.04 | 0.0 | -0.56 | 0.52 | 0.00 | 0.00 | 0.00 | 0.16 |
| | | 0.16 | 0.00 | 0.00 | 0.0 | 15.3 | -0.52 | 0.49 | 0.00 | 0.00 | 0.00 | 0.24 |
| 297 | 2 | 0.24 | 0.00 | 0.00 | -0.04 | 0.0 | -0.56 | 0.52 | 0.00 | 0.00 | 0.00 | 0.16 |
| | | 0.16 | 0.00 | 0.00 | 0.0 | 15.3 | -0.52 | 0.49 | 0.00 | 0.00 | 0.00 | 0.24 |
| 297 | 3 | 0.24 | 0.00 | 0.00 | -0.04 | 0.0 | -0.56 | 0.52 | 0.00 | 0.00 | 0.00 | 0.16 |
| | | 0.16 | 0.00 | 0.00 | 0.0 | 15.3 | -0.52 | 0.49 | 0.00 | 0.00 | 0.00 | 0.24 |
| 297 | 4 | 0.31 | 0.00 | 0.00 | -0.05 | 0.0 | -0.73 | 0.68 | 0.00 | 0.00 | 0.00 | 0.21 |
| | | 0.21 | 0.00 | 0.00 | 0.0 | 15.3 | -0.68 | 0.63 | 0.00 | 0.00 | 0.00 | 0.31 |
| 297 | 5 | 0.24 | 0.00 | 0.00 | -0.04 | 0.0 | -0.56 | 0.52 | 0.00 | 0.00 | 0.00 | 0.16 |
| | | 0.16 | 0.00 | 0.00 | 0.0 | 15.3 | -0.52 | 0.49 | 0.00 | 0.00 | 0.00 | 0.24 |
| 308 | 1 | 0.66 | 0.00 | 0.00 | -10.11 | 0.0 | 0.03 | 4.79 | 0.00 | 0.00 | 0.00 | -1.60 |
| | | -2.13 | 0.00 | 0.00 | 0.0 | 200.0 | 0.03 | -5.32 | 0.00 | 0.00 | 0.00 | -2.13 |
| 308 | 2 | 0.66 | 0.00 | 0.00 | -10.11 | 0.0 | 0.03 | 4.79 | 0.00 | 0.00 | 0.00 | -1.60 |
| | | -2.13 | 0.00 | 0.00 | 0.0 | 200.0 | 0.03 | -5.32 | 0.00 | 0.00 | 0.00 | -2.13 |
| 308 | 3 | 0.66 | 0.00 | 0.00 | -10.11 | 0.0 | 0.03 | 4.79 | 0.00 | 0.00 | 0.00 | -1.60 |
| | | -2.13 | 0.00 | 0.00 | 0.0 | 200.0 | 0.03 | -5.32 | 0.00 | 0.00 | 0.00 | -2.13 |
| 308 | 4 | 0.86 | 0.00 | 0.00 | -13.15 | 0.0 | 0.04 | 6.22 | 0.00 | 0.00 | 0.00 | -2.07 |
| | | -2.77 | 0.00 | 0.00 | 0.0 | 200.0 | 0.04 | -6.92 | 0.00 | 0.00 | 0.00 | -2.77 |
| 308 | 5 | 0.66 | 0.00 | 0.00 | -10.11 | 0.0 | 0.03 | 4.79 | 0.00 | 0.00 | 0.00 | -1.60 |
| | | -2.13 | 0.00 | 0.00 | 0.0 | 200.0 | 0.03 | -5.32 | 0.00 | 0.00 | 0.00 | -2.13 |
| 309 | 1 | 0.93 | 0.00 | 0.00 | -10.11 | 0.0 | 0.04 | 5.06 | 0.00 | 0.00 | 0.00 | -1.60 |
| | | -1.60 | 0.00 | 0.00 | 0.0 | 200.0 | 0.04 | -5.06 | 0.00 | 0.00 | 0.00 | -1.60 |
| 309 | 2 | 0.93 | 0.00 | 0.00 | -10.11 | 0.0 | 0.04 | 5.06 | 0.00 | 0.00 | 0.00 | -1.60 |
| | | -1.60 | 0.00 | 0.00 | 0.0 | 200.0 | 0.04 | -5.06 | 0.00 | 0.00 | 0.00 | -1.60 |
| 309 | 3 | 0.93 | 0.00 | 0.00 | -10.11 | 0.0 | 0.04 | 5.06 | 0.00 | 0.00 | 0.00 | -1.60 |
| | | -1.60 | 0.00 | 0.00 | 0.0 | 200.0 | 0.04 | -5.06 | 0.00 | 0.00 | 0.00 | -1.60 |
| 309 | 4 | 1.21 | 0.00 | 0.00 | -13.15 | 0.0 | 0.05 | 6.57 | 0.00 | 0.00 | 0.00 | -2.08 |
| | | -2.08 | 0.00 | 0.00 | 0.0 | 200.0 | 0.05 | -6.57 | 0.00 | 0.00 | 0.00 | -2.08 |
| 309 | 5 | 0.93 | 0.00 | 0.00 | -10.11 | 0.0 | 0.04 | 5.06 | 0.00 | 0.00 | 0.00 | -1.60 |
| | | -1.60 | 0.00 | 0.00 | 0.0 | 200.0 | 0.04 | -5.06 | 0.00 | 0.00 | 0.00 | -1.60 |
| 310 | 1 | 1.56 | 0.00 | 0.00 | -10.11 | 0.0 | -0.02 | 6.12 | 0.00 | 0.00 | 0.00 | -2.15 |
| | | -2.15 | 0.00 | 0.00 | 0.0 | 200.0 | -0.02 | -3.99 | 0.00 | 0.00 | 0.00 | -0.01 |
| 310 | 2 | 1.56 | 0.00 | 0.00 | -10.11 | 0.0 | -0.02 | 6.12 | 0.00 | 0.00 | 0.00 | -2.15 |
| | | -2.15 | 0.00 | 0.00 | 0.0 | 200.0 | -0.02 | -3.99 | 0.00 | 0.00 | 0.00 | -0.01 |
| 310 | 3 | 1.56 | 0.00 | 0.00 | -10.11 | 0.0 | -0.02 | 6.12 | 0.00 | 0.00 | 0.00 | -2.15 |
| | | -2.15 | 0.00 | 0.00 | 0.0 | 200.0 | -0.02 | -3.99 | 0.00 | 0.00 | 0.00 | -0.01 |
| 310 | 4 | 2.02 | 0.00 | 0.00 | -13.15 | 0.0 | -0.02 | 7.96 | 0.00 | 0.00 | 0.00 | -2.80 |
| | | -2.80 | 0.00 | 0.00 | 0.0 | 200.0 | -0.02 | -5.18 | 0.00 | 0.00 | 0.00 | -0.02 |
| 310 | 5 | 1.56 | 0.00 | 0.00 | -10.11 | 0.0 | -0.02 | 6.12 | 0.00 | 0.00 | 0.00 | -2.15 |
| | | -2.15 | 0.00 | 0.00 | 0.0 | 200.0 | -0.02 | -3.99 | 0.00 | 0.00 | 0.00 | -0.01 |
| 311 | 1 | 0.66 | 0.00 | 0.00 | -10.11 | 0.0 | 0.03 | 5.32 | 0.00 | 0.00 | 0.00 | -2.13 |
| | | -2.13 | 0.00 | 0.00 | 0.0 | 200.0 | 0.03 | -4.79 | 0.00 | 0.00 | 0.00 | -1.60 |
| 311 | 2 | 0.66 | 0.00 | 0.00 | -10.11 | 0.0 | 0.03 | 5.32 | 0.00 | 0.00 | 0.00 | -2.13 |
| | | -2.13 | 0.00 | 0.00 | 0.0 | 200.0 | 0.03 | -4.79 | 0.00 | 0.00 | 0.00 | -1.60 |
| 311 | 3 | 0.66 | 0.00 | 0.00 | -10.11 | 0.0 | 0.03 | 5.32 | 0.00 | 0.00 | 0.00 | -2.13 |
| | | -2.13 | 0.00 | 0.00 | 0.0 | 200.0 | 0.03 | -4.79 | 0.00 | 0.00 | 0.00 | -1.60 |
| 311 | 4 | 0.86 | 0.00 | 0.00 | -13.15 | 0.0 | 0.04 | 6.92 | 0.00 | 0.00 | 0.00 | -2.77 |
| | | -2.77 | 0.00 | 0.00 | 0.0 | 200.0 | 0.04 | -6.22 | 0.00 | 0.00 | 0.00 | -2.07 |
| 311 | 5 | 0.66 | 0.00 | 0.00 | -10.11 | 0.0 | 0.03 | 5.32 | 0.00 | 0.00 | 0.00 | -2.13 |
| | | -2.13 | 0.00 | 0.00 | 0.0 | 200.0 | 0.03 | -4.79 | 0.00 | 0.00 | 0.00 | -1.60 |
| 312 | 1 | 1.56 | 0.00 | 0.00 | -10.11 | 0.0 | -0.02 | 3.99 | 0.00 | 0.00 | 0.00 | -0.01 |
| | | -2.15 | 0.00 | 0.00 | 0.0 | 200.0 | -0.02 | -6.12 | 0.00 | 0.00 | 0.00 | -2.15 |
| 312 | 2 | 1.56 | 0.00 | 0.00 | -10.11 | 0.0 | -0.02 | 3.99 | 0.00 | 0.00 | 0.00 | -0.01 |
| | | -2.15 | 0.00 | 0.00 | 0.0 | 200.0 | -0.02 | -6.12 | 0.00 | 0.00 | 0.00 | -2.15 |
| 312 | 3 | 1.56 | 0.00 | 0.00 | -10.11 | 0.0 | -0.02 | 3.99 | 0.00 | 0.00 | 0.00 | -0.01 |
| | | -2.15 | 0.00 | 0.00 | 0.0 | 200.0 | -0.02 | -6.12 | 0.00 | 0.00 | 0.00 | -2.15 |
| 312 | 4 | 2.02 | 0.00 | 0.00 | -13.15 | 0.0 | -0.02 | 5.18 | 0.00 | 0.00 | 0.00 | -0.02 |
| | | -2.80 | 0.00 | 0.00 | 0.0 | 200.0 | -0.02 | -7.96 | 0.00 | 0.00 | 0.00 | -2.80 |
| 312 | 5 | 1.56 | 0.00 | 0.00 | -10.11 | 0.0 | -0.02 | 3.99 | 0.00 | 0.00 | 0.00 | -0.01 |
| | | -2.15 | 0.00 | 0.00 | 0.0 | 200.0 | -0.02 | -6.12 | 0.00 | 0.00 | 0.00 | -2.15 |
| 330 | 1 | 4.94 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 12.05 | 0.00 | 0.00 | 0.00 | 3.13 |
| | | 3.13 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 12.03 | 0.00 | 0.00 | 0.00 | 4.94 |
| 330 | 2 | 4.94 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 12.05 | 0.00 | 0.00 | 0.00 | 3.13 |
| | | 3.13 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 12.03 | 0.00 | 0.00 | 0.00 | 4.94 |
| 330 | 3 | 4.94 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 12.05 | 0.00 | 0.00 | 0.00 | 3.13 |
| | | 3.13 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 12.03 | 0.00 | 0.00 | 0.00 | 4.94 |
| 330 | 4 | 6.42 | 0.00 | 0.00 | -0.03 | 0.0 | -13.94 | 15.66 | 0.00 | 0.00 | 0.00 | 4.07 |
| | | 4.07 | 0.00 | 0.00 | 0.0 | 15.0 | -13.94 | 15.63 | 0.00 | 0.00 | 0.00 | 6.42 |
| 330 | 5 | 4.94 | 0.00 | 0.00 | -0.02 | 0.0 | -10.72 | 12.05 | 0.00 | 0.00 | 0.00 | 3.13 |
| | | 3.13 | 0.00 | 0.00 | 0.0 | 15.0 | -10.72 | 12.03 | 0.00 | 0.00 | 0.00 | 4.94 |
| | | | | | | | | | | | | |
| **Trave** | | **M3 mx/mn** | **M2 mx/mn** | **D 2 / D 3** | **Q 2 / Q 3** | | **N** | **V 2** | **V 3** | **T** | | |
| | | -30.67 | -0.44 | 0.00 | -13.15 | | -62.80 | -78.37 | -6.57 | -0.13 | | |
| | | 18.81 | 0.77 | 0.00 | 4.50 | | 4.93 | 85.15 | 6.57 | 0.13 | | |

## *Elementi in legno*

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| 2 | 1 | 0.0 | 0.0 | 0.00 | 0.12 | 0.0 | -0.02 | -0.06 | -0.06 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.12 | 200.0 | -0.02 | 0.06 | 0.06 | 0.00 | 0.0 | 0.0 |
| 2 | 2 | 0.0 | 0.0 | 0.00 | 0.12 | 0.0 | -0.02 | -0.06 | -0.06 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.12 | 200.0 | -0.02 | 0.06 | 0.06 | 0.00 | 0.0 | 0.0 |
| 2 | 3 | 0.0 | 0.0 | 0.00 | 0.12 | 0.0 | -0.02 | -0.06 | -0.06 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.12 | 200.0 | -0.02 | 0.06 | 0.06 | 0.00 | 0.0 | 0.0 |
| 2 | 4 | 0.0 | 0.0 | 0.00 | 0.15 | 0.0 | -0.02 | -0.08 | -0.08 | 0.00 | 0.0 | 0.0 |
| | | -0.04 | -0.04 | 0.00 | 0.15 | 200.0 | -0.02 | 0.08 | 0.08 | 0.00 | 0.0 | 0.0 |
| 2 | 5 | 0.0 | 0.0 | 0.00 | 0.12 | 0.0 | -0.02 | -0.06 | -0.06 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.12 | 200.0 | -0.02 | 0.06 | 0.06 | 0.00 | 0.0 | 0.0 |
| 11 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 11 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 11 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 11 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.03 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 11 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 17 | 1 | 0.0 | 0.0 | 0.00 | 0.07 | 0.0 | 0.02 | -0.04 | -0.08 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.04 | 0.00 | 0.15 | 200.0 | 0.02 | 0.04 | 0.08 | 0.00 | 0.0 | 0.0 |
| 17 | 2 | 0.0 | 0.0 | 0.00 | 0.07 | 0.0 | 0.02 | -0.04 | -0.08 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.04 | 0.00 | 0.15 | 200.0 | 0.02 | 0.04 | 0.08 | 0.00 | 0.0 | 0.0 |
| 17 | 3 | 0.0 | 0.0 | 0.00 | 0.07 | 0.0 | 0.02 | -0.04 | -0.08 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.04 | 0.00 | 0.15 | 200.0 | 0.02 | 0.04 | 0.08 | 0.00 | 0.0 | 0.0 |
| 17 | 4 | 0.0 | 0.0 | 0.00 | 0.09 | 0.0 | 0.02 | -0.05 | -0.10 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.05 | 0.00 | 0.20 | 200.0 | 0.02 | 0.05 | 0.10 | 0.00 | 0.0 | 0.0 |
| 17 | 5 | 0.0 | 0.0 | 0.00 | 0.07 | 0.0 | 0.02 | -0.04 | -0.08 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.04 | 0.00 | 0.15 | 200.0 | 0.02 | 0.04 | 0.08 | 0.00 | 0.0 | 0.0 |
| 19 | 1 | 1.28 | 0.0 | 0.00 | -5.12 | 0.0 | 0.08 | 2.56 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.08 | -2.56 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 2 | 1.28 | 0.0 | 0.00 | -5.12 | 0.0 | 0.08 | 2.56 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.08 | -2.56 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 3 | 1.28 | 0.0 | 0.00 | -5.12 | 0.0 | 0.08 | 2.56 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.08 | -2.56 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 4 | 1.66 | 0.0 | 0.00 | -6.65 | 0.0 | 0.11 | 3.33 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.11 | -3.33 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 5 | 1.28 | 0.0 | 0.00 | -5.12 | 0.0 | 0.08 | 2.56 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.08 | -2.56 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 1 | 9.57e-03 | 0.02 | 0.00 | 0.13 | 0.0 | -0.06 | -0.06 | -0.05 | 0.0 | 0.01 | 9.1e-03 |
| | | -0.02 | -0.01 | 0.00 | 0.11 | 200.0 | -0.06 | 0.06 | 0.06 | 0.0 | 0.02 | 9.5e-03 |
| 20 | 2 | 9.57e-03 | 0.02 | 0.00 | 0.13 | 0.0 | -0.06 | -0.06 | -0.05 | 0.0 | 0.01 | 9.1e-03 |
| | | -0.02 | -0.01 | 0.00 | 0.11 | 200.0 | -0.06 | 0.06 | 0.06 | 0.0 | 0.02 | 9.5e-03 |
| 20 | 3 | 9.57e-03 | 0.02 | 0.00 | 0.13 | 0.0 | -0.06 | -0.06 | -0.05 | 0.0 | 0.01 | 9.1e-03 |
| | | -0.02 | -0.01 | 0.00 | 0.11 | 200.0 | -0.06 | 0.06 | 0.06 | 0.0 | 0.02 | 9.5e-03 |
| 20 | 4 | 0.01 | 0.02 | 0.00 | 0.17 | 0.0 | -0.08 | -0.08 | -0.07 | 0.0 | 0.02 | 0.01 |
| | | -0.03 | -0.02 | 0.00 | 0.14 | 200.0 | -0.08 | 0.08 | 0.07 | 0.0 | 0.02 | 0.01 |
| 20 | 5 | 9.57e-03 | 0.02 | 0.00 | 0.13 | 0.0 | -0.06 | -0.06 | -0.05 | 0.0 | 0.01 | 9.1e-03 |
| | | -0.02 | -0.01 | 0.00 | 0.11 | 200.0 | -0.06 | 0.06 | 0.06 | 0.0 | 0.02 | 9.5e-03 |
| 27 | 1 | 0.0 | 0.0 | 0.00 | 0.10 | 0.0 | -0.06 | -0.05 | -0.07 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.03 | 0.00 | 0.14 | 200.0 | -0.06 | 0.05 | 0.07 | 0.00 | 0.0 | 0.0 |
| 27 | 2 | 0.0 | 0.0 | 0.00 | 0.10 | 0.0 | -0.06 | -0.05 | -0.07 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.03 | 0.00 | 0.14 | 200.0 | -0.06 | 0.05 | 0.07 | 0.00 | 0.0 | 0.0 |
| 27 | 3 | 0.0 | 0.0 | 0.00 | 0.10 | 0.0 | -0.06 | -0.05 | -0.07 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.03 | 0.00 | 0.14 | 200.0 | -0.06 | 0.05 | 0.07 | 0.00 | 0.0 | 0.0 |
| 27 | 4 | 0.0 | 0.0 | 0.00 | 0.13 | 0.0 | -0.08 | -0.06 | -0.09 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.04 | 0.00 | 0.18 | 200.0 | -0.08 | 0.06 | 0.09 | 0.00 | 0.0 | 0.0 |
| 27 | 5 | 0.0 | 0.0 | 0.00 | 0.10 | 0.0 | -0.06 | -0.05 | -0.07 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.03 | 0.00 | 0.14 | 200.0 | -0.06 | 0.05 | 0.07 | 0.00 | 0.0 | 0.0 |
| 29 | 1 | 0.0 | 0.0 | 0.00 | 0.16 | 0.0 | 0.10 | -0.08 | -0.03 | 0.0 | 0.0 | 0.0 |
| | | -0.04 | -0.01 | 0.00 | 0.06 | 200.0 | 0.10 | 0.08 | 0.03 | 0.0 | 0.0 | 0.0 |
| 29 | 2 | 0.0 | 0.0 | 0.00 | 0.16 | 0.0 | 0.10 | -0.08 | -0.03 | 0.0 | 0.0 | 0.0 |
| | | -0.04 | -0.01 | 0.00 | 0.06 | 200.0 | 0.10 | 0.08 | 0.03 | 0.0 | 0.0 | 0.0 |
| 29 | 3 | 0.0 | 0.0 | 0.00 | 0.16 | 0.0 | 0.10 | -0.08 | -0.03 | 0.0 | 0.0 | 0.0 |
| | | -0.04 | -0.01 | 0.00 | 0.06 | 200.0 | 0.10 | 0.08 | 0.03 | 0.0 | 0.0 | 0.0 |
| 29 | 4 | 0.0 | 0.0 | 0.00 | 0.21 | 0.0 | 0.14 | -0.10 | -0.04 | 0.0 | 0.0 | 0.0 |
| | | -0.05 | -0.02 | 0.00 | 0.07 | 200.0 | 0.14 | 0.10 | 0.04 | 0.0 | 0.0 | 0.0 |
| 29 | 5 | 0.0 | 0.0 | 0.00 | 0.16 | 0.0 | 0.10 | -0.08 | -0.03 | 0.0 | 0.0 | 0.0 |
| | | -0.04 | -0.01 | 0.00 | 0.06 | 200.0 | 0.10 | 0.08 | 0.03 | 0.0 | 0.0 | 0.0 |
| 39 | 1 | 0.0 | 0.0 | 0.00 | 0.16 | 0.0 | 0.29 | -0.08 | -0.03 | 0.00 | 0.0 | 0.0 |
| | | -0.04 | -0.01 | 0.00 | 0.06 | 200.0 | 0.29 | 0.08 | 0.03 | 0.00 | 0.0 | 0.0 |
| 39 | 2 | 0.0 | 0.0 | 0.00 | 0.16 | 0.0 | 0.29 | -0.08 | -0.03 | 0.00 | 0.0 | 0.0 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | -0.04 | -0.01 | 0.00 | 0.06 | 200.0 | 0.29 | 0.08 | 0.03 | 0.00 | 0.0 | 0.0 |
| 39 | 3 | 0.0 | 0.0 | 0.00 | 0.16 | 0.0 | 0.29 | -0.08 | -0.03 | 0.00 | 0.0 | 0.0 |
| | | -0.04 | -0.01 | 0.00 | 0.06 | 200.0 | 0.29 | 0.08 | 0.03 | 0.00 | 0.0 | 0.0 |
| 39 | 4 | 0.0 | 0.0 | 0.00 | 0.21 | 0.0 | 0.37 | -0.10 | -0.04 | 0.00 | 0.0 | 0.0 |
| | | -0.05 | -0.02 | 0.00 | 0.07 | 200.0 | 0.37 | 0.10 | 0.04 | 0.00 | 0.0 | 0.0 |
| 39 | 5 | 0.0 | 0.0 | 0.00 | 0.16 | 0.0 | 0.29 | -0.08 | -0.03 | 0.00 | 0.0 | 0.0 |
| | | -0.04 | -0.01 | 0.00 | 0.06 | 200.0 | 0.29 | 0.08 | 0.03 | 0.00 | 0.0 | 0.0 |
| 41 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 41 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 41 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 41 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | -0.02 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.02 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 41 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 42 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 1.49e-03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 1.49e-03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 42 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 1.49e-03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 1.49e-03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 42 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 1.49e-03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 1.49e-03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 42 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 1.94e-03 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 1.94e-03 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 42 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 1.49e-03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 1.49e-03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 51 | 1 | 1.28 | 0.0 | 0.00 | -5.12 | 0.0 | 0.35 | 2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.35 | -2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| 51 | 2 | 1.28 | 0.0 | 0.00 | -5.12 | 0.0 | 0.35 | 2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.35 | -2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| 51 | 3 | 1.28 | 0.0 | 0.00 | -5.12 | 0.0 | 0.35 | 2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.35 | -2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| 51 | 4 | 1.66 | 0.0 | 0.00 | -6.65 | 0.0 | 0.45 | 3.33 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.45 | -3.33 | 0.0 | 0.00 | 0.0 | 0.0 |
| 51 | 5 | 1.28 | 0.0 | 0.00 | -5.12 | 0.0 | 0.35 | 2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.35 | -2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| 53 | 1 | 0.0 | 0.0 | 0.00 | 0.13 | 0.0 | 0.10 | -0.06 | -0.05 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.11 | 200.0 | 0.10 | 0.06 | 0.05 | 0.00 | 0.0 | 0.0 |
| 53 | 2 | 0.0 | 0.0 | 0.00 | 0.13 | 0.0 | 0.10 | -0.06 | -0.05 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.11 | 200.0 | 0.10 | 0.06 | 0.05 | 0.00 | 0.0 | 0.0 |
| 53 | 3 | 0.0 | 0.0 | 0.00 | 0.13 | 0.0 | 0.10 | -0.06 | -0.05 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.11 | 200.0 | 0.10 | 0.06 | 0.05 | 0.00 | 0.0 | 0.0 |
| 53 | 4 | 0.0 | 0.0 | 0.00 | 0.17 | 0.0 | 0.12 | -0.08 | -0.07 | 0.00 | 0.0 | 0.0 |
| | | -0.04 | -0.04 | 0.00 | 0.14 | 200.0 | 0.12 | 0.08 | 0.07 | 0.00 | 0.0 | 0.0 |
| 53 | 5 | 0.0 | 0.0 | 0.00 | 0.13 | 0.0 | 0.10 | -0.06 | -0.05 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.11 | 200.0 | 0.10 | 0.06 | 0.05 | 0.00 | 0.0 | 0.0 |
| 54 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -1.3e-03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -1.3e-03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 54 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -1.3e-03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -1.3e-03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 54 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -1.3e-03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -1.3e-03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 54 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | -1.7e-03 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -1.7e-03 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 54 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -1.3e-03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -1.3e-03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 56 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.05 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.05 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 56 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.05 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.05 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 56 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.05 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.05 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 56 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.06 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.06 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 56 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.05 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.05 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 59 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.50 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.50 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 59 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.50 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.50 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 59 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.50 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.50 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 59 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | -0.65 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.65 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| 59 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.50 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.50 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 64 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 64 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 64 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 64 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.00 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 64 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 65 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 65 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 65 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 65 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.00 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 65 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 66 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 66 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 66 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 66 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.00 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 66 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 80 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 80 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 80 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 80 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.00 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 80 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 93 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.10 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.10 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 93 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.10 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.10 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 93 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.10 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.10 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 93 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.13 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.13 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 93 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.10 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.10 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 96 | 1 | 0.0 | 0.0 | 0.00 | 0.12 | 0.0 | 0.00 | -0.06 | -0.06 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.12 | 200.0 | 0.00 | 0.06 | 0.06 | 0.00 | 0.0 | 0.0 |
| 96 | 2 | 0.0 | 0.0 | 0.00 | 0.12 | 0.0 | 0.00 | -0.06 | -0.06 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.12 | 200.0 | 0.00 | 0.06 | 0.06 | 0.00 | 0.0 | 0.0 |
| 96 | 3 | 0.0 | 0.0 | 0.00 | 0.12 | 0.0 | 0.00 | -0.06 | -0.06 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.12 | 200.0 | 0.00 | 0.06 | 0.06 | 0.00 | 0.0 | 0.0 |
| 96 | 4 | 0.0 | 0.0 | 0.00 | 0.15 | 0.0 | 0.00 | -0.08 | -0.08 | 0.00 | 0.0 | 0.0 |
| | | -0.04 | -0.04 | 0.00 | 0.15 | 200.0 | 0.00 | 0.08 | 0.08 | 0.00 | 0.0 | 0.0 |
| 96 | 5 | 0.0 | 0.0 | 0.00 | 0.12 | 0.0 | 0.00 | -0.06 | -0.06 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.12 | 200.0 | 0.00 | 0.06 | 0.06 | 0.00 | 0.0 | 0.0 |
| 102 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.51 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.51 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 102 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.51 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.51 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 102 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.51 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.51 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 102 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | -0.66 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.66 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 102 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.51 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.51 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 103 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.02 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 103 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.02 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 103 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.02 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 103 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.02 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 103 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.02 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 105 | 1 | 0.0 | 0.0 | 0.00 | 0.07 | 0.0 | -0.10 | -0.04 | -0.08 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.04 | 0.00 | 0.15 | 200.0 | -0.10 | 0.04 | 0.08 | 0.00 | 0.0 | 0.0 |
| 105 | 2 | 0.0 | 0.0 | 0.00 | 0.07 | 0.0 | -0.10 | -0.04 | -0.08 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.04 | 0.00 | 0.15 | 200.0 | -0.10 | 0.04 | 0.08 | 0.00 | 0.0 | 0.0 |
| 105 | 3 | 0.0 | 0.0 | 0.00 | 0.07 | 0.0 | -0.10 | -0.04 | -0.08 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.04 | 0.00 | 0.15 | 200.0 | -0.10 | 0.04 | 0.08 | 0.00 | 0.0 | 0.0 |
| 105 | 4 | 0.0 | 0.0 | 0.00 | 0.09 | 0.0 | -0.13 | -0.05 | -0.10 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.05 | 0.00 | 0.20 | 200.0 | -0.13 | 0.05 | 0.10 | 0.00 | 0.0 | 0.0 |
| 105 | 5 | 0.0 | 0.0 | 0.00 | 0.07 | 0.0 | -0.10 | -0.04 | -0.08 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.04 | 0.00 | 0.15 | 200.0 | -0.10 | 0.04 | 0.08 | 0.00 | 0.0 | 0.0 |
| 114 | 1 | 0.0 | 0.0 | 0.00 | 0.10 | 0.0 | 0.01 | -0.05 | -0.07 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.03 | 0.00 | 0.14 | 200.0 | 0.01 | 0.05 | 0.07 | 0.00 | 0.0 | 0.0 |
| 114 | 2 | 0.0 | 0.0 | 0.00 | 0.10 | 0.0 | 0.01 | -0.05 | -0.07 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.03 | 0.00 | 0.14 | 200.0 | 0.01 | 0.05 | 0.07 | 0.00 | 0.0 | 0.0 |
| 114 | 3 | 0.0 | 0.0 | 0.00 | 0.10 | 0.0 | 0.01 | -0.05 | -0.07 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.03 | 0.00 | 0.14 | 200.0 | 0.01 | 0.05 | 0.07 | 0.00 | 0.0 | 0.0 |
| 114 | 4 | 0.0 | 0.0 | 0.00 | 0.13 | 0.0 | 0.02 | -0.06 | -0.09 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.04 | 0.00 | 0.18 | 200.0 | 0.02 | 0.06 | 0.09 | 0.00 | 0.0 | 0.0 |
| 114 | 5 | 0.0 | 0.0 | 0.00 | 0.10 | 0.0 | 0.01 | -0.05 | -0.07 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.03 | 0.00 | 0.14 | 200.0 | 0.01 | 0.05 | 0.07 | 0.00 | 0.0 | 0.0 |
| 129 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 129 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 129 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 129 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.03 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 129 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 130 | 1 | 1.28 | 0.0 | 0.00 | -5.12 | 0.0 | 0.35 | 2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.35 | -2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| 130 | 2 | 1.28 | 0.0 | 0.00 | -5.12 | 0.0 | 0.35 | 2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.35 | -2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| 130 | 3 | 1.28 | 0.0 | 0.00 | -5.12 | 0.0 | 0.35 | 2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.35 | -2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| 130 | 4 | 1.66 | 0.0 | 0.00 | -6.65 | 0.0 | 0.45 | 3.33 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.45 | -3.33 | 0.0 | 0.00 | 0.0 | 0.0 |
| 130 | 5 | 1.28 | 0.0 | 0.00 | -5.12 | 0.0 | 0.35 | 2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.35 | -2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| 131 | 1 | 0.0 | 0.0 | 0.00 | 0.13 | 0.0 | 0.02 | -0.06 | -0.05 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.11 | 200.0 | 0.02 | 0.06 | 0.05 | 0.00 | 0.0 | 0.0 |
| 131 | 2 | 0.0 | 0.0 | 0.00 | 0.13 | 0.0 | 0.02 | -0.06 | -0.05 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.11 | 200.0 | 0.02 | 0.06 | 0.05 | 0.00 | 0.0 | 0.0 |
| 131 | 3 | 0.0 | 0.0 | 0.00 | 0.13 | 0.0 | 0.02 | -0.06 | -0.05 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.11 | 200.0 | 0.02 | 0.06 | 0.05 | 0.00 | 0.0 | 0.0 |
| 131 | 4 | 0.0 | 0.0 | 0.00 | 0.17 | 0.0 | 0.03 | -0.08 | -0.07 | 0.00 | 0.0 | 0.0 |
| | | -0.04 | -0.04 | 0.00 | 0.14 | 200.0 | 0.03 | 0.08 | 0.07 | 0.00 | 0.0 | 0.0 |
| 131 | 5 | 0.0 | 0.0 | 0.00 | 0.13 | 0.0 | 0.02 | -0.06 | -0.05 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.11 | 200.0 | 0.02 | 0.06 | 0.05 | 0.00 | 0.0 | 0.0 |
| 132 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.18 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.18 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 132 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.18 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.18 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 132 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.18 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.18 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 132 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.23 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.23 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 132 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.18 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.18 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 134 | 1 | 0.0 | 0.0 | 0.00 | 0.13 | 0.0 | 0.08 | -0.06 | -0.05 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.11 | 200.0 | 0.08 | 0.06 | 0.05 | 0.00 | 0.0 | 0.0 |
| 134 | 2 | 0.0 | 0.0 | 0.00 | 0.13 | 0.0 | 0.08 | -0.06 | -0.05 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.11 | 200.0 | 0.08 | 0.06 | 0.05 | 0.00 | 0.0 | 0.0 |
| 134 | 3 | 0.0 | 0.0 | 0.00 | 0.13 | 0.0 | 0.08 | -0.06 | -0.05 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.11 | 200.0 | 0.08 | 0.06 | 0.05 | 0.00 | 0.0 | 0.0 |
| 134 | 4 | 0.0 | 0.0 | 0.00 | 0.17 | 0.0 | 0.10 | -0.08 | -0.07 | 0.00 | 0.0 | 0.0 |
| | | -0.04 | -0.04 | 0.00 | 0.14 | 200.0 | 0.10 | 0.08 | 0.07 | 0.00 | 0.0 | 0.0 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| 134 | 5 | 0.0 | 0.0 | 0.00 | 0.13 | 0.0 | 0.08 | -0.06 | -0.05 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.11 | 200.0 | 0.08 | 0.06 | 0.05 | 0.00 | 0.0 | 0.0 |
| 139 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 139 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 139 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 139 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.00 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 139 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 142 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.05 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.05 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 142 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.05 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.05 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 142 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.05 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.05 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 142 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.06 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.06 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 142 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.05 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.05 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 143 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.50 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.50 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 143 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.50 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.50 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 143 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.50 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.50 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 143 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | -0.65 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.65 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 143 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.50 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.50 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 148 | 1 | 1.28 | 0.0 | 0.00 | -5.12 | 0.0 | -0.03 | 2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.03 | -2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| 148 | 2 | 1.28 | 0.0 | 0.00 | -5.12 | 0.0 | -0.03 | 2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.03 | -2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| 148 | 3 | 1.28 | 0.0 | 0.00 | -5.12 | 0.0 | -0.03 | 2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.03 | -2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| 148 | 4 | 1.66 | 0.0 | 0.00 | -6.65 | 0.0 | -0.04 | 3.33 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.04 | -3.33 | 0.0 | 0.00 | 0.0 | 0.0 |
| 148 | 5 | 1.28 | 0.0 | 0.00 | -5.12 | 0.0 | -0.03 | 2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.03 | -2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| 161 | 1 | 0.0 | 0.0 | 0.00 | 0.16 | 0.0 | 0.29 | -0.08 | -0.03 | 0.00 | 0.0 | 0.0 |
| | | -0.04 | -0.01 | 0.00 | 0.06 | 200.0 | 0.29 | 0.08 | 0.03 | 0.00 | 0.0 | 0.0 |
| 161 | 2 | 0.0 | 0.0 | 0.00 | 0.16 | 0.0 | 0.29 | -0.08 | -0.03 | 0.00 | 0.0 | 0.0 |
| | | -0.04 | -0.01 | 0.00 | 0.06 | 200.0 | 0.29 | 0.08 | 0.03 | 0.00 | 0.0 | 0.0 |
| 161 | 3 | 0.0 | 0.0 | 0.00 | 0.16 | 0.0 | 0.29 | -0.08 | -0.03 | 0.00 | 0.0 | 0.0 |
| | | -0.04 | -0.01 | 0.00 | 0.06 | 200.0 | 0.29 | 0.08 | 0.03 | 0.00 | 0.0 | 0.0 |
| 161 | 4 | 0.0 | 0.0 | 0.00 | 0.21 | 0.0 | 0.38 | -0.10 | -0.04 | 0.00 | 0.0 | 0.0 |
| | | -0.05 | -0.02 | 0.00 | 0.07 | 200.0 | 0.38 | 0.10 | 0.04 | 0.00 | 0.0 | 0.0 |
| 161 | 5 | 0.0 | 0.0 | 0.00 | 0.16 | 0.0 | 0.29 | -0.08 | -0.03 | 0.00 | 0.0 | 0.0 |
| | | -0.04 | -0.01 | 0.00 | 0.06 | 200.0 | 0.29 | 0.08 | 0.03 | 0.00 | 0.0 | 0.0 |
| 162 | 1 | 0.0 | 0.0 | 0.00 | 0.10 | 0.0 | -0.04 | -0.05 | -0.07 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.03 | 0.00 | 0.14 | 200.0 | -0.04 | 0.05 | 0.07 | 0.00 | 0.0 | 0.0 |
| 162 | 2 | 0.0 | 0.0 | 0.00 | 0.10 | 0.0 | -0.04 | -0.05 | -0.07 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.03 | 0.00 | 0.14 | 200.0 | -0.04 | 0.05 | 0.07 | 0.00 | 0.0 | 0.0 |
| 162 | 3 | 0.0 | 0.0 | 0.00 | 0.10 | 0.0 | -0.04 | -0.05 | -0.07 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.03 | 0.00 | 0.14 | 200.0 | -0.04 | 0.05 | 0.07 | 0.00 | 0.0 | 0.0 |
| 162 | 4 | 0.0 | 0.0 | 0.00 | 0.13 | 0.0 | -0.05 | -0.06 | -0.09 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.04 | 0.00 | 0.18 | 200.0 | -0.05 | 0.06 | 0.09 | 0.00 | 0.0 | 0.0 |
| 162 | 5 | 0.0 | 0.0 | 0.00 | 0.10 | 0.0 | -0.04 | -0.05 | -0.07 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.03 | 0.00 | 0.14 | 200.0 | -0.04 | 0.05 | 0.07 | 0.00 | 0.0 | 0.0 |
| 163 | 1 | 0.0 | 0.0 | 0.00 | 0.10 | 0.0 | -0.04 | -0.05 | -0.07 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.03 | 0.00 | 0.14 | 200.0 | -0.04 | 0.05 | 0.07 | 0.00 | 0.0 | 0.0 |
| 163 | 2 | 0.0 | 0.0 | 0.00 | 0.10 | 0.0 | -0.04 | -0.05 | -0.07 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.03 | 0.00 | 0.14 | 200.0 | -0.04 | 0.05 | 0.07 | 0.00 | 0.0 | 0.0 |
| 163 | 3 | 0.0 | 0.0 | 0.00 | 0.10 | 0.0 | -0.04 | -0.05 | -0.07 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.03 | 0.00 | 0.14 | 200.0 | -0.04 | 0.05 | 0.07 | 0.00 | 0.0 | 0.0 |
| 163 | 4 | 0.0 | 0.0 | 0.00 | 0.13 | 0.0 | -0.05 | -0.06 | -0.09 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.04 | 0.00 | 0.18 | 200.0 | -0.05 | 0.06 | 0.09 | 0.00 | 0.0 | 0.0 |
| 163 | 5 | 0.0 | 0.0 | 0.00 | 0.10 | 0.0 | -0.04 | -0.05 | -0.07 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.03 | 0.00 | 0.14 | 200.0 | -0.04 | 0.05 | 0.07 | 0.00 | 0.0 | 0.0 |
| 165 | 1 | 0.0 | 0.0 | 0.00 | 0.12 | 0.0 | 0.01 | -0.06 | -0.06 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.12 | 200.0 | 0.01 | 0.06 | 0.06 | 0.00 | 0.0 | 0.0 |
| 165 | 2 | 0.0 | 0.0 | 0.00 | 0.12 | 0.0 | 0.01 | -0.06 | -0.06 | 0.00 | 0.0 | 0.0 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | -0.03 | -0.03 | 0.00 | 0.12 | 200.0 | 0.01 | 0.06 | 0.06 | 0.00 | 0.0 | 0.0 |
| 165 | 3 | 0.0 | 0.0 | 0.00 | 0.12 | 0.0 | 0.01 | -0.06 | -0.06 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.12 | 200.0 | 0.01 | 0.06 | 0.06 | 0.00 | 0.0 | 0.0 |
| 165 | 4 | 0.0 | 0.0 | 0.00 | 0.15 | 0.0 | 0.01 | -0.08 | -0.08 | 0.00 | 0.0 | 0.0 |
| | | -0.04 | -0.04 | 0.00 | 0.15 | 200.0 | 0.01 | 0.08 | 0.08 | 0.00 | 0.0 | 0.0 |
| 165 | 5 | 0.0 | 0.0 | 0.00 | 0.12 | 0.0 | 0.01 | -0.06 | -0.06 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.12 | 200.0 | 0.01 | 0.06 | 0.06 | 0.00 | 0.0 | 0.0 |
| 175 | 1 | 0.0 | 0.0 | 0.00 | 0.10 | 0.0 | -0.06 | -0.05 | -0.07 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.03 | 0.00 | 0.14 | 200.0 | -0.06 | 0.05 | 0.07 | 0.00 | 0.0 | 0.0 |
| 175 | 2 | 0.0 | 0.0 | 0.00 | 0.10 | 0.0 | -0.06 | -0.05 | -0.07 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.03 | 0.00 | 0.14 | 200.0 | -0.06 | 0.05 | 0.07 | 0.00 | 0.0 | 0.0 |
| 175 | 3 | 0.0 | 0.0 | 0.00 | 0.10 | 0.0 | -0.06 | -0.05 | -0.07 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.03 | 0.00 | 0.14 | 200.0 | -0.06 | 0.05 | 0.07 | 0.00 | 0.0 | 0.0 |
| 175 | 4 | 0.0 | 0.0 | 0.00 | 0.13 | 0.0 | -0.08 | -0.06 | -0.09 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.04 | 0.00 | 0.18 | 200.0 | -0.08 | 0.06 | 0.09 | 0.00 | 0.0 | 0.0 |
| 175 | 5 | 0.0 | 0.0 | 0.00 | 0.10 | 0.0 | -0.06 | -0.05 | -0.07 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.03 | 0.00 | 0.14 | 200.0 | -0.06 | 0.05 | 0.07 | 0.00 | 0.0 | 0.0 |
| 194 | 1 | 0.0 | 0.0 | 0.00 | 0.16 | 0.0 | -0.01 | -0.08 | -0.03 | 0.00 | 0.0 | 0.0 |
| | | -0.04 | -0.01 | 0.00 | 0.06 | 200.0 | -0.01 | 0.08 | 0.03 | 0.00 | 0.0 | 0.0 |
| 194 | 2 | 0.0 | 0.0 | 0.00 | 0.16 | 0.0 | -0.01 | -0.08 | -0.03 | 0.00 | 0.0 | 0.0 |
| | | -0.04 | -0.01 | 0.00 | 0.06 | 200.0 | -0.01 | 0.08 | 0.03 | 0.00 | 0.0 | 0.0 |
| 194 | 3 | 0.0 | 0.0 | 0.00 | 0.16 | 0.0 | -0.01 | -0.08 | -0.03 | 0.00 | 0.0 | 0.0 |
| | | -0.04 | -0.01 | 0.00 | 0.06 | 200.0 | -0.01 | 0.08 | 0.03 | 0.00 | 0.0 | 0.0 |
| 194 | 4 | 0.0 | 0.0 | 0.00 | 0.21 | 0.0 | -0.02 | -0.10 | -0.04 | 0.00 | 0.0 | 0.0 |
| | | -0.05 | -0.02 | 0.00 | 0.07 | 200.0 | -0.02 | 0.10 | 0.04 | 0.00 | 0.0 | 0.0 |
| 194 | 5 | 0.0 | 0.0 | 0.00 | 0.16 | 0.0 | -0.01 | -0.08 | -0.03 | 0.00 | 0.0 | 0.0 |
| | | -0.04 | -0.01 | 0.00 | 0.06 | 200.0 | -0.01 | 0.08 | 0.03 | 0.00 | 0.0 | 0.0 |
| 197 | 1 | 0.0 | 0.0 | 0.00 | 0.12 | 0.0 | -0.02 | -0.06 | -0.06 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.12 | 200.0 | -0.02 | 0.06 | 0.06 | 0.00 | 0.0 | 0.0 |
| 197 | 2 | 0.0 | 0.0 | 0.00 | 0.12 | 0.0 | -0.02 | -0.06 | -0.06 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.12 | 200.0 | -0.02 | 0.06 | 0.06 | 0.00 | 0.0 | 0.0 |
| 197 | 3 | 0.0 | 0.0 | 0.00 | 0.12 | 0.0 | -0.02 | -0.06 | -0.06 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.12 | 200.0 | -0.02 | 0.06 | 0.06 | 0.00 | 0.0 | 0.0 |
| 197 | 4 | 0.0 | 0.0 | 0.00 | 0.15 | 0.0 | -0.03 | -0.08 | -0.08 | 0.00 | 0.0 | 0.0 |
| | | -0.04 | -0.04 | 0.00 | 0.15 | 200.0 | -0.03 | 0.08 | 0.08 | 0.00 | 0.0 | 0.0 |
| 197 | 5 | 0.0 | 0.0 | 0.00 | 0.12 | 0.0 | -0.02 | -0.06 | -0.06 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.12 | 200.0 | -0.02 | 0.06 | 0.06 | 0.00 | 0.0 | 0.0 |
| 200 | 1 | 1.28 | 0.0 | 0.00 | -5.12 | 0.0 | -0.03 | 2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.03 | -2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| 200 | 2 | 1.28 | 0.0 | 0.00 | -5.12 | 0.0 | -0.03 | 2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.03 | -2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| 200 | 3 | 1.28 | 0.0 | 0.00 | -5.12 | 0.0 | -0.03 | 2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.03 | -2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| 200 | 4 | 1.66 | 0.0 | 0.00 | -6.65 | 0.0 | -0.04 | 3.33 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.04 | -3.33 | 0.0 | 0.00 | 0.0 | 0.0 |
| 200 | 5 | 1.28 | 0.0 | 0.00 | -5.12 | 0.0 | -0.03 | 2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.03 | -2.56 | 0.0 | 0.00 | 0.0 | 0.0 |
| 202 | 1 | 0.0 | 0.0 | 0.00 | 0.12 | 0.0 | -0.01 | -0.06 | -0.06 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.12 | 200.0 | -0.01 | 0.06 | 0.06 | 0.00 | 0.0 | 0.0 |
| 202 | 2 | 0.0 | 0.0 | 0.00 | 0.12 | 0.0 | -0.01 | -0.06 | -0.06 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.12 | 200.0 | -0.01 | 0.06 | 0.06 | 0.00 | 0.0 | 0.0 |
| 202 | 3 | 0.0 | 0.0 | 0.00 | 0.12 | 0.0 | -0.01 | -0.06 | -0.06 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.12 | 200.0 | -0.01 | 0.06 | 0.06 | 0.00 | 0.0 | 0.0 |
| 202 | 4 | 0.0 | 0.0 | 0.00 | 0.15 | 0.0 | -0.01 | -0.08 | -0.08 | 0.00 | 0.0 | 0.0 |
| | | -0.04 | -0.04 | 0.00 | 0.15 | 200.0 | -0.01 | 0.08 | 0.08 | 0.00 | 0.0 | 0.0 |
| 202 | 5 | 0.0 | 0.0 | 0.00 | 0.12 | 0.0 | -0.01 | -0.06 | -0.06 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.12 | 200.0 | -0.01 | 0.06 | 0.06 | 0.00 | 0.0 | 0.0 |
| 240 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 240 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 240 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 240 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | -0.02 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.02 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 240 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 242 | 1 | 0.0 | 0.0 | 0.00 | 0.13 | 0.0 | 0.07 | -0.06 | -0.05 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.11 | 200.0 | 0.07 | 0.06 | 0.05 | 0.00 | 0.0 | 0.0 |
| 242 | 2 | 0.0 | 0.0 | 0.00 | 0.13 | 0.0 | 0.07 | -0.06 | -0.05 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.11 | 200.0 | 0.07 | 0.06 | 0.05 | 0.00 | 0.0 | 0.0 |
| 242 | 3 | 0.0 | 0.0 | 0.00 | 0.13 | 0.0 | 0.07 | -0.06 | -0.05 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.11 | 200.0 | 0.07 | 0.06 | 0.05 | 0.00 | 0.0 | 0.0 |
| 242 | 4 | 0.0 | 0.0 | 0.00 | 0.17 | 0.0 | 0.09 | -0.08 | -0.07 | 0.00 | 0.0 | 0.0 |
| | | -0.04 | -0.04 | 0.00 | 0.14 | 200.0 | 0.09 | 0.08 | 0.07 | 0.00 | 0.0 | 0.0 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| 242 | 5 | 0.0 | 0.0 | 0.00 | 0.13 | 0.0 | 0.07 | -0.06 | -0.05 | 0.00 | 0.0 | 0.0 |
| | | -0.03 | -0.03 | 0.00 | 0.11 | 200.0 | 0.07 | 0.06 | 0.05 | 0.00 | 0.0 | 0.0 |
| 243 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 243 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 243 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 243 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.00 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 243 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 244 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.18 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.18 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 244 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.18 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.18 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 244 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.18 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.18 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 244 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.23 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.23 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 244 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.18 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.18 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 248 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 248 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 248 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 248 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.04 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.04 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 248 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 249 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 249 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 249 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 249 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | -0.01 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.01 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 249 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 250 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 250 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 250 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 250 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.04 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.04 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 250 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 251 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 251 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 251 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 251 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.04 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.04 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 251 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 252 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 252 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 252 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 252 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | -0.01 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.01 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 252 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -9.56e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -9.56e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 253 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.02 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 253 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.02 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 253 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.02 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 253 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.03 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 253 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.02 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 254 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 254 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 254 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 254 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.00 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 254 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 255 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 255 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 255 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 255 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.04 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.04 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 255 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 256 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.02 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 256 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.02 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 256 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.02 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 256 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.03 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 256 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.02 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 257 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 257 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 257 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 257 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.00 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 257 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 258 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 258 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 258 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 258 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.02 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 258 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 259 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 259 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 259 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 259 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.00 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 259 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.00 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.00 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 260 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.02 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 260 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.02 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 260 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.02 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 260 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.02 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| 260 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.02 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 261 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 261 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 261 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 261 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.02 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 261 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 262 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 1.65e-03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 1.65e-03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 262 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 1.65e-03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 1.65e-03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 262 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 1.65e-03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 1.65e-03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 262 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 2.14e-03 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 2.14e-03 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 262 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 1.65e-03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 1.65e-03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 268 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.15 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.15 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 268 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.15 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.15 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 268 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.15 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.15 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 268 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | -0.19 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.19 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 268 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.15 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.15 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 269 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.22 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.22 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 269 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.22 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.22 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 269 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.22 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.22 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 269 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.29 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.29 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 269 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.22 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.22 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 270 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.13 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.13 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 270 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.13 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.13 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 270 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.13 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.13 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 270 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | -0.17 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.17 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 270 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.13 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.13 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 271 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.15 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.15 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 271 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.15 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.15 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 271 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.15 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.15 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 271 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | -0.19 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.19 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 271 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.15 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.15 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 272 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.22 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.22 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 272 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.22 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.22 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 272 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.22 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.22 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 272 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.29 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.29 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 272 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.22 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.22 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 273 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.36 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.36 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 273 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.36 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.36 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 273 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.36 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.36 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 273 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | -0.46 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.46 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 273 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.36 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.36 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 274 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.34 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.34 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 274 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.34 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.34 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 274 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.34 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.34 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 274 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.45 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.45 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 274 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.34 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.34 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 275 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.28 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.28 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 275 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.28 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.28 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 275 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.28 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.28 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 275 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | -0.37 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.37 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 275 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.28 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.28 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 276 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.36 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.36 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 276 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.36 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.36 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 276 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.36 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.36 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 276 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | -0.46 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.46 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 276 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.36 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.36 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 277 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.34 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.34 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 277 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.34 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.34 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 277 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.34 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.34 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 277 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.45 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.45 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 277 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.34 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.34 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 278 | 1 | 0.0 | 0.0 | 0.00 | 0.07 | 0.0 | -0.01 | -0.04 | -0.08 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.04 | 0.00 | 0.15 | 200.0 | -0.01 | 0.04 | 0.08 | 0.00 | 0.0 | 0.0 |
| 278 | 2 | 0.0 | 0.0 | 0.00 | 0.07 | 0.0 | -0.01 | -0.04 | -0.08 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.04 | 0.00 | 0.15 | 200.0 | -0.01 | 0.04 | 0.08 | 0.00 | 0.0 | 0.0 |
| 278 | 3 | 0.0 | 0.0 | 0.00 | 0.07 | 0.0 | -0.01 | -0.04 | -0.08 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.04 | 0.00 | 0.15 | 200.0 | -0.01 | 0.04 | 0.08 | 0.00 | 0.0 | 0.0 |
| 278 | 4 | 0.0 | 0.0 | 0.00 | 0.09 | 0.0 | -0.01 | -0.05 | -0.10 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.05 | 0.00 | 0.20 | 200.0 | -0.01 | 0.05 | 0.10 | 0.00 | 0.0 | 0.0 |
| 278 | 5 | 0.0 | 0.0 | 0.00 | 0.07 | 0.0 | -0.01 | -0.04 | -0.08 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.04 | 0.00 | 0.15 | 200.0 | -0.01 | 0.04 | 0.08 | 0.00 | 0.0 | 0.0 |
| 279 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.59 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.59 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 279 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.59 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.59 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 279 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.59 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.59 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 279 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | -0.76 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.76 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 279 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.59 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.59 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 280 | 1 | 0.0 | 0.0 | 0.00 | 0.07 | 0.0 | -2.75e-03 | -0.04 | -0.08 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.04 | 0.00 | 0.15 | 200.0 | -2.75e-03 | 0.04 | 0.08 | 0.00 | 0.0 | 0.0 |
| 280 | 2 | 0.0 | 0.0 | 0.00 | 0.07 | 0.0 | -2.75e-03 | -0.04 | -0.08 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.04 | 0.00 | 0.15 | 200.0 | -2.75e-3 | 0.04 | 0.08 | 0.00 | 0.0 | 0.0 |
| 280 | 3 | 0.0 | 0.0 | 0.00 | 0.07 | 0.0 | -2.75e-3 | -0.04 | -0.08 | 0.00 | 0.0 | 0.0 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | -0.02 | -0.04 | 0.00 | 0.15 | 200.0 | -2.75e-3 | 0.04 | 0.08 | 0.00 | 0.0 | 0.0 |
| 280 | 4 | 0.0 | 0.0 | 0.00 | 0.09 | 0.0 | -3.57e-3 | -0.05 | -0.10 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.05 | 0.00 | 0.20 | 200.0 | -3.57e-3 | 0.05 | 0.10 | 0.00 | 0.0 | 0.0 |
| 280 | 5 | 0.0 | 0.0 | 0.00 | 0.07 | 0.0 | -2.75e-3 | -0.04 | -0.08 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.04 | 0.00 | 0.15 | 200.0 | -2.75e-3 | 0.04 | 0.08 | 0.00 | 0.0 | 0.0 |
| 281 | 1 | 0.0 | 0.0 | 0.00 | 0.07 | 0.0 | -0.10 | -0.04 | -0.08 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.04 | 0.00 | 0.15 | 200.0 | -0.10 | 0.04 | 0.08 | 0.00 | 0.0 | 0.0 |
| 281 | 2 | 0.0 | 0.0 | 0.00 | 0.07 | 0.0 | -0.10 | -0.04 | -0.08 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.04 | 0.00 | 0.15 | 200.0 | -0.10 | 0.04 | 0.08 | 0.00 | 0.0 | 0.0 |
| 281 | 3 | 0.0 | 0.0 | 0.00 | 0.07 | 0.0 | -0.10 | -0.04 | -0.08 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.04 | 0.00 | 0.15 | 200.0 | -0.10 | 0.04 | 0.08 | 0.00 | 0.0 | 0.0 |
| 281 | 4 | 0.0 | 0.0 | 0.00 | 0.09 | 0.0 | -0.13 | -0.05 | -0.10 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.05 | 0.00 | 0.20 | 200.0 | -0.13 | 0.05 | 0.10 | 0.00 | 0.0 | 0.0 |
| 281 | 5 | 0.0 | 0.0 | 0.00 | 0.07 | 0.0 | -0.10 | -0.04 | -0.08 | 0.00 | 0.0 | 0.0 |
| | | -0.02 | -0.04 | 0.00 | 0.15 | 200.0 | -0.10 | 0.04 | 0.08 | 0.00 | 0.0 | 0.0 |
| 282 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.59 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.59 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 282 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.59 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.59 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 282 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.59 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.59 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 282 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | -0.76 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.76 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 282 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -0.59 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.59 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 288 | 1 | 2.48 | 0.0 | 0.00 | -9.92 | 0.0 | -0.45 | 4.96 | -0.87 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | -0.44 | 0.00 | 1.75 | 200.0 | -0.45 | -4.96 | 0.87 | 0.00 | 0.0 | 0.0 |
| 288 | 2 | 2.48 | 0.0 | 0.00 | -9.92 | 0.0 | -0.45 | 4.96 | -0.87 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | -0.44 | 0.00 | 1.75 | 200.0 | -0.45 | -4.96 | 0.87 | 0.00 | 0.0 | 0.0 |
| 288 | 3 | 2.48 | 0.0 | 0.00 | -9.92 | 0.0 | -0.45 | 4.96 | -0.87 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | -0.44 | 0.00 | 1.75 | 200.0 | -0.45 | -4.96 | 0.87 | 0.00 | 0.0 | 0.0 |
| 288 | 4 | 3.22 | 0.0 | 0.00 | -12.89 | 0.0 | -0.58 | 6.44 | -1.14 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | -0.57 | 0.00 | 2.27 | 200.0 | -0.58 | -6.44 | 1.14 | 0.00 | 0.0 | 0.0 |
| 288 | 5 | 2.48 | 0.0 | 0.00 | -9.92 | 0.0 | -0.45 | 4.96 | -0.87 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | -0.44 | 0.00 | 1.75 | 200.0 | -0.45 | -4.96 | 0.87 | 0.00 | 0.0 | 0.0 |
| 289 | 1 | 2.48 | 0.0 | 0.00 | -9.92 | 0.0 | -2.23 | 4.96 | -0.87 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | -0.44 | 0.00 | 1.75 | 200.0 | -2.23 | -4.96 | 0.87 | 0.00 | 0.0 | 0.0 |
| 289 | 2 | 2.48 | 0.0 | 0.00 | -9.92 | 0.0 | -2.23 | 4.96 | -0.87 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | -0.44 | 0.00 | 1.75 | 200.0 | -2.23 | -4.96 | 0.87 | 0.00 | 0.0 | 0.0 |
| 289 | 3 | 2.48 | 0.0 | 0.00 | -9.92 | 0.0 | -2.23 | 4.96 | -0.87 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | -0.44 | 0.00 | 1.75 | 200.0 | -2.23 | -4.96 | 0.87 | 0.00 | 0.0 | 0.0 |
| 289 | 4 | 3.22 | 0.0 | 0.00 | -12.89 | 0.0 | -2.90 | 6.44 | -1.14 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | -0.57 | 0.00 | 2.27 | 200.0 | -2.90 | -6.44 | 1.14 | 0.00 | 0.0 | 0.0 |
| 289 | 5 | 2.48 | 0.0 | 0.00 | -9.92 | 0.0 | -2.23 | 4.96 | -0.87 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | -0.44 | 0.00 | 1.75 | 200.0 | -2.23 | -4.96 | 0.87 | 0.00 | 0.0 | 0.0 |
| 290 | 1 | 2.48 | 0.0 | 0.00 | -9.92 | 0.0 | -0.53 | 4.96 | -0.87 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | -0.44 | 0.00 | 1.75 | 200.0 | -0.53 | -4.96 | 0.87 | 0.00 | 0.0 | 0.0 |
| 290 | 2 | 2.48 | 0.0 | 0.00 | -9.92 | 0.0 | -0.53 | 4.96 | -0.87 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | -0.44 | 0.00 | 1.75 | 200.0 | -0.53 | -4.96 | 0.87 | 0.00 | 0.0 | 0.0 |
| 290 | 3 | 2.48 | 0.0 | 0.00 | -9.92 | 0.0 | -0.53 | 4.96 | -0.87 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | -0.44 | 0.00 | 1.75 | 200.0 | -0.53 | -4.96 | 0.87 | 0.00 | 0.0 | 0.0 |
| 290 | 4 | 3.22 | 0.0 | 0.00 | -12.89 | 0.0 | -0.69 | 6.44 | -1.14 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | -0.57 | 0.00 | 2.27 | 200.0 | -0.69 | -6.44 | 1.14 | 0.00 | 0.0 | 0.0 |
| 290 | 5 | 2.48 | 0.0 | 0.00 | -9.92 | 0.0 | -0.53 | 4.96 | -0.87 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | -0.44 | 0.00 | 1.75 | 200.0 | -0.53 | -4.96 | 0.87 | 0.00 | 0.0 | 0.0 |
| 291 | 1 | 2.48 | 0.0 | 0.00 | -9.92 | 0.0 | -0.45 | 4.96 | -0.87 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | -0.44 | 0.00 | 1.75 | 200.0 | -0.45 | -4.96 | 0.87 | 0.00 | 0.0 | 0.0 |
| 291 | 2 | 2.48 | 0.0 | 0.00 | -9.92 | 0.0 | -0.45 | 4.96 | -0.87 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | -0.44 | 0.00 | 1.75 | 200.0 | -0.45 | -4.96 | 0.87 | 0.00 | 0.0 | 0.0 |
| 291 | 3 | 2.48 | 0.0 | 0.00 | -9.92 | 0.0 | -0.45 | 4.96 | -0.87 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | -0.44 | 0.00 | 1.75 | 200.0 | -0.45 | -4.96 | 0.87 | 0.00 | 0.0 | 0.0 |
| 291 | 4 | 3.22 | 0.0 | 0.00 | -12.89 | 0.0 | -0.58 | 6.44 | -1.14 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | -0.57 | 0.00 | 2.27 | 200.0 | -0.58 | -6.44 | 1.14 | 0.00 | 0.0 | 0.0 |
| 291 | 5 | 2.48 | 0.0 | 0.00 | -9.92 | 0.0 | -0.45 | 4.96 | -0.87 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | -0.44 | 0.00 | 1.75 | 200.0 | -0.45 | -4.96 | 0.87 | 0.00 | 0.0 | 0.0 |
| 292 | 1 | 2.48 | 0.0 | 0.00 | -9.92 | 0.0 | -2.23 | 4.96 | -0.87 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | -0.44 | 0.00 | 1.75 | 200.0 | -2.23 | -4.96 | 0.87 | 0.00 | 0.0 | 0.0 |
| 292 | 2 | 2.48 | 0.0 | 0.00 | -9.92 | 0.0 | -2.23 | 4.96 | -0.87 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | -0.44 | 0.00 | 1.75 | 200.0 | -2.23 | -4.96 | 0.87 | 0.00 | 0.0 | 0.0 |
| 292 | 3 | 2.48 | 0.0 | 0.00 | -9.92 | 0.0 | -2.23 | 4.96 | -0.87 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | -0.44 | 0.00 | 1.75 | 200.0 | -2.23 | -4.96 | 0.87 | 0.00 | 0.0 | 0.0 |
| 292 | 4 | 3.22 | 0.0 | 0.00 | -12.89 | 0.0 | -2.90 | 6.44 | -1.14 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | -0.57 | 0.00 | 2.27 | 200.0 | -2.90 | -6.44 | 1.14 | 0.00 | 0.0 | 0.0 |
| 292 | 5 | 2.48 | 0.0 | 0.00 | -9.92 | 0.0 | -2.23 | 4.96 | -0.87 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | -0.44 | 0.00 | 1.75 | 200.0 | -2.23 | -4.96 | 0.87 | 0.00 | 0.0 | 0.0 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| 298 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 298 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 298 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 298 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.04 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.04 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 298 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 299 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.11 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.11 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 299 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.11 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.11 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 299 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.11 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.11 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 299 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.14 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.14 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 299 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.11 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.11 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 300 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.40 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.40 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 300 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.40 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.40 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 300 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.40 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.40 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 300 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.52 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.52 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 300 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.40 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.40 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 301 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 301 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 301 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 301 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.04 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.04 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 301 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 302 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.40 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.40 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 302 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.40 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.40 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 302 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.40 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.40 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 302 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.52 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.52 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 302 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.40 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.40 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 303 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.05 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.05 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 303 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.05 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.05 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 303 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.05 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.05 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 303 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.06 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.06 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 303 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.05 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.05 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 304 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.07 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.07 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 304 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.07 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.07 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 304 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.07 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.07 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 304 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.09 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.09 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 304 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.07 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.07 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 305 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.02 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 305 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.02 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 305 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.02 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 305 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.03 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 305 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.02 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 306 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.05 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.05 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 306 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.05 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.05 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 306 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.05 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.05 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 306 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.06 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.06 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 306 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.05 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.05 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 307 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.02 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 307 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.02 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 307 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.02 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 307 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.03 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.03 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 307 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.02 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 313 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 313 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 313 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 313 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.01 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.01 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 313 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 314 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 314 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 314 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 314 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.02 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.02 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 314 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 315 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -7.9e-03 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -7.95e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 315 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -7.95e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -7.95e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 315 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -7.95e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -7.95e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 315 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | -0.01 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.01 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 315 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -7.95e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -7.95e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 316 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 316 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 316 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 316 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 0.01 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.01 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 316 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 0.01 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 0.01 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 317 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -7.96e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -7.96e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 317 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -7.96e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -7.96e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 317 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -7.96e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -7.96e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 317 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | -0.01 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -0.01 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 317 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -7.96e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -7.96e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| 318 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -2.32e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -2.32e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 318 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -2.32e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -2.32e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 318 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -2.32e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -2.32e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 318 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | -3.02e-3 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -3.02e-3 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 318 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -2.32e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -2.32e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 319 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -3.08e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -3.08e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 319 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -3.08e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -3.08e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 319 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -3.08e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -3.08e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 319 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | -4.00e-3 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -4.00e-3 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 319 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -3.08e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -3.08e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 320 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 4.08e-04 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 4.08e-04 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 320 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 4.08e-04 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 4.08e-04 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 320 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 4.08e-04 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 4.08e-04 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 320 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 5.30e-04 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 5.30e-04 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 320 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 4.08e-04 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 4.08e-04 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 321 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -2.31e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -2.31e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 321 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -2.31e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -2.31e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 321 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -2.31e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -2.31e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 321 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | -3.00e-3 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -3.00e-3 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 321 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -2.31e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -2.31e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 322 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 4.12e-04 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 4.12e-04 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 322 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 4.12e-04 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 4.12e-04 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 322 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 4.12e-04 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 4.12e-04 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 322 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 5.36e-04 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 5.36e-04 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 322 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 4.12e-04 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 4.12e-04 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 323 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -2.74e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -2.74e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 323 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -2.74e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -2.74e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 323 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -2.74e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -2.74e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 323 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | -3.56e-3 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -3.56e-3 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 323 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -2.74e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -2.74e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 324 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -3.74e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -3.74e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 324 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -3.74e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -3.74e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 324 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -3.74e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -3.74e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 324 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | -4.86e-3 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -4.86e-3 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 324 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -3.74e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -3.74e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 325 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 2.34e-04 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 2.34e-04 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 325 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 2.34e-04 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 2.34e-04 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 325 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 2.34e-04 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kN m | kN m | m | kN | cm | kN | kN | kN | kN m | kN m | kN m |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 2.34e-04 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 325 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 3.04e-04 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 3.04e-04 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 325 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 2.34e-04 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 2.34e-04 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 326 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -2.73e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -2.73e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 326 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -2.73e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -2.73e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 326 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -2.73e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -2.73e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 326 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | -3.55e-3 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -3.55e-3 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 326 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -2.73e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -2.73e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 327 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 2.36e-04 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 2.36e-04 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 327 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 2.36e-04 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 2.36e-04 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 327 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 2.36e-04 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 2.36e-04 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 327 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | 3.06e-04 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 3.06e-04 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 327 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | 2.36e-04 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | 2.36e-04 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 328 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -1.71e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -1.71e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 328 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -1.71e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -1.71e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 328 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -1.71e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -1.71e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 328 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | -2.23e-3 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -2.23e-3 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 328 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -1.71e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -1.71e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 329 | 1 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -2.39e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -2.39e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 329 | 2 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -2.39e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -2.39e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 329 | 3 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -2.39e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -2.39e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 329 | 4 | 3.27 | 0.0 | 0.00 | -13.09 | 0.0 | -3.11e-3 | 6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -3.11e-3 | -6.54 | 0.0 | 0.00 | 0.0 | 0.0 |
| 329 | 5 | 2.52 | 0.0 | 0.00 | -10.07 | 0.0 | -2.39e-3 | 5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| | | 0.0 | 0.0 | 0.00 | 0.0 | 200.0 | -2.39e-3 | -5.03 | 0.0 | 0.00 | 0.0 | 0.0 |
| 331 | 1 | 0.0 | 0.0 | 0.00 | 0.16 | 0.0 | -0.02 | -0.08 | -0.03 | 0.00 | 0.0 | 0.0 |
| | | -0.04 | -0.01 | 0.00 | 0.06 | 200.0 | -0.02 | 0.08 | 0.03 | 0.00 | 0.0 | 0.0 |
| 331 | 2 | 0.0 | 0.0 | 0.00 | 0.16 | 0.0 | -0.02 | -0.08 | -0.03 | 0.00 | 0.0 | 0.0 |
| | | -0.04 | -0.01 | 0.00 | 0.06 | 200.0 | -0.02 | 0.08 | 0.03 | 0.00 | 0.0 | 0.0 |
| 331 | 3 | 0.0 | 0.0 | 0.00 | 0.16 | 0.0 | -0.02 | -0.08 | -0.03 | 0.00 | 0.0 | 0.0 |
| | | -0.04 | -0.01 | 0.00 | 0.06 | 200.0 | -0.02 | 0.08 | 0.03 | 0.00 | 0.0 | 0.0 |
| 331 | 4 | 0.0 | 0.0 | 0.00 | 0.21 | 0.0 | -0.03 | -0.10 | -0.04 | 0.00 | 0.0 | 0.0 |
| | | -0.05 | -0.02 | 0.00 | 0.07 | 200.0 | -0.03 | 0.10 | 0.04 | 0.00 | 0.0 | 0.0 |
| 331 | 5 | 0.0 | 0.0 | 0.00 | 0.16 | 0.0 | -0.02 | -0.08 | -0.03 | 0.00 | 0.0 | 0.0 |
| | | -0.04 | -0.01 | 0.00 | 0.06 | 200.0 | -0.02 | 0.08 | 0.03 | 0.00 | 0.0 | 0.0 |
| | | | | | | | | | | | | |
| **Trave** | | **M3 mx/mn** | **M2 mx/mn** | **D 2 / D 3** | **Q 2 / Q 3** | | **N** | **V 2** | **V 3** | **T** | | |
| | | -0.05 | -0.57 | 0.00 | -13.09 | | -2.90 | -6.54 | -1.14 | 0.00 | | |
| | | 3.27 | 0.02 | 0.00 | 2.27 | | 0.52 | 6.54 | 1.14 | 0.00 | | |

## 3.7 Verifiche elementi in acciaio

L'esito delle verifiche è espresso con un codice come di seguito indicato

***Ok***: verifica con esito positivo

***NV***: verifica con esito negativo

***Nr***: verifica non richiesta.

Per comodità gli elementi vengono raggruppati in tabelle in relazione al tipo.

Ai fini delle verifiche (come da D.M. 14 Gennaio 2008 e circ. 2 Febbraio 2009 n.617

Le verifiche sono riportate in tabelle con il significato sottoindicato; le verifiche sono espresse dal rapporto tra l' azione di progetto e la capacità ultima, pertanto la verifica ha esito positivo per rapporti non superiori all' unità.

| | | | |
|---|---|---|---|
| Asta | Trave | Pilastro | numero dell'elemento |
| Stato | | | codice di verifica per resistenza, stabilità, svergolamento |
| Note | | | sezione e materiali adottati per l'elemento |
| V V/T | | | (TRAVI ) verifica come da par. 4.2.4.1.2 per azioni taglio-torsione |
| V N/M | | | (TRAVI ) verifica come da par. 4.2.4.1.2 per azioni composte con riduzione per taglio (4.2.41) ove richiesto |
| V stab | | | (TRAVI ) verifica come da par. 4.2.4.1.3 per punti (C4.2.32) o (C4.2.36) (membrature inflesse e compresse senza/con presenza di instabilità flesso-torsionale |
| BetaxL | B22xL | B33xL | lunghezze libere di inflessione (se indicato riferiti al piano di normale 22 o 33 rispettivamente) |
| Snellezza | | | snellezza massima |
| Classe | | | classe del profilo |
| Chi mn | | | coefficiente di riduzione (della capacità) per la modalità di instabilità pertinente |
| Rif. cmb | | | combinazioni in cui si sono rispettivamente attinti i valori di verifica più elevati |

| Trave | Stato | Note | V V/T | V N/M | V stab | Classe | B22xL | B33xL | Snellezza | Chi mn | Rif. cmb |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | cm | | | | |
| 1 | ok | s=2,m=11 | 0.13 | 0.18 | 0.15 | 1 | 15.0 | 165.0 | 30.3 | 0.92 | 4,4,4,0 |
| 3 | ok | s=2,m=11 | 0.05 | 0.31 | 0.32 | 1 | 15.0 | 165.0 | 30.3 | 0.92 | 4,4,4,0 |
| 4 | ok | s=2,m=11 | 0.01 | 0.33 | 0.33 | 1 | 15.0 | 165.0 | 30.3 | 0.92 | 4,4,4,0 |
| 5 | ok | s=2,m=11 | 0.02 | 0.33 | 0.33 | 1 | 15.0 | 165.0 | 30.3 | 0.92 | 4,4,4,0 |
| 6 | ok | s=2,m=11 | 0.06 | 0.31 | 0.31 | 1 | 15.0 | 165.0 | 30.3 | 0.92 | 4,4,4,0 |
| 7 | ok | s=2,m=11 | 0.10 | 0.25 | 0.25 | 1 | 15.0 | 165.0 | 30.3 | 0.92 | 4,4,4,0 |
| 8 | ok | s=2,m=11 | 0.14 | 0.15 | 0.12 | 1 | 15.0 | 165.0 | 30.3 | 0.92 | 4,4,4,0 |
| 9 | ok | s=3,m=11 | 0.17 | 0.20 | 0.22 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 10 | ok | s=6,m=11 | 0.07 | 0.21 | 0.16 | 1 | 200.0 | 300.0 | 136.2 | 0.29 | 4,4,4,0 |
| 12 | ok | s=3,m=11 | 0.16 | 0.21 | 0.24 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 13 | ok | s=3,m=11 | 0.09 | 0.25 | 0.28 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 14 | ok | s=3,m=11 | 0.43 | 0.48 | 0.50 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 15 | ok | s=3,m=11 | 0.37 | 0.28 | 0.27 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 16 | ok | s=3,m=11 | 0.06 | 0.29 | 0.32 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 18 | ok | s=3,m=11 | 2.92e-03 | 7.67e-03 | 7.66e-03 | 1 | 15.3 | 15.3 | 4.3 | 1.00 | 4,4,4,0 |
| 21 | ok | s=3,m=11 | 0.02 | 0.27 | 0.29 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 22 | ok | s=3,m=11 | 0.04 | 0.27 | 0.29 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 23 | ok | s=1,m=11 | 0.19 | 0.28 | 0.24 | 1 | 15.1 | 15.1 | 8.6 | 1.00 | 4,4,4,0 |
| 24 | ok | s=1,m=11 | 0.05 | 0.34 | 0.35 | 1 | 15.0 | 135.0 | 24.8 | 0.96 | 4,4,4,0 |
| 25 | ok | s=3,m=11 | 0.30 | 0.11 | 0.10 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 26 | ok | s=3,m=11 | 0.23 | 0.14 | 0.14 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 28 | ok | s=3,m=11 | 8.15e-04 | 7.89e-03 | 7.66e-03 | 1 | 7.6 | 15.3 | 2.6 | 1.00 | 4,4,4,0 |

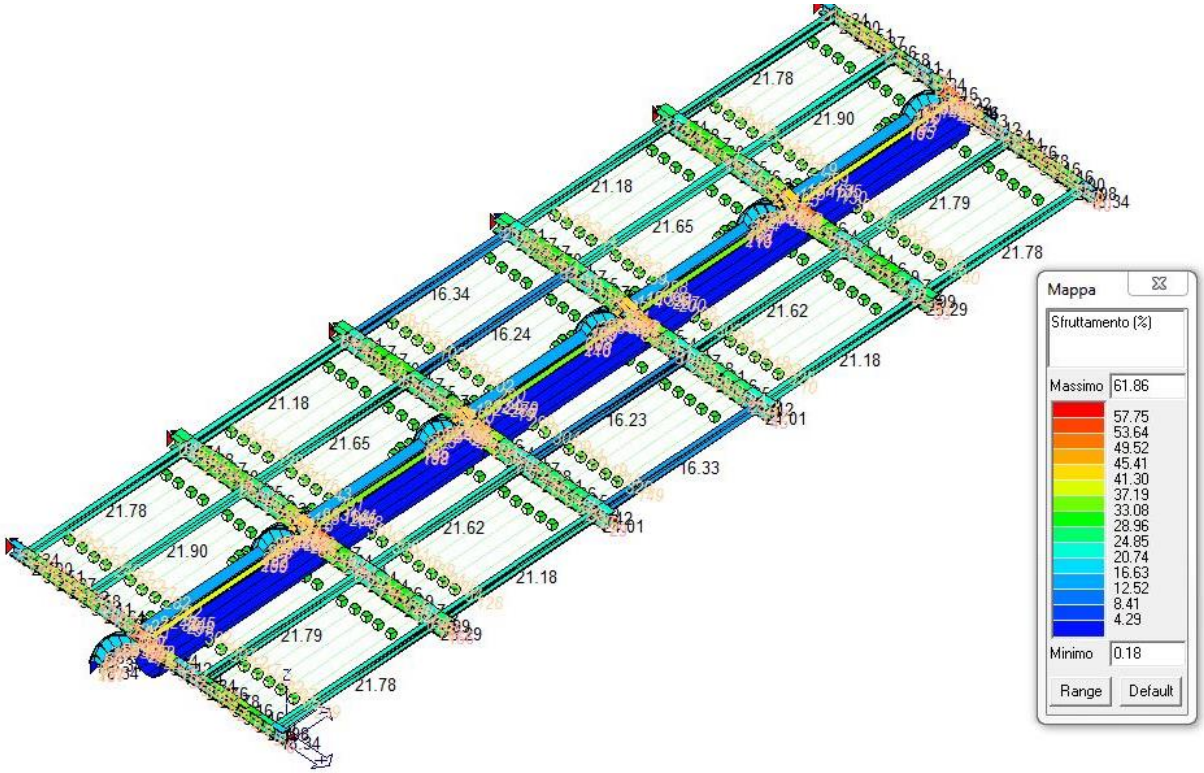
| Trave | Stato | Note | V V/T | V N/M | V stab | Classe | B22xL | B33xL | Snellezza | Chi mn | Rif. cmb |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | cm | | | | |
| 30 | ok | s=2,m=11 | 0.14 | 0.15 | 0.12 | 1 | 15.0 | 165.0 | 30.3 | 0.92 | 4,4,4,0 |
| 31 | ok | s=1,m=11 | 8.50e-03 | 0.35 | 0.35 | 1 | 15.0 | 135.0 | 24.8 | 0.96 | 4,4,4,0 |
| 32 | ok | s=2,m=11 | 0.06 | 0.31 | 0.31 | 1 | 15.0 | 165.0 | 30.3 | 0.92 | 4,4,4,0 |
| 33 | ok | s=2,m=11 | 0.10 | 0.25 | 0.25 | 1 | 15.0 | 165.0 | 30.3 | 0.92 | 4,4,4,0 |
| 34 | ok | s=1,m=11 | 0.08 | 0.30 | 0.30 | 1 | 15.0 | 135.0 | 24.8 | 0.96 | 4,4,4,0 |
| 35 | ok | s=3,m=11 | 0.08 | 0.28 | 0.30 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 36 | ok | s=3,m=11 | 0.14 | 0.24 | 0.27 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 37 | ok | s=3,m=11 | 0.11 | 0.24 | 0.26 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 38 | ok | s=3,m=11 | 0.17 | 0.19 | 0.21 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 40 | ok | s=6,m=11 | 0.08 | 0.22 | 0.16 | 1 | 200.0 | 300.0 | 136.2 | 0.29 | 4,4,4,0 |
| 43 | ok | s=1,m=11 | 0.12 | 0.23 | 0.22 | 1 | 15.0 | 135.0 | 24.8 | 0.96 | 4,4,4,0 |
| 44 | ok | s=1,m=11 | 0.22 | 0.60 | 0.62 | 1 | 7.8 | 7.8 | 4.5 | 1.00 | 4,4,4,0 |
| 45 | ok | s=3,m=11 | 0.21 | 0.18 | 0.19 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 46 | ok | s=3,m=11 | 0.38 | 0.46 | 0.52 | 1 | 7.8 | 7.8 | 2.2 | 1.00 | 4,4,4,0 |
| 47 | ok | s=3,m=11 | 0.36 | 0.37 | 0.41 | 1 | 15.7 | 15.7 | 4.4 | 1.00 | 4,4,4,0 |
| 48 | ok | s=3,m=11 | 0.24 | 0.11 | 0.11 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 49 | ok | s=2,m=11 | 8.88e-04 | 6.78e-03 | 6.31e-03 | 1 | 15.3 | 15.3 | 8.7 | 1.00 | 4,4,4,0 |
| 50 | ok | s=3,m=11 | 0.01 | 0.28 | 0.31 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 52 | ok | s=3,m=11 | 0.09 | 0.25 | 0.27 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 55 | ok | s=6,m=11 | 0.08 | 0.22 | | 1 | | | | | 4,4,0,0 |
| 57 | ok | s=2,m=11 | 0.05 | 0.31 | 0.32 | 1 | 15.0 | 165.0 | 30.3 | 0.92 | 4,4,4,0 |
| 58 | ok | s=3,m=11 | 0.29 | 0.10 | 0.10 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 60 | ok | s=3,m=11 | 0.22 | 0.18 | 0.20 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 61 | ok | s=2,m=11 | 1.61e-03 | 4.35e-03 | 4.60e-03 | 1 | 15.3 | 15.3 | 8.7 | 1.00 | 4,4,4,0 |
| 62 | ok | s=3,m=11 | 0.11 | 0.25 | 0.27 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 63 | ok | s=3,m=11 | 0.40 | 0.48 | 0.54 | 1 | 7.8 | 7.8 | 2.2 | 1.00 | 4,4,4,0 |
| 67 | ok | s=2,m=11 | 0.24 | 0.58 | 0.57 | 1 | 15.0 | 165.0 | 30.3 | 0.92 | 4,4,4,0 |
| 68 | ok | s=3,m=11 | 5.52e-04 | 7.29e-03 | 7.20e-03 | 1 | 7.6 | 15.3 | 2.6 | 1.00 | 4,4,4,0 |
| 69 | ok | s=3,m=11 | 0.37 | 0.39 | 0.43 | 1 | 15.7 | 15.7 | 4.4 | 1.00 | 4,4,4,0 |
| 70 | ok | s=3,m=11 | 0.22 | 0.13 | 0.13 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 71 | ok | s=3,m=11 | 0.02 | 0.27 | 0.29 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 72 | ok | s=3,m=11 | 0.16 | 0.21 | 0.23 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 73 | ok | s=3,m=11 | 0.09 | 0.25 | 0.27 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 74 | ok | s=3,m=11 | 0.19 | 0.20 | 0.23 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 75 | ok | s=3,m=11 | 0.09 | 0.25 | 0.28 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 76 | ok | s=3,m=11 | 0.42 | 0.46 | 0.49 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 77 | ok | s=5,m=11 | 1.17e-03 | 2.20e-03 | | 2 | | | | | 4,4,0,0 |
| 78 | ok | s=3,m=11 | 0.25 | 0.12 | 0.11 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 79 | ok | s=2,m=11 | 0.24 | 0.58 | 0.57 | 1 | 15.0 | 165.0 | 30.3 | 0.92 | 4,4,4,0 |
| 81 | ok | s=3,m=11 | 0.23 | 0.14 | 0.14 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 82 | ok | s=3,m=11 | 2.67e-03 | 1.69e-03 | 2.66e-03 | 1 | 15.3 | 15.3 | 4.3 | 1.00 | 4,4,4,0 |
| 83 | ok | s=2,m=11 | 1.36e-03 | 6.85e-03 | 6.20e-03 | 1 | 15.3 | 15.3 | 8.7 | 1.00 | 4,4,4,0 |
| 84 | ok | s=3,m=11 | 0.25 | 0.12 | 0.11 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 85 | ok | s=3,m=11 | 0.43 | 0.48 | 0.50 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 86 | ok | s=3,m=11 | 0.08 | 0.29 | 0.31 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 87 | ok | s=3,m=11 | 0.42 | 0.46 | 0.49 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 88 | ok | s=2,m=11 | 1.08e-03 | 6.30e-03 | 6.09e-03 | 1 | 15.3 | 15.3 | 8.7 | 1.00 | 4,4,4,0 |
| 89 | ok | s=3,m=11 | 0.03 | 0.26 | 0.28 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 90 | ok | s=6,m=11 | 0.06 | 0.37 | | 1 | | | | | 4,4,0,0 |
| 91 | ok | s=3,m=11 | 0.12 | 0.26 | 0.28 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 92 | ok | s=3,m=11 | 0.03 | 0.26 | 0.28 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 94 | ok | s=3,m=11 | 0.04 | 0.26 | 0.28 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 95 | ok | s=6,m=11 | 0.07 | 0.21 | | 1 | | | | | 4,4,0,0 |
| 97 | ok | s=6,m=11 | 1.04e-03 | 0.01 | | 1 | | | | | 4,4,0,0 |
| 98 | ok | s=6,m=11 | 1.01e-03 | 0.01 | | 1 | | | | | 4,4,0,0 |
| 99 | ok | s=3,m=11 | 0.04 | 0.26 | 0.28 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 100 | ok | s=3,m=11 | 1.95e-03 | 7.88e-03 | 8.06e-03 | 1 | 15.3 | 15.3 | 4.3 | 1.00 | 4,4,4,0 |
| 101 | ok | s=3,m=11 | 0.36 | 0.27 | 0.26 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 104 | ok | s=3,m=11 | 3.36e-03 | 3.32e-03 | 4.41e-03 | 1 | 15.3 | 15.3 | 4.3 | 1.00 | 4,4,4,0 |
| 106 | ok | s=2,m=11 | 2.51e-03 | 0.01 | | 1 | | | | | 4,4,0,0 |
| 107 | ok | s=2,m=11 | 1.15e-03 | 6.91e-03 | 6.40e-03 | 1 | 15.3 | 15.3 | 8.7 | 1.00 | 4,4,4,0 |
| 108 | ok | s=2,m=11 | 2.41e-03 | 0.01 | | 1 | | | | | 4,4,0,0 |
| 109 | ok | s=3,m=11 | 0.22 | 0.18 | 0.20 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 110 | ok | s=2,m=11 | 1.64e-03 | 4.39e-03 | 4.46e-03 | 1 | 15.3 | 15.3 | 8.7 | 1.00 | 4,4,4,0 |
| 111 | ok | s=3,m=11 | 0.36 | 0.37 | 0.41 | 1 | 15.7 | 15.7 | 4.4 | 1.00 | 4,4,4,0 |
| 112 | ok | s=3,m=11 | 0.24 | 0.11 | 0.11 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 113 | ok | s=3,m=11 | 0.08 | 0.28 | 0.30 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |

| Trave | Stato | Note | V V/T | V N/M | V stab | Classe | B22xL | B33xL | Snellezza | Chi mn | Rif. cmb |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | cm | | | | |
| 115 | ok | s=3,m=11 | 0.14 | 0.24 | 0.27 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 116 | ok | s=3,m=11 | 0.01 | 0.29 | 0.32 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 117 | ok | s=1,m=11 | 0.16 | 0.12 | 0.11 | 1 | 15.0 | 135.0 | 24.8 | 0.96 | 4,4,4,0 |
| 118 | ok | s=3,m=11 | 0.40 | 0.48 | 0.54 | 1 | 7.8 | 7.8 | 2.2 | 1.00 | 4,4,4,0 |
| 119 | ok | s=1,m=11 | 0.11 | 0.26 | 0.26 | 1 | 15.0 | 135.0 | 24.8 | 0.96 | 4,4,4,0 |
| 120 | ok | s=3,m=11 | 0.29 | 0.08 | 0.09 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 121 | ok | s=3,m=11 | 0.19 | 0.21 | 0.23 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 122 | ok | s=1,m=11 | 0.15 | 0.16 | 0.13 | 1 | 15.0 | 135.0 | 24.8 | 0.96 | 4,4,4,0 |
| 123 | ok | s=3,m=11 | 0.05 | 0.28 | 0.31 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 124 | ok | s=3,m=11 | 0.11 | 0.24 | 0.26 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 125 | ok | s=3,m=11 | 0.04 | 0.27 | 0.29 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 126 | ok | s=3,m=11 | 0.17 | 0.20 | 0.22 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 127 | ok | s=3,m=11 | 0.33 | 0.20 | 0.19 | 1 | 15.1 | 15.1 | 4.2 | 1.00 | 4,4,4,0 |
| 128 | ok | s=6,m=11 | 0.07 | 0.21 | 0.16 | 1 | 200.0 | 300.0 | 136.2 | 0.29 | 4,4,4,0 |
| 133 | ok | s=2,m=11 | 1.37e-03 | 6.71e-03 | 6.03e-03 | 1 | 15.3 | 15.3 | 8.7 | 1.00 | 4,4,4,0 |
| 135 | ok | s=6,m=11 | 0.07 | 0.40 | 0.33 | 1 | 200.0 | 300.0 | 136.2 | 0.29 | 4,4,4,0 |
| 136 | ok | s=2,m=11 | 0.01 | 0.33 | 0.33 | 1 | 15.0 | 165.0 | 30.3 | 0.92 | 4,4,4,0 |
| 137 | ok | s=3,m=11 | 0.37 | 0.39 | 0.43 | 1 | 15.7 | 15.7 | 4.4 | 1.00 | 4,4,4,0 |
| 138 | ok | s=2,m=11 | 0.02 | 0.33 | 0.33 | 1 | 15.0 | 165.0 | 30.3 | 0.92 | 4,4,4,0 |
| 140 | ok | s=1,m=11 | 0.15 | 0.16 | 0.13 | 1 | 15.0 | 135.0 | 24.8 | 0.96 | 4,4,4,0 |
| 141 | ok | s=1,m=11 | 0.07 | 0.32 | 0.33 | 1 | 15.0 | 135.0 | 24.8 | 0.96 | 4,4,4,0 |
| 144 | ok | s=6,m=11 | 0.06 | 0.37 | | 1 | | | | | 4,4,0,0 |
| 145 | ok | s=2,m=11 | 0.20 | 0.34 | 0.31 | 1 | 15.0 | 165.0 | 30.3 | 0.92 | 4,4,4,0 |
| 146 | ok | s=6,m=11 | 0.07 | 0.21 | | 1 | | | | | 4,4,0,0 |
| 147 | ok | s=6,m=11 | 1.01e-03 | 0.01 | | 1 | | | | | 4,4,0,0 |
| 149 | ok | s=6,m=11 | 0.06 | 0.16 | 0.12 | 1 | 200.0 | 300.0 | 136.2 | 0.29 | 4,4,4,0 |
| 150 | ok | s=3,m=11 | 0.01 | 0.28 | 0.31 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 151 | ok | s=3,m=11 | 0.29 | 0.10 | 0.10 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 152 | ok | s=2,m=11 | 0.16 | 0.14 | 0.12 | 1 | 15.0 | 165.0 | 30.3 | 0.92 | 4,4,4,0 |
| 153 | ok | s=1,m=11 | 0.22 | 0.60 | 0.62 | 1 | 7.8 | 7.8 | 4.5 | 1.00 | 4,4,4,0 |
| 154 | ok | s=3,m=11 | 0.25 | 0.12 | 0.11 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 155 | ok | s=2,m=11 | 9.19e-04 | 1.86e-03 | 1.78e-03 | 1 | 7.7 | 7.7 | 4.4 | 1.00 | 4,4,4,0 |
| 156 | ok | s=1,m=11 | 0.21 | 0.51 | 0.49 | 1 | 15.7 | 15.7 | 8.9 | 1.00 | 4,4,4,0 |
| 157 | ok | s=3,m=11 | 0.01 | 0.29 | 0.32 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 158 | ok | s=2,m=11 | 1.13e-03 | 6.59e-03 | 6.25e-03 | 1 | 15.3 | 15.3 | 8.7 | 1.00 | 4,4,4,0 |
| 159 | ok | s=2,m=11 | 1.50e-03 | 5.22e-03 | 5.39e-03 | 1 | 15.3 | 15.3 | 8.7 | 1.00 | 4,4,4,0 |
| 160 | ok | s=1,m=11 | 0.21 | 0.51 | 0.49 | 1 | 15.7 | 15.7 | 8.9 | 1.00 | 4,4,4,0 |
| 164 | ok | s=1,m=11 | 0.19 | 0.28 | 0.24 | 1 | 15.1 | 15.1 | 8.6 | 1.00 | 4,4,4,0 |
| 166 | ok | s=2,m=11 | 0.20 | 0.34 | 0.31 | 1 | 15.0 | 165.0 | 30.3 | 0.92 | 4,4,4,0 |
| 167 | ok | s=3,m=11 | 2.66e-03 | 2.02e-03 | 2.84e-03 | 1 | 15.3 | 15.3 | 4.3 | 1.00 | 4,4,4,0 |
| 168 | ok | s=3,m=11 | 0.08 | 0.29 | 0.31 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 169 | ok | s=1,m=11 | 0.03 | 0.35 | 0.35 | 1 | 15.0 | 135.0 | 24.8 | 0.96 | 4,4,4,0 |
| 170 | ok | s=2,m=11 | 0.16 | 0.14 | 0.12 | 1 | 15.0 | 165.0 | 30.3 | 0.92 | 4,4,4,0 |
| 171 | ok | s=2,m=11 | 1.54e-03 | 5.22e-03 | 5.43e-03 | 1 | 15.3 | 15.3 | 8.7 | 1.00 | 4,4,4,0 |
| 172 | ok | s=3,m=11 | 0.15 | 0.25 | 0.28 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 173 | ok | s=2,m=11 | 0.13 | 0.18 | 0.15 | 1 | 15.0 | 165.0 | 30.3 | 0.92 | 4,4,4,0 |
| 174 | ok | s=3,m=11 | 0.27 | 0.12 | 0.11 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 176 | ok | s=3,m=11 | 0.11 | 0.25 | 0.27 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 177 | ok | s=2,m=11 | 0.09 | 0.26 | 0.27 | 1 | 15.0 | 165.0 | 30.3 | 0.92 | 4,4,4,0 |
| 178 | ok | s=3,m=11 | 0.12 | 0.27 | 0.29 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 179 | ok | s=6,m=11 | 0.06 | 0.33 | 0.25 | 1 | 200.0 | 300.0 | 136.2 | 0.29 | 4,4,4,0 |
| 180 | ok | s=1,m=11 | 0.11 | 0.26 | 0.26 | 1 | 15.0 | 135.0 | 24.8 | 0.96 | 4,4,4,0 |
| 181 | ok | s=1,m=11 | 0.07 | 0.32 | 0.33 | 1 | 15.0 | 135.0 | 24.8 | 0.96 | 4,4,4,0 |
| 182 | ok | s=1,m=11 | 0.03 | 0.35 | 0.35 | 1 | 15.0 | 135.0 | 24.8 | 0.96 | 4,4,4,0 |
| 183 | ok | s=1,m=11 | 8.50e-03 | 0.35 | 0.35 | 1 | 15.0 | 135.0 | 24.8 | 0.96 | 4,4,4,0 |
| 184 | ok | s=1,m=11 | 0.05 | 0.34 | 0.35 | 1 | 15.0 | 135.0 | 24.8 | 0.96 | 4,4,4,0 |
| 185 | ok | s=1,m=11 | 0.08 | 0.30 | 0.30 | 1 | 15.0 | 135.0 | 24.8 | 0.96 | 4,4,4,0 |
| 186 | ok | s=1,m=11 | 0.12 | 0.23 | 0.22 | 1 | 15.0 | 135.0 | 24.8 | 0.96 | 4,4,4,0 |
| 187 | ok | s=1,m=11 | 0.16 | 0.12 | 0.11 | 1 | 15.0 | 135.0 | 24.8 | 0.96 | 4,4,4,0 |
| 188 | ok | s=6,m=11 | 0.06 | 0.16 | | 1 | | | | | 4,4,0,0 |
| 189 | ok | s=6,m=11 | 1.01e-03 | 0.01 | | 1 | | | | | 4,4,0,0 |
| 190 | ok | s=3,m=11 | 5.45e-04 | 7.67e-03 | 7.47e-03 | 1 | 7.6 | 15.3 | 2.6 | 1.00 | 4,4,4,0 |
| 191 | ok | s=3,m=11 | 0.02 | 8.76e-03 | | 1 | | | | | 4,4,0,0 |
| 192 | ok | s=3,m=11 | 1.81e-03 | 1.61e-03 | 1.93e-03 | 1 | 7.7 | 7.7 | 2.1 | 1.00 | 4,4,4,0 |
| 193 | ok | s=3,m=11 | 0.15 | 0.25 | 0.28 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 195 | ok | s=3,m=11 | 1.84e-03 | 7.04e-03 | 7.05e-03 | 1 | 15.3 | 15.3 | 4.3 | 1.00 | 4,4,4,0 |
| 196 | ok | s=3,m=11 | 0.22 | 0.13 | 0.13 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |

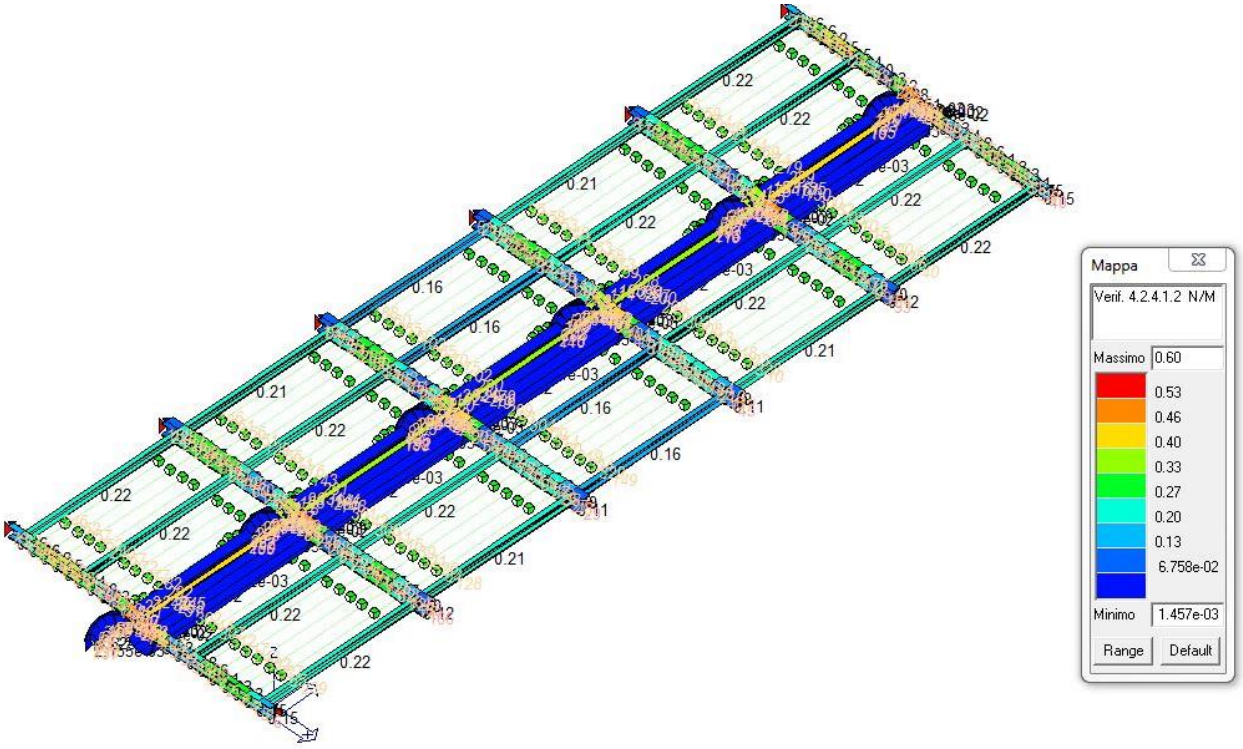
| Trave | Stato | Note | V V/T | V N/M | V stab | Classe | B22xL | B33xL | Snellezza | Chi mn | Rif. cmb |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | cm | | | | |
| 198 | ok | s=3,m=11 | 1.85e-03 | 7.27e-03 | 7.59e-03 | 1 | 15.3 | 15.3 | 4.3 | 1.00 | 4,4,4,0 |
| 199 | ok | s=3,m=11 | 3.34e-03 | 3.35e-03 | 4.20e-03 | 1 | 15.3 | 15.3 | 4.3 | 1.00 | 4,4,4,0 |
| 201 | ok | s=3,m=11 | 0.36 | 0.27 | 0.26 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 203 | ok | s=3,m=11 | 3.34e-03 | 3.22e-03 | 4.14e-03 | 1 | 15.3 | 15.3 | 4.3 | 1.00 | 4,4,4,0 |
| 204 | ok | s=3,m=11 | 0.28 | 0.08 | 0.08 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 205 | ok | s=3,m=11 | 0.16 | 0.21 | 0.23 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 206 | ok | s=3,m=11 | 0.28 | 0.08 | 0.08 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 207 | ok | s=3,m=11 | 0.19 | 0.20 | 0.23 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 208 | ok | s=3,m=11 | 2.67e-03 | 1.67e-03 | 2.67e-03 | 1 | 15.3 | 15.3 | 4.3 | 1.00 | 4,4,4,0 |
| 209 | ok | s=3,m=11 | 0.05 | 0.28 | 0.31 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 210 | ok | s=3,m=11 | 0.17 | 0.19 | 0.21 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 211 | ok | s=3,m=11 | 0.21 | 0.18 | 0.19 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 212 | ok | s=3,m=11 | 0.38 | 0.46 | 0.52 | 1 | 7.8 | 7.8 | 2.2 | 1.00 | 4,4,4,0 |
| 213 | ok | s=3,m=11 | 1.85e-03 | 1.64e-03 | 1.97e-03 | 1 | 7.7 | 7.7 | 2.1 | 1.00 | 4,4,4,0 |
| 214 | ok | s=3,m=11 | 0.33 | 0.22 | 0.21 | 1 | 15.1 | 15.1 | 4.2 | 1.00 | 4,4,4,0 |
| 215 | ok | s=3,m=11 | 2.83e-03 | 7.24e-03 | 7.33e-03 | 1 | 15.3 | 15.3 | 4.3 | 1.00 | 4,4,4,0 |
| 216 | ok | s=3,m=11 | 0.25 | 0.12 | 0.11 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 217 | ok | s=3,m=11 | 0.12 | 0.26 | 0.28 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 218 | ok | s=3,m=11 | 1.81e-03 | 1.61e-03 | 1.93e-03 | 1 | 7.7 | 7.7 | 2.1 | 1.00 | 4,4,4,0 |
| 219 | ok | s=3,m=11 | 0.33 | 0.20 | 0.19 | 1 | 15.1 | 15.1 | 4.2 | 1.00 | 4,4,4,0 |
| 220 | ok | s=2,m=11 | 1.48e-03 | 2.34e-03 | 2.77e-03 | 1 | 7.7 | 7.7 | 4.4 | 1.00 | 4,4,4,0 |
| 221 | ok | s=3,m=11 | 0.16 | 0.21 | 0.24 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 222 | ok | s=3,m=11 | 2.83e-03 | 6.07e-03 | 6.39e-03 | 1 | 15.3 | 15.3 | 4.3 | 1.00 | 4,4,4,0 |
| 223 | ok | s=3,m=11 | 1.95e-03 | 7.27e-03 | 7.42e-03 | 1 | 15.3 | 15.3 | 4.3 | 1.00 | 4,4,4,0 |
| 224 | ok | s=3,m=11 | 3.36e-03 | 3.48e-03 | 4.48e-03 | 1 | 15.3 | 15.3 | 4.3 | 1.00 | 4,4,4,0 |
| 225 | ok | s=3,m=11 | 0.29 | 0.08 | 0.09 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 226 | ok | s=3,m=11 | 0.19 | 0.21 | 0.23 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 227 | ok | s=3,m=11 | 2.66e-03 | 2.02e-03 | 2.85e-03 | 1 | 15.3 | 15.3 | 4.3 | 1.00 | 4,4,4,0 |
| 228 | ok | s=3,m=11 | 0.27 | 0.12 | 0.11 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 229 | ok | s=3,m=11 | 0.12 | 0.27 | 0.29 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 230 | ok | s=3,m=11 | 1.85e-03 | 1.64e-03 | 1.97e-03 | 1 | 7.7 | 7.7 | 2.1 | 1.00 | 4,4,4,0 |
| 231 | ok | s=3,m=11 | 0.33 | 0.22 | 0.21 | 1 | 15.1 | 15.1 | 4.2 | 1.00 | 4,4,4,0 |
| 232 | ok | s=3,m=11 | 2.92e-03 | 6.40e-03 | 6.63e-03 | 1 | 15.3 | 15.3 | 4.3 | 1.00 | 4,4,4,0 |
| 233 | ok | s=3,m=11 | 1.06e-03 | 7.68e-03 | 7.35e-03 | 1 | 7.6 | 15.3 | 2.6 | 1.00 | 4,4,4,0 |
| 234 | ok | s=2,m=11 | 0.05 | 0.04 | | 1 | | | | | 4,4,0,0 |
| 235 | ok | s=3,m=11 | 0.02 | 8.78e-03 | | 1 | | | | | 4,4,0,0 |
| 236 | ok | s=3,m=11 | 0.37 | 0.28 | 0.27 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 237 | ok | s=3,m=11 | 0.06 | 0.29 | 0.32 | 1 | 15.0 | 135.0 | 22.8 | 0.98 | 4,4,4,0 |
| 238 | ok | s=3,m=11 | 0.30 | 0.11 | 0.10 | 1 | 15.0 | 165.0 | 27.9 | 0.96 | 4,4,4,0 |
| 239 | ok | s=6,m=11 | 0.08 | 0.22 | 0.16 | 1 | 200.0 | 300.0 | 136.2 | 0.29 | 4,4,4,0 |
| 241 | ok | s=3,m=11 | 0.02 | 0.01 | | 1 | | | | | 4,4,0,0 |
| 245 | ok | s=6,m=11 | 0.07 | 0.40 | 0.33 | 1 | 200.0 | 300.0 | 136.2 | 0.29 | 4,4,4,0 |
| 246 | ok | s=6,m=11 | 0.08 | 0.22 | | 1 | | | | | 4,4,0,0 |
| 247 | ok | s=6,m=11 | 1.04e-03 | 0.01 | | 1 | | | | | 4,4,0,0 |
| 263 | ok | s=6,m=11 | 0.07 | 0.22 | 0.16 | 1 | 200.0 | 300.0 | 136.2 | 0.29 | 4,4,4,0 |
| 264 | ok | s=6,m=11 | 0.08 | 0.22 | | 1 | | | | | 4,4,0,0 |
| 265 | ok | s=6,m=11 | 0.06 | 0.16 | 0.12 | 1 | 200.0 | 300.0 | 136.2 | 0.29 | 4,4,4,0 |
| 266 | ok | s=6,m=11 | 0.07 | 0.22 | 0.16 | 1 | 200.0 | 300.0 | 136.2 | 0.29 | 4,4,4,0 |
| 267 | ok | s=6,m=11 | 0.08 | 0.22 | | 1 | | | | | 4,4,0,0 |
| 283 | ok | s=5,m=11 | 1.17e-03 | 2.20e-03 | | 2 | | | | | 4,4,0,0 |
| 284 | ok | s=3,m=11 | 0.02 | 0.01 | | 1 | | | | | 4,4,0,0 |
| 285 | ok | s=5,m=11 | 1.28e-03 | 1.04e-03 | | 2 | | | | | 4,4,0,0 |
| 286 | ok | s=5,m=11 | 1.06e-03 | 1.09e-03 | | 2 | | | | | 4,4,0,0 |
| 287 | ok | s=5,m=11 | 1.28e-03 | 1.05e-03 | | 2 | | | | | 4,4,0,0 |
| 293 | ok | s=3,m=11 | 3.42e-03 | 4.79e-03 | 5.58e-03 | 1 | 15.3 | 15.3 | 4.3 | 1.00 | 4,4,4,0 |
| 294 | ok | s=2,m=11 | 0.05 | 0.04 | | 1 | | | | | 4,4,0,0 |
| 295 | ok | s=3,m=11 | 3.37e-03 | 4.75e-03 | 5.37e-03 | 1 | 15.3 | 15.3 | 4.3 | 1.00 | 4,4,4,0 |
| 296 | ok | s=3,m=11 | 3.37e-03 | 5.36e-03 | 5.79e-03 | 1 | 15.3 | 15.3 | 4.3 | 1.00 | 4,4,4,0 |
| 297 | ok | s=3,m=11 | 3.42e-03 | 5.41e-03 | 5.76e-03 | 1 | 15.3 | 15.3 | 4.3 | 1.00 | 4,4,4,0 |
| 308 | ok | s=6,m=11 | 0.07 | 0.22 | | 1 | | | | | 4,4,0,0 |
| 309 | ok | s=6,m=11 | 0.06 | 0.16 | | 1 | | | | | 4,4,0,0 |
| 310 | ok | s=6,m=11 | 0.08 | 0.22 | 0.16 | 1 | 200.0 | 300.0 | 136.2 | 0.29 | 4,4,4,0 |
| 311 | ok | s=6,m=11 | 0.07 | 0.22 | | 1 | | | | | 4,4,0,0 |
| 312 | ok | s=6,m=11 | 0.08 | 0.22 | 0.16 | 1 | 200.0 | 300.0 | 136.2 | 0.29 | 4,4,4,0 |
| 330 | ok | s=2,m=11 | 0.09 | 0.26 | 0.27 | 1 | 15.0 | 165.0 | 30.3 | 0.92 | 4,4,4,0 |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

| Trave | Stato | Note | V V/T | V N/M | V stab | Classe | B22xL | B33xL | Snellezza | Chi mn | Rif. cmb |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | cm | | | | |
| | | | | | | | | | | 0.29 | |
| | | | 0.43 | 0.60 | 0.62 | | 300.00 | | 136.22 | | |

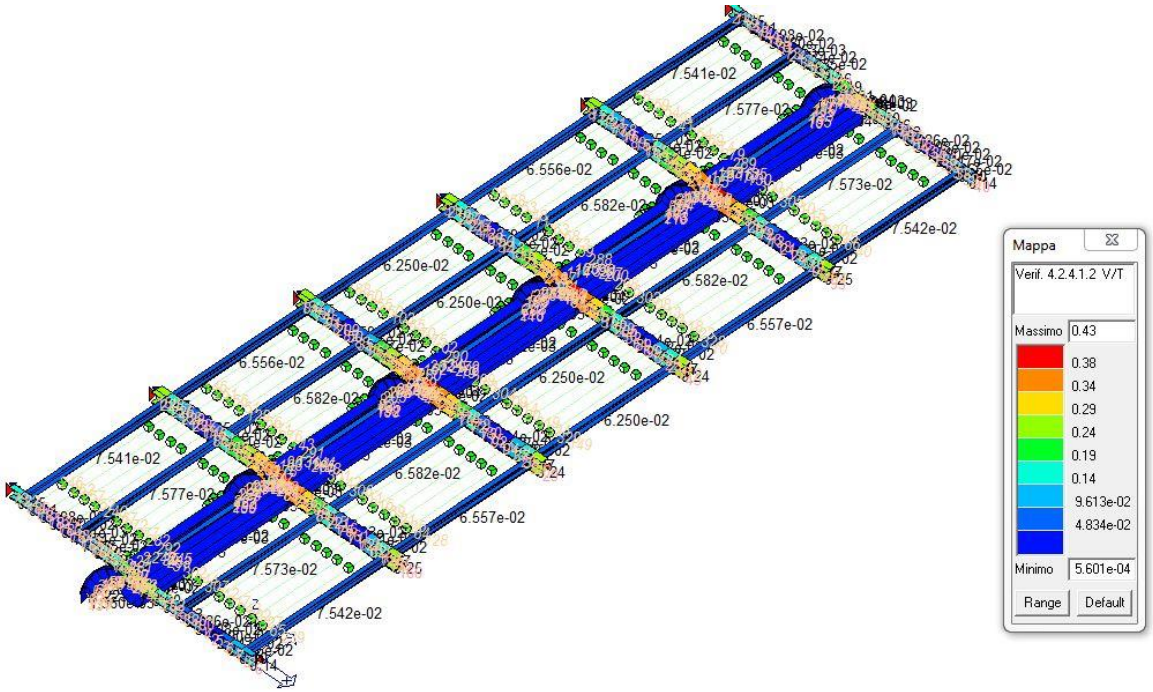
Per una migliore comprensione si riportano graficamente i risultati:



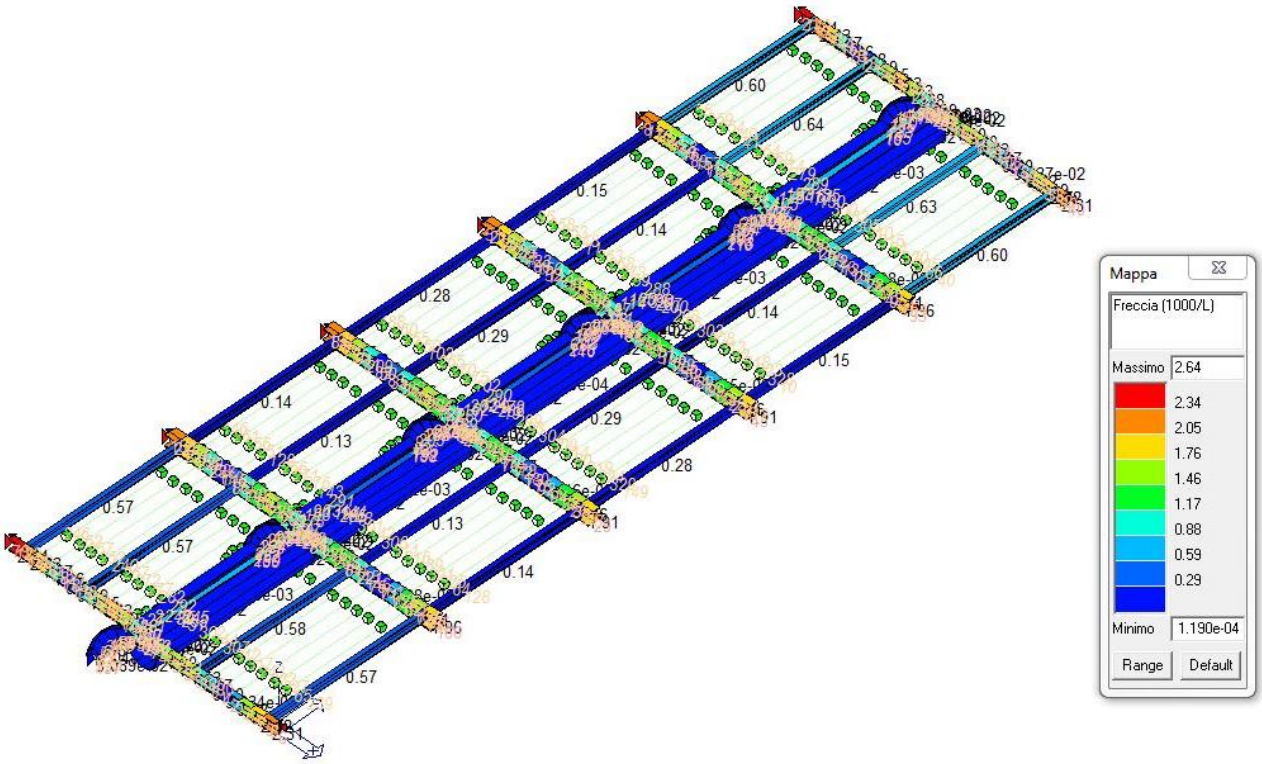

*Sfruttamento dell'acciaio*




*Verifica a presso-flessione coeff. ≤ 1*




*Verifica taglio-torsione coeff. ≤ 1*




*Spostamento acciaio*

### 3.8 Verifiche S.L. elementi in legno

L'esito delle verifiche è espresso con un codice come di seguito indicato:

***ok***: verifica con esito positivo

***NV***: verifica con esito negativo

Le verifiche sono condotte in ottemperanza alle NTC 14 Gennaio 2008 seguendo anche le indicazioni analitiche riportate nella norma tecnica UNI EN 1995-1-1:2005 "Eurocodice 5 - Progettazione delle strutture di legno - Parte 1-1: Regole generali - Regole comuni e regole per gli edifici" ; in particolare le verifiche effettuate sono riconducibili ai punti:

- 4.4.8 Stati limite ultimi
- 4.4.8.1.7 Tensoflessione
- 4.4.8.1.8 Pressoflessione
- 4.4.8.1.11 Taglio e torsione
- 4.4.8.2.1 Elementi inflessi
- 4.4.8.2.2 Elementi compressi

Le verifiche effettuate sono dettagliatamente riportate come da tabella seguente:

| | |
|---|---|
| Elem. | Numero dell'elemento |
| Tipo | Codice di individuazione del tipo di elemento:<br>trave (**T)** pilastro (**P)** asta (**A)** |
| Stato | Codice della verifica: ok verificato, NV non verificato |
| Note | Numero della sezione (s) e del materiale (m) dell'archivio |
| Ver N+/M | Verifica come da formule 4.4.6a e 4.4.6b per tensoflessione<br>I valori di Km utilizzati nelle formule sono definiti dal paragrafo 4.4.8.1.6<br>(0,7 per sezioni trasversali rettangolari; 1 per altre sezioni trasversali) |
| Ver N-/M | Verifica come da formule 4.4.7a e 4.4.7b per pressoflessione<br>I valori di Km utilizzati nelle formule sono definiti dal paragrafo 4.4.8.1.6<br>(0,7 per sezioni trasversali rettangolari; 1 per altre sezioni trasversali) |
| Ver V/T | Verifica come da formula 4.4.10 (taglio torsione) con interazione ottenuta per quadratura del termine di taglio |
| Ver N(s) | Verifica instabilità come da formula 4.4.13 |
| Kcy(z) | Fattore di instabilità utilizzato nella formula 4.4.13. Per elementi con snellezza relativa <= 0,3 Kcy(z) è posto = 1 , altrimenti Kcy(z) viene definito dalla 4.4.15 |
| Ver M(s) | Verifica come da formula 4.4.11 (effettuata in entrambi i piani principali) per instabilità laterale |
| Kcrit (y) / (z) | Fattore di instabilità laterale utilizzato nella formula 4.4.11 rispettivamente per la flessione y e z. Kcrit (y) / (z) viene definito dalla 4.4.12 |
| w,net R | Massima deformazione in combinazione rara (F frequente, P quasi permanente) |
| w,net Ri | Massima deformazione in combinazione rara (F frequente, P quasi permanente) valutata a tempo infinito |
| kdef | Fattore di deformazione dell' elemento |
| Rif. cmb | Numero della combinazione in cui si è attinto il valore riportato per le verifiche |

Si sottolinea che le cinque verifiche sono espresse dal rapporto tra domanda e capacità, affinché la verifica sia positiva il rapporto deve essere inferiore o uguale a 1. La capacità è affetta dal termine **kmod**, espressione della classe di servizio e della durata dei carichi (si considera a livello di combinazione il caso di carico di minor durata).

Le deformazioni dell' elemento espresse in rapporto ad un millesimo di lunghezza sono rappresentate dal valore istantaneo e dal valore a tempo infinito. Il valore della deformazione a tempo infinito per una combinazione di carichi è ottenuta sommando per ogni caso di carico sia il valore istantaneo che il valore ottenuto dall' aliquota quasi-permanente amplificata del fattore kdef (formula 2.2 e 2.3).

In termini analitici il contributo del caso di carico con coefficiente di combinazione ***Psi*** (diverso da 0) è ***Psi + kdef * Psi2***

| Elem. | Note | Pos. | Ver N+/M | Ver N-/M | Ver V/T | Rif. cmb | Ver N(s) | Kcy | Kcz | Ver M(s) | Kcrit(y) | Kcrit(z) | Rif. cmb |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | cm | | | | | | | | | | | |
| 2 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.8 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.8 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 11 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 17 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.00 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.00 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 19 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.00 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.00 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 20 ok | T,s=4,m=42 | 0.0 | | 0.00 | 0.00 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.00 | 0.00 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 27 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 29 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.00 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.00 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 39 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.00 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.00 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 41 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 42 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 51 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.00 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.00 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 53 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.00 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.00 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 54 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 56 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 59 ok | T,s=4,m=42 | 0.0 | | 0.00 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.00 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 64 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 65 ok | T,s=4,m=42 | 0.0 | 0.0 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.0 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 66 ok | T,s=4,m=42 | 0.0 | 0.0 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.0 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 80 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 93 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 96 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.8 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.8 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 102 ok | T,s=4,m=42 | 0.0 | | 0.00 | 0.00 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.00 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 103 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | 0.00 | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | 0.00 | | 0.0 | 1.0 | 1.0 | 0,4 |
| 105 ok | T,s=4,m=42 | 0.0 | 0.00 | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 114 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.00 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.00 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 129 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 130 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.00 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.00 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 131 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.00 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | | | 0.00 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 132 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 134 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.00 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.00 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 139 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.00 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 142 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 143 ok | T,s=4,m=42 | 0.0 | | 0.00 | 0.3 | 0,4,4 | 0.00 | 5.9e-2 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.00 | 0.3 | 0,4,4 | 0.00 | 5.9e-2 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |

| Elem. | Note | Pos. | Ver N+/M | Ver N-/M | Ver V/T | Rif. cmb | Ver N(s) | Kcy | Kcz | Ver M(s) | Kcrit(y) | Kcrit(z) | Rif. cmb |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | cm | | | | | | | | | | | |
| 148 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.8 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.8 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 161 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.00 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.00 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 162 ok | T,s=4,m=42 | 0.0 | 0.00 | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 163 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 165 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.00 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.00 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 175 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 194 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 197 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.8 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.8 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 200 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.8 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.8 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 202 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.8 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.8 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 240 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 242 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.00 | 4,0,4 | | 0.00 | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.00 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 243 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 244 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 248 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 249 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 250 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 251 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 252 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 253 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 254 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 255 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 256 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 257 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 258 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 259 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 260 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 261 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 262 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 268 ok | T,s=4,m=42 | 0.0 | | 0.00 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.00 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 269 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 270 ok | T,s=4,m=42 | 0.0 | | 0.00 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.00 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 271 ok | T,s=4,m=42 | 0.0 | | 0.00 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.00 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |

| Elem. | Note | Pos. | Ver N+/M | Ver N-/M | Ver V/T | Rif. cmb | Ver N(s) | Kcy | Kcz | Ver M(s) | Kcrit(y) | Kcrit(z) | Rif. cmb |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | cm | | | | | | | | | | | |
| 272 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 273 ok | T,s=4,m=42 | 0.0 | | 0.00 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.00 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 274 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 275 ok | T,s=4,m=42 | 0.0 | | 0.00 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.00 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 276 ok | T,s=4,m=42 | 0.0 | | 0.00 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.00 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 277 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 278 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 279 ok | T,s=4,m=42 | 0.0 | | 0.00 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.00 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 280 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 281 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 282 ok | T,s=4,m=42 | 0.0 | | 0.00 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.00 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 288 ok | T,s=4,m=42 | 0.0 | | 0.00 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.00 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 289 ok | T,s=4,m=42 | 0.0 | | 0.00 | 0.3 | 0,4,4 | 0.3 | 0.00 | 0.9 | 0.3 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.00 | 0.3 | 0,4,4 | 0.3 | 0.00 | 0.9 | 0.3 | 1.0 | 1.0 | 4,4 |
| 290 ok | T,s=4,m=42 | 0.0 | | 0.00 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.00 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 291 ok | T,s=4,m=42 | 0.0 | | 0.00 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.00 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 292 NV | T,s=4,m=42 | 0.0 | | 0.00 | 0.3 | 0,4,4 | 0.3 | 0.00 | 0.9 | 0.3 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.00 | 0.3 | 0,4,4 | 0.3 | 0.00 | 0.9 | 0.3 | 1.0 | 1.0 | 4,4 |
| 298 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 299 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 300 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 301 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 302 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 303 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 304 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 305 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 306 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 307 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 313 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 314 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 315 ok | T,s=4,m=42 | 0.0 | 0.00 | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | 0.00 | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 316 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 317 ok | T,s=4,m=42 | 0.0 | 0.00 | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | 0.00 | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 318 ok | T,s=4,m=42 | 0.0 | 0.00 | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 319 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |

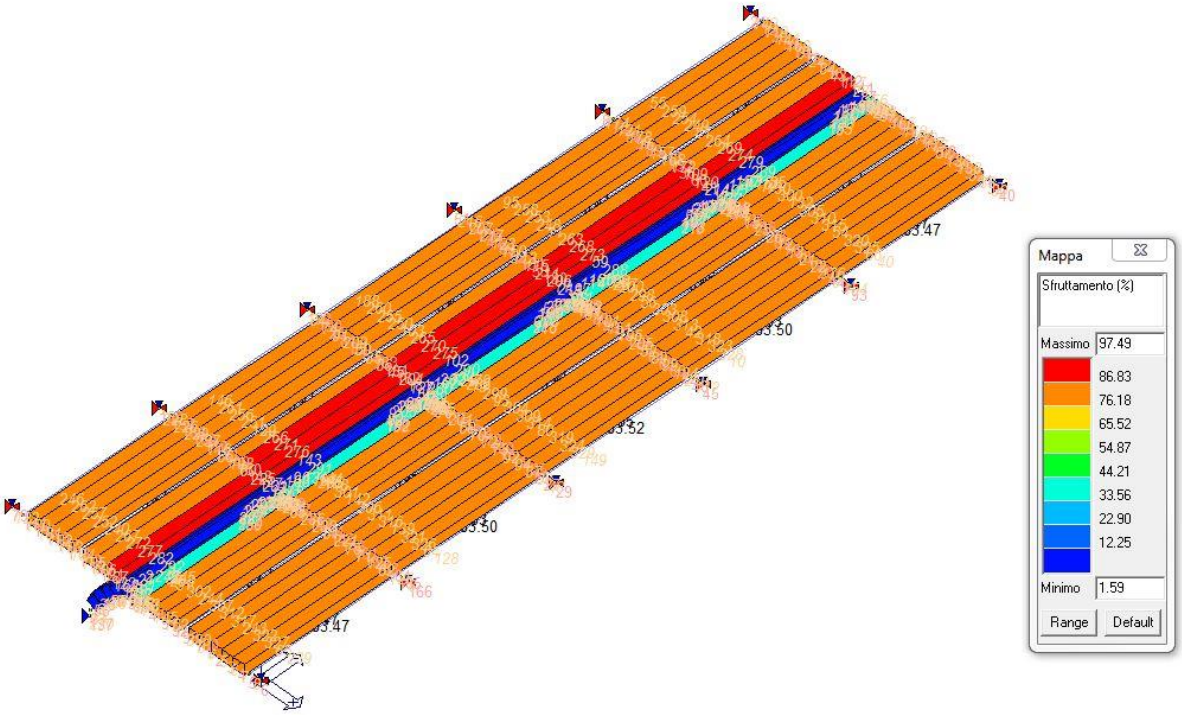
| Elem. | Note | Pos. | Ver N+/M | Ver N-/M | Ver V/T | Rif. cmb | Ver N(s) | Kcy | Kcz | Ver M(s) | Kcrit(y) | Kcrit(z) | Rif. cmb |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | cm | | | | | | | | | | | |
| 320 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 321 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 322 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 323 ok | T,s=4,m=42 | 0.0 | 0.00 | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | 0.00 | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 324 ok | T,s=4,m=42 | 0.0 | 0.00 | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 325 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 326 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 327 ok | T,s=4,m=42 | 0.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| | | 200.0 | 0.00 | | 0.3 | 4,0,4 | | | | 0.0 | 1.0 | 1.0 | 0,4 |
| 328 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 329 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.3 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| 331 ok | T,s=4,m=42 | 0.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | 200.0 | | 0.0 | 0.00 | 0,4,4 | 0.00 | 0.00 | 0.9 | 0.00 | 1.0 | 1.0 | 4,4 |
| | | | | | | | | | | | | | |
| **Elem.** | | | **Ver N+/M** | **Ver N-/M** | **Ver V/T** | | **Ver N(s)** | **Kcy** | **Kcz** | **Ver M(s)** | **Kcrit(y)** | **Kcrit(z)** | |
| | | | | | | | | 0.06 | 0.85 | | 1.00 | 1.00 | |
| | | | 0.00 | 0.00 | 0.33 | | 0.33 | | | 0.33 | | | |

| Elem. | w,net R | w,net F | w,net P | Rif. cmb | Kdef | w,net Ri | w,net Fi | w,net Pi | Rif. cmb |
|---|---|---|---|---|---|---|---|---|---|
| 2 | 1.51e-02 | 1.51e-02 | 1.51e-02 | 3,2,1 | 2.0 | 4.54e-02 | 4.54e-02 | 4.54e-02 | 3,2,1 |
| 11 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 17 | 1.80e-02 | 1.80e-02 | 1.80e-02 | 3,2,1 | 2.0 | 5.40e-02 | 5.40e-02 | 5.40e-02 | 3,2,1 |
| 19 | 0.7 | 0.7 | 0.7 | 3,2,1 | 2.0 | 2.1 | 2.1 | 2.1 | 3,2,1 |
| 20 | 1.20e-02 | 1.20e-02 | 1.20e-02 | 3,2,1 | 2.0 | 3.59e-02 | 3.59e-02 | 3.59e-02 | 3,2,1 |
| 27 | 1.72e-02 | 1.72e-02 | 1.72e-02 | 3,2,1 | 2.0 | 5.16e-02 | 5.16e-02 | 5.16e-02 | 3,2,1 |
| 29 | 2.14e-02 | 2.14e-02 | 2.14e-02 | 3,2,1 | 2.0 | 6.41e-02 | 6.41e-02 | 6.41e-02 | 3,2,1 |
| 39 | 2.10e-02 | 2.10e-02 | 2.10e-02 | 3,2,1 | 2.0 | 6.29e-02 | 6.29e-02 | 6.29e-02 | 3,2,1 |
| 41 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.2 | 4.2 | 4.2 | 3,2,1 |
| 42 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 51 | 0.7 | 0.7 | 0.7 | 3,2,1 | 2.0 | 2.1 | 2.1 | 2.1 | 3,2,1 |
| 53 | 1.82e-02 | 1.82e-02 | 1.82e-02 | 3,2,1 | 2.0 | 5.47e-02 | 5.47e-02 | 5.47e-02 | 3,2,1 |
| 54 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.2 | 4.2 | 4.2 | 3,2,1 |
| 56 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 59 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 64 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 65 | 1.3 | 1.3 | 1.3 | 3,2,1 | 2.0 | 4.0 | 4.0 | 4.0 | 3,2,1 |
| 66 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.2 | 4.2 | 4.2 | 3,2,1 |
| 80 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 93 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 96 | 1.58e-02 | 1.58e-02 | 1.58e-02 | 3,2,1 | 2.0 | 4.75e-02 | 4.75e-02 | 4.75e-02 | 3,2,1 |
| 102 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 103 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 105 | 1.75e-02 | 1.75e-02 | 1.75e-02 | 3,2,1 | 2.0 | 5.26e-02 | 5.26e-02 | 5.26e-02 | 3,2,1 |
| 114 | 1.62e-02 | 1.62e-02 | 1.62e-02 | 3,2,1 | 2.0 | 4.87e-02 | 4.87e-02 | 4.87e-02 | 3,2,1 |
| 129 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 130 | 0.7 | 0.7 | 0.7 | 3,2,1 | 2.0 | 2.1 | 2.1 | 2.1 | 3,2,1 |
| 131 | 1.72e-02 | 1.72e-02 | 1.72e-02 | 3,2,1 | 2.0 | 5.16e-02 | 5.16e-02 | 5.16e-02 | 3,2,1 |
| 132 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 134 | 1.74e-02 | 1.74e-02 | 1.74e-02 | 3,2,1 | 2.0 | 5.22e-02 | 5.22e-02 | 5.22e-02 | 3,2,1 |
| 139 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 142 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 143 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 148 | 0.7 | 0.7 | 0.7 | 3,2,1 | 2.0 | 2.1 | 2.1 | 2.1 | 3,2,1 |
| 161 | 2.18e-02 | 2.18e-02 | 2.18e-02 | 3,2,1 | 2.0 | 6.53e-02 | 6.53e-02 | 6.53e-02 | 3,2,1 |
| 162 | 1.64e-02 | 1.64e-02 | 1.64e-02 | 3,2,1 | 2.0 | 4.92e-02 | 4.92e-02 | 4.92e-02 | 3,2,1 |

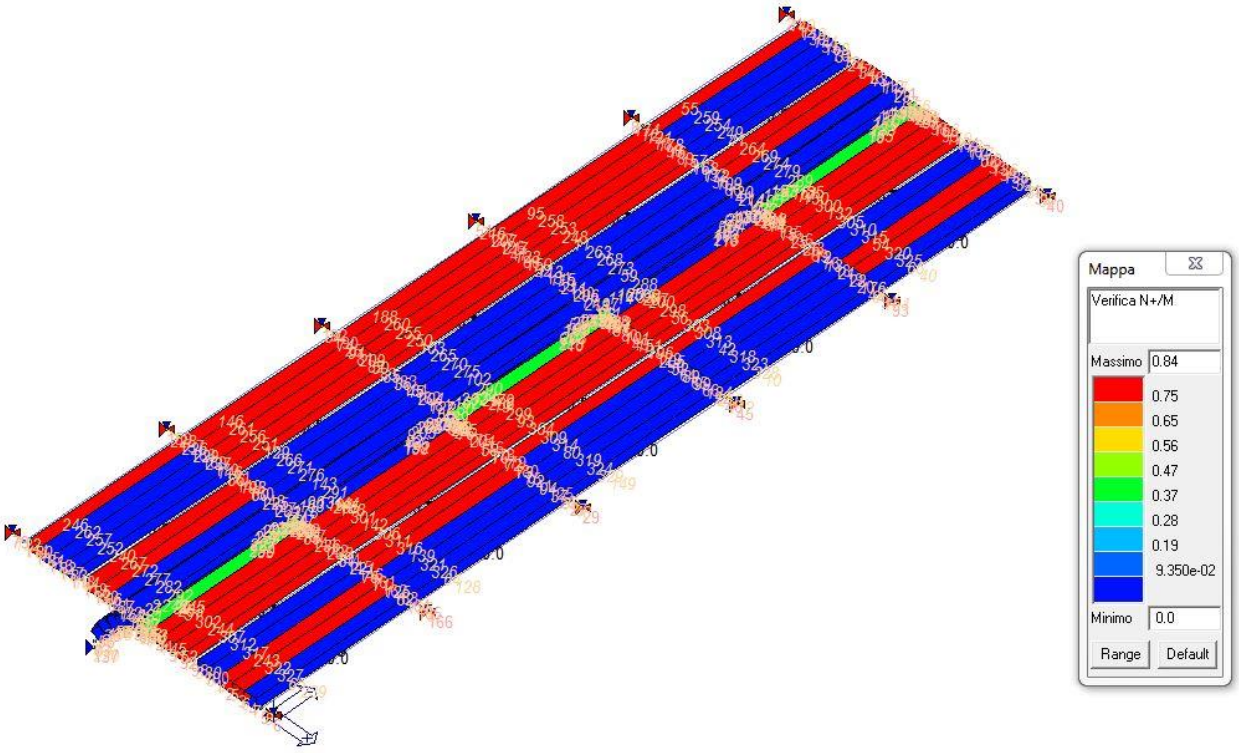
| Elem. | w,net R | w,net F | w,net P | Rif. cmb | Kdef | w,net Ri | w,net Fi | w,net Pi | Rif. cmb |
|---|---|---|---|---|---|---|---|---|---|
| 163 | 1.65e-02 | 1.65e-02 | 1.65e-02 | 3,2,1 | 2.0 | 4.96e-02 | 4.96e-02 | 4.96e-02 | 3,2,1 |
| 165 | 1.63e-02 | 1.63e-02 | 1.63e-02 | 3,2,1 | 2.0 | 4.89e-02 | 4.89e-02 | 4.89e-02 | 3,2,1 |
| 175 | 1.56e-02 | 1.56e-02 | 1.56e-02 | 3,2,1 | 2.0 | 4.67e-02 | 4.67e-02 | 4.67e-02 | 3,2,1 |
| 194 | 2.12e-02 | 2.12e-02 | 2.12e-02 | 3,2,1 | 2.0 | 6.37e-02 | 6.37e-02 | 6.37e-02 | 3,2,1 |
| 197 | 1.70e-02 | 1.70e-02 | 1.70e-02 | 3,2,1 | 2.0 | 5.11e-02 | 5.11e-02 | 5.11e-02 | 3,2,1 |
| 200 | 0.7 | 0.7 | 0.7 | 3,2,1 | 2.0 | 2.1 | 2.1 | 2.1 | 3,2,1 |
| 202 | 1.61e-02 | 1.61e-02 | 1.61e-02 | 3,2,1 | 2.0 | 4.82e-02 | 4.82e-02 | 4.82e-02 | 3,2,1 |
| 240 | 1.3 | 1.3 | 1.3 | 3,2,1 | 2.0 | 4.0 | 4.0 | 4.0 | 3,2,1 |
| 242 | 1.66e-02 | 1.66e-02 | 1.66e-02 | 3,2,1 | 2.0 | 4.97e-02 | 4.97e-02 | 4.97e-02 | 3,2,1 |
| 243 | 1.3 | 1.3 | 1.3 | 3,2,1 | 2.0 | 4.0 | 4.0 | 4.0 | 3,2,1 |
| 244 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 248 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 249 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.2 | 4.2 | 4.2 | 3,2,1 |
| 250 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 251 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 252 | 1.3 | 1.3 | 1.3 | 3,2,1 | 2.0 | 4.0 | 4.0 | 4.0 | 3,2,1 |
| 253 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 254 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.2 | 4.2 | 4.2 | 3,2,1 |
| 255 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 256 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 257 | 1.3 | 1.3 | 1.3 | 3,2,1 | 2.0 | 4.0 | 4.0 | 4.0 | 3,2,1 |
| 258 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 259 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.2 | 4.2 | 4.2 | 3,2,1 |
| 260 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 261 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 262 | 1.3 | 1.3 | 1.3 | 3,2,1 | 2.0 | 4.0 | 4.0 | 4.0 | 3,2,1 |
| 268 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 269 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.2 | 4.2 | 4.2 | 3,2,1 |
| 270 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 271 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 272 | 1.3 | 1.3 | 1.3 | 3,2,1 | 2.0 | 4.0 | 4.0 | 4.0 | 3,2,1 |
| 273 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 274 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.2 | 4.2 | 4.2 | 3,2,1 |
| 275 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 276 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 277 | 1.3 | 1.3 | 1.3 | 3,2,1 | 2.0 | 4.0 | 4.0 | 4.0 | 3,2,1 |
| 278 | 1.82e-02 | 1.82e-02 | 1.82e-02 | 3,2,1 | 2.0 | 5.47e-02 | 5.47e-02 | 5.47e-02 | 3,2,1 |
| 279 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 280 | 1.81e-02 | 1.81e-02 | 1.81e-02 | 3,2,1 | 2.0 | 5.44e-02 | 5.44e-02 | 5.44e-02 | 3,2,1 |
| 281 | 1.87e-02 | 1.87e-02 | 1.87e-02 | 3,2,1 | 2.0 | 5.62e-02 | 5.62e-02 | 5.62e-02 | 3,2,1 |
| 282 | 1.3 | 1.3 | 1.3 | 3,2,1 | 2.0 | 4.0 | 4.0 | 4.0 | 3,2,1 |
| 288 | 1.3 | 1.3 | 1.3 | 3,2,1 | 2.0 | 4.0 | 4.0 | 4.0 | 3,2,1 |
| 289 | 1.3 | 1.3 | 1.3 | 3,2,1 | 2.0 | 4.0 | 4.0 | 4.0 | 3,2,1 |
| 290 | 1.3 | 1.3 | 1.3 | 3,2,1 | 2.0 | 4.0 | 4.0 | 4.0 | 3,2,1 |
| 291 | 1.3 | 1.3 | 1.3 | 3,2,1 | 2.0 | 4.0 | 4.0 | 4.0 | 3,2,1 |
| 292 | 1.3 | 1.3 | 1.3 | 3,2,1 | 2.0 | 4.0 | 4.0 | 4.0 | 3,2,1 |
| 298 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 299 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 300 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 301 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 302 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 303 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 304 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 305 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 306 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 307 | 1.3 | 1.3 | 1.3 | 3,2,1 | 2.0 | 4.0 | 4.0 | 4.0 | 3,2,1 |
| 313 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 314 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 315 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.2 | 4.2 | 4.2 | 3,2,1 |
| 316 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 317 | 1.3 | 1.3 | 1.3 | 3,2,1 | 2.0 | 4.0 | 4.0 | 4.0 | 3,2,1 |
| 318 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 319 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 320 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.2 | 4.2 | 4.2 | 3,2,1 |
| 321 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 322 | 1.3 | 1.3 | 1.3 | 3,2,1 | 2.0 | 4.0 | 4.0 | 4.0 | 3,2,1 |
| 323 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 324 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |

| Elem. | w,net R | w,net F | w,net P | Rif. cmb | Kdef | w,net Ri | w,net Fi | w,net Pi | Rif. cmb |
|---|---|---|---|---|---|---|---|---|---|
| 325 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.2 | 4.2 | 4.2 | 3,2,1 |
| 326 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 327 | 1.3 | 1.3 | 1.3 | 3,2,1 | 2.0 | 4.0 | 4.0 | 4.0 | 3,2,1 |
| 328 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 329 | 1.4 | 1.4 | 1.4 | 3,2,1 | 2.0 | 4.1 | 4.1 | 4.1 | 3,2,1 |
| 331 | 2.15e-02 | 2.15e-02 | 2.15e-02 | 3,2,1 | 2.0 | 6.44e-02 | 6.44e-02 | 6.44e-02 | 3,2,1 |
| | | | | | | | | | |
| **Elem.** | **w,net R** | **w,net F** | **w,net P** | | | **w,net Ri** | **w,net Fi** | **w,net Pi** | |
| | 1.40 | 1.40 | 1.40 | | | 4.21 | 4.21 | 4.21 | |

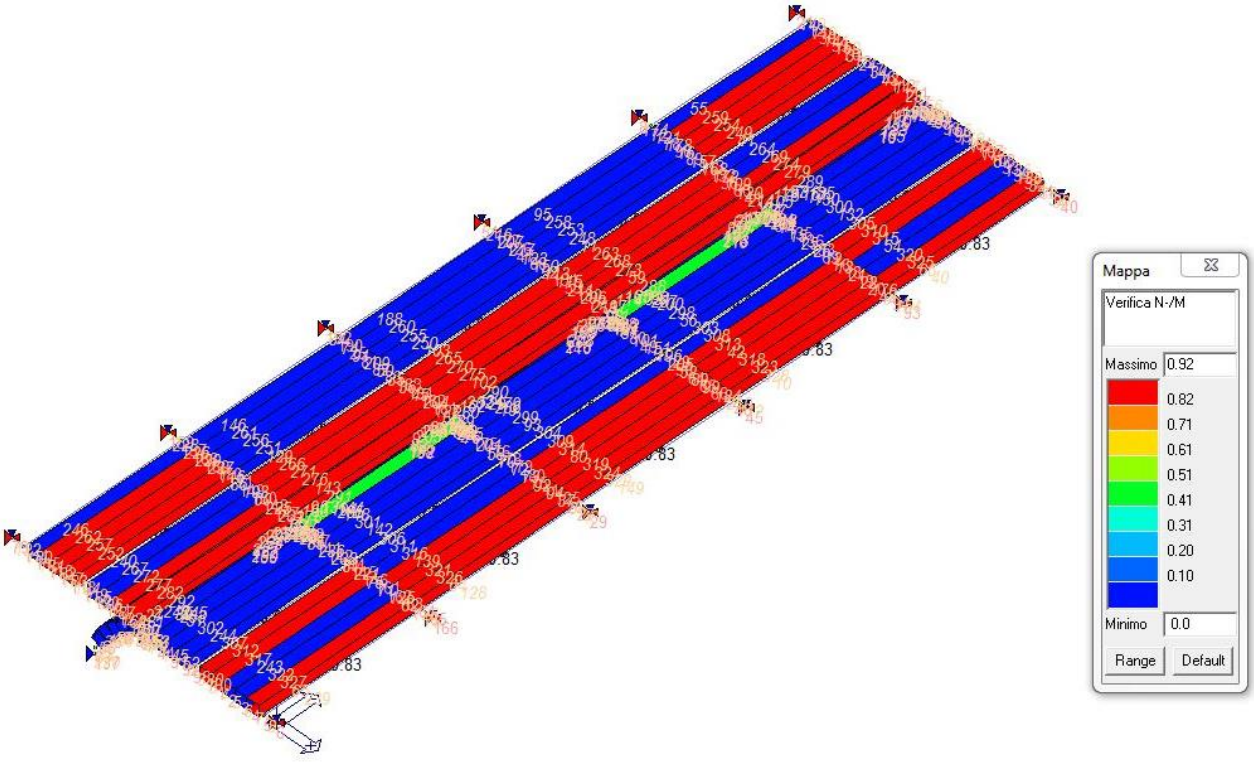
Per una migliore comprensione si riportano graficamente i risultati:



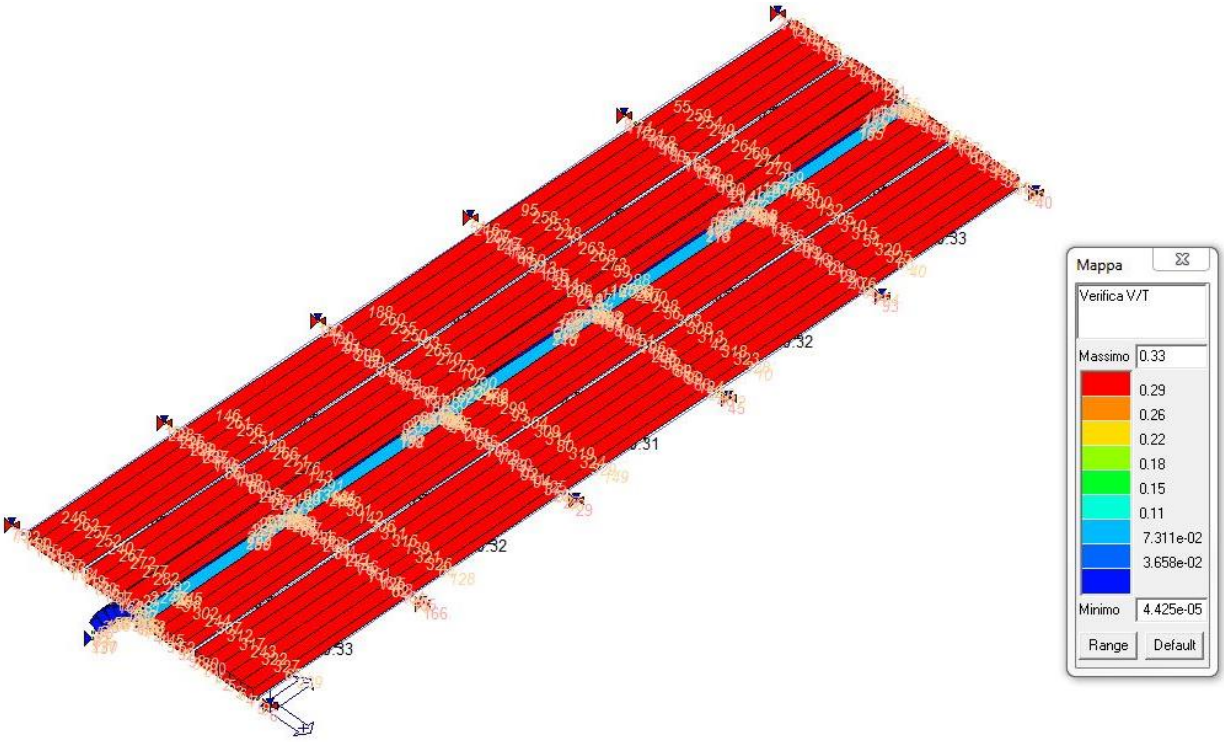

*Sfruttamento del legno*



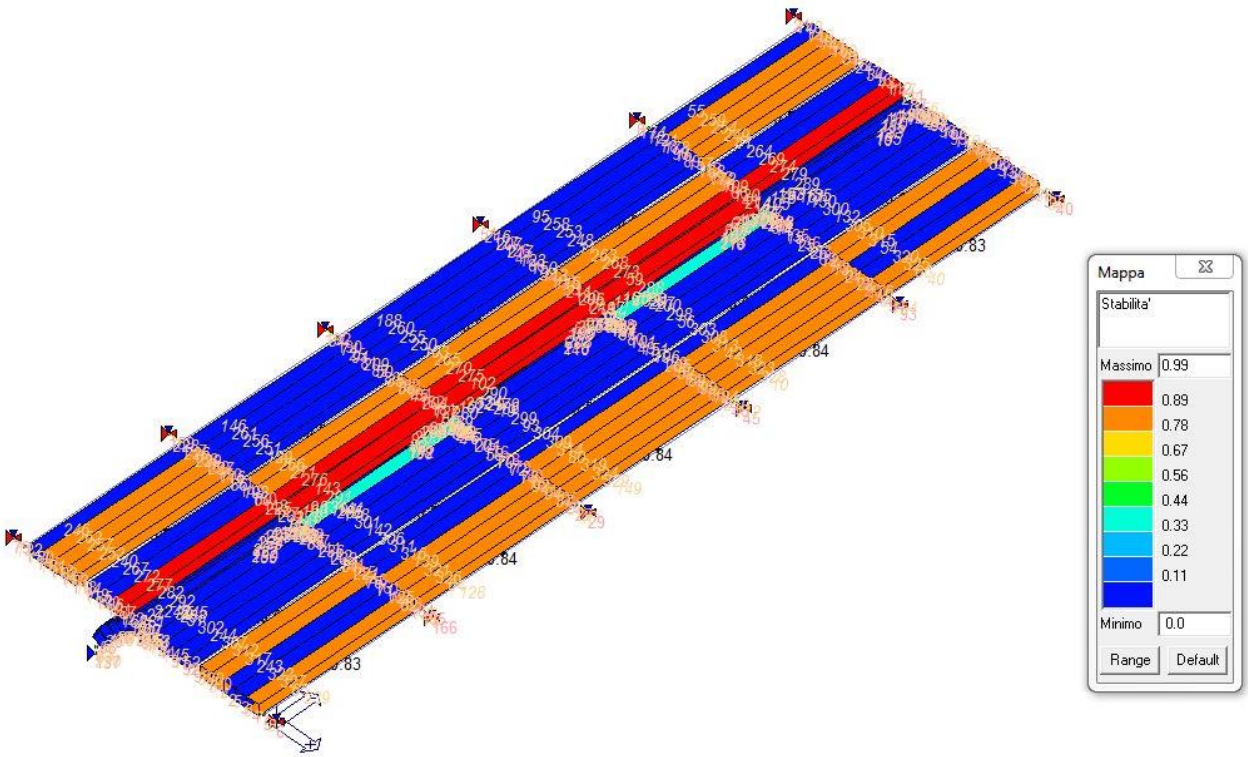

*Verifica a presso-flessione coeff. ≤ 1*



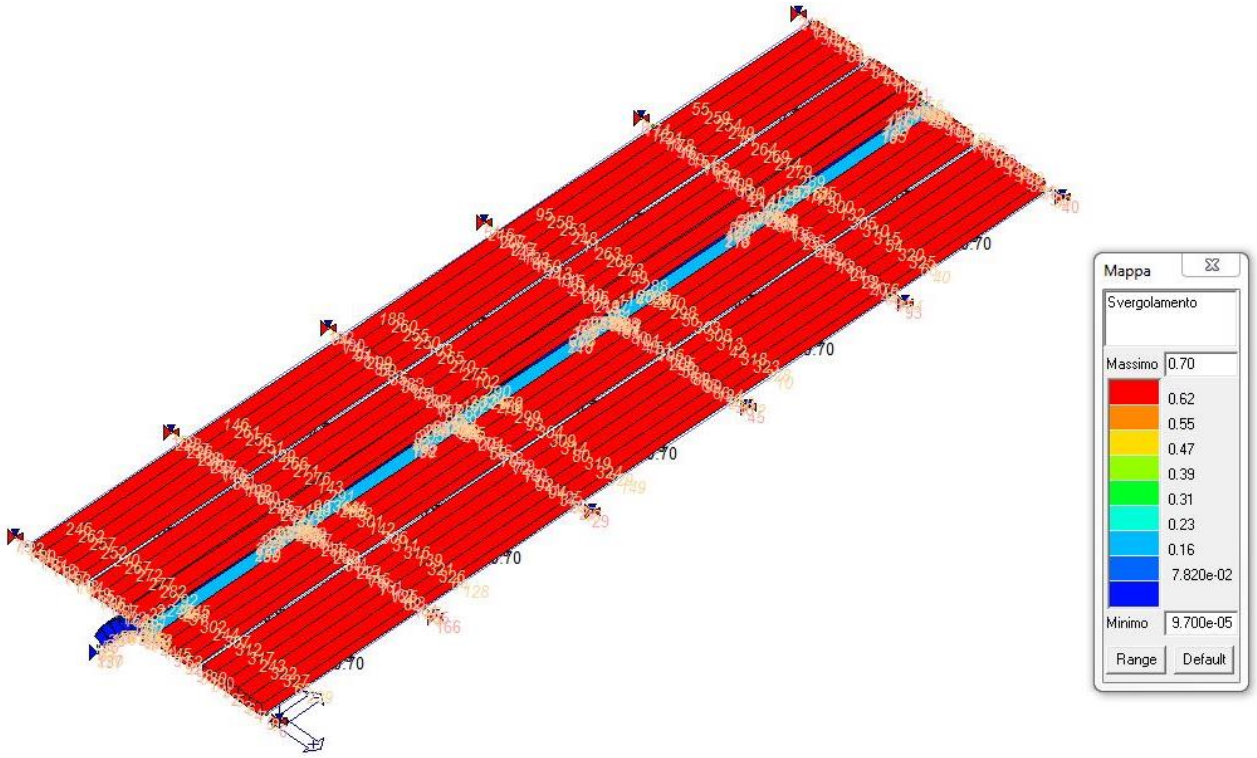

*Verifica a tenso-flessione coeff. ≤ 1*



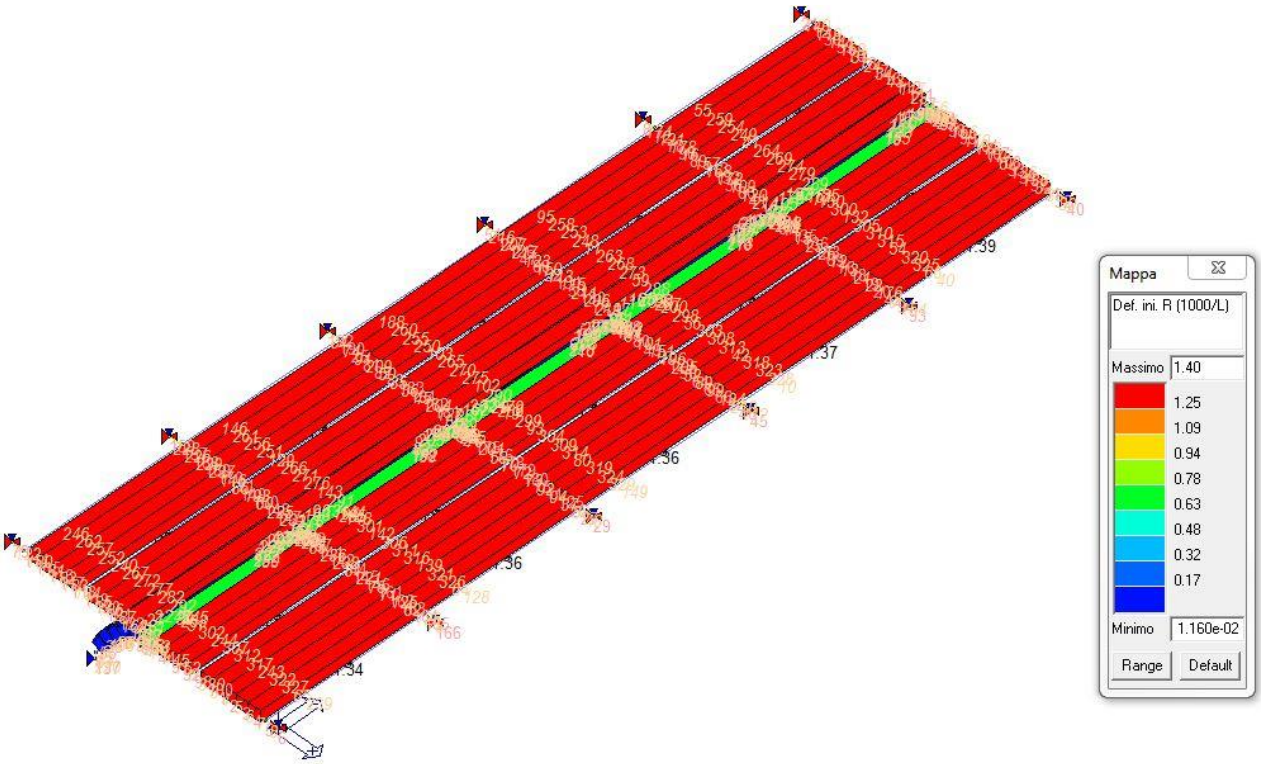

*Verifica a taglio-torsione coeff. ≤ 1*




*Stabilità ≤ 1*




*Svergolamento ≤ 1*




*Spostamento in condizione Rara*