

COMMITTENTE:



PROGETTAZIONE:



DIREZIONE TECNICA

U.O. GALLERIE

PROGETTO DEFINITIVO

Nuova linea Ferrandina - Matera La Martella per il collegamento di Matera con la rete ferroviaria nazionale

NUOVA LINEA FERRANDINA - MATERA LA MARTELLA

GALLERIA MIGLIONICO

Relazione geotecnica e di calcolo delle opere di imbocco

SCALA:

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1 PREMESSA

Nel presente documento vengono analizzate le tematiche progettuali e gli aspetti tecnici relativi al progetto definitivo delle opere in sotterraneo della nuova linea Ferrandina – Matera La Martella, per il collegamento di Matera con la rete ferroviaria nazionale. In particolare, si fa riferimento agli interventi di risanamento e messa in sicurezza della esistente Galleria Miglionico, lunga oltre 6 km, nonché della realizzazione di un’uscita/accesso intermedio, costituito da una finestra carrabile, denominata finestra Miglionico, lunga circa 600 m e destinata all’esodo dei passeggeri e all’accesso dei mezzi di soccorso.

La Galleria Miglionico è stata già oggetto da parte di Italferr di una progettazione esecutiva degli interventi di ripristino, conclusasi nel 2006. Gran parte delle informazioni desunte all’epoca, così come buona parte delle scelte progettuali effettuate, sono state considerate un utile riferimento per la presente fase di progettazione.

2 SCOPO E CONTENUTI DEL DOCUMENTO

Nella presente relazione si affrontano le problematiche progettuali connesse alla realizzazione delle opere di imbocco della galleria Miglionico, nell’ambito del progetto definitivo della Linea Ferrandina-Matera. Per l’inquadramento generale delle opere in sotterraneo si rimanda al documento “Relazione tecnica delle opere in sotterraneo” (Rif. [3]). In questo documento sono illustrate le soluzioni progettuali adottate e le verifiche strutturali delle gallerie artificiali.

3 NORMATIVA DI RIFERIMENTO

3.1 Leggi e normative cogenti

- Rif. [1] Decreto Ministero delle Infrastrutture e Trasporti 17/01/2018, “Aggiornamento delle Nuove norme tecniche per le costruzioni”;
- Rif. [2] C.S.LL.PP., Circolare n°7 del 19/01/2019, “Istruzioni per l’applicazione dell’“Aggiornamento delle “Norme tecniche per le costruzioni” di cui al DM 17/01/2018”;
- Rif. [3] Decreto Ministeriale 28/10/2005. “Sicurezza nelle gallerie ferroviarie”;

3.2 Normative non cogenti e raccomandazioni

- Rif. [4] SIG, “Linee guida per la progettazione, l’appalto e la costruzione di opere in sotterraneo”, 1997;
- Rif. [5] ITA, “Guidelines for the design of tunnels”, 1988;
- Rif. [6] AGI, “Raccomandazioni sulla programmazione ed esecuzione delle indagini geotecniche”, 1977;
- Rif. [7] Cotecchia V., Fidelibus M.D., Guerricchio A., Tulipano L. “Valutazione del rischio di venute d’acqua nella realizzazione della galleria ferroviaria attraversante il rilievo argilloso di Miglionico”, Geol. Appl. Idrogeol., Vol. XXXI, Bari, 1996;
- Rif. [8] Cotecchia V. e Tafuni N. “Galleria “Miglionico in argille azzurre: metodologie costruttive e di monitoraggio strutturale e geotecnico”, Gallerie e Grandi Opere Sotterranee, Marzo 1997.

3.3 Prescrizioni e specifiche tecniche (RFI, ITF)

- Rif. [9] RFI, doc RFI DTC SI MA IFS 001 C “Manuale di Progettazione delle opere civili” (21/12/2018);
- Rif. [10] RFI, doc RFI DTC SI SP IFS 001 C “Capitolato generale tecnico di Appalto delle opere civili” (21/12/2018);

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Rif. [11] ITALFERR, Specifica Tecnica PPA.0002403 “Linee guida per la progettazione geotecnica delle gallerie naturali” (Dic 2015).

4 DOCUMENTI DI RIFERIMENTO

4.1 Documenti Referenziati

Come input per il presente documento sono stati utilizzati gli elaborati di progetto relativi alle precedenti fasi progettuali:

Rif. [12] ITALFERR, Progetto Esecutivo (2006);

Rif. [13] ITALFERR, Progetto Preliminare (2018).

Nel presente documento si fa inoltre riferimento ai seguenti elaborati allegati al progetto:

Rif. [14] Italferr, documento IA5F00F13ROMD0000001A “Dossier dati e requisiti di base” datato Agosto 2017;

Rif. [15] U.O. Geologia, Gestione Terre e Bonifiche, Elaborati Specialistici;

Rif. [16] U.O. Infrastrutture Sud, Elaborati Specialistici.

4.2 Documenti Correlati

Rif. [17] Lunardi P. (2006). Progetto e Costruzione di Gallerie: Analisi delle deformazioni controllate nelle rocce e nei suoli - ADECO-RS – (Hoepli Ed.);

Rif. [18] Bernaud D., Benamar I., Rousset G. (1994). La “nouvelle méthode implicite” pour le calcul des tunnel dans les milieux élastoplastiques et viscoplastiques – Revue Francaise de Géotechnique, N° 68.

Rif. [19] Bernaud D., Rousset G. (1992). La « nouvelle méthode implicite » pour l'étude du dimensionnement des tunnels – Revue Francaise de Géotechnique, N° 60.

Rif. [20] Peck R.B. (1969). Deep excavations and tunnelling in soft ground. SOA Report 7th Int. Conf. SMFE Mexico City, State of the Art Volume.

4.3 Documenti Superati

Non sono presenti documenti superati.

5 ALLEGATI

Il documento è corredato dai seguenti allegati:

All. [1] Risultati delle analisi di verifica della Nuova Galleria Artificiale

6 DOCUMENTI PRODOTTI A SUPPORTO

I contenuti della presente relazione sono completati dai seguenti elaborati di progetto:

Rif. [21] U.O. Gallerie, documento IA5F01D07RHGN0000001A "Relazione tecnica delle opere in sotterraneo", datato Luglio 2019;

Rif. [22] U.O. Gallerie, documento IA5F01D07SPGN0000001A "Caratteristiche dei materiali - Note generali ", datato Luglio 2019;

Rif. [23] U.O. Gallerie, documento IA5F01D07WBG0100001A "Tratte a singolo binario - Sezioni tipo di intradosso", datato Luglio 2019;

- Rif. [24] U.O. Gallerie, documento IA5F01D07WBG0100003A "Tratte artificiali di nuova realizzazione - Sezioni tipo di intradosso", datato Luglio 2019;
- Rif. [25] U.O. Gallerie, documento IA5F01D07RHGN0100001A "Galleria Miglionico - Relazione geotecnica e di calcolo della galleria naturale", datato Luglio 2019;
- Rif. [26] U.O. Gallerie, documento IA5F01D07F5GN0100001A "Galleria Miglionico - Profilo geotecnico", datato Luglio 2019;
- Rif. [27] U.O. Gallerie, documento IA5F01D07L9GA0100001A "Sistemazione finale - Planimetria e profilo", datato Luglio 2019;
- Rif. [28] U.O. Gallerie, documento IA5F01D07W9GA0100001A "Sistemazione finale - Sezioni trasversali", datato Luglio 2019;
- Rif. [29] U.O. Gallerie, documento IA5F01D07BBGA0100001A "Portale d'imbocco - Carpenteria", datato Luglio 2019;
- Rif. [30] U.O. Gallerie, documento IA5F01D07BBGA0100002A "Nuova Galleria artificiale - Carpenteria", datato Luglio 2019;
- Rif. [31] U.O. Gallerie, documento IA5F01D07BBGA0100003A "Galleria artificiale esistente - Carpenteria", datato Luglio 2019;
- Rif. [32] U.O. Gallerie, documento IA5F01D07L9GA0200001A "Sistemazione finale - Planimetria e profilo", datato Luglio 2019;
- Rif. [33] U.O. Gallerie, documento IA5F01D07W9GA0200001A "Sistemazione finale - Sezioni trasversali", datato Luglio 2019;
- Rif. [34] U.O. Gallerie, documento IA5F01D07BBGA0200001A "Portale d'imbocco - Carpenteria", datato Luglio 2019;
- Rif. [35] U.O. Gallerie, documento IA5F01D07BBGA0200002A "Nuova Galleria artificiale - Carpenteria", datato Luglio 2019;
- Rif. [36] U.O. Gallerie, documento IA5F01D07BBGA0200003A "Galleria artificiale esistente - Carpenteria", datato Luglio 2019.

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7 DESCRIZIONE DELL'OPERA

7.1 Il tracciato e le opere in sotterraneo

La lunghezza totale del tracciato della linea Ferrandina - Matera La Martella, dalla stazione di Ferrandina (pk 0+000.00) alla stazione di Matera La Martella inclusa (pk 19+543.99), è di circa 20 km e si sviluppa in sotterraneo per una lunghezza complessiva di circa 6.5 km, mediante la galleria naturale esistente denominata Miglionico. Di nuova realizzazione è invece la finestra Miglionico che, innestandosi alla pk 6+245.30, presenta una lunghezza complessiva di 609 m, suddivisi in opere di imbocco (portale e galleria artificiale) di lunghezza complessiva pari a 35.5 m e in galleria naturale di lunghezza complessiva pari a 573.5 m

La massima velocità di tracciato è di 120 km/h; in galleria di linea si ha una pendenza longitudinale massima pari a 12,7 ‰, la massima copertura è pari a 330 m circa e si verifica nell'intorno della progressiva 4+200.

La galleria Miglionico esistente presenta le tratte di imbocco in artificiale scatolare con configurazione a doppio binario, le tratte di galleria naturale a doppio binario con sezione di intradosso policentrica, la tratta centrale di galleria naturale a singolo binario con sezione circolare. In Tabella 1 si sintetizza quanto appena detto.

Tabella 1 Configurazione galleria esistente

Sezione di intradosso		pk	
DB	Artificiale Scatolare	2+390.45	2+438.45
	Naturale Policentrica	2+438.45	3+455.11
SB	Naturale Circolare	3+455.11	7+181.29
DB	Naturale Policentrica	7+181.29	8+708.89
	Artificiale Scatolare	8+708.89	8+853.89

In Tabella 2 si riporta invece la configurazione di progetto che, secondo gli interventi previsti, prevede il prolungamento delle gallerie artificiali, circa 50 m per entrambi gli imbocchi, e la realizzazione di un controanello in calcestruzzo armato (impermeabilizzato full-round), che seguirà la forma circolare o policentrica degli intradossi esistenti delle tratte a singolo o doppio binario esistenti rispettivamente.

Tabella 2 Progressive della galleria Miglionico

		pk	L (m)
Tratto in artificiale lato Ferrandina (GA01)	inizio portale	2+345.60	15.80
	inizio GA nuova	2+361.40	29.05
	inizio GA esistente	2+390.45	48.00
Tratto in naturale (GN01)	inizio GN DB	2+438.45	914.85
	inizio GN SB	3+353.30	3981.17
	fine GN SB	7+334.47	
	fine GN DB	8+709.39	
Tratto in artificiale lato Matera (GA02)	fine GA esistente	8+853.89	144.50
	fine GA nuova	8+888.59	34.70
	fine portale	8+904.39	15.80

Per ulteriori dettagli sulla descrizione del tracciato della galleria di linea e della finestra si rimanda alla "Relazione tecnica delle opere in sotterraneo" (Rif. [21]).

8 FASE CONOSCITIVA

Nella fase conoscitiva si acquisiscono gli elementi necessari alla caratterizzazione e modellazione geologica del sito e alla caratterizzazione e modellazione geotecnica del volume significativo del mezzo interessato dall'opera.

8.1 Inquadramento geologico

Per una dettagliata descrizione del modello geologico si rimanda al documento "Relazione geologica, geomorfologica ed idrogeologica" (Rif. [15]).

8.2 Indagini geotecniche

Per una dettagliata descrizione delle indagini geotecniche eseguite sul sito si rimanda al documento "Relazione geotecnica e di calcolo" (Rif. [25]).

8.3 Caratterizzazione e modellazione geotecnica

Gli imbocchi della galleria naturale Miglionico sono realizzati all'interno di un'unica formazione, per esattezza la formazione delle argille supappennine (ASP), quindi una stratigrafia omogenea da piano campagna sino alla base delle opere di sostegno, con caratteristiche meccaniche che migliorano con l'aumentare della profondità.

I risultati delle indagini geotecniche, in sito e di laboratorio, hanno permesso di definire il modello geotecnico, rappresentativo delle condizioni stratigrafiche e delle caratteristiche fisico-meccaniche dei terreni interessati dalle opere di imbocco. Il modello geotecnico complessivo dell'opera in sotterraneo è rappresentato nell'elaborato "Galleria Miglionico - Profilo Geotecnico" (Rif. [26]).

8.3.1 Definizione dei valori caratteristici dei parametri geotecnici utilizzati nelle analisi

I risultati delle indagini geotecniche, in sito e di laboratorio, hanno permesso di definire il modello geotecnico, rappresentativo delle condizioni stratigrafiche e delle caratteristiche fisico-meccaniche dei terreni interessati dalle opere di imbocco.

I parametri geotecnici caratteristici utilizzati nelle analisi di simulazione e verifiche, in riferimento alla stratigrafia assunta, sono riportati nelle tabelle seguenti:

Tabella 3 Valori caratteristici dei parametri geotecnici utilizzati nelle analisi degli imbocchi

Formazione	γ	c'	ϕ'	E'
	(kN/m ³)	(kPa)	(°)	(MPa)
ASP	20	0	25	40

Dove:

γ = peso di volume naturale

ϕ' = angolo di resistenza al taglio

c' = coesione drenata

E = modulo di deformazione

8.3.2 Il regime idraulico

Il livello piezometrico utilizzato nei calcoli è posto al di sotto del volume significativo che interessa le opere di imbocco.

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8.4 Caratteristiche del sito e definizione dell'azione sismica

Le opere in progetto si trovano nel comune di Ferrandina e di Miglionico, si prendono a riferimento le seguenti coordinate geografiche: Latitudine 40.554112°, Longitudine 16.517664°, in corrispondenza dell'imbocco lato Ferrandina.

Alle strutture delle gallerie artificiali, trattandosi di opere definitive, si attribuisce una vita nominale V_N di 75 anni. Di conseguenza, il periodo di riferimento per la definizione dell'azione sismica, V_R , si assume pari a 112.5 anni (DM 17/01/2018, per opere in classe d'uso III a cui corrisponde un coefficiente C_u pari a 1.5). Con riferimento alla probabilità di superamento dell'azione sismica, P_{V_R} , attribuita allo stato limite ultimo di salvaguardia della vita (SLV), nel periodo V_R dell'opera in progetto, si determina il periodo di ritorno T_R del sisma di progetto. Sulla base delle coordinate geografiche del sito e del tempo di ritorno del sisma di progetto, T_R , sopra definito, si ricavano i parametri che caratterizzano il sisma di progetto relativo al sito di riferimento, rigido ed orizzontale (Tabella 1 dell'allegato B del D.M. 17/01/2018):

- a_g : accelerazione orizzontale massima
- F_0 : 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.

Per le opere provvisionali di imbocco il periodo di ritorno si determina con l'espressione:

$$T_R = - \frac{V_R}{\ln(1 - P_{V_R})}$$

Per tenere conto dei fattori locali del sito, l'accelerazione orizzontale massima attesa al sito è valutata con la relazione (DM 17/01/2018):

$$a_{\max} = S_s \cdot S_T \cdot \left(\frac{a_g}{g} \right)$$

dove:

a_g è l'accelerazione orizzontale massima attesa su sito di riferimento rigido.

S_s è il fattore di amplificazione stratigrafica del terreno, funzione della categoria del sottosuolo di fondazione e dei parametri sismici F_0 e a_g/g (Tabella 3.2.V del D.M. 17/01/2018);

S_T è il fattore di amplificazione che tiene conto delle condizioni topografiche, il cui valore dipende dalla categoria topografica e dall'ubicazione dell'opera (Tabella 3.2.VI del D.M. 17/01/2018).

I valori delle grandezze necessarie per la definizione dell'azione sismica per le opere d'imbocco sono riassunti nella seguente tabella:

Tabella 4 Parametri per la definizione dell'azione sismica di progetto

	Strutture di imbocco
Coord. geografiche	40° 55' 41.12" latitudine 16° 51' 76.64" longitudine
$T_{R(SLV)}$	1068

a_g/g	0.209
F_0	2.497
Categoria sottosuolo	C
S_s	1.391
Categoria topografica	T1
S_T	1

9 SOLUZIONI PROGETTUALI

Per la realizzazione delle gallerie artificiali oggetto di questa relazione non sono necessarie ulteriori opere di tipo provvisoria rispetto a quelle esistenti. Le soluzioni progettuali adottate sono finalizzate da un lato all'adeguamento della sagoma d'intradosso della galleria scatolare esistente secondo le indicazioni di progetto (sezione d'intradosso a singolo binario) e dall'altro al prolungamento mediante la realizzazione di una nuova tratta in artificiale. Quest'ultima è costituita da un portale d'imbocco a becco di flauto e da una galleria policentrica al fine di predisporre la zona di imbocco al risanamento paesaggistico.

Nel seguito sono illustrate le soluzioni progettuali e le verifiche di dimensionamento sia della nuova tratta di galleria artificiale (costituita dal portale d'imbocco a becco di flauto e dalla galleria policentrica) sia della galleria artificiale esistente.

Il tratto di imbocco lato Ferrandina (imbocco Sud) si estende per una lunghezza di circa 92.85 m ed è composto dai seguenti distinti segmenti:

- Portale d'imbocco sagomato a becco di flauto, di lunghezza pari a 15.80 m a partire dalla progressiva di imbocco posta al km 2+345.60 fino alla progressiva km 2+361.40, caratterizzato da una sezione d'intradosso a singolo binario;
- Nuova galleria artificiale in c.a., di lunghezza pari a 29.05 m e compresa tra le progressive km 2+361.40 e km 2+390.45, costituita da una sezione policentrica a piedritti verticali e caratterizzata da una sezione d'intradosso a singolo binario;
- Galleria artificiale esistente in c.a., di lunghezza pari a 48.00 m e compresa tra le progressive km 2+390.45 e km 2+438.45, attualmente si presenta con una sezione a scatolare. L'intervento previsto riguarda l'adeguamento alla nuova sagoma d'intradosso della configurazione a singolo binario.

Il tratto di imbocco lato Matera (imbocco Nord) si estende per una lunghezza di circa 195.00 m ed è composto dalle stesse strutture dell'altro imbocco, di seguito le pk:

- Galleria artificiale esistente, di lunghezza pari a 144.50 m e compresa tra le progressive km 8+709.39 e km 8+853.89;
- Nuova galleria artificiale in c.a., di lunghezza pari a 34.70 m e compresa tra le progressive km 8+853.89 e km 8+888.59;
- Portale d'imbocco, di lunghezza pari a 15.80 m a partire dalla progressiva km 8+888.59 fino alla progressiva di imbocco km 8+904.39.

Il portale d'imbocco, Figura 1, presenta una tipica configurazione a becco di flauto con pendenza di circa 28° sull'orizzontale e con sezione policentrica caratterizzata da uno spessore in calotta di 0.70 m, nonché spessore minimo dei piedritti anch'esso di 0.70 m. Il solettone di fondo (arco rovescio piatto) è caratterizzato anch'esso da uno spessore minimo pari a 0.70 m.

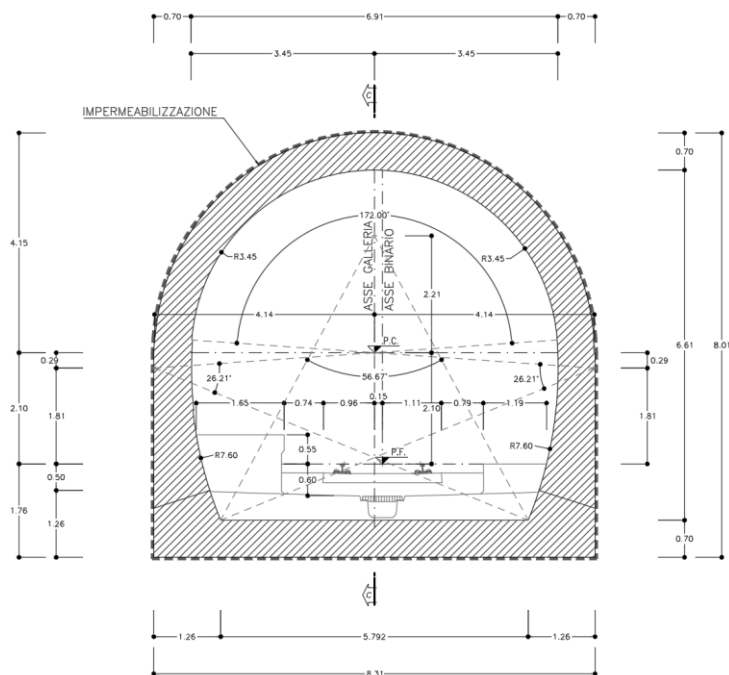


Figura 1 Portale d'imbocco: carpenteria

La sezione della nuova galleria artificiale, Figura 2, presenta una forma a ferro di cavallo con piedritti verticali. Lo spessore minimo del rivestimento in calotta è di 0.70 m, anche il solettone di fondo (arco rovescio piatto) presenta uno spessore minimo di 0.70 m.

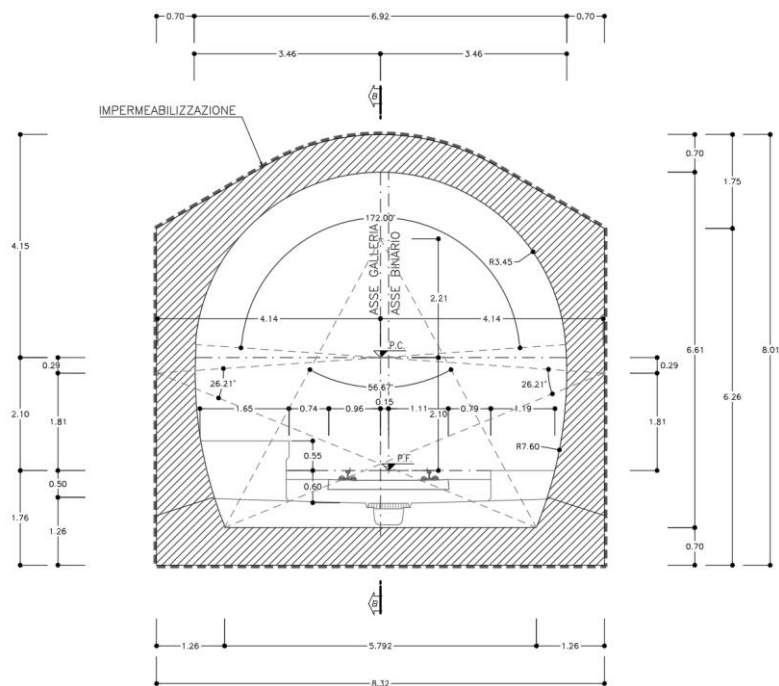


Figura 2 Nuova galleria artificiale: carpenteria

L'imbocco lato Ferrandina, data la presenza dei muri laterali esistenti, la porzione destra a tergo delle pareti esterne della nuova galleria artificiale verrà riempita con calcestruzzo fino alla sommità del muro.

La galleria artificiale esistente presenta una geometria a sezione scatolare. Si prevede l'adeguamento alla nuova sagoma di progetto (intradosso a singolo binario) mediante armatura e getto del nuovo rivestimento interno,

caratterizzato da un riempimento in calcestruzzo avente spessore variabile. Lo spessore strutturale minimo è pari a 0.50 m. Prima del getto verrà messa in opera un'impermeabilizzazione full-round su tutto il profilo di intradosso della sagoma esistente, Figura 3.

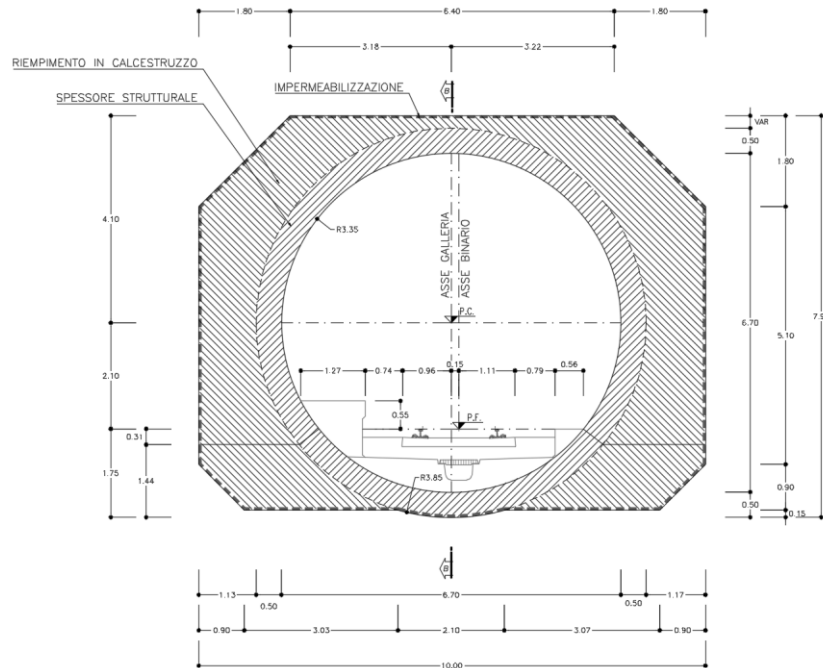


Figura 3 Galleria artificiale esistente: carpenteria

Per una corretta realizzazione delle strutture appena descritte si rende necessario prevedere un intervento di demolizione, che interesserà la soletta esistente tra le opere di sostegno laterali e la soletta di fondo della galleria artificiale esistente. In entrambi i casi si tratta di demolire un getto di calcestruzzo non armato.

Per la sistemazione finale, il ritombamento dovrà ricoprire interamente i manufatti, raccordando l'imbocco con il versante a monte e garantendo l'inserimento paesaggistico-ambientale dell'opera.

La sistemazione finale dell'imbocco lato Matera è sagomata in previsione del passaggio della strada proveniente dal piazzale di emergenza della Finestra Miglionico. Come si vede dallo stralcio del profilo in Figura 4, la sede stradale sovrappassa la galleria in corrispondenza della galleria artificiale esistente.

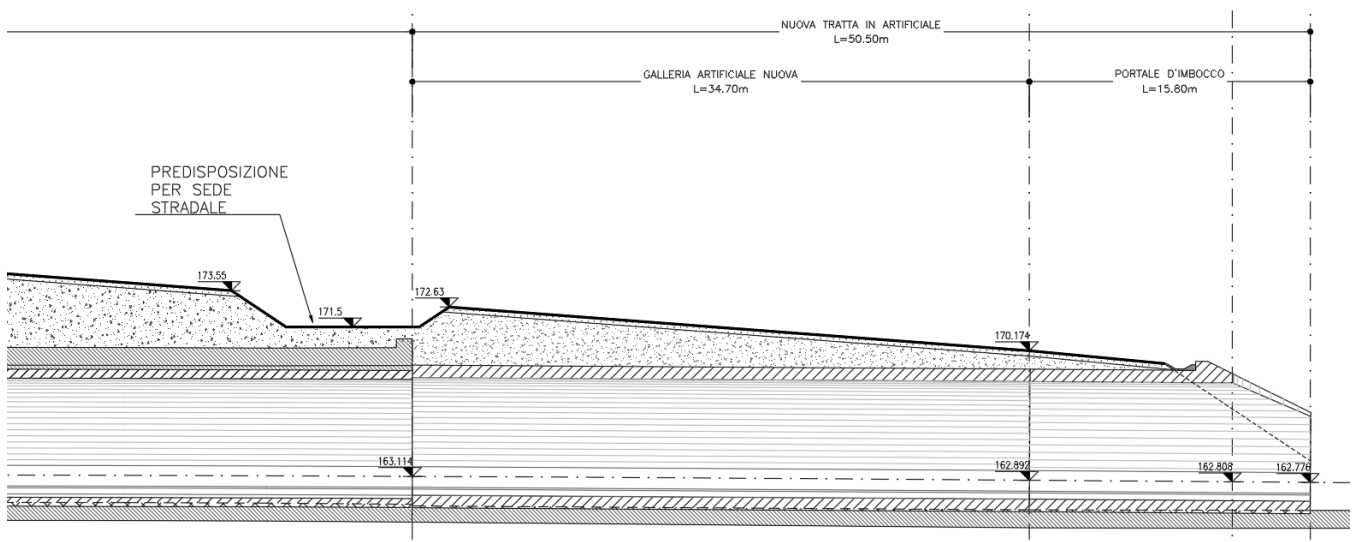


Figura 4 Lato Matera: sagomatura del ritombamento per sede stradale

10 CARATTERISTICHE DEI MATERIALI STRUTTURALI

Si riportano di seguito le principali caratteristiche dei diversi materiali impiegati nelle opere in progetto, con l'indicazione dei valori di resistenza e deformabilità adottati nelle verifiche, nel rispetto delle indicazioni del DM 17/01/2018 e del "Manuale di progettazione delle opere civili" RFI DTC SI MA IFS 001 C (§ 3.1).

Per la completa e puntuale definizione delle caratteristiche dei materiali previsti per la realizzazione dell'opera si rimanda all'elaborato specifico "Elaborati generali - Caratteristiche dei materiali – Note generali" (Rif. [22]).

Calcestruzzo armato – Calotta e arco rovescio	
Classe di resistenza	C25/30
Resistenza di progetto a compressione a 28 giorni	$f_{cd} = 0.85 f_{ck}/1.5 = 14.11 \text{ MPa}$
Modulo elastico a 28 giorni	$E_{cm} = 22000(f_{cm}/10)^{0.3} \text{ MPa} = 31475 \text{ MPa}$
Tensione massima di compressione in esercizio	$\sigma_c \leq 0.6 f_{ck} = 14.94 \text{ MPa}$ per comb. rara $\sigma_c \leq 0.45 f_{ck} = 11.2 \text{ MPa}$ per comb. quasi permanente

Acciaio per barre di armatura	
Tipo	B 450 C
Resistenza di progetto	$f_{yd} = f_{yk}/\gamma_s = 450/1.15 = 391.3 \text{ MPa}$
Tensione massima in condizioni di esercizio	$\sigma_{lim} = 0.80 f_{yk} = 360 \text{ MPa}$
Verifica indiretta per il controllo della fessurazione	tabelle C4.1.II e C4.1.III della Circolare 7/9

 ITALFERR GRUPPO FERROVIE DELLO STATO ITALIANE	Nuova linea Ferrandina - Matera La Martella per il collegamento di Matera con la rete ferroviaria nazionale NUOVA LINEA FERRANDINA – MATERA LA MARTELLA					
	RELAZIONE GEOTECNICA E DI CALCOLO DELLE OPERE DI IMBOCCO	COMMESSA IA5F	LOTTO 01 D 07	CODIFICA RH	DOCUMENTO GN0100 002	REV. A

11 CRITERI DI VERIFICA DELLE OPERE

Le verifiche sono state condotte in accordo con le prescrizioni e le indicazioni del D.M. 17/01/2018 e della Circolare n.7/19 (Rif. [1] e Rif. [2]).

11.1 Gallerie artificiali

11.1.1 Azioni

Per le gallerie artificiali si individuano le seguenti azioni:

- **azioni permanenti strutturali:** peso proprio della struttura (P.P), spinte del terreno sui fianchi della galleria (SP_{1sx} e SP_{1dx}), carico verticale P.cop (rappresentato dal terreno di ricoprimento), spinte risultanti dalla pressione dell'acqua (P.w) in presenza di falda;
- **azioni variabili:** carico variabile Q₁ pari a 20 kN/m² (legato ai mezzi di cantiere), spinte sui fianchi della galleria (SQ_{1sx} e SQ_{1dx}) generate dal carico Q₁.
- **azione sismica:** l'accelerazione orizzontale massima attesa al suolo è definita nel paragrafo 8.4. I carichi considerati sono: incremento di spinta del terreno sui fianchi della galleria ($\pm \Delta Sh$), variazione del peso del terreno di ritombamento ($\pm \Delta Sv$), effetti inerziali della struttura della galleria nelle direzioni orizzontale e verticale (I_h e I_v).

Sulla base della definizione dei carichi di cui sopra, in accordo a quanto prescritto dal DM 17/01/2018, sono state individuate le combinazioni di carico per le verifiche di stati limite ultimi e di esercizio in condizioni statiche e in condizioni sismiche:

- combinazione fondamentale (SLU)
- combinazione caratteristica (SLE): il coefficiente di combinazione per il carico variabile Q₁ è pari a 1
- combinazione frequente (SLE): il coefficiente di combinazione per il carico variabile Q₁ è pari a 0.8
- combinazione quasi permanente (SLE): il coefficiente di combinazione per il carico variabile Q₁ è pari a 0
- combinazione sismica (SLV, SLD): il coefficiente di combinazione per il carico variabile Q₁ è pari a 0.2.

11.1.2 Approcci progettuali e metodi di verifica

Le verifiche delle gallerie artificiali sono state condotte nei riguardi dei seguenti stati limite:

- stati limite ultimi (SLU):
 - instabilità globale dell'insieme terreno-opera;
 - raggiungimento della resistenza strutturale
- stati limite di esercizio in condizioni statiche (SLE):
 - controllo dello stato tensionale e fessurativo degli elementi strutturali.

Le verifiche in condizioni sismiche sono state condotte con riferimento allo stato limite ultimo di salvaguardia della vita (SLV) e allo stato limite di danno (SLD). Per tali verifiche i coefficienti parziali sulle azioni sono pari all'unità.

SLU							
Carico	SLU1	SLU2	SLU3	SLU4	SLU5	SLU6	SLU7
<i>P.P.</i>	1.3	1.3	1.0	1.3	1.0	1.3	1.0
<i>P.cop</i>	1.3	1.3	1.0	1.3	1.0	1.3	1.0
<i>SP.sx</i>	1.3	1.0	1.3	1.3	1.3	1.0	1.0
<i>SP.dx</i>	1.3	1.0	1.3	1.0	1.0	1.3	1.3
<i>V</i>	1.5	1.5	0.0	1.5	0.0	1.5	0.0
<i>SV.sx</i>	1.5	0.0	1.5	1.5	1.5	0.0	0.0
<i>SV.dx</i>	1.5	0.0	1.5	0.0	0.0	1.5	1.5

Tabella 1 – Sezione 3. Coefficienti di combinazione allo stato limite ultimo in condizioni statiche

SLE-C		SLE-F			SLE-QP		
Carico	SLE-C	Carico	SLE-F-1	SLE-F-2	SLE-F-3	Carico	SLE-QP
<i>P.P.</i>	1.0	<i>P.P.</i>	1.0	1.0	1.0	<i>P.P.</i>	1.0
<i>P.cop</i>	1.0	<i>P.cop</i>	1.0	1.0	1.0	<i>P.cop</i>	1.0
<i>SP.sx</i>	1.0	<i>SP.sx</i>	1.0	1.0	1.0	<i>SP.sx</i>	1.0
<i>SP.dx</i>	1.0	<i>SP.dx</i>	1.0	1.0	1.0	<i>SP.dx</i>	1.0
<i>V</i>	1.0	<i>V</i>	0.8	0.0	0.0	<i>V</i>	0.0
<i>SV.sx</i>	1.0	<i>SV.sx</i>	0.0	0.8	0.0	<i>SV.sx</i>	0.0
<i>SV.dx</i>	1.0	<i>SV.dx</i>	0.0	0.0	0.8	<i>SV.dx</i>	0.0
<i>ΔS.h</i>	0.0	<i>ΔS.h</i>	0.0	0.0	0.0	<i>ΔS.h</i>	0.0
<i>ΔS.v</i>	0.0	<i>ΔS.v</i>	0.0	0.0	0.0	<i>ΔS.v</i>	0.0
<i>I.h</i>	0.0	<i>I.h</i>	0.0	0.0	0.0	<i>I.h</i>	0.0
<i>I.v</i>	0.0	<i>I.v</i>	0.0	0.0	0.0	<i>I.v</i>	0.0

Tabella 2 – Coefficienti di combinazione allo stato limite di esercizio in condizioni statiche

SLV/SLD																
Carico	SLV1	SLV2	SLV3	SLV4	SLV5	SLV6	SLV7	SLV8	SLV9	SLV10	SLV11	SLV12	SLV13	SLV14	SLV15	SLV16
<i>P.P.</i>	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
<i>P.cop</i>	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
<i>SP.sx</i>	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
<i>SP.dx</i>	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
<i>V</i>	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
<i>SV.sx</i>	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
<i>SV.dx</i>	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
<i>ΔS.h</i>	1.0	-1.0	1.0	-1.0	0.3	-0.3	0.3	-0.3	1.0	-1.0	1.0	-1.0	0.3	-0.3	0.3	-0.3
<i>ΔS.v</i>	-0.3	-0.3	0.3	0.3	-1.0	-1.0	1.0	1.0	-0.3	-0.3	0.3	0.3	-1.0	-1.0	1.0	1.0
<i>I.h</i>	1.0	-1.0	1.0	-1.0	0.3	-0.3	0.3	-0.3	-1.0	1.0	-1.0	1.0	-0.3	0.3	-0.3	0.3
<i>I.v</i>	-0.3	-0.3	0.3	0.3	-1.0	-1.0	1.0	1.0	0.3	0.3	-0.3	-0.3	1.0	1.0	-1.0	-1.0

Tabella 3 – Coefficienti di combinazione allo stato limite ultimo in condizioni sismiche

Per la verifica agli stati limite in condizioni sismiche (SLV e SLD) si è adottato il metodo pseudostatico, calcolando i coefficienti sismici orizzontale e verticale in analogia con quanto indicato dalla normativa (DM 14/1/2008) per i muri di sostegno:

$$k_h = \beta_m \cdot \left(\frac{a_{\max}}{g} \right)$$

$$k_v = \pm \frac{1}{2} \cdot k_h$$

dove:

- a_{max} è l'accelerazione orizzontale massima attesa al sito,
- β_m è il coefficiente di riduzione dell'accelerazione massima assunto pari a 1.

Per il calcolo delle sollecitazioni si è adottato il metodo delle reazioni iperstatiche attraverso una modellazione numerica ad elementi finiti monodimensionali. Si è utilizzato il codice di calcolo Straus 7 (versione 2.4.6). Si considera una sezione di galleria di lunghezza unitaria definendo per la struttura un modello costituito da conci monodimensionali (elementi beam). Gli spessori delle diverse aste sono variabili secondo l'elemento strutturale considerato (calotta, piedritto, arco rovescio). L'interazione tra il terreno e la struttura è simulata attraverso elementi elastici radiali: la rigidezza di tali supporti è calcolata secondo le seguenti formulazioni:

$$k = \frac{E'}{R_{eq} \cdot (1+\nu)} \cdot i \quad (\text{per i tratti curvilinei dell'arco di calotta})$$

$$k = \frac{E'}{B \cdot (1-\nu^2)} \cdot i \quad (\text{per tratti rettilinei dell'arco di calotta})$$

$$k = \frac{E'}{B \cdot (1-\nu^2) \cdot c_t} \cdot i \quad (\text{per l'arco rovescio})$$

dove:

- R_{eq} è il raggio di curvatura equivalente dell'anello;
- B è la lunghezza del tratto rettilineo di carpenteria;
- i è l'interasse tra le bielle;
- ν ed E' il coefficiente di Poisson ed il modulo elastico del mezzo al contorno rispettivamente;
- c_t = coefficiente di forma della fondazione ottenuto attraverso le relazioni proposte da Bowles (1960) (L = lato maggiore della fondazione):

$$c_t = 0.853 + 0.534 \cdot \ln(L/B) \quad \text{fondazione rettangolare con } (L/B) \leq 10;$$

$$c_t = 2 + 0.0089 \cdot (L/B) \quad \text{fondazione rettangolare con } (L/B) > 10.$$

Il modulo elastico da assegnare all'elemento è calcolabile attraverso la seguente relazione: $E = K \cdot i$.

12 VERIFICA DELLE OPERE DELL'IMBOCCO

Di seguito si riporta l'analisi e la verifica della sezione più sollecitata della nuova galleria artificiale. Per quanto riguarda la verifica della galleria artificiale esistente si faccia riferimento alle analisi della galleria naturale, dato che la struttura è identica.

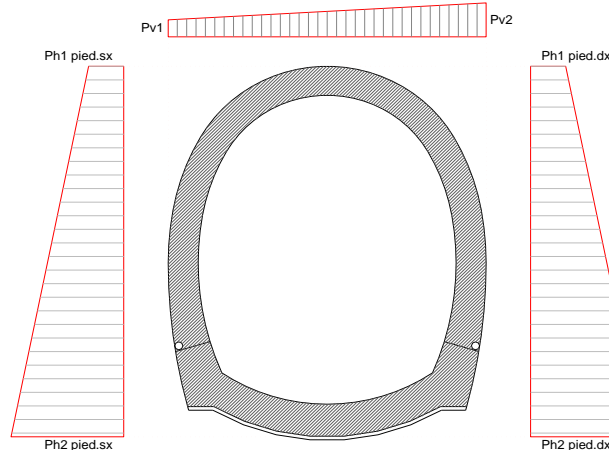
12.1 Nuova Galleria artificiale

Per la verifica della nuova galleria artificiale è stata presa in considerazione la sezione caratterizzata dalla massima altezza di ritombamento. La sezione analizzata è situata alla pk. 2+390 ca. Di seguito è fornita una descrizione delle principali caratteristiche geometriche e uno schema del modello di calcolo.

Al terreno di ritombamento ed a quello di spinta laterale sono state assegnate le caratteristiche meccaniche riportate nella seguente Tabella.

Peso di volume γ (kN/m ³)	20
Coesione efficace c' (kPa)	0
Angolo di resistenza al taglio ϕ' (°)	25
Coefficiente di spinta a riposo K_0	0.58

Le combinazioni di carico analizzate sono quelle indicate al paragrafo 11.1.2. Nella tabella seguente sono riassunti i carichi ed i valori delle molle assegnati al modello di calcolo.



Copertura (m)	γ_{ritomb} (kN/m ³)	P.cop (kN/m ²)	SP.sx (kN/m ²)	SP.dx (kN/m ²)	V (kN/m ²)	SV.sx (kN/m ²)	SV.dx (kN/m ²)	$\Delta S.h$ (kN/m ²)	$\Delta S.v$ (kN/m ²)
7 ÷ 8.7	20	140 ÷ 174	81 (sup) 166 (inf)	81 (sup) 166 (inf)	20	11.54	11.54	33.4	14 ÷ 18

$K_{terr. a.c.}$ (kN/m ³)	$K_{terr. a.c. rett}$ (kN/m/m)	$K_{terr. a.r.}$ (kN/m/m)	$K_{terr. pied. alto}$ (kN/m/m)	$K_{terr. pied. basso}$ (kN/m/m)
814	4227	$8.2 \cdot 10^5$	4186	$1.5 \cdot 10^6$

La rigidità delle molle è calcolata impiegando le formule al paragrafo § 11.1.2, con modulo elastico "E" pari a 40 MPa in calotta e lungo la parte alta del piedritto, mentre $E=31000$ Mpa, lungo la parte basse del piedritto ed in

arco rovescio, per tener conto della presenza dei muri laterali ed il solettone in calcestruzzo già realizzato in corrispondenza del piano di imposta della struttura.

Si riportano di seguito alcune immagini del modello di calcolo finalizzate a rappresentare la schematizzazione ad elementi finiti (nodi-elementi) adottata.

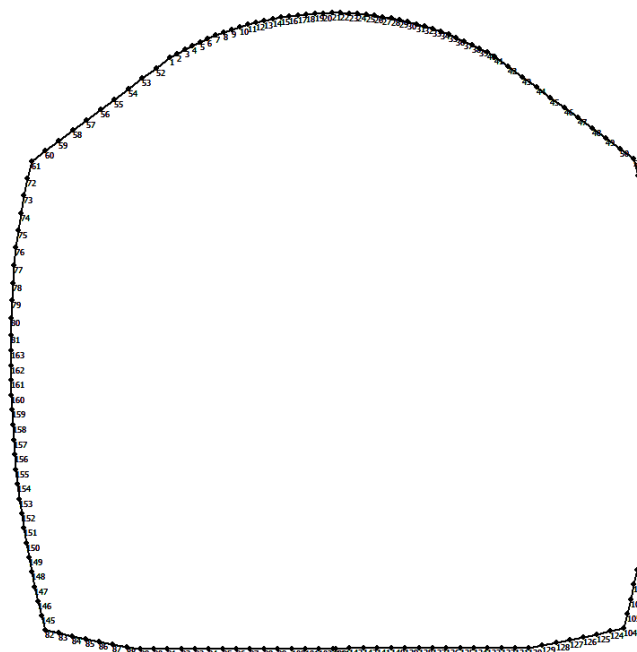


Figura 5 – Numerazione nodi e numerazione elementi beam

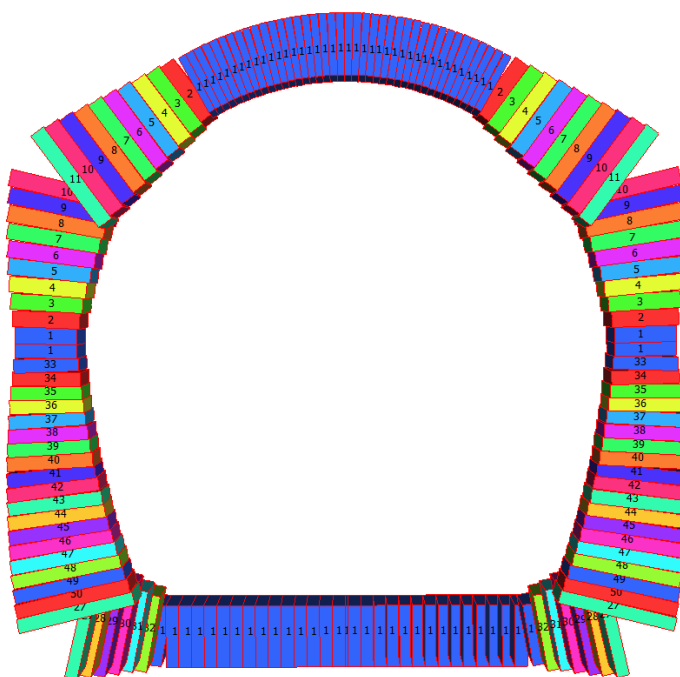


Figura 6 – Modello strutturale con evidenziati gli spessori degli elementi beam

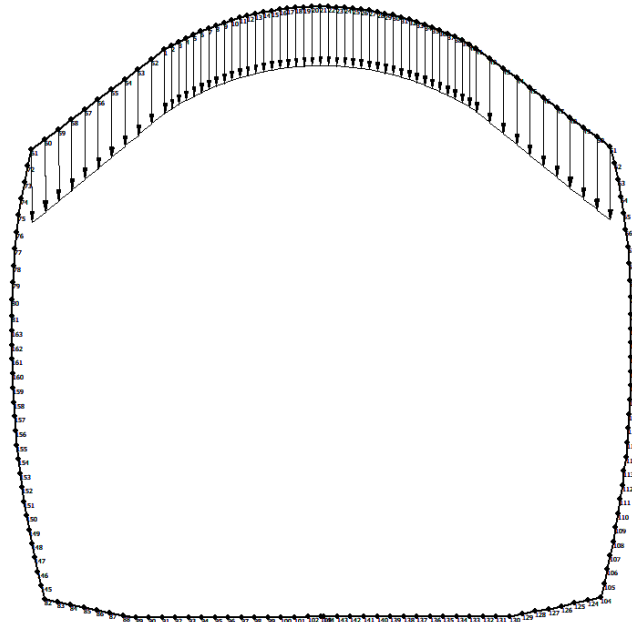


Figura 7 – Carico di ricoprimento superiore P.cop (distribuzione valida anche per il carico variabile superficiale V e la sovraspinta sismica verticale $\Delta S.v$)

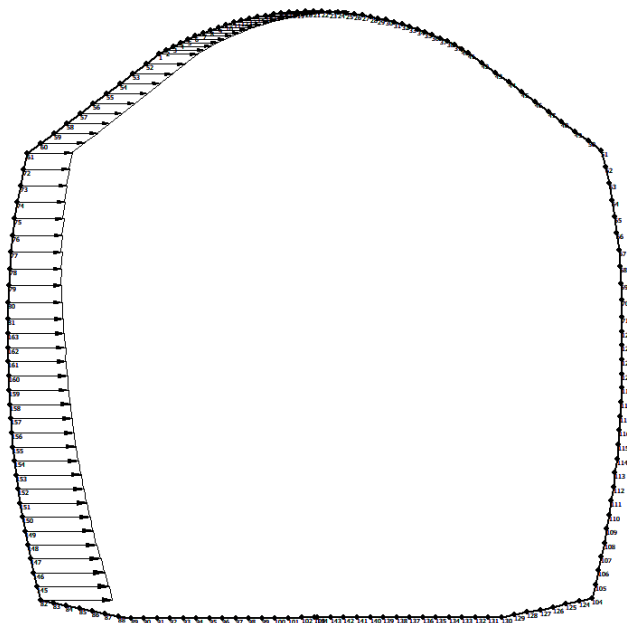


Figura 8 – Carico dovuto alla spinta orizzontale sinistra SP.sx (distribuzione valida anche per la sovraspinta dovuta al carico variabile superficiale SV.sx e la spinta sismica orizzontale $\Delta S.h$)

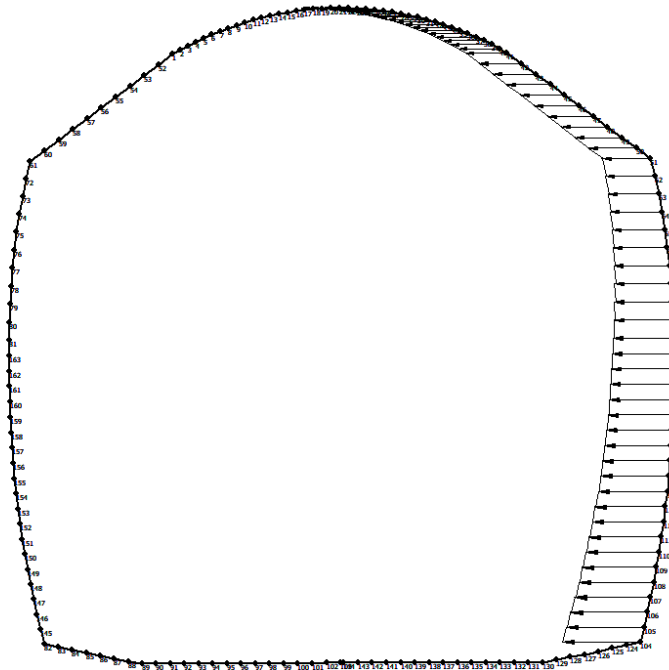


Figura 9 – Carico dovuto alla spinta orizzontale destra SP_dx (distribuzione valida anche per la sovraspinta dovuta al carico variabile SV_dx)

12.1.1 Risultati delle verifiche SLU

I risultati delle analisi sono descritti in sintesi nel seguito ed illustrati in dettaglio all'interno dell'allegato (All. [1]).

Si riportano di seguito i risultati delle analisi di calcolo rappresentati dagli involuipi delle azioni interne calcolate:

- diagrammi di involuppo delle combinazioni di carico statiche;
- diagrammi relativi alla combinazione di carico sismica.

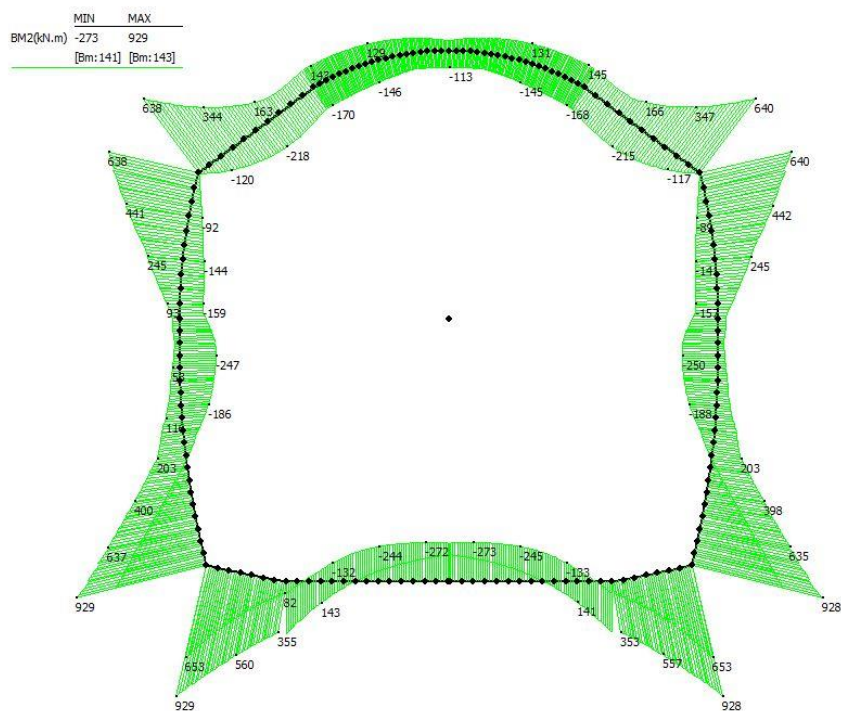


Figura 10 – Diagramma di involuppo del Momento flettente (condizioni statiche SLU)

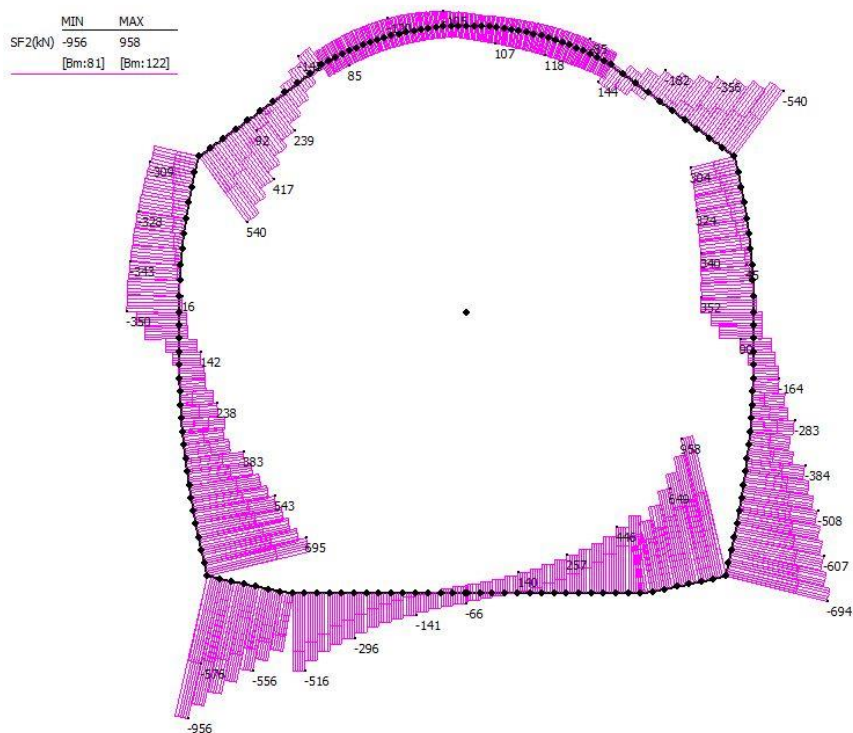


Figura 11 – Diagramma di involuppo del Taglio (condizioni statiche SLU)

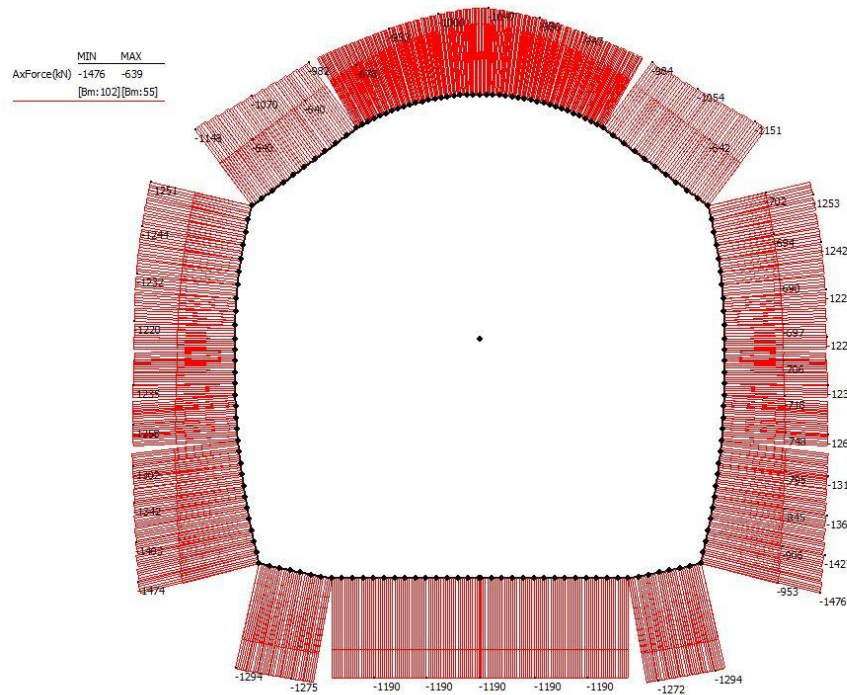


Figura 12 – Diagramma di involuppo dell’Azione assiale (condizioni statiche SLU)

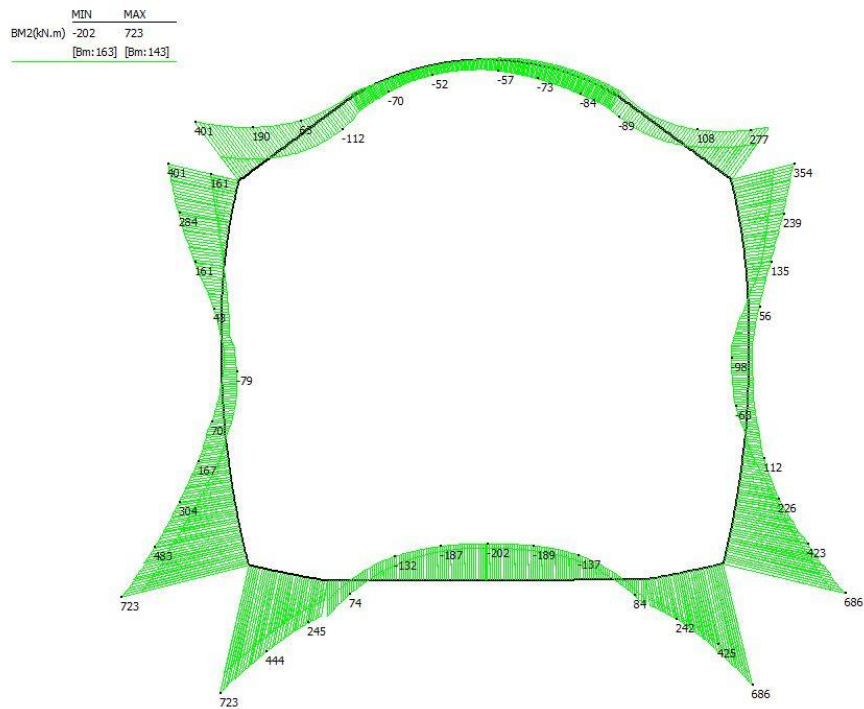


Figura 13 – Diagramma di involuppo del Momento flettente (condizioni sismiche)

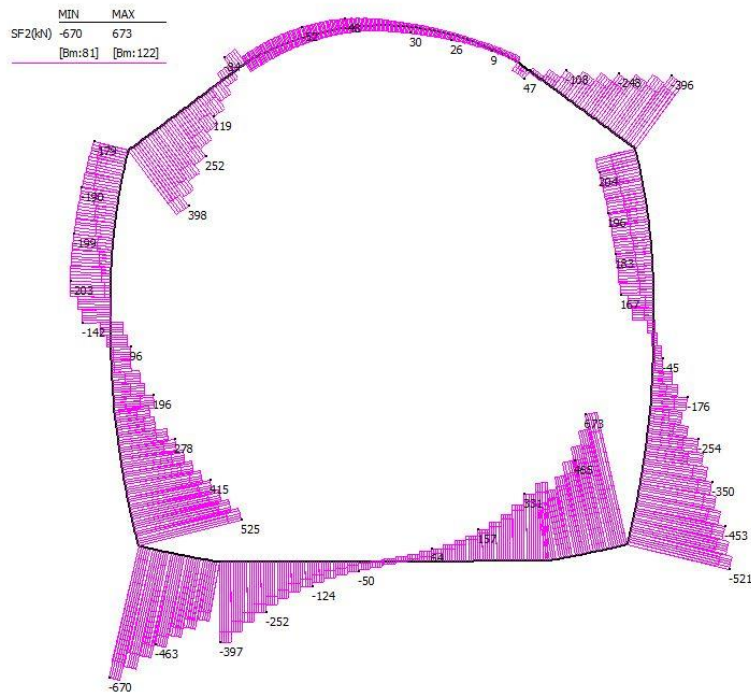


Figura 14 – Diagramma di involuppo del Taglio (condizioni sismiche)

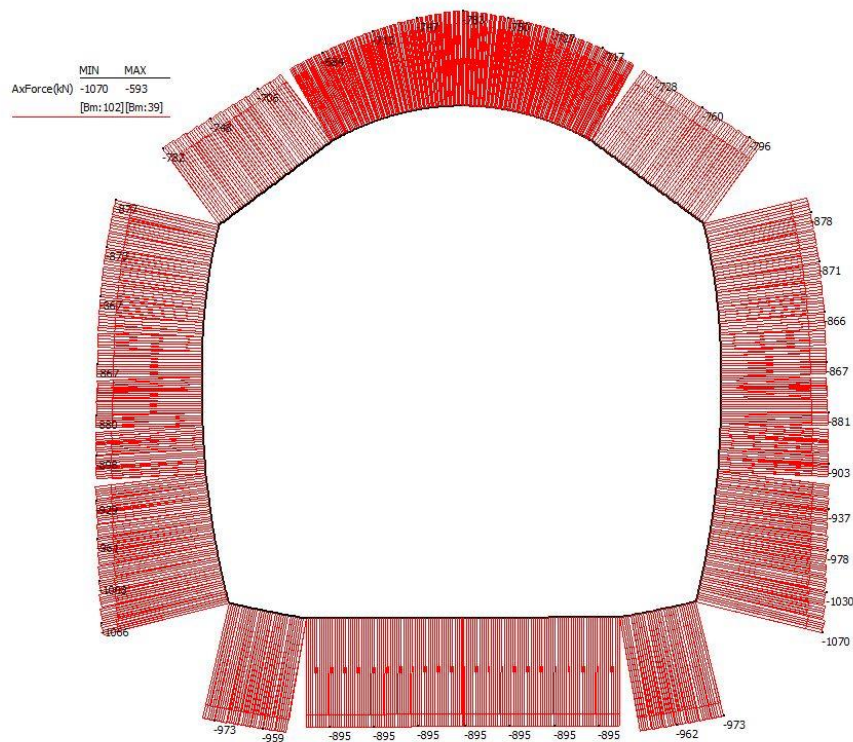


Figura 15 – Diagramma di involuppo dell'Azione assiale (condizioni sismiche)

Verifica a Pressoflessione SLU/SLV – calotta - MOMENTO MAX

CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.

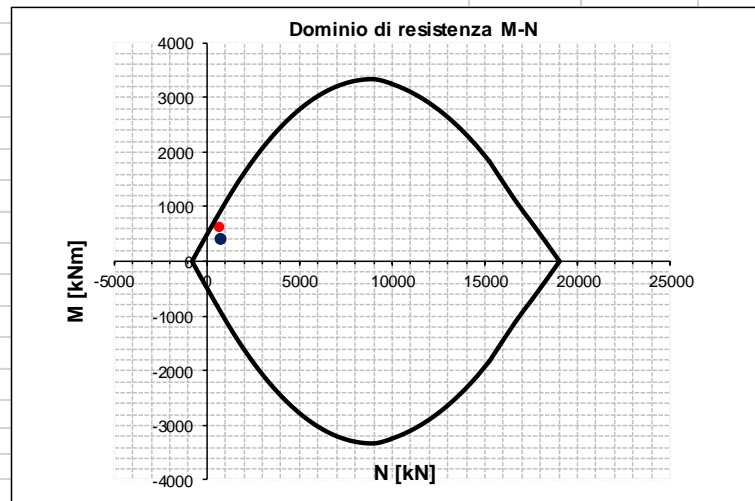
Geometria della sezione			
Base (ortogonale al Taglio)		B [cm]	100
Altezza (parallela al Taglio)		H [cm]	129
Altezza utile della sezione		d [cm]	124
Area di calcestruzzo		A _c [cm ²]	12900

Armatura longitudinale tesa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	φ [mm]	16	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	As [cm ²]	10.05	0.00	0.00
Rapporto di armatura	ρ [%]	0.081%		

Armatura longitudinale compressa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	φ [mm]	16	0	0
Posizione dal lembo esterno	c' [cm]	5.0	0.0	0.0
Area strato	As' [cm ²]	10.05	0.00	0.00
Rapporto di armatura	ρ' [%]	0.081%		

VERIFICA DI RESISTENZA A PRESSO-FLESSIONE

Solicitazioni di progetto			
Momento sollecitante	M _{Sd} [kNm]	640.0	401.0
Sforzo Normale concomitante	N _{Sd} [kN]	-642.0	-782.0
Verifica di resistenza in termini di momento			
Momento resistente	M _{Rd} [kNm]	866.4	948.2
Coefficiente di sicurezza	M _{Rd} /M _{Sd}	1.35	2.36
Verifica di resistenza in termini di sforzo normale			
Sforzo normale resistente	N _{Rd} [kN]	-	-
Coefficiente di sicurezza	N _{Rd} /N _{Sd}	-	-



Verifica a Pressoflessione SLU/SLV – calotta - SFORZO NORMALE MAX

CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.

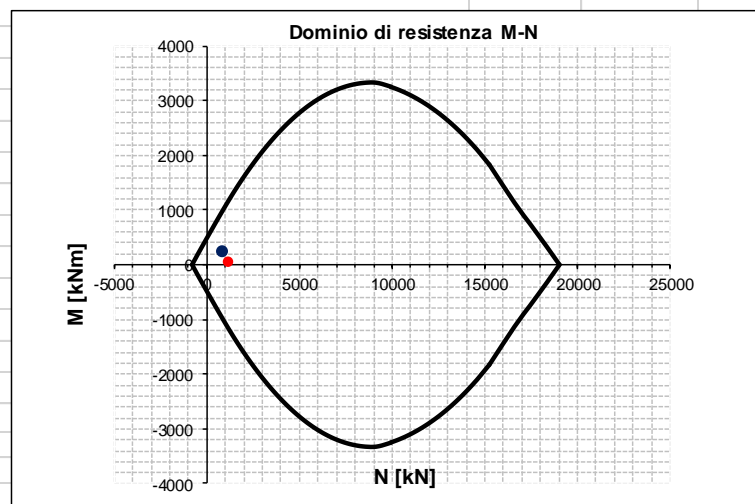
CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.			
Geometria della sezione			
Base (ortogonale al Taglio)		B [cm]	100
Altezza (parallela al Taglio)		H [cm]	129
Altezza utile della sezione		d [cm]	124
Area di calcestruzzo		A_c [cm ²]	12900

Armatura longitudinale tesa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	ϕ [mm]	16	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	A_s [cm ²]	10.05	0.00	0.00
Rapporto di armatura	ρ [%]	0.081%		

Armatura longitudinale compressa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	ϕ [mm]	16	0	0
Posizione dal lembo esterno	c' [cm]	5.0	0.0	0.0
Area strato	A_s' [cm ²]	10.05	0.00	0.00
Rapporto di armatura	ρ' [%]	0.081%		

VERIFICA DI RESISTENZA A PRESSO-FLESSIONE

Sollecitazioni di progetto			
Momento sollecitante	M_{sd} [kNm]	66.0	239.0
Sforzo Normale concomitante	N_{sd} [kN]	-1151.0	-796.0
Verifica di resistenza in termini di momento			
Momento resistente	M_{Rd} [kNm]	1160.8	956.3
Coefficiente di sicurezza	M_{Rd}/M_{sd}	17.59	4.00
Verifica di resistenza in termini di sforzo normale			
Sforzo normale resistente	N_{Rd} [kN]	-	-
Coefficiente di sicurezza	N_{Rd}/N_{sd}	-	-



Verifica a Pressoflessione SLU/SLV – calotta sp. min 0.70m

CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.

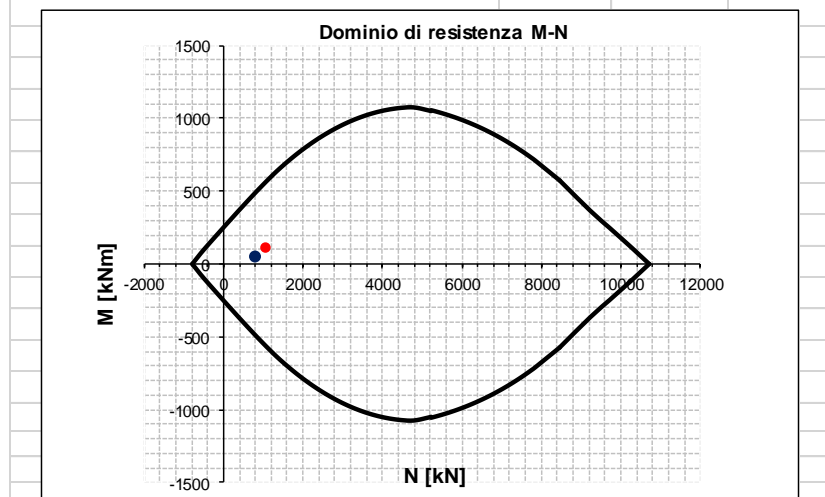
Geometria della sezione			
Base (ortogonale al Taglio)		B [cm]	100
Altezza (parallela al Taglio)		H [cm]	70
Altezza utile della sezione		d [cm]	65
Area di calcestruzzo		A _c [cm ²]	7000

Armatura longitudinale tesa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	φ [mm]	16	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	As [cm ²]	10.05	0.00	0.00
Rapporto di armatura	ρ [%]	0.155%		

Armatura longitudinale compressa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	φ [mm]	16	0	0
Posizione dal lembo esterno	c' [cm]	5.0	0.0	0.0
Area strato	As' [cm ²]	10.05	0.00	0.00
Rapporto di armatura	ρ' [%]	0.155%		

VERIFICA DI RESISTENZA A PRESSO-FLESSIONE

Sollecitazioni di progetto			
Momento sollecitante	M _{Sd} [kNm]	113.0	52.0
Sforzo Normale concomitante	N _{Sd} [kN]	-1045.0	-782.0
Verifica di resistenza in termini di momento			
Momento resistente	M _{Rd} [kNm]	560.4	485.9
Coefficiente di sicurezza	M _{Rd} /M _{Sd}	4.96	9.34
Verifica di resistenza in termini di sforzo normale			
Sforzo normale resistente	N _{Rd} [kN]	-	-
Coefficiente di sicurezza	N _{Rd} /N _{Sd}	-	-



Verifica a Pressoflessione SLU/SLV – piedritto – MOMENTO MAX

CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.

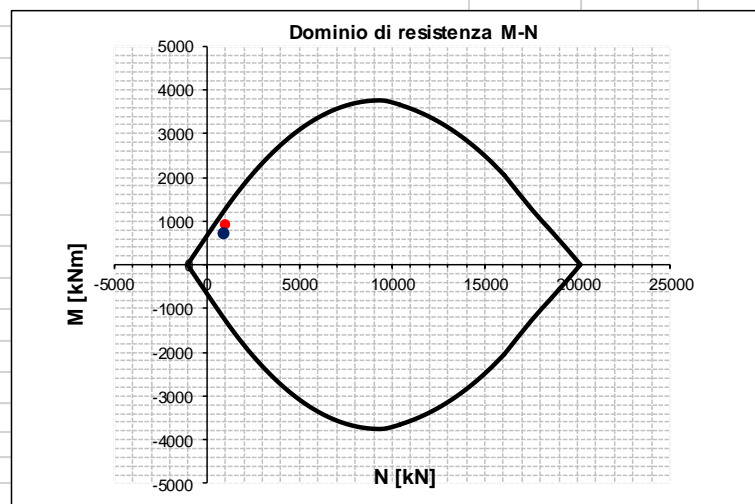
Geometria della sezione			
Base (ortogonale al Taglio)		B [cm]	100
Altezza (parallela al Taglio)		H [cm]	135
Altezza utile della sezione		d [cm]	130
Area di calcestruzzo		A_c [cm ²]	13500

Armatura longitudinale tesa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	ϕ [mm]	18	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	A_s [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ [%]	0.098%		

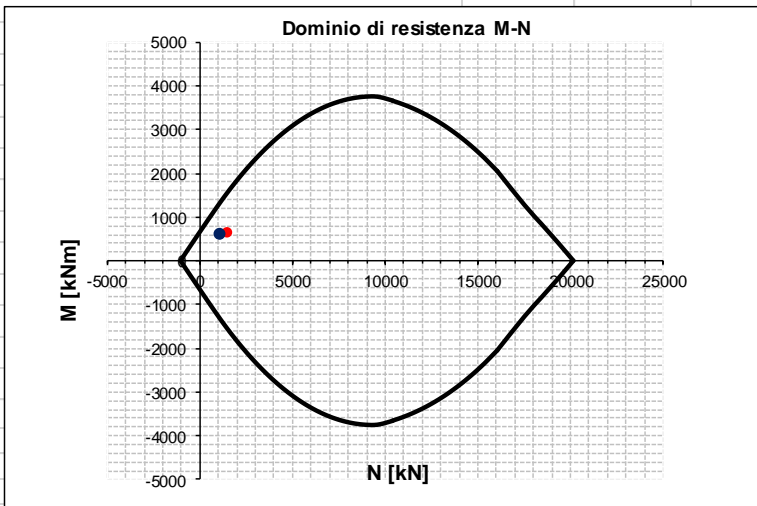
Armatura longitudinale compressa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	ϕ [mm]	18	0	0
Posizione dal lembo esterno	c' [cm]	5.0	0.0	0.0
Area strato	A_s' [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ' [%]	0.098%		

VERIFICA DI RESISTENZA A PRESSO-FLESSIONE

Sollecitazioni di progetto			
Momento sollecitante	M_{sd} [kNm]	929.0	723.0
Sforzo Normale concomitante	N_{sd} [kN]	-951.0	-936.0
Verifica di resistenza in termini di momento			
Momento resistente	M_{Rd} [kNm]	1228.3	1219.2
Coefficiente di sicurezza	M_{Rd}/M_{sd}	1.32	1.69
Verifica di resistenza in termini di sforzo normale			
Sforzo normale resistente	N_{Rd} [kN]	-	-
Coefficiente di sicurezza	N_{Rd}/N_{sd}	-	-



Verifica a Pressoflessione SLU/SLV – piedritto – SFORZO NORMALE MAX

CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.				
Geometria della sezione				
Base (ortogonale al Taglio)		B [cm]	100	
Altezza (parallela al Taglio)		H [cm]	135	
Altezza utile della sezione		d [cm]	130	
Area di calcestruzzo		A _c [cm ²]	13500	
Armatura longitudinale tesa				
		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	φ [mm]	18	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	As [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ [%]	0.098%		
Armatura longitudinale compressa				
		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	φ [mm]	18	0	0
Posizione dal lembo esterno	c' [cm]	5.0	0.0	0.0
Area strato	As' [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ' [%]	0.098%		
VERIFICA DI RESISTENZA A PRESSO-FLESSIONE				
Sollecitazioni di progetto				
Momento sollecitante	M _{Sd} [kNm]	653.0	612.0	
Sforzo Normale concomitante	N _{Sd} [kN]	-1476.0	-1070.0	
Verifica di resistenza in termini di momento				
Momento resistente	M _{Rd} [kNm]	1539.4	1300.6	
Coefficiente di sicurezza	M _{Rd} /M _{Sd}	2.36	2.13	
Verifica di resistenza in termini di sforzo normale				
Sforzo normale resistente	N _{Rd} [kN]	-	-	
Coefficiente di sicurezza	N _{Rd} /N _{Sd}	-	-	
 <p>Domínio di resistenza M-N</p>				

Verifica a Pressoflessione SLU/SLV – piedritto sp.min 0.70m

CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.

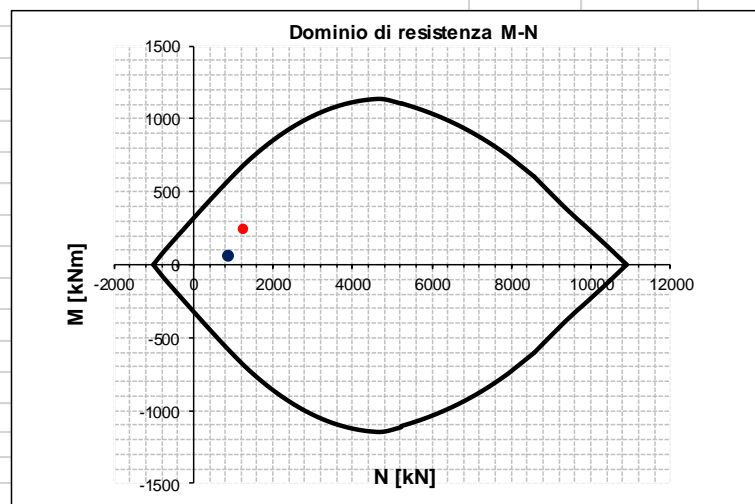
Geometria della sezione			
Base (ortogonale al Taglio)		B [cm]	100
Altezza (parallela al Taglio)		H [cm]	70
Altezza utile della sezione		d [cm]	65
Area di calcestruzzo		A _c [cm ²]	7000

Armatura longitudinale tesa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	φ [mm]	18	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	As [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ [%]	0.196%		

Armatura longitudinale compressa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	φ [mm]	18	0	0
Posizione dal lembo esterno	c' [cm]	5.0	0.0	0.0
Area strato	As' [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ' [%]	0.196%		

VERIFICA DI RESISTENZA A PRESSO-FLESSIONE

Sollecitazioni di progetto			
Momento sollecitante	M _{Sd} [kNm]	247.0	66.0
Sforzo Normale concomitante	N _{Sd} [kN]	-1226.0	-866.0
Verifica di resistenza in termini di momento			
Momento resistente	M _{Rd} [kNm]	672.2	572.3
Coefficiente di sicurezza	M _{Rd} /M _{Sd}	2.72	8.67
Verifica di resistenza in termini di sforzo normale			
Sforzo normale resistente	N _{Rd} [kN]	-	-
Coefficiente di sicurezza	N _{Rd} /N _{Sd}	-	-



Verifica a Pressoflessione SLU/SLV – arco rovescio – MOMENTO MAX

CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.

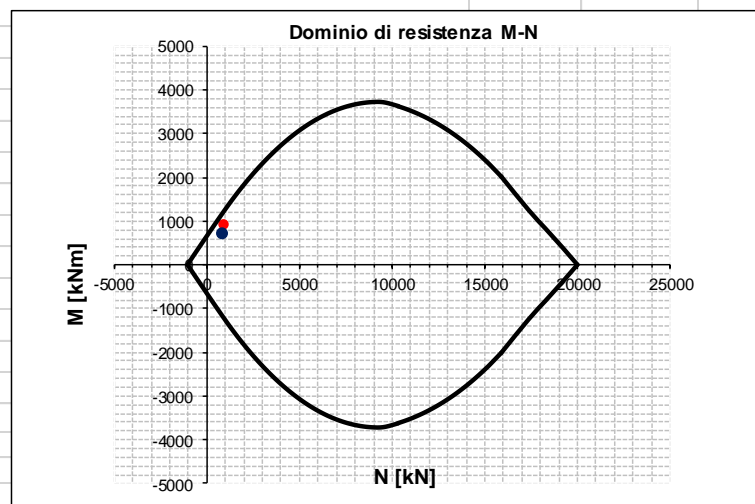
Geometria della sezione			
Base (ortogonale al Taglio)		B [cm]	100
Altezza (parallela al Taglio)		H [cm]	134
Altezza utile della sezione		d [cm]	129
Area di calcestruzzo		A_c [cm ²]	13400

Armatura longitudinale tesa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	ϕ [mm]	18	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	A_s [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ [%]	0.099%		

Armatura longitudinale compressa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	ϕ [mm]	18	0	0
Posizione dal lembo esterno	c' [cm]	5.0	0.0	0.0
Area strato	A_s' [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ' [%]	0.099%		

VERIFICA DI RESISTENZA A PRESSO-FLESSIONE

Sollecitazioni di progetto			
Momento sollecitante	M_{sd} [kNm]	929.0	723.0
Sforzo Normale concomitante	N_{sd} [kN]	-933.0	-861.0
Verifica di resistenza in termini di momento			
Momento resistente	M_{Rd} [kNm]	1207.8	1164.4
Coefficiente di sicurezza	M_{Rd}/M_{sd}	1.30	1.61
Verifica di resistenza in termini di sforzo normale			
Sforzo normale resistente	N_{Rd} [kN]	-	-
Coefficiente di sicurezza	N_{Rd}/N_{sd}	-	-



Verifica a Pressoflessione SLU/SLV – arco rovescio – SFORZO NORMALE MAX

CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.

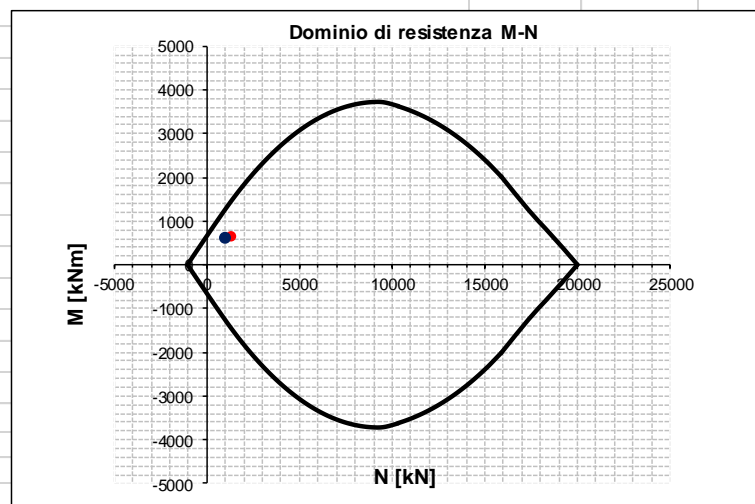
Geometria della sezione			
Base (ortogonale al Taglio)		B [cm]	100
Altezza (parallela al Taglio)		H [cm]	134
Altezza utile della sezione		d [cm]	129
Area di calcestruzzo		A_c [cm ²]	13400

Armatura longitudinale tesa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	ϕ [mm]	18	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	A_s [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ [%]	0.099%		

Armatura longitudinale compressa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	ϕ [mm]	18	0	0
Posizione dal lembo esterno	c' [cm]	5.0	0.0	0.0
Area strato	A_s' [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ' [%]	0.099%		

VERIFICA DI RESISTENZA A PRESSO-FLESSIONE

Sollecitazioni di progetto			
Momento sollecitante	M_{sd} [kNm]	653.0	612.0
Sforzo Normale concomitante	N_{sd} [kN]	-1294.0	-973.0
Verifica di resistenza in termini di momento			
Momento resistente	M_{Rd} [kNm]	1421.9	1231.9
Coefficiente di sicurezza	M_{Rd}/M_{sd}	2.18	2.01
Verifica di resistenza in termini di sforzo normale			
Sforzo normale resistente	N_{Rd} [kN]	-	-
Coefficiente di sicurezza	N_{Rd}/N_{sd}	-	-



Verifica a Pressoflessione SLU/SLV – arco rovescio sp.min 0.70m

CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.

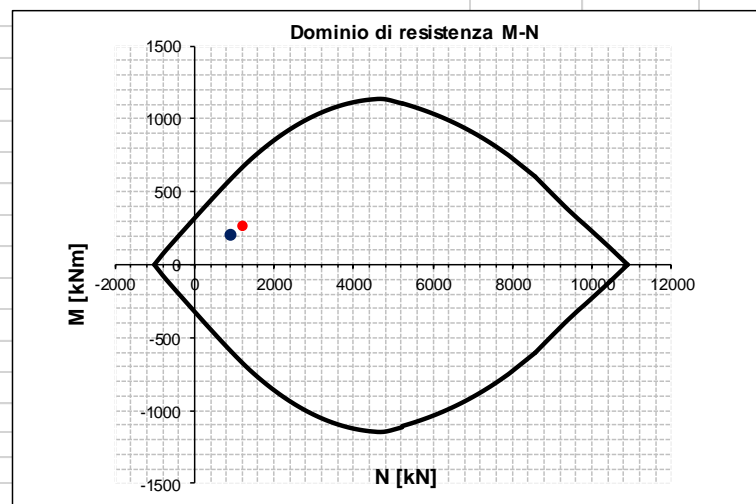
Geometria della sezione			
Base (ortogonale al Taglio)		B [cm]	100
Altezza (parallela al Taglio)		H [cm]	70
Altezza utile della sezione		d [cm]	65
Area di calcestruzzo		A _c [cm ²]	7000

Armatura longitudinale tesa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	φ [mm]	18	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	As [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ [%]	0.196%		

Armatura longitudinale compressa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	φ [mm]	18	0	0
Posizione dal lembo esterno	c' [cm]	5.0	0.0	0.0
Area strato	As' [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ' [%]	0.196%		

VERIFICA DI RESISTENZA A PRESSO-FLESSIONE

Sollecitazioni di progetto			
Momento sollecitante	M _{Sd} [kNm]	272.0	201.0
Sforzo Normale concomitante	N _{Sd} [kN]	-1190.0	-895.0
Verifica di resistenza in termini di momento			
Momento resistente	M _{Rd} [kNm]	662.7	580.6
Coefficiente di sicurezza	M _{Rd} /M _{Sd}	2.44	2.89
Verifica di resistenza in termini di sforzo normale			
Sforzo normale resistente	N _{Rd} [kN]	-	-
Coefficiente di sicurezza	N _{Rd} /N _{Sd}	-	-



12.1.2 Risultati delle verifiche SLE

Si riportano di seguito i risultati delle analisi di calcolo rappresentati dagli involuipi delle azioni interne calcolate:

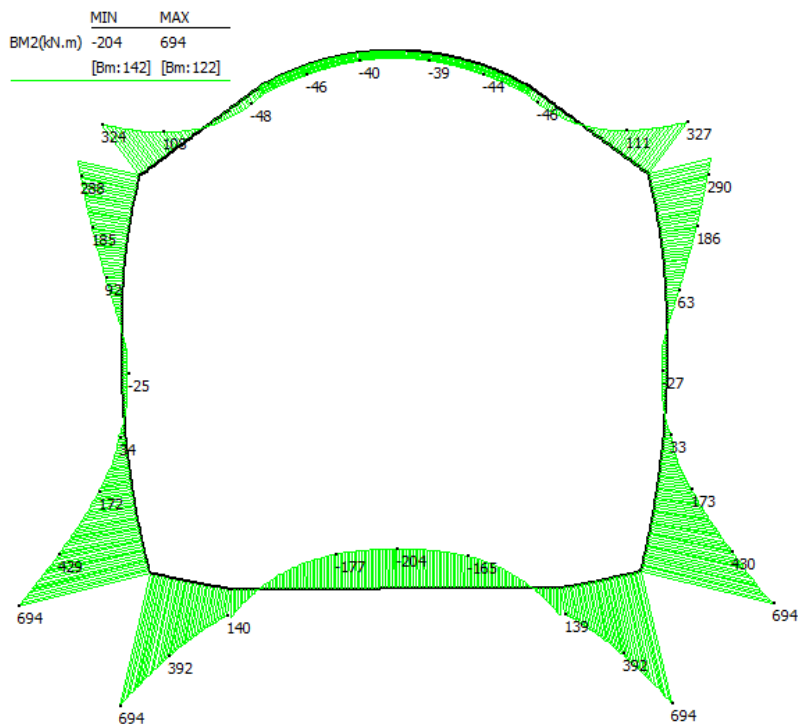


Figura 16 – Diagramma di involuppo del Momento flettente (condizioni statiche SLE-C)

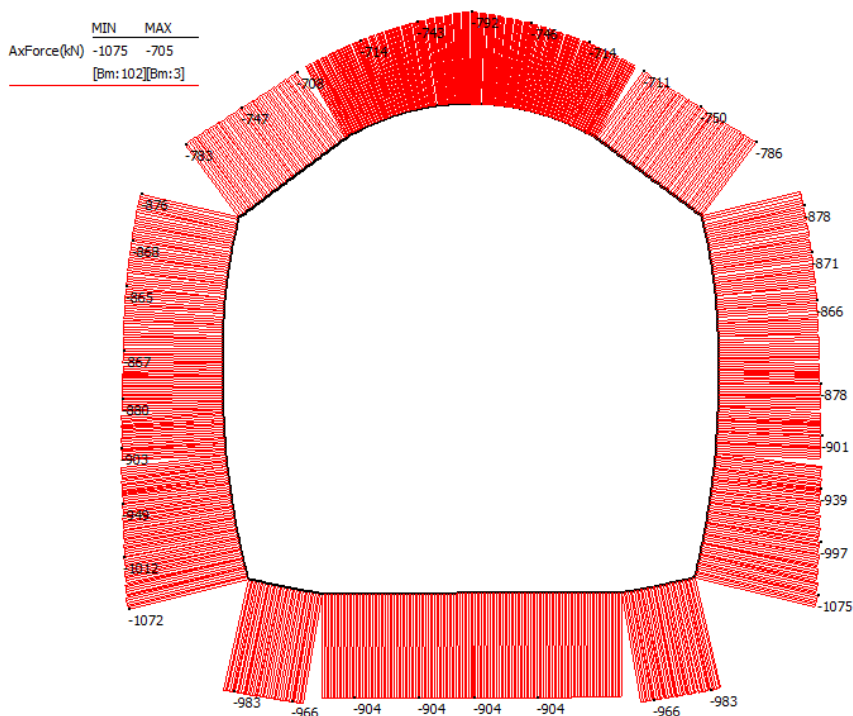


Figura 17 – Diagramma di involuppo dell'Azione assiale (condizioni statiche SLE-C)

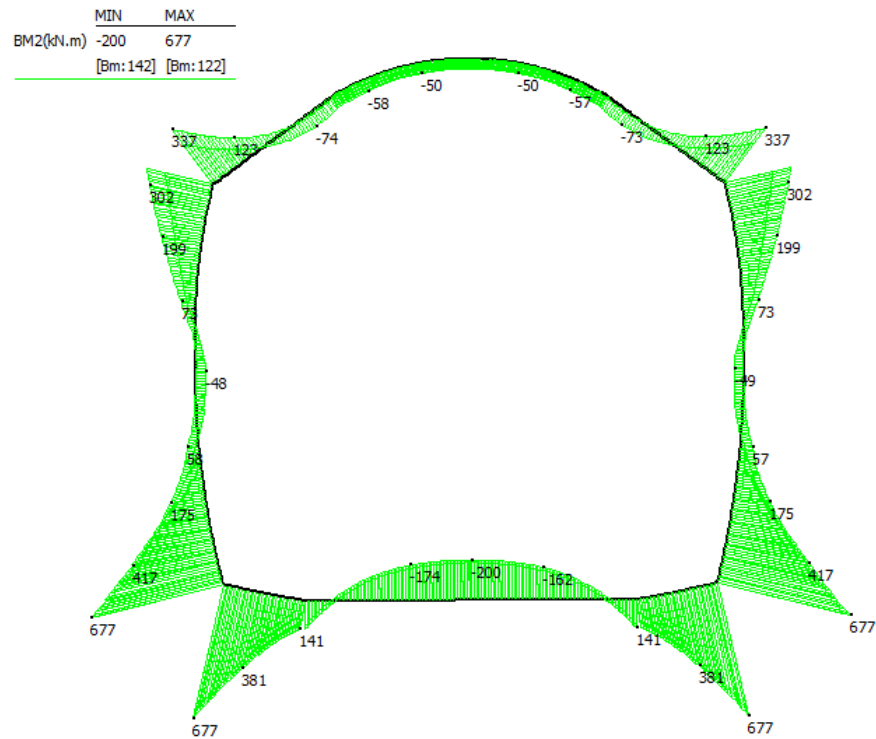


Figura 18 – Diagramma di involuppo del Momento flettente (condizioni statiche SLE-F)

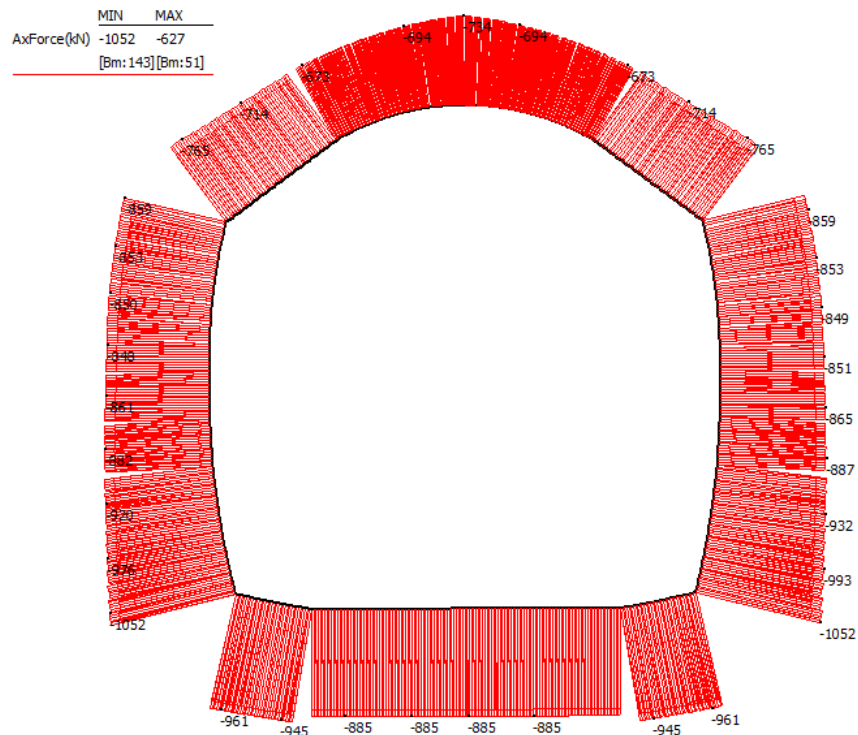


Figura 19 – Diagramma di involuppo dell'Azione assiale (condizioni statiche SLE-F)

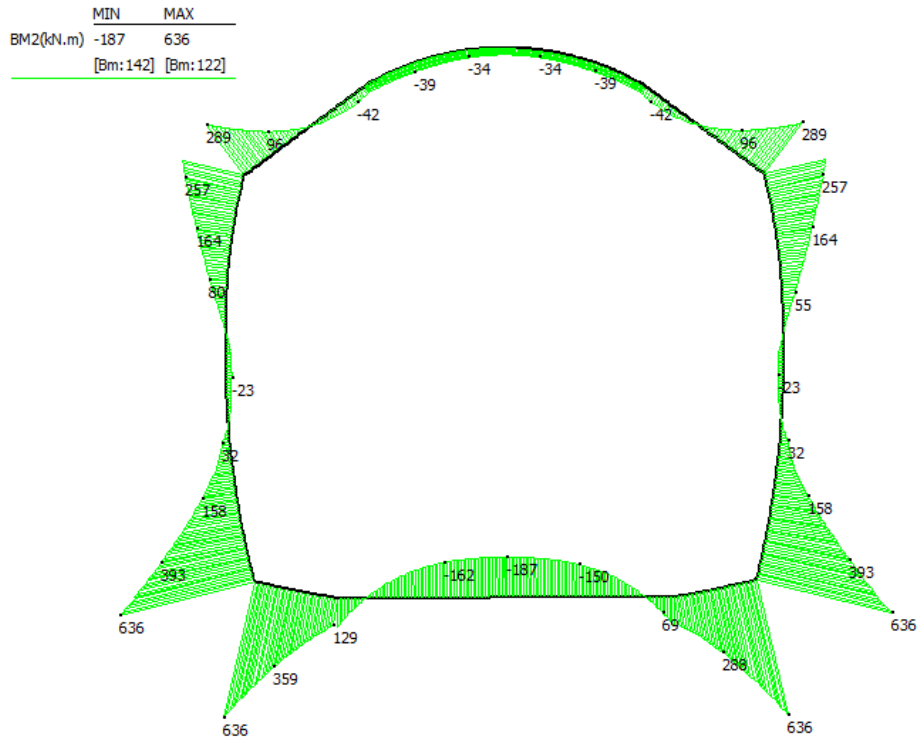


Figura 20 – Diagramma di involuppo del Momento flettente (condizioni statiche SLE-QP)

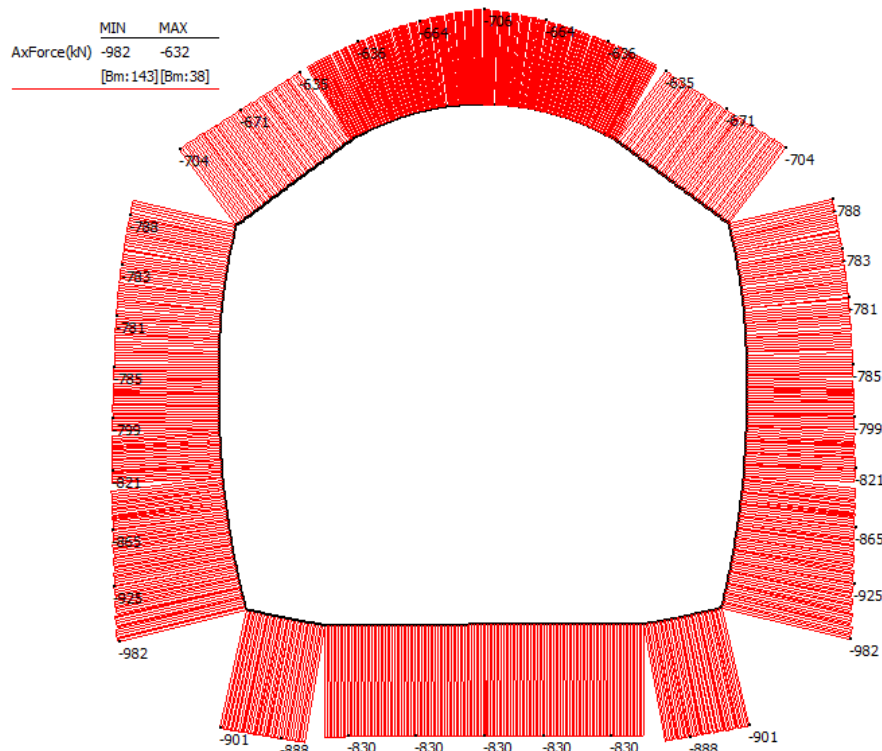


Figura 21 – Diagramma di involuppo dell'Azione assiale (condizioni statiche SLE-QP)

Verifica SLE – calotta - MOMENTO MAX

CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.				
Geometria della sezione				
Base (ortogonale al Taglio)		B [cm]	100	
Altezza (parallela al Taglio)		H [cm]	129	
Altezza utile della sezione		d [cm]	124	
Area di calcestruzzo		A _c [cm ²]	12900	
Armatura longitudinale tesa				
		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	φ [mm]	16	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	As [cm ²]	10.05	0.00	0.00
Rapporto di armatura	ρ [%]	0.081%		
Armatura longitudinale compressa				
		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	φ [mm]	16	0	0
Posizione dal lembo esterno	c' [cm]	5.0	0.0	0.0
Area strato	As' [cm ²]	10.05	0.00	0.00
Rapporto di armatura	ρ' [%]	0.081%		
VERIFICHE IN ESERCIZIO				
Verifica Tensionale				
				σ limit
Calcestruzzo SLE Quasi Permanente	σ _c [Mpa] =	1.76	11.250	
Calcestruzzo SLE Rara	σ _c [Mpa] =	2.00	15.000	
Acciaio SLE Rara	σ _s [Mpa] =	17.88	360.000	
Verifica di fessurazione				
				w limit
Combinazione SLE Quasi permanente	w _d [mm] =	0.000	0.200	
Combinazione SLE Frequente	w _d [mm] =	0.000	0.300	

Verifica SLE – calotta - SFORZO NORMALE MAX

CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.				
Geometria della sezione				
Base (ortogonale al Taglio)		B [cm]	100	
Altezza (parallela al Taglio)		H [cm]	129	
Altezza utile della sezione		d [cm]	124	
Area di calcestruzzo		A _c [cm ²]	12900	
Armatura longitudinale tesa				
		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	φ [mm]	16	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	As [cm ²]	10.05	0.00	0.00
Rapporto di armatura	ρ [%]	0.081%		

Armatura longitudinale compressa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	ϕ [mm]	16	0	0
Posizione dal lembo esterno	c' [cm]	5.0	0.0	0.0
Area strato	As' [cm ²]	10.05	0.00	0.00
Rapporto di armatura	ρ' [%]		0.081%	

VERIFICHE IN ESERCIZIO

VERIFICHE IN ESERCIZIO			
Verifica Tensionale			σ limit
Calcestruzzo SLE Quasi Permanente	σ_c [Mpa] =	1.76	11.250
Calcestruzzo SLE Rara	σ_c [Mpa] =	2.00	15.000
Acciaio SLE Rara	σ_s [Mpa] =	17.88	360.000
Verifica di fessurazione			w limit
Combinazione SLE Quasi permanente	w _d [mm] =	0.000	0.200
Combinazione SLE Frequente	w _d [mm] =	0.000	0.300

Verifica SLE – calotta sp. min 0.70m
CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.

CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.			
Geometria della sezione			
Base (ortogonale al Taglio)		B [cm]	100
Altezza (parallela al Taglio)		H [cm]	70
Altezza utile della sezione		d [cm]	65
Area di calcestruzzo		A _c [cm ²]	7000

Armatura longitudinale tesa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	ϕ [mm]	16	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	As [cm ²]	10.05	0.00	0.00
Rapporto di armatura	ρ [%]		0.155%	

Armatura longitudinale compressa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	ϕ [mm]	16	0	0
Posizione dal lembo esterno	c' [cm]	5.0	0.0	0.0
Area strato	As' [cm ²]	10.05	0.00	0.00
Rapporto di armatura	ρ' [%]		0.155%	

VERIFICHE IN ESERCIZIO

VERIFICHE IN ESERCIZIO			
Verifica Tensionale			σ limit
Calcestruzzo SLE Quasi Permanente	σ_c [Mpa] =	1.31	11.250
Calcestruzzo SLE Rara	σ_c [Mpa] =	1.50	15.000
Acciaio SLE Rara	σ_s [Mpa] =	-10.93	360.000
Verifica di fessurazione			w limit
Combinazione SLE Quasi permanente	w _d [mm] =	0.000	0.200
Combinazione SLE Frequente	w _d [mm] =	0.000	0.300

Verifica SLE – piedritto – MOMENTO MAX

CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.			
Geometria della sezione			
Base (ortogonale al Taglio)		B [cm]	100
Altezza (parallela al Taglio)		H [cm]	135
Altezza utile della sezione		d [cm]	130
Area di calcestruzzo		A _c [cm ²]	13500

Armatura longitudinale tesa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	φ [mm]	18	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	As [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ [%]	0.098%		

Armatura longitudinale compressa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	φ [mm]	18	0	0
Posizione dal lembo esterno	c' [cm]	5.0	0.0	0.0
Area strato	As' [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ' [%]	0.098%		

VERIFICHE IN ESERCIZIO			
Verifica Tensionale			σ limit
Calcestruzzo SLE Quasi Permanente	σ _c [Mpa] =	4.02	11.250
Calcestruzzo SLE Rara	σ _c [Mpa] =	4.38	15.000
Acciaio SLE Rara	σ _s [Mpa] =	100.10	360.000
Verifica di fessurazione			w limit
Combinazione SLE Quasi permanente	w _d [mm] =	0.000	0.200
Combinazione SLE Frequente	w _d [mm] =	0.000	0.300

Verifica SLE – piedritto – SFORZO NORMALE MAX

CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.			
Geometria della sezione			
Base (ortogonale al Taglio)		B [cm]	100
Altezza (parallela al Taglio)		H [cm]	135
Altezza utile della sezione		d [cm]	130
Area di calcestruzzo		A _c [cm ²]	13500

Armatura longitudinale tesa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	φ [mm]	18	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	As [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ [%]	0.098%		

Armatura longitudinale compressa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	ϕ [mm]	18	0	0
Posizione dal lembo esterno	c' [cm]	5.0	0.0	0.0
Area strato	As' [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ' [%]		0.098%	

VERIFICHE IN ESERCIZIO			
Verifica Tensionale			σ limit
Calcestruzzo SLE Quasi Permanente	σ_c [Mpa] =	4.02	11.250
Calcestruzzo SLE Rara	σ_c [Mpa] =	4.38	15.000
Acciaio SLE Rara	σ_s [Mpa] =	100.10	360.000
Verifica di fessurazione			w limit
Combinazione SLE Quasi permanente	w _d [mm] =	0.000	0.200
Combinazione SLE Frequente	w _d [mm] =	0.000	0.300

Verifica SLE – piedritto sp.min 0.70m

CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.			
Geometria della sezione			
Base (ortogonale al Taglio)		B [cm]	100
Altezza (parallela al Taglio)		H [cm]	70
Altezza utile della sezione		d [cm]	65
Area di calcestruzzo		A _c [cm ²]	7000

Armatura longitudinale tesa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	ϕ [mm]	18	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	As [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ [%]		0.196%	

Armatura longitudinale compressa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	ϕ [mm]	18	0	0
Posizione dal lembo esterno	c' [cm]	5.0	0.0	0.0
Area strato	As' [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ' [%]		0.196%	

VERIFICHE IN ESERCIZIO			
Verifica Tensionale			σ limit
Calcestruzzo SLE Quasi Permanente	σ_c [Mpa] =	1.32	11.250
Calcestruzzo SLE Rara	σ_c [Mpa] =	1.46	15.000
Acciaio SLE Rara	σ_s [Mpa] =	-14.23	360.000
Verifica di fessurazione			w limit
Combinazione SLE Quasi permanente	w _d [mm] =	0.000	0.200
Combinazione SLE Frequente	w _d [mm] =	0.000	0.300

Verifica SLE – arco rovescio – MOMENTO MAX

CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.				
Geometria della sezione				
Base (ortogonale al Taglio)		B [cm]	100	
Altezza (parallela al Taglio)		H [cm]	134	
Altezza utile della sezione		d [cm]	129	
Area di calcestruzzo		A_c [cm ²]	13400	
Armatura longitudinale tesa				
		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	ϕ [mm]	18	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	A_s [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ [%]	0.099%		
Armatura longitudinale compressa				
		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	ϕ [mm]	18	0	0
Posizione dal lembo esterno	c' [cm]	5.0	0.0	0.0
Area strato	A_s' [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ' [%]	0.099%		
VERIFICHE IN ESERCIZIO				
Verifica Tensionale				
				σ limit
Calcestruzzo SLE Quasi Permanente	σ_c [Mpa] =	4.21	11.250	
Calcestruzzo SLE Rara	σ_c [Mpa] =	4.60	15.000	
Acciaio SLE Rara	σ_s [Mpa] =	123.59	360.000	
Verifica di fessurazione				
				w limit
Combinazione SLE Quasi permanente	w_d [mm] =	0.000	0.200	
Combinazione SLE Frequente	w_d [mm] =	0.000	0.300	

Verifica SLE – arco rovescio – SFORZO NORMALE MAX

CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.				
Geometria della sezione				
Base (ortogonale al Taglio)		B [cm]	100	
Altezza (parallela al Taglio)		H [cm]	134	
Altezza utile della sezione		d [cm]	129	
Area di calcestruzzo		A_c [cm ²]	13400	
Armatura longitudinale tesa				
		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	ϕ [mm]	18	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	A_s [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ [%]	0.099%		

Armatura longitudinale compressa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	ϕ [mm]	18	0	0
Posizione dal lembo esterno	c' [cm]	5.0	0.0	0.0
Area strato	As' [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ' [%]		0.099%	

VERIFICHE IN ESERCIZIO			
Verifica Tensionale			σ limit
Calcestruzzo SLE Quasi Permanente	σ_c [Mpa] =	4.21	11.250
Calcestruzzo SLE Rara	σ_c [Mpa] =	4.60	15.000
Acciaio SLE Rara	σ_s [Mpa] =	123.59	360.000
Verifica di fessurazione			w limit
Combinazione SLE Quasi permanente	w _d [mm] =	0.000	0.200
Combinazione SLE Frequente	w _d [mm] =	0.000	0.300

Verifica SLE – arco rovescio sp.min 0.70m

CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.			
Geometria della sezione			
Base (ortogonale al Taglio)		B [cm]	100
Altezza (parallela al Taglio)		H [cm]	70
Altezza utile della sezione		d [cm]	65
Area di calcestruzzo		A _c [cm ²]	7000

Armatura longitudinale tesa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	ϕ [mm]	18	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	As [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ [%]		0.196%	

Armatura longitudinale compressa		1° STRATO	2° STRATO	3° STRATO
Numero Barre	n	5	0	0
Diametro	ϕ [mm]	18	0	0
Posizione dal lembo esterno	c' [cm]	5.0	0.0	0.0
Area strato	As' [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ' [%]		0.196%	

VERIFICHE IN ESERCIZIO			
Verifica Tensionale			σ limit
Calcestruzzo SLE Quasi Permanente	σ_c [Mpa] =	3.53	11.250
Calcestruzzo SLE Rara	σ_c [Mpa] =	3.86	15.000
Acciaio SLE Rara	σ_s [Mpa] =	25.39	360.000
Verifica di fessurazione			w limit
Combinazione SLE Quasi permanente	w _d [mm] =	0.000	0.200
Combinazione SLE Frequente	w _d [mm] =	0.000	0.300

L'armatura è composta da ferri di forza ϕ 16mm passo 20cm. L'incidenza complessiva risulta pari a 50 kg/m³.

Le verifiche risultano soddisfatte. In particolare si riportano i valori relativi alle condizioni maggiormente rappresentative per ogni componente strutturale dell'opera.

13 MONITORAGGIO

Nella fase realizzativa dovrà essere posto in opera un adeguato programma di monitoraggio, volto a verificare gli effetti indotti dagli interventi di risanamento e messa in sicurezza della Galleira Miglionico, in considerazione delle demolizioni e dei nuovi rivestimenti definitivi previsti.

Con riferimento alle zone degli imbocchi, in sintesi il programma di monitoraggio dovrà prevedere:

- monitoraggio degli spostamenti delle paratie mediante mire ottiche disposte sull'opera di sostegno;

Il sistema di monitoraggio dovrà essere predisposto in modo tale da garantire l'esame tempestivo e continuativo dei dati rilevati e la trasmissione sistematica dei dati e delle elaborazioni, avendo precedentemente definito ed assegnato le responsabilità per la lettura, l'elaborazione e l'interpretazione dei dati di monitoraggio, nonché per la loro distribuzione.

Le grandezze individuate come rappresentative dovranno essere rilevate e controllate con un sistema di misura che abbia un grado di precisione compatibile con i valori attesi per le grandezze sopra dette, in modo da poter essere confrontati con le previsioni progettuali (i valori attesi) al fine di consentire la verifica e la messa a punto del progetto, e la gestione delle variabilità previste. Per ulteriori dettagli riguardo le frequenze delle letture si rimanda agli elaborati specialistici allegati al progetto.

14 CONCLUSIONI

La presente relazione contiene la descrizione e la verifica delle opere di imbocco della Galleria Miglionico della linea Ferrandina – Matera la Martella.

Le soluzioni progettuali adottate sono finalizzate da un lato all'adeguamento della sagoma d'intradosso della galleria scatolare esistente e dall'altro al prolungamento mediante la realizzazione di una nuova tratta in artificiale. Quest'ultima è costituita da un portale d'imbocco a becco di flauto e da una galleria policentrica al fine di predisporre la zona di imbocco al risanamento paesaggistico.

La relazione contiene le verifiche di dimensionamento della galleria artificiale. Tutte le verifiche eseguite risultano soddisfatte in accordo alla Normativa vigente sia in condizioni statiche che sismiche.

ALLEGATO 1

TITOLO	Risultati delle analisi di verifica della Nuova Galleria Artificiale
TIPO DI DOCUMENTO:	Documento - Formato A4
CODIFICA:	-
PAGINE:	242
DATA:	Luglio 2019
SORGENTE:	U.O. Gallerie Italferr S.p.A.
NOTE:	

Input-Output di calcolo STRAUS7 -nuova galleria artificiale

/ Straus7 MODEL EXCHANGE FILE
/ TIMESTAMP: 6:15:36 pm, 05 giugno 2019

/ MODEL INFORMATION

FileFormat Straus7.2.4.6
ModelName "GA_open_SLU_001"
Title ""
Project ""
Author ""
Reference ""
Comments ""

/ UNITS

LengthUnit m
MassUnit kg
EnergyUnit J
PressureUnit MPa
ForceUnit kN
TemperatureUnit C

/ GROUP DEFINITIONS

Group 1 16711680 "\\Model"
Group 2 3355647 "calotta"
Group 3 16757299 "calotta\curvilinea"
Group 4 6750003 "calotta\rettilinea"
Group 5 3407692 "piedritto"
Group 6 3375359 "piedritto\piedritto_alto"
Group 7 16724812 "piedritto\piedritto_basso"
Group 8 3407846 "arco rovescio"

/ FREEDOM CASE DEFINITIONS

FreedomCase 1 0 1 "Freedom Case 1"

/ LOAD CASE DEFINITIONS

LoadCase 1 1 "PP"
Gravity 2 -9.806650000000000E+0
LCInclude 3

LoadCase 2 0 "P_cop"
LCInclude 3

LoadCase 3 0 "SP_sx"
LCInclude 3

LoadCase 4 0 "SP_dx"
LCInclude 3

LoadCase 5 0 "V"
LCInclude 3

LoadCase 6 0 "SV_sx"

LCInclude	3	
LoadCase	7	0 "SV_dx"
LCInclude	3	
LoadCase	8	0 "dS_h"
LCInclude	3	
LoadCase	9	0 "dS_V"
LCInclude	3	

/ INCREMENT ENVELOPES

IncrementEnvelope "Envelope Case" Abs

ON	1
ON	2
ON	3
ON	4
ON	5
ON	6
ON	7
ON	8
ON	9
ON	10
ON	11
ON	12
ON	13
ON	14
ON	15
ON	16

/ COORDINATE SYSTEM DEFINITIONS

CoordSys	1	"Global XYZ" GlobalXYZ
CoordSys	2	"carichi" RectXYZ
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/ NODE COORDINATES

Node	1	0	-1.9483000000000E+0	3.3329000000000E+0	0.0000000000000E+0
Node	2	0	-1.85947466801228E+0	3.38326015242999E+0	0.0000000000000E+0
Node	3	0	-1.76934854991663E+0	3.43125356231625E+0	0.0000000000000E+0
Node	4	0	-1.67798469298355E+0	3.47684665611138E+0	0.0000000000000E+0
Node	5	0	-1.58544701033748E+0	3.52000753939703E+0	0.0000000000000E+0
Node	6	0	-1.49180023624673E+0	3.56070601919538E+0	0.0000000000000E+0
Node	7	0	-1.39710988083890E+0	3.59891362509054E+0	0.0000000000000E+0
Node	8	0	-1.30144218427364E+0	3.63460362914487E+0	0.0000000000000E+0
Node	9	0	-1.20486407040466E+0	3.66775106459638E+0	0.0000000000000E+0
Node	10	0	-1.10744309996351E+0	3.69833274332411E+0	0.0000000000000E+0
Node	11	0	-1.00924742329778E+0	3.72632727206921E+0	0.0000000000000E+0
Node	12	0	-9.10345732696894E-1	3.75171506740058E+0	0.0000000000000E+0
Node	13	0	-8.10807214338750E-1	3.77447836941427E+0	0.0000000000000E+0
Node	14	0	-7.10701499890891E-1	3.79460125415739E+0	0.0000000000000E+0
Node	15	0	-6.10098617800016E-1	3.81206964476759E+0	0.0000000000000E+0
Node	16	0	-5.09068944303938E-1	3.82687132132050E+0	0.0000000000000E+0
Node	17	0	-4.07683154200238E-1	3.83899592937806E+0	0.0000000000000E+0
Node	18	0	-3.06012171406074E-1	3.84843498723200E+0	0.0000000000000E+0
Node	19	0	-2.04127119343708E-1	3.85518189183707E+0	0.0000000000000E+0
Node	20	0	-1.02099271186475E-1	3.85923192343026E+0	0.0000000000000E+0

Node	21	0	-3.80446542325164E-16	3.86058224883242E+0	0.00000000000000E+0
Node	22	0	1.02099271186474E-1	3.85923192343026E+0	0.00000000000000E+0
Node	23	0	2.04127119343707E-1	3.85518189183707E+0	0.00000000000000E+0
Node	24	0	3.06012171406073E-1	3.84843498723200E+0	0.00000000000000E+0
Node	25	0	4.07683154200237E-1	3.83899592937806E+0	0.00000000000000E+0
Node	26	0	5.09068944303936E-1	3.82687132132050E+0	0.00000000000000E+0
Node	27	0	6.10098617800015E-1	3.81206964476759E+0	0.00000000000000E+0
Node	28	0	7.10701499890890E-1	3.79460125415739E+0	0.00000000000000E+0
Node	29	0	8.10807214338749E-1	3.77447836941427E+0	0.00000000000000E+0
Node	30	0	9.10345732696893E-1	3.75171506740058E+0	0.00000000000000E+0
Node	31	0	1.00924742329778E+0	3.72632727206921E+0	0.00000000000000E+0
Node	32	0	1.10744309996351E+0	3.69833274332411E+0	0.00000000000000E+0
Node	33	0	1.20486407040466E+0	3.66775106459638E+0	0.00000000000000E+0
Node	34	0	1.30144218427364E+0	3.63460362914487E+0	0.00000000000000E+0
Node	35	0	1.39710988083890E+0	3.59891362509054E+0	0.00000000000000E+0
Node	36	0	1.49180023624673E+0	3.56070601919538E+0	0.00000000000000E+0
Node	37	0	1.58544701033748E+0	3.52000753939703E+0	0.00000000000000E+0
Node	38	0	1.67798469298354E+0	3.47684665611138E+0	0.00000000000000E+0
Node	39	0	1.76934854991663E+0	3.43125356231625E+0	0.00000000000000E+0
Node	40	0	1.85947466801228E+0	3.38326015242999E+0	0.00000000000000E+0
Node	41	0	1.94830000000000E+0	3.33290000000000E+0	0.00000000000000E+0
Node	42	0	2.11546000000000E+0	3.20923000000000E+0	0.00000000000000E+0
Node	43	0	2.28262000000000E+0	3.08556000000000E+0	0.00000000000000E+0
Node	44	0	2.44978000000000E+0	2.96189000000000E+0	0.00000000000000E+0
Node	45	0	2.61694000000000E+0	2.83822000000000E+0	0.00000000000000E+0
Node	46	0	2.78410000000000E+0	2.71455000000000E+0	0.00000000000000E+0
Node	47	0	2.95126000000000E+0	2.59088000000000E+0	0.00000000000000E+0
Node	48	0	3.11842000000000E+0	2.46721000000000E+0	0.00000000000000E+0
Node	49	0	3.28558000000000E+0	2.34354000000000E+0	0.00000000000000E+0
Node	50	0	3.45274000000000E+0	2.21987000000000E+0	0.00000000000000E+0
Node	51	0	3.61990000000000E+0	2.09620000000000E+0	0.00000000000000E+0
Node	52	0	0.00000000000000E+0	0.00000000000000E+0	0.00000000000000E+0
Node	53	0	-2.11546000000000E+0	3.20923000000000E+0	0.00000000000000E+0
Node	54	0	-2.28262000000000E+0	3.08556000000000E+0	0.00000000000000E+0
Node	55	0	-2.44978000000000E+0	2.96189000000000E+0	0.00000000000000E+0
Node	56	0	-2.61694000000000E+0	2.83822000000000E+0	0.00000000000000E+0
Node	57	0	-2.78410000000000E+0	2.71455000000000E+0	0.00000000000000E+0
Node	58	0	-2.95126000000000E+0	2.59088000000000E+0	0.00000000000000E+0
Node	59	0	-3.11842000000000E+0	2.46721000000000E+0	0.00000000000000E+0
Node	60	0	-3.28558000000000E+0	2.34354000000000E+0	0.00000000000000E+0
Node	61	0	-3.45274000000000E+0	2.21987000000000E+0	0.00000000000000E+0
Node	62	0	-3.61990000000000E+0	2.09620000000000E+0	0.00000000000000E+0
Node	63	0	3.66914272971283E+0	1.89024296185021E+0	0.00000000000000E+0
Node	64	0	3.71328302196233E+0	1.68313240539995E+0	0.00000000000000E+0
Node	65	0	3.75229394019274E+0	1.47499471959599E+0	0.00000000000000E+0
Node	66	0	3.78615167804214E+0	1.26595692018946E+0	0.00000000000000E+0
Node	67	0	3.81483557387019E+0	1.05614657222461E+0	0.00000000000000E+0
Node	68	0	3.83832812336690E+0	8.45691712192458E-1	0.00000000000000E+0
Node	69	0	3.85661499023460E+0	6.34720769896678E-1	0.00000000000000E+0
Node	70	0	3.86968501493665E+0	4.23362490079458E-1	0.00000000000000E+0
Node	71	0	3.87753022150753E+0	2.11745853855208E-1	0.00000000000000E+0
Node	72	0	3.88015000000000E+0	0.00000000000000E+0	0.00000000000000E+0
Node	73	0	-3.66914272971283E+0	1.89024296185021E+0	0.00000000000000E+0
Node	74	0	-3.71328302196233E+0	1.68313240539995E+0	0.00000000000000E+0
Node	75	0	-3.75229394019274E+0	1.47499471959599E+0	0.00000000000000E+0
Node	76	0	-3.78615167804214E+0	1.26595692018946E+0	0.00000000000000E+0
Node	77	0	-3.81483557387019E+0	1.05614657222461E+0	0.00000000000000E+0
Node	78	0	-3.83832812336690E+0	8.45691712192458E-1	0.00000000000000E+0
Node	79	0	-3.85661499023460E+0	6.34720769896678E-1	0.00000000000000E+0
Node	80	0	-3.86968501493665E+0	4.23362490079458E-1	0.00000000000000E+0
Node	81	0	-3.87753022150753E+0	2.11745853855208E-1	0.00000000000000E+0
Node	82	0	-3.88015000000000E+0	0.00000000000000E+0	0.00000000000000E+0
Node	83	0	-3.49550000000000E+0	-3.56270000000000E+0	0.00000000000000E+0
Node	84	0	-3.33230782624253E+0	-3.60057547048123E+0	0.00000000000000E+0
Node	85	0	-3.16879248559635E+0	-3.63703051420949E+0	0.00000000000000E+0
Node	86	0	-3.00496634122818E+0	-3.67206237486980E+0	0.00000000000000E+0

Node	87	0	-2.84084177980416E+0	-3.70566840375206E+0	0.00000000000000E+0
Node	88	0	-2.67643121055332E+0	-3.73784605995134E+0	0.00000000000000E+0
Node	89	0	-2.51174706432936E+0	-3.76859291055994E+0	0.00000000000000E+0
Node	90	0	-2.34680179267073E+0	-3.79790663085141E+0	0.00000000000000E+0
Node	91	0	-2.18160786685924E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	92	0	-2.0161777697708E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	93	0	-1.85052403096246E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	94	0	-1.68465915366393E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	95	0	-1.51859568589340E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	96	0	-1.35234618347790E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	97	0	-1.18592321631029E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	98	0	-1.01933936739887E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	99	0	-8.52607231915959E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	100	0	-6.85739416245641E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	101	0	-5.18748537030578E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	102	0	-3.51647220218097E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	103	0	-1.84448100105556E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	104	0	-1.71638183850854E-2	-3.79790000000000E+0	0.00000000000000E+0
Node	105	0	3.49550000000000E+0	-3.56270000000000E+0	0.00000000000000E+0
Node	106	0	3.53876190604596E+0	-3.38827494401322E+0	0.00000000000000E+0
Node	107	0	3.57939848608508E+0	-3.21321963551490E+0	0.00000000000000E+0
Node	108	0	3.61740056791651E+0	-3.03757358674864E+0	0.00000000000000E+0
Node	109	0	3.65275957397965E+0	-2.86137644329578E+0	0.00000000000000E+0
Node	110	0	3.68546752329024E+0	-2.68466797512683E+0	0.00000000000000E+0
Node	111	0	3.71551703324176E+0	-2.50748806762490E+0	0.00000000000000E+0
Node	112	0	3.74290132127180E+0	-2.32987671258303E+0	0.00000000000000E+0
Node	113	0	3.76761420639292E+0	-2.15187399917756E+0	0.00000000000000E+0
Node	114	0	3.78965011058784E+0	-1.97352010491945E+0	0.00000000000000E+0
Node	115	0	3.81400406006844E+0	-1.79485528658573E+0	0.00000000000000E+0
Node	116	0	3.83567168639838E+0	-1.61591987113298E+0	0.00000000000000E+0
Node	117	0	3.84464922747919E+0	-1.43675424659509E+0	0.00000000000000E+0
Node	118	0	3.85593352839935E+0	-1.25739885296706E+0	0.00000000000000E+0
Node	119	0	3.86452204214643E+0	-1.07789417307727E+0	0.00000000000000E+0
Node	120	0	3.87541283018197E+0	-8.98280723449910E-1	0.00000000000000E+0
Node	121	0	3.87860456287904E+0	-7.18599045159911E-1	0.00000000000000E+0
Node	122	0	3.87909651982237E+0	-5.38889694682297E-1	0.00000000000000E+0
Node	123	0	3.87688858997090E+0	-3.59193234738058E-1	0.00000000000000E+0
Node	124	0	3.88198127168293E+0	-1.79550225138629E-1	0.00000000000000E+0
Node	125	0	3.33230782624253E+0	-3.60057547048123E+0	0.00000000000000E+0
Node	126	0	3.16879248559635E+0	-3.63703051420949E+0	0.00000000000000E+0
Node	127	0	3.00496634122818E+0	-3.67206237486980E+0	0.00000000000000E+0
Node	128	0	2.84084177980416E+0	-3.70566840375206E+0	0.00000000000000E+0
Node	129	0	2.67643121055332E+0	-3.73784605995134E+0	0.00000000000000E+0
Node	130	0	2.51174706432936E+0	-3.76859291055994E+0	0.00000000000000E+0
Node	131	0	2.34680179267073E+0	-3.79790663085141E+0	0.00000000000000E+0
Node	132	0	2.18160786685924E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	133	0	2.0161777697708E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	134	0	1.85052403096246E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	135	0	1.68465915366393E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	136	0	1.51859568589340E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	137	0	1.35234618347790E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	138	0	1.18592321631029E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	139	0	1.01933936739887E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	140	0	8.52607231915959E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	141	0	6.85739416245641E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	142	0	5.18748537030578E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	143	0	3.51647220218097E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	144	0	1.84448100105556E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	145	0	1.71638183850854E-2	-3.79790000000000E+0	0.00000000000000E+0
Node	146	0	-3.53876190604596E+0	-3.38827494401322E+0	0.00000000000000E+0
Node	147	0	-3.57939848608508E+0	-3.21321963551490E+0	0.00000000000000E+0
Node	148	0	-3.61740056791651E+0	-3.03757358674864E+0	0.00000000000000E+0
Node	149	0	-3.65275957397965E+0	-2.86137644329578E+0	0.00000000000000E+0
Node	150	0	-3.68546752329024E+0	-2.68466797512683E+0	0.00000000000000E+0
Node	151	0	-3.71551703324176E+0	-2.50748806762490E+0	0.00000000000000E+0
Node	152	0	-3.74290132127180E+0	-2.32987671258303E+0	0.00000000000000E+0

Node	153	0	-3.76761420639292E+0	-2.15187399917756E+0	0.00000000000000E+0
Node	154	0	-3.78965011058784E+0	-1.97352010491945E+0	0.00000000000000E+0
Node	155	0	-3.81400406006844E+0	-1.79485528658573E+0	0.00000000000000E+0
Node	156	0	-3.83567168639838E+0	-1.61591987113298E+0	0.00000000000000E+0
Node	157	0	-3.84464922747919E+0	-1.43675424659509E+0	0.00000000000000E+0
Node	158	0	-3.85593352839935E+0	-1.25739885296706E+0	0.00000000000000E+0
Node	159	0	-3.86452204214643E+0	-1.07789417307727E+0	0.00000000000000E+0
Node	160	0	-3.87541283018197E+0	-8.98280723449910E-1	0.00000000000000E+0
Node	161	0	-3.87860456287904E+0	-7.18599045159911E-1	0.00000000000000E+0
Node	162	0	-3.87909651982237E+0	-5.38889694682297E-1	0.00000000000000E+0
Node	163	0	-3.87688858997090E+0	-3.59193234738058E-1	0.00000000000000E+0
Node	164	0	-3.88198127168293E+0	-1.79550225138629E-1	0.00000000000000E+0

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/ BEAM ELEMENTS

Beam	1	0	3	1	2	1
Beam	2	0	3	1	3	2
Beam	3	0	3	1	4	3
Beam	4	0	3	1	5	4
Beam	5	0	3	1	6	5
Beam	6	0	3	1	7	6
Beam	7	0	3	1	8	7
Beam	8	0	3	1	9	8
Beam	9	0	3	1	10	9
Beam	10	0	3	1	11	10
Beam	11	0	3	1	12	11
Beam	12	0	3	1	13	12
Beam	13	0	3	1	14	13
Beam	14	0	3	1	15	14
Beam	15	0	3	1	16	15
Beam	16	0	3	1	17	16
Beam	17	0	3	1	18	17
Beam	18	0	3	1	19	18
Beam	19	0	3	1	20	19
Beam	20	0	3	1	21	20
Beam	21	0	3	1	22	21
Beam	22	0	3	1	23	22
Beam	23	0	3	1	24	23
Beam	24	0	3	1	25	24
Beam	25	0	3	1	26	25
Beam	26	0	3	1	27	26
Beam	27	0	3	1	28	27
Beam	28	0	3	1	29	28
Beam	29	0	3	1	30	29
Beam	30	0	3	1	31	30
Beam	31	0	3	1	32	31
Beam	32	0	3	1	33	32
Beam	33	0	3	1	34	33
Beam	34	0	3	1	35	34
Beam	35	0	3	1	36	35
Beam	36	0	3	1	37	36
Beam	37	0	3	1	38	37
Beam	38	0	3	1	39	38
Beam	39	0	3	1	40	39
Beam	40	0	3	1	41	40
Beam	41	0	4	2	42	41
Beam	42	0	4	3	43	42
Beam	43	0	4	4	44	43
Beam	44	0	4	5	45	44
Beam	45	0	4	6	46	45
Beam	46	0	4	7	47	46
Beam	47	0	4	8	48	47
Beam	48	0	4	9	49	48
Beam	49	0	4	10	50	49
Beam	50	0	4	11	51	50

Beam	51	0	4	2	1	53
Beam	52	0	4	3	53	54
Beam	53	0	4	4	54	55
Beam	54	0	4	5	55	56
Beam	55	0	4	6	56	57
Beam	56	0	4	7	57	58
Beam	57	0	4	8	58	59
Beam	58	0	4	9	59	60
Beam	59	0	4	10	60	61
Beam	60	0	4	11	61	62
Beam	61	0	6	10	63	51
Beam	62	0	6	9	64	63
Beam	63	0	6	8	65	64
Beam	64	0	6	7	66	65
Beam	65	0	6	6	67	66
Beam	66	0	6	5	68	67
Beam	67	0	6	4	69	68
Beam	68	0	6	3	70	69
Beam	69	0	6	2	71	70
Beam	70	0	6	1	72	71
Beam	71	0	6	10	62	73
Beam	72	0	6	9	73	74
Beam	73	0	6	8	74	75
Beam	74	0	6	7	75	76
Beam	75	0	6	6	76	77
Beam	76	0	6	5	77	78
Beam	77	0	6	4	78	79
Beam	78	0	6	3	79	80
Beam	79	0	6	2	80	81
Beam	80	0	6	1	81	82
Beam	81	0	8	27	83	84
Beam	82	0	8	28	84	85
Beam	83	0	8	29	85	86
Beam	84	0	8	30	86	87
Beam	85	0	8	31	87	88
Beam	86	0	8	32	88	89
Beam	87	0	8	1	89	90
Beam	88	0	8	1	90	91
Beam	89	0	8	1	91	92
Beam	90	0	8	1	92	93
Beam	91	0	8	1	93	94
Beam	92	0	8	1	94	95
Beam	93	0	8	1	95	96
Beam	94	0	8	1	96	97
Beam	95	0	8	1	97	98
Beam	96	0	8	1	98	99
Beam	97	0	8	1	99	100
Beam	98	0	8	1	100	101
Beam	99	0	8	1	101	102
Beam	100	0	8	1	102	103
Beam	101	0	8	1	103	104
Beam	102	0	7	27	105	106
Beam	103	0	7	50	106	107
Beam	104	0	7	49	107	108
Beam	105	0	7	48	108	109
Beam	106	0	7	47	109	110
Beam	107	0	7	46	110	111
Beam	108	0	7	45	111	112
Beam	109	0	7	44	112	113
Beam	110	0	7	43	113	114
Beam	111	0	7	42	114	115
Beam	112	0	7	41	115	116
Beam	113	0	7	40	116	117
Beam	114	0	7	39	117	118
Beam	115	0	7	38	118	119
Beam	116	0	7	37	119	120

Beam	117	0	7	36	120	121
Beam	118	0	7	35	121	122
Beam	119	0	7	34	122	123
Beam	120	0	7	33	123	124
Beam	121	0	7	1	124	72
Beam	122	0	8	27	125	105
Beam	123	0	8	28	126	125
Beam	124	0	8	29	127	126
Beam	125	0	8	30	128	127
Beam	126	0	8	31	129	128
Beam	127	0	8	32	130	129
Beam	128	0	8	1	131	130
Beam	129	0	8	1	132	131
Beam	130	0	8	1	133	132
Beam	131	0	8	1	134	133
Beam	132	0	8	1	135	134
Beam	133	0	8	1	136	135
Beam	134	0	8	1	137	136
Beam	135	0	8	1	138	137
Beam	136	0	8	1	139	138
Beam	137	0	8	1	140	139
Beam	138	0	8	1	141	140
Beam	139	0	8	1	142	141
Beam	140	0	8	1	143	142
Beam	141	0	8	1	144	143
Beam	142	0	8	1	145	144
Beam	143	0	7	27	146	83
Beam	144	0	7	50	147	146
Beam	145	0	7	49	148	147
Beam	146	0	7	48	149	148
Beam	147	0	7	47	150	149
Beam	148	0	7	46	151	150
Beam	149	0	7	45	152	151
Beam	150	0	7	44	153	152
Beam	151	0	7	43	154	153
Beam	152	0	7	42	155	154
Beam	153	0	7	41	156	155
Beam	154	0	7	40	157	156
Beam	155	0	7	39	158	157
Beam	156	0	7	38	159	158
Beam	157	0	7	37	160	159
Beam	158	0	7	36	161	160
Beam	159	0	7	35	162	161
Beam	160	0	7	34	163	162
Beam	161	0	7	33	164	163
Beam	162	0	7	1	82	164
Beam	163	0	8	1	104	145

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/ BEAM SUPPORTS

/ Freedom Case 1

BmSupport	1	1	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	2	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	3	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	4	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	5	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	6	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	7	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	8	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	9	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	10	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	11	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	12	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	13	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	14	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	15	0.00000000000000E+0	8.14000000000000E+2	CompOnly

BmSupport	1	148	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	149	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	150	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	151	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	152	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	153	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	154	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	155	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	156	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	157	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	158	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	159	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	160	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	161	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	162	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	163	0.00000000000000E+0	8.20646364281200E+5	CompOnly

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/ BEAM GLOBAL DISTRIBUTED LOADS

/ P_cop

BmDistLoadG	2	1	Y	1	-1.50038398475700E+2	-1.50038398475700E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0								
BmDistLoadG	2	2	Y	1	-1.49054862852538E+2	-1.49054862852538E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0								
BmDistLoadG	2	3	Y	1	-1.48118997815724E+2	-1.48118997815724E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0								
BmDistLoadG	2	4	Y	1	-1.47231458044916E+2	-1.47231458044916E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0								
BmDistLoadG	2	5	Y	1	-1.46392864414076E+2	-1.46392864414076E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0								
BmDistLoadG	2	6	Y	1	-1.45603803557141E+2	-1.45603803557141E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0								
BmDistLoadG	2	7	Y	1	-1.44864827457646E+2	-1.44864827457646E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0								
BmDistLoadG	2	8	Y	1	-1.44176453062587E+2	-1.44176453062587E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0								
BmDistLoadG	2	9	Y	1	-1.43539161920795E+2	-1.43539161920795E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0								
BmDistLoadG	2	10	Y	1	-1.42953399846067E+2	-1.42953399846067E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0								
BmDistLoadG	2	11	Y	1	-1.42419576605302E+2	-1.42419576605302E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0								
BmDistLoadG	2	12	Y	1	-1.41938065631851E+2	-1.41938065631851E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0								
BmDistLoadG	2	13	Y	1	-1.41509203764283E+2	-1.41509203764283E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0								
BmDistLoadG	2	14	Y	1	-1.41133291010750E+2	-1.41133291010750E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0								
BmDistLoadG	2	15	Y	1	-1.40810590339119E+2	-1.40810590339119E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0								
BmDistLoadG	2	16	Y	1	-1.40541327493014E+2	-1.40541327493014E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0								
BmDistLoadG	2	17	Y	1	-1.40325690833899E+2	-1.40325690833899E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0								
BmDistLoadG	2	18	Y	1	-1.40163831209309E+2	-1.40163831209309E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0								
BmDistLoadG	2	19	Y	1	-1.40055861847327E+2	-1.40055861847327E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0								
BmDistLoadG	2	20	Y	1	-1.40001858277373E+2	-1.40001858277373E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0								
BmDistLoadG	2	21	Y	1	-1.40001858277373E+2	-1.40001858277373E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0								
BmDistLoadG	2	22	Y	1	-1.40055861847327E+2	-1.40055861847327E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0								
BmDistLoadG	2	23	Y	1	-1.40163831209309E+2	-1.40163831209309E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0								

BmDistLoadG	2	57	Y	1	-1.66619100000000E+2	-1.66619100000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	2	58	Y	1	-1.69092500000000E+2	-1.69092500000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	2	59	Y	1	-1.71565900000000E+2	-1.71565900000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	2	60	Y	1	-1.74039300000000E+2	-1.74039300000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			

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/ BEAM GLOBAL DISTRIBUTED LOADS

/ SP_sx

BmDistLoadG	3	1	X	1	8.70222711159060E+1	8.70222711159060E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	2	X	1	8.64518204544718E+1	8.64518204544718E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	3	X	1	8.59090187331197E+1	8.59090187331197E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	4	X	1	8.53942456660512E+1	8.53942456660512E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	5	X	1	8.49078613601640E+1	8.49078613601640E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	6	X	1	8.44502060631416E+1	8.44502060631416E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	7	X	1	8.40215999254346E+1	8.40215999254346E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	8	X	1	8.36223427763007E+1	8.36223427763007E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	9	X	1	8.32527139140611E+1	8.32527139140611E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	10	X	1	8.29129719107187E+1	8.29129719107187E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	11	X	1	8.26033544310752E+1	8.26033544310752E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	12	X	1	8.23240780664738E+1	8.23240780664738E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	13	X	1	8.20753381832843E+1	8.20753381832843E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	14	X	1	8.18573087862351E+1	8.18573087862351E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	15	X	1	8.16701423966891E+1	8.16701423966891E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	16	X	1	8.15139699459483E+1	8.15139699459483E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	17	X	1	8.13889006836616E+1	8.13889006836616E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	18	X	1	8.12950221013994E+1	8.12950221013994E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	19	X	1	8.12323998714495E+1	8.12323998714495E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	20	X	1	8.12010778008764E+1	8.12010778008764E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	51	X	1	8.80316460000000E+1	8.80316460000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	52	X	1	8.94662180000000E+1	8.94662180000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	53	X	1	9.09007900000000E+1	9.09007900000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	54	X	1	9.23353620000000E+1	9.23353620000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	55	X	1	9.37699340000000E+1	9.37699340000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	56	X	1	9.52045060000000E+1	9.52045060000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	57	X	1	9.66390780000000E+1	9.66390780000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			

BmDistLoadG	3	58	X	1	9.80736500000000E+1	9.80736500000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	59	X	1	9.95082220000000E+1	9.95082220000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	60	X	1	1.00942794000000E+2	1.00942794000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	71	X	1	1.02854630821268E+2	1.02854630821268E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	72	X	1	1.05250422869949E+2	1.05250422869949E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	73	X	1	1.07658862675023E+2	1.07658862675023E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	74	X	1	1.10078480489244E+2	1.10078480489244E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	75	X	1	1.12507799743998E+2	1.12507799743998E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	76	X	1	1.14945337950381E+2	1.14945337950381E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	77	X	1	1.17389607603883E+2	1.17389607603883E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	78	X	1	1.19839117092138E+2	1.19839117092138E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	79	X	1	1.22292371605178E+2	1.22292371605178E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	80	X	1	1.24747874047639E+2	1.24747874047639E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	143	X	1	1.66291654675277E+2	1.66291654675277E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	144	X	1	1.64264668561263E+2	1.64264668561263E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	145	X	1	1.62230600689128E+2	1.62230600689128E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	146	X	1	1.60189910174258E+2	1.60189910174258E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	147	X	1	1.58143057626851E+2	1.58143057626851E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	148	X	1	1.56090505047960E+2	1.56090505047960E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	149	X	1	1.54032715725206E+2	1.54032715725206E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	150	X	1	1.51970154128211E+2	1.51970154128211E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	151	X	1	1.49903285803763E+2	1.49903285803763E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	152	X	1	1.47832577270730E+2	1.47832577270730E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	153	X	1	1.45758495914769E+2	1.45758495914769E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	154	X	1	1.43681509882823E+2	1.43681509882823E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	155	X	1	1.41602087977460E+2	1.41602087977460E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	156	X	1	1.39520699551057E+2	1.39520699551057E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	157	X	1	1.37437814399858E+2	1.37437814399858E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	158	X	1	1.35353902657937E+2	1.35353902657937E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	159	X	1	1.33269434691085E+2	1.33269434691085E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	160	X	1	1.31184880990638E+2	1.31184880990638E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	161	X	1	1.29100712067285E+2	1.29100712067285E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	162	X	1	1.27017391305804E+2	1.27017391305804E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							

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/ BEAM GLOBAL DISTRIBUTED LOADS

/ SP_dx

BmDistLoadG	4	21	X	1	-8.12010778008764E+1	-8.12010778008764E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	22	X	1	-8.12323998714495E+1	-8.12323998714495E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	23	X	1	-8.12950221013994E+1	-8.12950221013994E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	24	X	1	-8.13889006836616E+1	-8.13889006836616E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	25	X	1	-8.15139699459483E+1	-8.15139699459483E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	26	X	1	-8.16701423966891E+1	-8.16701423966891E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	27	X	1	-8.18573087862351E+1	-8.18573087862351E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	28	X	1	-8.20753381832843E+1	-8.20753381832843E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	29	X	1	-8.23240780664738E+1	-8.23240780664738E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	30	X	1	-8.26033544310752E+1	-8.26033544310752E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	31	X	1	-8.29129719107187E+1	-8.29129719107187E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	32	X	1	-8.32527139140611E+1	-8.32527139140611E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	33	X	1	-8.36223427763007E+1	-8.36223427763007E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	34	X	1	-8.40215999254346E+1	-8.40215999254346E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	35	X	1	-8.44502060631416E+1	-8.44502060631416E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	36	X	1	-8.49078613601640E+1	-8.49078613601640E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	37	X	1	-8.53942456660512E+1	-8.53942456660512E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	38	X	1	-8.59090187331197E+1	-8.59090187331197E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	39	X	1	-8.64518204544718E+1	-8.64518204544718E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	40	X	1	-8.70222711159060E+1	-8.70222711159060E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	41	X	1	-8.80316460000000E+1	-8.80316460000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	42	X	1	-8.94662180000000E+1	-8.94662180000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	43	X	1	-9.09007900000000E+1	-9.09007900000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	44	X	1	-9.23353620000000E+1	-9.23353620000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	45	X	1	-9.37699340000000E+1	-9.37699340000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	46	X	1	-9.52045060000000E+1	-9.52045060000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	47	X	1	-9.66390780000000E+1	-9.66390780000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	48	X	1	-9.80736500000000E+1	-9.80736500000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	49	X	1	-9.95082220000000E+1	-9.95082220000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	50	X	1	-1.00942794000000E+2	-1.00942794000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	61	X	1	-1.02854630821268E+2	-1.02854630821268E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							

BmDistLoadG	4	62	X	1	-1.05250422869949E+2	-1.05250422869949E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	63	X	1	-1.07658862675023E+2	-1.07658862675023E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	64	X	1	-1.10078480489244E+2	-1.10078480489244E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	65	X	1	-1.12507799743998E+2	-1.12507799743998E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	66	X	1	-1.14945337950381E+2	-1.14945337950381E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	67	X	1	-1.17389607603883E+2	-1.17389607603883E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	68	X	1	-1.19839117092138E+2	-1.19839117092138E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	69	X	1	-1.22292371605178E+2	-1.22292371605178E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	70	X	1	-1.24747874047639E+2	-1.24747874047639E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	102	X	1	-1.66291654675277E+2	-1.66291654675277E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	103	X	1	-1.64264668561263E+2	-1.64264668561263E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	104	X	1	-1.62230600689128E+2	-1.62230600689128E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	105	X	1	-1.60189910174258E+2	-1.60189910174258E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	106	X	1	-1.58143057626851E+2	-1.58143057626851E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	107	X	1	-1.56090505047960E+2	-1.56090505047960E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	108	X	1	-1.54032715725206E+2	-1.54032715725206E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	109	X	1	-1.51970154128211E+2	-1.51970154128211E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	110	X	1	-1.49903285803763E+2	-1.49903285803763E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	111	X	1	-1.47832577270730E+2	-1.47832577270730E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	112	X	1	-1.45758495914769E+2	-1.45758495914769E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	113	X	1	-1.43681509882823E+2	-1.43681509882823E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	114	X	1	-1.41602087977460E+2	-1.41602087977460E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	115	X	1	-1.39520699551057E+2	-1.39520699551057E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	116	X	1	-1.37437814399858E+2	-1.37437814399858E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	117	X	1	-1.35353902657937E+2	-1.35353902657937E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	118	X	1	-1.33269434691085E+2	-1.33269434691085E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	119	X	1	-1.31184880990638E+2	-1.31184880990638E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	120	X	1	-1.29100712067285E+2	-1.29100712067285E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	121	X	1	-1.27017391305804E+2	-1.27017391305804E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0

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/ BEAM GLOBAL DISTRIBUTED LOADS

/ V

BmDistLoadG	5	1	Y	1	-2.00000000000000E+1	-2.00000000000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	5	2	Y	1	-2.00000000000000E+1	-2.00000000000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0

BmDistLoadG	8	150	X	1	3.34400000000000E+1	3.34400000000000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	8	151	X	1	3.34400000000000E+1	3.34400000000000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	8	152	X	1	3.34400000000000E+1	3.34400000000000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	8	153	X	1	3.34400000000000E+1	3.34400000000000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	8	154	X	1	3.34400000000000E+1	3.34400000000000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	8	155	X	1	3.34400000000000E+1	3.34400000000000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	8	156	X	1	3.34400000000000E+1	3.34400000000000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	8	157	X	1	3.34400000000000E+1	3.34400000000000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	8	158	X	1	3.34400000000000E+1	3.34400000000000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	8	159	X	1	3.34400000000000E+1	3.34400000000000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	8	160	X	1	3.34400000000000E+1	3.34400000000000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	8	161	X	1	3.34400000000000E+1	3.34400000000000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	8	162	X	1	3.34400000000000E+1	3.34400000000000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected

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/ BEAM GLOBAL DISTRIBUTED LOADS

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BmDistLoadG	9	1	Y	1	-1.56790126407106E+1	-1.56790126407106E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	2	Y	1	-1.55762331680901E+1	-1.55762331680901E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	3	Y	1	-1.54784352717431E+1	-1.54784352717431E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	4	Y	1	-1.53856873656937E+1	-1.53856873656937E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	5	Y	1	-1.52980543312709E+1	-1.52980543312709E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	6	Y	1	-1.52155974717212E+1	-1.52155974717212E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	7	Y	1	-1.51383744693239E+1	-1.51383744693239E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	8	Y	1	-1.50664393450403E+1	-1.50664393450403E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	9	Y	1	-1.49998424207230E+1	-1.49998424207230E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	10	Y	1	-1.49386302839139E+1	-1.49386302839139E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	11	Y	1	-1.48828457552540E+1	-1.48828457552540E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	12	Y	1	-1.48325278585284E+1	-1.48325278585284E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	13	Y	1	-1.47877117933676E+1	-1.47877117933676E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	14	Y	1	-1.47484289106233E+1	-1.47484289106233E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	15	Y	1	-1.47147066904379E+1	-1.47147066904379E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	16	Y	1	-1.46865687230200E+1	-1.46865687230200E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	17	Y	1	-1.46640346921424E+1	-1.46640346921424E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	18	Y	1	-1.46471203613728E+1	-1.46471203613728E+1	0.00000000000000E+0	0.00000000000000E+0	Projected

BmDistLoadG	9	52	Y	1	-1.61193444500000E+1	-1.61193444500000E+1	0.00000000000000E+0	0.00000000000000E+0	
0.00000000000000E+0	0.00000000000000E+0	Projected							
BmDistLoadG	9	53	Y	1	-1.63778147500000E+1	-1.63778147500000E+1	0.00000000000000E+0	0.00000000000000E+0	
0.00000000000000E+0	0.00000000000000E+0	Projected							
BmDistLoadG	9	54	Y	1	-1.66362850500000E+1	-1.66362850500000E+1	0.00000000000000E+0	0.00000000000000E+0	
0.00000000000000E+0	0.00000000000000E+0	Projected							
BmDistLoadG	9	55	Y	1	-1.68947553500000E+1	-1.68947553500000E+1	0.00000000000000E+0	0.00000000000000E+0	
0.00000000000000E+0	0.00000000000000E+0	Projected							
BmDistLoadG	9	56	Y	1	-1.71532256500000E+1	-1.71532256500000E+1	0.00000000000000E+0	0.00000000000000E+0	
0.00000000000000E+0	0.00000000000000E+0	Projected							
BmDistLoadG	9	57	Y	1	-1.74116959500000E+1	-1.74116959500000E+1	0.00000000000000E+0	0.00000000000000E+0	
0.00000000000000E+0	0.00000000000000E+0	Projected							
BmDistLoadG	9	58	Y	1	-1.76701662500000E+1	-1.76701662500000E+1	0.00000000000000E+0	0.00000000000000E+0	
0.00000000000000E+0	0.00000000000000E+0	Projected							
BmDistLoadG	9	59	Y	1	-1.79286365500000E+1	-1.79286365500000E+1	0.00000000000000E+0	0.00000000000000E+0	
0.00000000000000E+0	0.00000000000000E+0	Projected							
BmDistLoadG	9	60	Y	1	-1.81871068500000E+1	-1.81871068500000E+1	0.00000000000000E+0	0.00000000000000E+0	
0.00000000000000E+0	0.00000000000000E+0	Projected							

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/ BEAM PROPERTIES

```

BeamProp      1  16737843  "Beam Property 1"
MaterialName  "Concrete: Compressive Strength fc = 25 MPa"
Modulus      2.74600000000000E+4
ShearMod     1.14420000000000E+4
Poisson      2.00000000000000E-1
UsePoisson   TRUE
Density      2.40000000000000E+3
Expansion    1.00000000000000E-5
ThermalCond  1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area         8.00000000000000E-1
MomentI11   4.26666666670000E-2
MomentI22   6.66666666670000E-2
MomentI     9.03304533330000E-2
SectionType SolidRect
B            1.00000000000000E+0
D            8.00000000000000E-1
CT           FALSE
TimeDependentMod Elastic
UseMomCurv  FALSE
NonLinType   Elasticplastic
Hardening    Isotropic

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```

BeamProp      2  3355647  "Beam Property 2"
MaterialName  "Concrete: Compressive Strength fc = 25 MPa"
Modulus      2.74600000000000E+4
ShearMod     1.14420000000000E+4
Poisson      2.00000000000000E-1
UsePoisson   TRUE
Density      2.40000000000000E+3
Expansion    1.00000000000000E-5
ThermalCond  1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area         8.67000000000000E-1
MomentI11   5.43095302500000E-2
MomentI22   7.22500000000000E-2
MomentI     1.07071853237000E-1
SectionType SolidRect
B            1.00000000000000E+0
D            8.67000000000000E-1
CT           FALSE
TimeDependentMod Elastic

```

UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 3 3407692 "Beam Property 3"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 9.3400000000000E-1
MomentI11 6.7898375333000E-2
MomentI22 7.7833333333000E-2
MomentJ 1.2410261674200E-1
SectionType SolidRect
B 1.0000000000000E+0
D 9.3400000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 4 3407846 "Beam Property 4"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.0010000000000E+0
MomentI11 8.3583583417000E-2
MomentI22 8.3416666667000E-2
MomentJ 1.4098268398300E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.0010000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 5 16757299 "Beam Property 5"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.0680000000000E+0
MomentI11 1.0151553600000E-1
MomentI22 8.9000000000000E-2

MomentJ 1.62229712859000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.06800000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 6 16724966 "Beam Property 6"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.13500000000000E+0
MomentI11 1.21844614583000E-1
MomentI22 9.45833333330000E-2
MomentJ 1.83604992658000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.13500000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 7 6750003 "Beam Property 7"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.20200000000000E+0
MomentI11 1.44721200667000E-1
MomentI22 1.00166666667000E-1
MomentJ 2.05087077094000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.20200000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 8 3375359 "Beam Property 8"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5

ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.26900000000000E+0
MomentI11 1.70295675750000E-1
MomentI22 1.05750000000000E-1
MomentJ 2.26659049120000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.26900000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 9 16724812 "Beam Property 9"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.33600000000000E+0
MomentI11 1.98718421333000E-1
MomentI22 1.11333333333000E-1
MomentJ 2.48307385230000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.33600000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 10 8401919 "Beam Property 10"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.40300000000000E+0
MomentI11 2.30139818917000E-1
MomentI22 1.16916666667000E-1
MomentJ 2.70021145165000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.40300000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 11 11730739 "Beam Property 11"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"

Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.4700000000000E+0
MomentI11 2.6471025000000E-1
MomentI22 1.2250000000000E-1
MomentJ 2.9179138322000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.4700000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 12 3394815 "Beam Property 12"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 6.0000000000000E-1
MomentI11 1.8000000000000E-2
MomentI22 5.0000000000000E-2
MomentJ 4.6131840000000E-2
SectionType SolidRect
B 1.0000000000000E+0
D 6.0000000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 13 16724889 "Beam Property 13"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 6.8330000000000E-1
MomentI11 2.6586000961000E-2
MomentI22 5.6941666670000E-2
MomentJ 6.3147042077000E-2
SectionType SolidRect
B 1.0000000000000E+0
D 6.8330000000000E-1
CT FALSE
TimeDependentMod Elastic

UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 14 13382655 "Beam Property 14"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 7.6667000000000E-1
MomentI11 3.7552958953000E-2
MomentI22 6.3889166667000E-2
MomentJ 8.2250384903000E-2
SectionType SolidRect
B 1.0000000000000E+0
D 7.6667000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 15 16777011 "Beam Property 15"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 8.5000000000000E-1
MomentI11 5.1177083333000E-2
MomentI22 7.0833333330000E-2
MomentJ 1.0277791291700E-1
SectionType SolidRect
B 1.0000000000000E+0
D 8.5000000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 16 3407769 "Beam Property 16"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 9.3333000000000E-1
MomentI11 6.7752360496000E-2
MomentI22 7.7777500000000E-2

MomentJ 1.23932497010000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 9.33330000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 17 15096878 "Beam Property 17"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.01667000000000E+0
MomentI11 8.75706915920000E-2
MomentI22 8.47225000000000E-2
MomentJ 1.45939124429000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.01667000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 18 3026662 "Beam Property 18"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.10000000000000E+0
MomentI11 1.10916666667000E-1
MomentI22 9.16666666670000E-2
MomentJ 1.72424242424000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.10000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 19 3073605 "Beam Property 19"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5

ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.1833300000000E+0
MomentI11 1.38081780636000E-1
MomentI22 9.86108333330000E-2
MomentJ 1.99091261919000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.1833300000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 20 3073743 "Beam Property 20"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.2666700000000E+0
MomentI11 1.69359361732000E-1
MomentI22 1.0555833333000E-1
MomentJ 2.25907507849000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.2666700000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 21 15114542 "Beam Property 21"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.3500000000000E+0
MomentI11 2.0503125000000E-1
MomentI22 1.1250000000000E-1
MomentJ 2.52839506173000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.3500000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 22 15085263 "Beam Property 22"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"

Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.4333300000000E+0
MomentI11 2.4539026327600E-1
MomentI22 1.1944416666700E-1
MomentJ 2.7986971804600E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.4333300000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 23 6088238 "Beam Property 23"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.5166700000000E+0
MomentI11 2.9073146937100E-1
MomentI22 1.2638916666700E-1
MomentJ 3.0698521297800E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.5166700000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 24 3044326 "Beam Property 24"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.6000000000000E+0
MomentI11 3.413333333300E-1
MomentI22 1.333333333300E-1
MomentJ 3.341666666700E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.6000000000000E+0
CT FALSE
TimeDependentMod Elastic

UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 25 15085125 "Beam Property 25"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.6833000000000E+0
MomentI11 3.97469056795000E-1
MomentI22 1.4027500000000E-1
MomentJ 3.61397233609000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.6833000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 26 7548646 "Beam Property 26"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.7666670000000E+0
MomentI11 4.59497173673000E-1
MomentI22 1.4722225000000E-1
MomentJ 3.88700318904000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.7666670000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 27 10610222 "Beam Property 27"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.5400000000000E+0
MomentI11 3.04355333333000E-1
MomentI22 1.28333333333000E-1

MomentJ 3.14588744589000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.54000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 28 3061990 "Beam Property 28"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.41000000000000E+0
MomentI11 2.33601750000000E-1
MomentI22 1.17500000000000E-1
MomentJ 2.72293144208000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.41000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 29 15085194 "Beam Property 29"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.33000000000000E+0
MomentI11 1.96053083333000E-1
MomentI22 1.10833333333000E-1
MomentJ 2.46365914787000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.33000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 30 12070630 "Beam Property 30"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5

ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.2000000000000E+0
MomentI11 1.4400000000000E-1
MomentI22 1.0000000000000E-1
MomentJ 2.0444444444400E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.2000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 31 15132206 "Beam Property 31"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.0700000000000E+0
MomentI11 1.0208691666700E-1
MomentI22 8.9166666667000E-2
MomentJ 1.6286604361400E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.0700000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 32 3073674 "Beam Property 32"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.0000000000000E+0
MomentI11 8.3333333330000E-2
MomentI22 8.3333333330000E-2
MomentJ 1.4066666666700E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.0000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 33 13390377 "Beam Property 33"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"

Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 8.3894700000000E-1
MomentI11 4.9206483553000E-2
MomentI22 6.9912250000000E-2
MomentJ 9.9999907215000E-2
SectionType SolidRect
B 1.0000000000000E+0
D 8.3894700000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 34 2697676 "Beam Property 34"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 8.7789500000000E-1
MomentI11 5.6382779382000E-2
MomentI22 7.3157916667000E-2
MomentJ 1.0983422501200E-1
SectionType SolidRect
B 1.0000000000000E+0
D 8.7789500000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 35 2739261 "Beam Property 35"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 9.1684200000000E-1
MomentI11 6.4224725024000E-2
MomentI22 7.6403500000000E-2
MomentJ 1.1974075746000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 9.1684200000000E-1
CT FALSE
TimeDependentMod Elastic

UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 36 2739384 "Beam Property 36"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 9.55789000000000E-1
MomentI11 7.27620351820000E-2
MomentI22 7.96490833330000E-2
MomentJ 1.29620217916000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 9.55789000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 37 13405993 "Beam Property 37"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 9.94737000000000E-1
MomentI11 8.20244959770000E-2
MomentI22 8.28947500000000E-2
MomentJ 1.39366107904000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 9.94737000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 38 13380024 "Beam Property 38"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.03368400000000E+0
MomentI11 9.20411711530000E-2
MomentI22 8.61403333300000E-2

MomentJ 1.51329836409000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.0336840000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 39 5426217 "Beam Property 39"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.0726320000000E+0
MomentI11 1.02842115472000E-1
MomentI22 8.9386000000000E-2
MomentJ 1.63703627284000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.0726320000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 40 2713292 "Beam Property 40"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.1115790000000E+0
MomentI11 1.14456313677000E-1
MomentI22 9.26315833330000E-2
MomentJ 1.76119766938000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.1115790000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 41 13379901 "Beam Property 41"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5

ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.1505260000000E+0
MomentI11 1.2691357164000E-1
MomentI22 9.5877166667000E-2
MomentJ 1.8857423957300E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.1505260000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 42 6695372 "Beam Property 42"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.1894740000000E+0
MomentI11 1.4024378181600E-1
MomentI22 9.9122833333000E-2
MomentJ 2.0106360085100E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.1894740000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 43 9423913 "Beam Property 43"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.2284210000000E+0
MomentI11 1.5447579906900E-1
MomentI22 1.0236841666700E-1
MomentJ 2.1358392148400E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.2284210000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 44 2728908 "Beam Property 44"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"

Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.2673680000000E+0
MomentI11 1.69639493071000E-1
MomentI22 1.0561400000000E-1
MomentJ 2.26132637988000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.2673680000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 45 13379962 "Beam Property 45"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.3063160000000E+0
MomentI11 1.85764829183000E-1
MomentI22 1.08859666667000E-1
MomentJ 2.38707533720000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.3063160000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 46 10693068 "Beam Property 46"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.3452630000000E+0
MomentI11 2.02880518737000E-1
MomentI22 1.1210525000000E-1
MomentJ 2.51305717214000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.3452630000000E+0
CT FALSE
TimeDependentMod Elastic

UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 47 13421609 "Beam Property 47"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.3842110000000E+0
MomentI11 2.21016981042000E-1
MomentI22 1.15350916667000E-1
MomentJ 2.63925842356000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.3842110000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 48 2739322 "Beam Property 48"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.4231580000000E+0
MomentI11 2.40202824160000E-1
MomentI22 1.1859650000000E-1
MomentJ 2.76565486279000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.4231580000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 49 11683620 "Beam Property 49"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.4621050000000E+0
MomentI11 2.60468039268000E-1
MomentI22 1.21842083333000E-1

MomentJ 2.89223387063000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.46210500000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 50 2368690 "Beam Property 50"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.50105300000000E+0
MomentI11 2.81842728401000E-1
MomentI22 1.25087750000000E-1
MomentJ 3.01898449246000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.50105300000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

/ _____
/ LINEAR STATIC SOLVER DATA

LoadFreedomSetLSA 1 ON
1 2 3 4 5 6 7 8
9

/ _____
/ LINEAR BUCKLING SOLVER DATA

BuckNumModes 4
BuckShift 0.00000000000000E+0

/ _____
/ LOAD INFLUENCE SOLVER DATA

LoadFreedomSetLIA 1 ON
1

/ _____
/ NON-LINEAR STATIC SOLVER DATA

NonLinearIncrement 0 Yes "SLU1"
LON1 1.30000000000000E+0
LON2 1.30000000000000E+0
LON3 1.30000000000000E+0
LON4 1.30000000000000E+0

LON5 1.50000000000000E+0
LON6 1.50000000000000E+0
LON7 1.50000000000000E+0
FON1 1.00000000000000E+0

NonLinearIncrement 0 Yes "SLU2"

LON1 1.30000000000000E+0
LON2 1.30000000000000E+0
LON3 1.00000000000000E+0
LON4 1.00000000000000E+0
LON5 1.50000000000000E+0
FON1 1.00000000000000E+0

NonLinearIncrement 0 Yes "SLU3"

LON1 1.00000000000000E+0
LON2 1.00000000000000E+0
LON3 1.30000000000000E+0
LON4 1.30000000000000E+0
LON6 1.50000000000000E+0
LON7 1.50000000000000E+0
FON1 1.00000000000000E+0

NonLinearIncrement 0 Yes "SLU4"

LON1 1.30000000000000E+0
LON2 1.30000000000000E+0
LON3 1.30000000000000E+0
LON4 1.00000000000000E+0
LON5 1.50000000000000E+0
LON6 1.50000000000000E+0
FON1 1.00000000000000E+0

NonLinearIncrement 0 Yes "SLU5"

LON1 1.00000000000000E+0
LON2 1.00000000000000E+0
LON3 1.30000000000000E+0
LON4 1.00000000000000E+0
LON6 1.50000000000000E+0
FON1 1.00000000000000E+0

NonLinearIncrement 0 Yes "SLU6"

LON1 1.30000000000000E+0
LON2 1.30000000000000E+0
LON3 1.00000000000000E+0
LON4 1.30000000000000E+0
LON5 1.50000000000000E+0
LON7 1.50000000000000E+0
FON1 1.00000000000000E+0

NonLinearIncrement 0 Yes "SLU7"

LON1 1.00000000000000E+0
LON2 1.00000000000000E+0
LON3 1.00000000000000E+0
LON4 1.30000000000000E+0
LON7 1.50000000000000E+0
FON1 1.00000000000000E+0

NonLinearStage Unstaged

/ _____
/ NATURAL FREQUENCY SOLVER DATA

FreqNumModes 4

FreqShift 0.00000000000000E+0

FreqIncludeNSMass 1 2 3 4 5 6 7 8
9

FreqModeParticipation FALSE
0.00000000000000E+0 0.00000000000000E+0 0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 0.00000000000000E+0

/ HEAT SOLVER DATA

LoadSetHeat 1 2 3 4 5 6 7 8
9

HeatTempLoadCase 1

HeatNonlinear FALSE

/ GENERAL SOLVER DATA

SolverTempDependence None

SolverLoadCaseTempDependence 0

SolverActiveStage 0

SturmCheck FALSE

SolverFreedomCase 1

ModalLoadType BaseAcceleration

ModalNodeReactType Element

DampingType Rayleigh

RayleighFactors Frequency
1.00000000000000E+0 1.00000000000000E+1 1.00000000000000E+0 1.00000000000000E+1 1.00000000000000E-2
1.00000000000000E-2

NonLinearGeometry TRUE

NonLinearMaterial TRUE

IncludeCreep FALSE

SolverDefaultsGeneral

SolDefMatrixZeroDiag 1.00000000000000E-20
SolDefConjGradTol 1.00000000000000E-5
SolDefMaxConjGradIter 5000
SolDefMaxNumWarnings 10
SolDefWindowState 3
SolDefReducedLogFile TRUE
SolDefDoResidualsCheck FALSE
SolDefSuppressAllSingularities FALSE

SolverDefaultsElements

SolDefMinDimension 1.00000000000000E-9
SolDefMinInternalAngle 1.50000000000000E+1
SolDefZeroPointForce 1.00000000000000E-6
SolDefZeroDiagonal 1.00000000000000E-20
SolDefBeamMass Lumped

SolDefPlateMass Lumped
SolDefBrickMass Lumped
SolDefBeamLoads Consistent
SolDefPlateLoads Consistent
SolDefBeamSlices 5
SolDefIncludeLinkReactions TRUE

SolverDefaultsDrilling

SolDefZeroTrans 1.0000000000000000E-8
SolDefZeroRot 1.0000000000000000E-6
SolDrillStiffMult 1.0000000000000000E-4
SolDrillZeroEig 1.0000000000000000E-6
SolDefMaxNormalsAngle 5.0000000000000000E+0
SolDefForceDrillingCheck FALSE

SolverDefaultsIteration

SolDefZeroDisp 1.0000000000000000E-8
SolDefDispNormTol 1.0000000000000000E-4
SolDefResidualsNormTol 1.0000000000000000E-3
SolDefNonlinIterLimit 20
SolDefAddIterations TRUE
SolDefMaxUpdateInterval 5
SolDefMaxDispChange 1.0000000000000000E+0
SolDefMaxResidualChange 1.0000000000000000E-1
SolDefFormStiffnessMatrix 0
SolDefFormHeatStiffnessMatrix 2
SolDefHeatConvergenceTol 1.0000000000000000E-5
SolDefHeatRelaxationFactor 6.6667000000000000E-1
SolDefNonlinHeatIterLimit 20

SolverDefaultsSubSteps

SolDefSubStepping 0
SolDefMinLoadReductionFactor 1.0000000000000000E-1
SolDefMaxRot 3.0000000000000000E+1
SolDefMaxDispRatio 1.0000000000000000E-1
SolDefMinArcLength 1.0000000000000000E-3
SolDefMaxFibreInc 1.0000000000000000E-2
SolDefSaveSubIncrements FALSE
SolDefDynamicAutoSteppingMode 0
SolDefMinTimeStep 1.0000000000000000E-3
SolDefConsiderTableSteps FALSE
SolDefSingleShotRestart FALSE
SolDefAutoAssignPathDiv FALSE

SolverDefaultsNonlinear

SolDefIncludeKG TRUE
SolDefAutoScaleKg TRUE
SolDefIgnoreCompressiveBeamKg FALSE
SolDefBeamKgType Simplified
SolDefFiniteStrainDefinition Nominal
SolDefBeamLength Initial
SolDefRatioMNL 5.0000000000000000E-1
SolDefZeroContactFactor 1.0000000000000000E-6
SolDefSlidingFriction 1.0000000000000000E-15
SolDefStickingFriction 1.0000000000000000E+0
SolDefFrictionCutoffStrain 1.0000000000000000E-5
SolDefScaleSupports TRUE

SolverDefaultsCreep

SolDefTimeStepParam 5.0000000000000000E-1
SolDefMinViscoUnits 3
SolDefMaxViscoUnits 6
SolDefCurveFitTime 1.0000000000000000E+4
SolDefCurveFitTimeUnit d
SolDefSpacingBias 5.0000000000000000E-1
SolDefDoInstantNTA TRUE

SolverDefaultsEigenvalue
SolDefZeroFreq 1.000000000000000E-6
SolDefZeroBuckEigenvalue 1.000000000000000E-10
SolDefExpandWorkingSetBy 6
SolDefEigIterLimit 20
SolDefEigIterTol 1.000000000000000E-5
SolDefEigAutoShift FALSE

SolverDefaultsDynamics
SolDefWilsonTheta 1.370000000000000E+0
SolDefNewmarkBeta 5.000000000000000E-1
SolDefTransientMethod Newmark
SolDefExcludeMassComponents
SolDefIncludeRotMass TRUE

/ RESULT OPTIONS

ResultOptions
ResOptsRotationUnit Degrees
ResOptsHRADisplacement Total
ResOptsHRAVelocity Total
ResOptsHRAAcceleration Relative
ResOptsBeamForceMoment Principal
ResOptsStageDisplacement BirthStage

/ Straus7 MODEL EXCHANGE FILE
/ TIMESTAMP: 6:16:38 pm, 05 giugno 2019

/ MODEL INFORMATION

FileFormat Straus7.2.4.6
ModelName "GA_open_SLV_SLD"
Title ""
Project ""
Author ""
Reference ""
Comments ""

/ UNITS

LengthUnit m
MassUnit kg
EnergyUnit J
PressureUnit MPa
ForceUnit kN
TemperatureUnit C

/ GROUP DEFINITIONS

Group 1 16711680 "\\Model"
Group 2 3355647 "calotta"
Group 3 16757299 "calotta\curvilinea"
Group 4 6750003 "calotta\rettilinea"
Group 5 3407692 "piedritto"
Group 6 3375359 "piedritto\piedritto_alto"

Group 7 16724812 "piedritto\piedritto_basso"
Group 8 3407846 "arco rovescio"

/ FREEDOM CASE DEFINITIONS

FreedomCase 1 0 1 "Freedom Case 1"

/ LOAD CASE DEFINITIONS

LoadCase 1 1 "PP"
Gravity 2 -9.80665000000000E+0
LCInclude 3

LoadCase 2 0 "P_cop"
LCInclude 3

LoadCase 3 0 "SP_sx"
LCInclude 3

LoadCase 4 0 "SP_dx"
LCInclude 3

LoadCase 5 0 "V"
LCInclude 3

LoadCase 6 0 "SV_sx"
LCInclude 3

LoadCase 7 0 "SV_dx"
LCInclude 3

LoadCase 8 0 "dS_h"
LCInclude 3

LoadCase 9 0 "dS_V"
LCInclude 3

/ INCREMENT ENVELOPES

IncrementEnvelope "Envelope Case" Abs
ON 1
ON 2
ON 3
ON 4
ON 5
ON 6
ON 7
ON 8
ON 9
ON 10
ON 11
ON 12
ON 13
ON 14
ON 15
ON 16

/ COORDINATE SYSTEM DEFINITIONS

CoordSys 1 "Global XYZ" GlobalXYZ

CoordSys 2 "carichi" RectXYZ

0.00000000000000E+0 1.08600000000000E+1 0.00000000000000E+0

/

 / NODE COORDINATES

Node	1	0	-1.94830000000000E+0	3.33290000000000E+0	0.00000000000000E+0
Node	2	0	-1.85947466801228E+0	3.38326015242999E+0	0.00000000000000E+0
Node	3	0	-1.76934854991663E+0	3.43125356231625E+0	0.00000000000000E+0
Node	4	0	-1.67798469298355E+0	3.47684665611138E+0	0.00000000000000E+0
Node	5	0	-1.58544701033748E+0	3.52000753939703E+0	0.00000000000000E+0
Node	6	0	-1.49180023624673E+0	3.56070601919538E+0	0.00000000000000E+0
Node	7	0	-1.39710988083890E+0	3.59891362509054E+0	0.00000000000000E+0
Node	8	0	-1.30144218427364E+0	3.63460362914487E+0	0.00000000000000E+0
Node	9	0	-1.20486407040466E+0	3.66775106459638E+0	0.00000000000000E+0
Node	10	0	-1.10744309996351E+0	3.69833274332411E+0	0.00000000000000E+0
Node	11	0	-1.00924742329778E+0	3.72632727206921E+0	0.00000000000000E+0
Node	12	0	-9.10345732696894E-1	3.75171506740058E+0	0.00000000000000E+0
Node	13	0	-8.10807214338750E-1	3.77447836941427E+0	0.00000000000000E+0
Node	14	0	-7.10701499890891E-1	3.79460125415739E+0	0.00000000000000E+0
Node	15	0	-6.10098617800016E-1	3.81206964476759E+0	0.00000000000000E+0
Node	16	0	-5.09068944303938E-1	3.82687132132050E+0	0.00000000000000E+0
Node	17	0	-4.07683154200238E-1	3.83899592937806E+0	0.00000000000000E+0
Node	18	0	-3.06012171406074E-1	3.84843498723200E+0	0.00000000000000E+0
Node	19	0	-2.04127119343708E-1	3.85518189183707E+0	0.00000000000000E+0
Node	20	0	-1.02099271186475E-1	3.85923192343026E+0	0.00000000000000E+0
Node	21	0	-3.80446542325164E-16	3.86058224883242E+0	0.00000000000000E+0
Node	22	0	1.02099271186474E-1	3.85923192343026E+0	0.00000000000000E+0
Node	23	0	2.04127119343707E-1	3.85518189183707E+0	0.00000000000000E+0
Node	24	0	3.06012171406073E-1	3.84843498723200E+0	0.00000000000000E+0
Node	25	0	4.07683154200237E-1	3.83899592937806E+0	0.00000000000000E+0
Node	26	0	5.09068944303936E-1	3.82687132132050E+0	0.00000000000000E+0
Node	27	0	6.10098617800015E-1	3.81206964476759E+0	0.00000000000000E+0
Node	28	0	7.10701499890890E-1	3.79460125415739E+0	0.00000000000000E+0
Node	29	0	8.10807214338749E-1	3.77447836941427E+0	0.00000000000000E+0
Node	30	0	9.10345732696893E-1	3.75171506740058E+0	0.00000000000000E+0
Node	31	0	1.00924742329778E+0	3.72632727206921E+0	0.00000000000000E+0
Node	32	0	1.10744309996351E+0	3.69833274332411E+0	0.00000000000000E+0
Node	33	0	1.20486407040466E+0	3.66775106459638E+0	0.00000000000000E+0
Node	34	0	1.30144218427364E+0	3.63460362914487E+0	0.00000000000000E+0
Node	35	0	1.39710988083890E+0	3.59891362509054E+0	0.00000000000000E+0
Node	36	0	1.49180023624673E+0	3.56070601919538E+0	0.00000000000000E+0
Node	37	0	1.58544701033748E+0	3.52000753939703E+0	0.00000000000000E+0
Node	38	0	1.67798469298354E+0	3.47684665611138E+0	0.00000000000000E+0
Node	39	0	1.76934854991663E+0	3.43125356231625E+0	0.00000000000000E+0
Node	40	0	1.85947466801228E+0	3.38326015242999E+0	0.00000000000000E+0
Node	41	0	1.94830000000000E+0	3.33290000000000E+0	0.00000000000000E+0
Node	42	0	2.11546000000000E+0	3.20923000000000E+0	0.00000000000000E+0
Node	43	0	2.28262000000000E+0	3.08556000000000E+0	0.00000000000000E+0
Node	44	0	2.44978000000000E+0	2.96189000000000E+0	0.00000000000000E+0
Node	45	0	2.61694000000000E+0	2.83822000000000E+0	0.00000000000000E+0
Node	46	0	2.78410000000000E+0	2.71455000000000E+0	0.00000000000000E+0
Node	47	0	2.95126000000000E+0	2.59088000000000E+0	0.00000000000000E+0
Node	48	0	3.11842000000000E+0	2.46721000000000E+0	0.00000000000000E+0
Node	49	0	3.28580000000000E+0	2.34354000000000E+0	0.00000000000000E+0
Node	50	0	3.45274000000000E+0	2.21987000000000E+0	0.00000000000000E+0
Node	51	0	3.61990000000000E+0	2.09620000000000E+0	0.00000000000000E+0
Node	52	0	-2.11546000000000E+0	3.20923000000000E+0	0.00000000000000E+0
Node	53	0	-2.28262000000000E+0	3.08556000000000E+0	0.00000000000000E+0
Node	54	0	-2.44978000000000E+0	2.96189000000000E+0	0.00000000000000E+0
Node	55	0	-2.61694000000000E+0	2.83822000000000E+0	0.00000000000000E+0
Node	56	0	-2.78410000000000E+0	2.71455000000000E+0	0.00000000000000E+0
Node	57	0	-2.95126000000000E+0	2.59088000000000E+0	0.00000000000000E+0

Node	58	0	-3.1184200000000E+0	2.4672100000000E+0	0.0000000000000E+0
Node	59	0	-3.2855800000000E+0	2.3435400000000E+0	0.0000000000000E+0
Node	60	0	-3.4527400000000E+0	2.2198700000000E+0	0.0000000000000E+0
Node	61	0	-3.6199000000000E+0	2.0962000000000E+0	0.0000000000000E+0
Node	62	0	3.66914272971283E+0	1.89024296185021E+0	0.0000000000000E+0
Node	63	0	3.71328302196233E+0	1.68313240539995E+0	0.0000000000000E+0
Node	64	0	3.75229394019274E+0	1.47499471959599E+0	0.0000000000000E+0
Node	65	0	3.78615167804214E+0	1.26595692018946E+0	0.0000000000000E+0
Node	66	0	3.81483557387019E+0	1.05614657222461E+0	0.0000000000000E+0
Node	67	0	3.83832812336690E+0	8.45691712192458E-1	0.0000000000000E+0
Node	68	0	3.85661499023460E+0	6.34720769896678E-1	0.0000000000000E+0
Node	69	0	3.86968501493665E+0	4.23362490079458E-1	0.0000000000000E+0
Node	70	0	3.87753022150753E+0	2.11745853855208E-1	0.0000000000000E+0
Node	71	0	3.8801500000000E+0	0.0000000000000E+0	0.0000000000000E+0
Node	72	0	-3.66914272971283E+0	1.89024296185021E+0	0.0000000000000E+0
Node	73	0	-3.71328302196233E+0	1.68313240539995E+0	0.0000000000000E+0
Node	74	0	-3.75229394019274E+0	1.47499471959599E+0	0.0000000000000E+0
Node	75	0	-3.78615167804214E+0	1.26595692018946E+0	0.0000000000000E+0
Node	76	0	-3.81483557387019E+0	1.05614657222461E+0	0.0000000000000E+0
Node	77	0	-3.83832812336690E+0	8.45691712192458E-1	0.0000000000000E+0
Node	78	0	-3.85661499023460E+0	6.34720769896678E-1	0.0000000000000E+0
Node	79	0	-3.86968501493665E+0	4.23362490079458E-1	0.0000000000000E+0
Node	80	0	-3.87753022150753E+0	2.11745853855208E-1	0.0000000000000E+0
Node	81	0	-3.8801500000000E+0	0.0000000000000E+0	0.0000000000000E+0
Node	82	0	-3.4955000000000E+0	-3.5627000000000E+0	0.0000000000000E+0
Node	83	0	-3.33230782624253E+0	-3.60057547048123E+0	0.0000000000000E+0
Node	84	0	-3.16879248559635E+0	-3.63703051420949E+0	0.0000000000000E+0
Node	85	0	-3.00496634122818E+0	-3.67206237486980E+0	0.0000000000000E+0
Node	86	0	-2.84084177980416E+0	-3.70566840375206E+0	0.0000000000000E+0
Node	87	0	-2.67643121055332E+0	-3.73784605995134E+0	0.0000000000000E+0
Node	88	0	-2.51174706432936E+0	-3.76859291055994E+0	0.0000000000000E+0
Node	89	0	-2.34680179267073E+0	-3.79790663085141E+0	0.0000000000000E+0
Node	90	0	-2.18160786685924E+0	-3.7979000000000E+0	0.0000000000000E+0
Node	91	0	-2.0161777697708E+0	-3.7979000000000E+0	0.0000000000000E+0
Node	92	0	-1.85052403096246E+0	-3.7979000000000E+0	0.0000000000000E+0
Node	93	0	-1.68465915366393E+0	-3.7979000000000E+0	0.0000000000000E+0
Node	94	0	-1.51859568589340E+0	-3.7979000000000E+0	0.0000000000000E+0
Node	95	0	-1.35234618347790E+0	-3.7979000000000E+0	0.0000000000000E+0
Node	96	0	-1.18592321631029E+0	-3.7979000000000E+0	0.0000000000000E+0
Node	97	0	-1.01933936739887E+0	-3.7979000000000E+0	0.0000000000000E+0
Node	98	0	-8.52607231915959E-1	-3.7979000000000E+0	0.0000000000000E+0
Node	99	0	-6.85739416245641E-1	-3.7979000000000E+0	0.0000000000000E+0
Node	100	0	-5.18748537030578E-1	-3.7979000000000E+0	0.0000000000000E+0
Node	101	0	-3.51647220218097E-1	-3.7979000000000E+0	0.0000000000000E+0
Node	102	0	-1.84448100105556E-1	-3.7979000000000E+0	0.0000000000000E+0
Node	103	0	-1.71638183850854E-2	-3.7979000000000E+0	0.0000000000000E+0
Node	104	0	3.4955000000000E+0	-3.5627000000000E+0	0.0000000000000E+0
Node	105	0	3.53876190604596E+0	-3.38827494401322E+0	0.0000000000000E+0
Node	106	0	3.57939848608508E+0	-3.21321963551490E+0	0.0000000000000E+0
Node	107	0	3.61740056791651E+0	-3.03757358674864E+0	0.0000000000000E+0
Node	108	0	3.65275957397965E+0	-2.86137644329578E+0	0.0000000000000E+0
Node	109	0	3.68546752329024E+0	-2.68466797512683E+0	0.0000000000000E+0
Node	110	0	3.71551703324176E+0	-2.50748806762490E+0	0.0000000000000E+0
Node	111	0	3.74290132127180E+0	-2.32987671258303E+0	0.0000000000000E+0
Node	112	0	3.76761420639292E+0	-2.15187399917756E+0	0.0000000000000E+0
Node	113	0	3.78965011058784E+0	-1.97352010491945E+0	0.0000000000000E+0
Node	114	0	3.81400406006844E+0	-1.79485528658573E+0	0.0000000000000E+0
Node	115	0	3.83567168639838E+0	-1.61591987113298E+0	0.0000000000000E+0
Node	116	0	3.84464922747919E+0	-1.43675424659509E+0	0.0000000000000E+0
Node	117	0	3.85593352839935E+0	-1.25739885296706E+0	0.0000000000000E+0
Node	118	0	3.86452204214643E+0	-1.07789417307727E+0	0.0000000000000E+0
Node	119	0	3.87541283018197E+0	-8.98280723449910E-1	0.0000000000000E+0
Node	120	0	3.87860456287904E+0	-7.18599045159911E-1	0.0000000000000E+0
Node	121	0	3.87909651982237E+0	-5.38889694682297E-1	0.0000000000000E+0
Node	122	0	3.87688858997090E+0	-3.59193234738058E-1	0.0000000000000E+0
Node	123	0	3.88198127168293E+0	-1.79550225138629E-1	0.0000000000000E+0

Node	124	0	3.33230782624253E+0	-3.60057547048123E+0	0.00000000000000E+0
Node	125	0	3.16879248559635E+0	-3.63703051420949E+0	0.00000000000000E+0
Node	126	0	3.00496634122818E+0	-3.67206237486980E+0	0.00000000000000E+0
Node	127	0	2.84084177980416E+0	-3.70566840375206E+0	0.00000000000000E+0
Node	128	0	2.67643121055332E+0	-3.73784605995134E+0	0.00000000000000E+0
Node	129	0	2.51174706432936E+0	-3.76859291055994E+0	0.00000000000000E+0
Node	130	0	2.34680179267073E+0	-3.79790663085141E+0	0.00000000000000E+0
Node	131	0	2.18160786685924E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	132	0	2.0161777697708E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	133	0	1.85052403096246E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	134	0	1.68465915366393E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	135	0	1.51859568589340E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	136	0	1.35234618347790E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	137	0	1.18592321631029E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	138	0	1.01933936739887E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	139	0	8.52607231915959E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	140	0	6.85739416245641E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	141	0	5.18748537030578E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	142	0	3.51647220218097E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	143	0	1.84448100105556E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	144	0	1.71638183850854E-2	-3.79790000000000E+0	0.00000000000000E+0
Node	145	0	-3.53876190604596E+0	-3.38827494401322E+0	0.00000000000000E+0
Node	146	0	-3.57939848608508E+0	-3.21321963551490E+0	0.00000000000000E+0
Node	147	0	-3.61740056791651E+0	-3.03757358674864E+0	0.00000000000000E+0
Node	148	0	-3.65275957397965E+0	-2.86137644329578E+0	0.00000000000000E+0
Node	149	0	-3.68546752329024E+0	-2.68466797512683E+0	0.00000000000000E+0
Node	150	0	-3.71551703324176E+0	-2.50748806762490E+0	0.00000000000000E+0
Node	151	0	-3.74290132127180E+0	-2.32987671258303E+0	0.00000000000000E+0
Node	152	0	-3.76761420639292E+0	-2.15187399917756E+0	0.00000000000000E+0
Node	153	0	-3.78965011058784E+0	-1.97352010491945E+0	0.00000000000000E+0
Node	154	0	-3.81400406006844E+0	-1.79485528658573E+0	0.00000000000000E+0
Node	155	0	-3.83567168639838E+0	-1.61591987113298E+0	0.00000000000000E+0
Node	156	0	-3.84464922747919E+0	-1.43675424659509E+0	0.00000000000000E+0
Node	157	0	-3.85593352839935E+0	-1.25739885296706E+0	0.00000000000000E+0
Node	158	0	-3.86452204214643E+0	-1.07789417307727E+0	0.00000000000000E+0
Node	159	0	-3.87541283018197E+0	-8.98280723449910E-1	0.00000000000000E+0
Node	160	0	-3.87860456287904E+0	-7.18599045159911E-1	0.00000000000000E+0
Node	161	0	-3.87909651982237E+0	-5.38889694682297E-1	0.00000000000000E+0
Node	162	0	-3.87688858997090E+0	-3.59193234738058E-1	0.00000000000000E+0
Node	163	0	-3.88198127168293E+0	-1.79550225138629E-1	0.00000000000000E+0

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/ BEAM ELEMENTS

Beam	1	0	3	1	2	1
Beam	2	0	3	1	3	2
Beam	3	0	3	1	4	3
Beam	4	0	3	1	5	4
Beam	5	0	3	1	6	5
Beam	6	0	3	1	7	6
Beam	7	0	3	1	8	7
Beam	8	0	3	1	9	8
Beam	9	0	3	1	10	9
Beam	10	0	3	1	11	10
Beam	11	0	3	1	12	11
Beam	12	0	3	1	13	12
Beam	13	0	3	1	14	13
Beam	14	0	3	1	15	14
Beam	15	0	3	1	16	15
Beam	16	0	3	1	17	16
Beam	17	0	3	1	18	17
Beam	18	0	3	1	19	18
Beam	19	0	3	1	20	19
Beam	20	0	3	1	21	20
Beam	21	0	3	1	22	21
Beam	22	0	3	1	23	22

Beam	23	0	3	1	24	23
Beam	24	0	3	1	25	24
Beam	25	0	3	1	26	25
Beam	26	0	3	1	27	26
Beam	27	0	3	1	28	27
Beam	28	0	3	1	29	28
Beam	29	0	3	1	30	29
Beam	30	0	3	1	31	30
Beam	31	0	3	1	32	31
Beam	32	0	3	1	33	32
Beam	33	0	3	1	34	33
Beam	34	0	3	1	35	34
Beam	35	0	3	1	36	35
Beam	36	0	3	1	37	36
Beam	37	0	3	1	38	37
Beam	38	0	3	1	39	38
Beam	39	0	3	1	40	39
Beam	40	0	3	1	41	40
Beam	41	0	4	2	42	41
Beam	42	0	4	3	43	42
Beam	43	0	4	4	44	43
Beam	44	0	4	5	45	44
Beam	45	0	4	6	46	45
Beam	46	0	4	7	47	46
Beam	47	0	4	8	48	47
Beam	48	0	4	9	49	48
Beam	49	0	4	10	50	49
Beam	50	0	4	11	51	50
Beam	51	0	4	2	1	52
Beam	52	0	4	3	52	53
Beam	53	0	4	4	53	54
Beam	54	0	4	5	54	55
Beam	55	0	4	6	55	56
Beam	56	0	4	7	56	57
Beam	57	0	4	8	57	58
Beam	58	0	4	9	58	59
Beam	59	0	4	10	59	60
Beam	60	0	4	11	60	61
Beam	61	0	6	10	62	51
Beam	62	0	6	9	63	62
Beam	63	0	6	8	64	63
Beam	64	0	6	7	65	64
Beam	65	0	6	6	66	65
Beam	66	0	6	5	67	66
Beam	67	0	6	4	68	67
Beam	68	0	6	3	69	68
Beam	69	0	6	2	70	69
Beam	70	0	6	1	71	70
Beam	71	0	6	10	61	72
Beam	72	0	6	9	72	73
Beam	73	0	6	8	73	74
Beam	74	0	6	7	74	75
Beam	75	0	6	6	75	76
Beam	76	0	6	5	76	77
Beam	77	0	6	4	77	78
Beam	78	0	6	3	78	79
Beam	79	0	6	2	79	80
Beam	80	0	6	1	80	81
Beam	81	0	8	27	82	83
Beam	82	0	8	28	83	84
Beam	83	0	8	29	84	85
Beam	84	0	8	30	85	86
Beam	85	0	8	31	86	87
Beam	86	0	8	32	87	88
Beam	87	0	8	1	88	89
Beam	88	0	8	1	89	90

Beam	89	0	8	1	90	91
Beam	90	0	8	1	91	92
Beam	91	0	8	1	92	93
Beam	92	0	8	1	93	94
Beam	93	0	8	1	94	95
Beam	94	0	8	1	95	96
Beam	95	0	8	1	96	97
Beam	96	0	8	1	97	98
Beam	97	0	8	1	98	99
Beam	98	0	8	1	99	100
Beam	99	0	8	1	100	101
Beam	100	0	8	1	101	102
Beam	101	0	8	1	102	103
Beam	102	0	7	27	104	105
Beam	103	0	7	50	105	106
Beam	104	0	7	49	106	107
Beam	105	0	7	48	107	108
Beam	106	0	7	47	108	109
Beam	107	0	7	46	109	110
Beam	108	0	7	45	110	111
Beam	109	0	7	44	111	112
Beam	110	0	7	43	112	113
Beam	111	0	7	42	113	114
Beam	112	0	7	41	114	115
Beam	113	0	7	40	115	116
Beam	114	0	7	39	116	117
Beam	115	0	7	38	117	118
Beam	116	0	7	37	118	119
Beam	117	0	7	36	119	120
Beam	118	0	7	35	120	121
Beam	119	0	7	34	121	122
Beam	120	0	7	33	122	123
Beam	121	0	7	1	123	71
Beam	122	0	8	27	124	104
Beam	123	0	8	28	125	124
Beam	124	0	8	29	126	125
Beam	125	0	8	30	127	126
Beam	126	0	8	31	128	127
Beam	127	0	8	32	129	128
Beam	128	0	8	1	130	129
Beam	129	0	8	1	131	130
Beam	130	0	8	1	132	131
Beam	131	0	8	1	133	132
Beam	132	0	8	1	134	133
Beam	133	0	8	1	135	134
Beam	134	0	8	1	136	135
Beam	135	0	8	1	137	136
Beam	136	0	8	1	138	137
Beam	137	0	8	1	139	138
Beam	138	0	8	1	140	139
Beam	139	0	8	1	141	140
Beam	140	0	8	1	142	141
Beam	141	0	8	1	143	142
Beam	142	0	8	1	144	143
Beam	143	0	7	27	145	82
Beam	144	0	7	50	146	145
Beam	145	0	7	49	147	146
Beam	146	0	7	48	148	147
Beam	147	0	7	47	149	148
Beam	148	0	7	46	150	149
Beam	149	0	7	45	151	150
Beam	150	0	7	44	152	151
Beam	151	0	7	43	153	152
Beam	152	0	7	42	154	153
Beam	153	0	7	41	155	154
Beam	154	0	7	40	156	155

BmDistLoadG	2	43	Y	1	-1.56725500000000E+2	-1.56725500000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	2	44	Y	1	-1.59198900000000E+2	-1.59198900000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	2	45	Y	1	-1.61672300000000E+2	-1.61672300000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	2	46	Y	1	-1.64145700000000E+2	-1.64145700000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	2	47	Y	1	-1.66619100000000E+2	-1.66619100000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	2	48	Y	1	-1.69092500000000E+2	-1.69092500000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	2	49	Y	1	-1.71565900000000E+2	-1.71565900000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	2	50	Y	1	-1.74039300000000E+2	-1.74039300000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	2	51	Y	1	-1.51778700000000E+2	-1.51778700000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	2	52	Y	1	-1.54252100000000E+2	-1.54252100000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	2	53	Y	1	-1.56725500000000E+2	-1.56725500000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	2	54	Y	1	-1.59198900000000E+2	-1.59198900000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	2	55	Y	1	-1.61672300000000E+2	-1.61672300000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	2	56	Y	1	-1.64145700000000E+2	-1.64145700000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	2	57	Y	1	-1.66619100000000E+2	-1.66619100000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	2	58	Y	1	-1.69092500000000E+2	-1.69092500000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	2	59	Y	1	-1.71565900000000E+2	-1.71565900000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	2	60	Y	1	-1.74039300000000E+2	-1.74039300000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			

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/ BEAM GLOBAL DISTRIBUTED LOADS

/ SP_sx

BmDistLoadG	3	1	X	1	8.70222711159060E+1	8.70222711159060E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	2	X	1	8.64518204544718E+1	8.64518204544718E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	3	X	1	8.59090187331197E+1	8.59090187331197E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	4	X	1	8.53942456660512E+1	8.53942456660512E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	5	X	1	8.49078613601640E+1	8.49078613601640E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	6	X	1	8.44502060631416E+1	8.44502060631416E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	7	X	1	8.40215999254346E+1	8.40215999254346E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	8	X	1	8.36223427763007E+1	8.36223427763007E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	9	X	1	8.32527139140611E+1	8.32527139140611E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	10	X	1	8.29129719107187E+1	8.29129719107187E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	11	X	1	8.26033544310752E+1	8.26033544310752E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	12	X	1	8.23240780664738E+1	8.23240780664738E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			
BmDistLoadG	3	13	X	1	8.20753381832843E+1	8.20753381832843E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0					0.00000000000000E+0			

BmDistLoadG	3	149	X	1	1.54032715725206E+2	1.54032715725206E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	150	X	1	1.51970154128211E+2	1.51970154128211E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	151	X	1	1.49903285803763E+2	1.49903285803763E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	152	X	1	1.47832577270730E+2	1.47832577270730E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	153	X	1	1.45758495914769E+2	1.45758495914769E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	154	X	1	1.43681509882823E+2	1.43681509882823E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	155	X	1	1.41602087977460E+2	1.41602087977460E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	156	X	1	1.39520699551057E+2	1.39520699551057E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	157	X	1	1.37437814399858E+2	1.37437814399858E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	158	X	1	1.35353902657937E+2	1.35353902657937E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	159	X	1	1.33269434691085E+2	1.33269434691085E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	160	X	1	1.31184880990638E+2	1.31184880990638E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	161	X	1	1.29100712067285E+2	1.29100712067285E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	162	X	1	1.27017391305804E+2	1.27017391305804E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							

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/ BEAM GLOBAL DISTRIBUTED LOADS

/ SP_dx

BmDistLoadG	4	21	X	1	-8.12010778008764E+1	-8.12010778008764E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	22	X	1	-8.12323998714495E+1	-8.12323998714495E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	23	X	1	-8.12950221013994E+1	-8.12950221013994E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	24	X	1	-8.13889006836616E+1	-8.13889006836616E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	25	X	1	-8.15139699459483E+1	-8.15139699459483E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	26	X	1	-8.16701423966891E+1	-8.16701423966891E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	27	X	1	-8.18573087862351E+1	-8.18573087862351E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	28	X	1	-8.20753381832843E+1	-8.20753381832843E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	29	X	1	-8.23240780664738E+1	-8.23240780664738E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	30	X	1	-8.26033544310752E+1	-8.26033544310752E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	31	X	1	-8.29129719107187E+1	-8.29129719107187E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	32	X	1	-8.32527139140611E+1	-8.32527139140611E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	33	X	1	-8.36223427763007E+1	-8.36223427763007E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	34	X	1	-8.40215999254346E+1	-8.40215999254346E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	35	X	1	-8.44502060631416E+1	-8.44502060631416E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	36	X	1	-8.49078613601640E+1	-8.49078613601640E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	37	X	1	-8.53942456660512E+1	-8.53942456660512E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							

BmDistLoadG	4	38	X	1	-8.59090187331197E+1	-8.59090187331197E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	39	X	1	-8.64518204544718E+1	-8.64518204544718E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	40	X	1	-8.70222711159060E+1	-8.70222711159060E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	41	X	1	-8.80316460000000E+1	-8.80316460000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	42	X	1	-8.94662180000000E+1	-8.94662180000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	43	X	1	-9.09007900000000E+1	-9.09007900000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	44	X	1	-9.23353620000000E+1	-9.23353620000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	45	X	1	-9.37699340000000E+1	-9.37699340000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	46	X	1	-9.52045060000000E+1	-9.52045060000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	47	X	1	-9.66390780000000E+1	-9.66390780000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	48	X	1	-9.80736500000000E+1	-9.80736500000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	49	X	1	-9.95082220000000E+1	-9.95082220000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	50	X	1	-1.00942794000000E+2	-1.00942794000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	61	X	1	-1.02854630821268E+2	-1.02854630821268E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	62	X	1	-1.05250422869949E+2	-1.05250422869949E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	63	X	1	-1.07658862675023E+2	-1.07658862675023E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	64	X	1	-1.10078480489244E+2	-1.10078480489244E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	65	X	1	-1.12507799743998E+2	-1.12507799743998E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	66	X	1	-1.14945337950381E+2	-1.14945337950381E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	67	X	1	-1.17389607603883E+2	-1.17389607603883E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	68	X	1	-1.19839117092138E+2	-1.19839117092138E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	69	X	1	-1.22292371605178E+2	-1.22292371605178E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	70	X	1	-1.24747874047639E+2	-1.24747874047639E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	102	X	1	-1.66291654675277E+2	-1.66291654675277E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	103	X	1	-1.64264668561263E+2	-1.64264668561263E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	104	X	1	-1.62230600689128E+2	-1.62230600689128E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	105	X	1	-1.60189910174258E+2	-1.60189910174258E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	106	X	1	-1.58143057626851E+2	-1.58143057626851E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	107	X	1	-1.56090505047960E+2	-1.56090505047960E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	108	X	1	-1.54032715725206E+2	-1.54032715725206E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	109	X	1	-1.51970154128211E+2	-1.51970154128211E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	110	X	1	-1.49903285803763E+2	-1.49903285803763E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	111	X	1	-1.47832577270730E+2	-1.47832577270730E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							

BmDistLoadG	9	38	Y	1	-1.54784352717431E+1	-1.54784352717431E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	39	Y	1	-1.55762331680901E+1	-1.55762331680901E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	40	Y	1	-1.56790126407106E+1	-1.56790126407106E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	41	Y	1	-1.58608741500000E+1	-1.58608741500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	42	Y	1	-1.61193444500000E+1	-1.61193444500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	43	Y	1	-1.63778147500000E+1	-1.63778147500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	44	Y	1	-1.66362850500000E+1	-1.66362850500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	45	Y	1	-1.68947553500000E+1	-1.68947553500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	46	Y	1	-1.71532256500000E+1	-1.71532256500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	47	Y	1	-1.74116959500000E+1	-1.74116959500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	48	Y	1	-1.76701662500000E+1	-1.76701662500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	49	Y	1	-1.79286365500000E+1	-1.79286365500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	50	Y	1	-1.81871068500000E+1	-1.81871068500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	51	Y	1	-1.58608741500000E+1	-1.58608741500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	52	Y	1	-1.61193444500000E+1	-1.61193444500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	53	Y	1	-1.63778147500000E+1	-1.63778147500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	54	Y	1	-1.66362850500000E+1	-1.66362850500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	55	Y	1	-1.68947553500000E+1	-1.68947553500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	56	Y	1	-1.71532256500000E+1	-1.71532256500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	57	Y	1	-1.74116959500000E+1	-1.74116959500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	58	Y	1	-1.76701662500000E+1	-1.76701662500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	59	Y	1	-1.79286365500000E+1	-1.79286365500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	60	Y	1	-1.81871068500000E+1	-1.81871068500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected

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/ BEAM PROPERTIES

BeamProp	1	16737843	"Beam Property 1"
MaterialName	"Concrete: Compressive Strength fc = 25 MPa"		
Modulus	2.74600000000000E+4		
ShearMod	1.14420000000000E+4		
Poisson	2.00000000000000E-1		
UsePoisson	TRUE		
Density	2.40000000000000E+3		
Expansion	1.00000000000000E-5		
ThermalCond	1.37000000000000E+0		
SpecificHeat	8.80000000000000E+2		
InstantAlpha	FALSE		
Area	8.00000000000000E-1		
MomentI11	4.26666666670000E-2		
MomentI22	6.66666666670000E-2		
MomentJ	9.03304533330000E-2		
SectionType	SolidRect		

B 1.00000000000000E+0
D 8.00000000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 2 3355647 "Beam Property 2"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 8.67000000000000E-1
MomentI11 5.43095302500000E-2
MomentI22 7.22500000000000E-2
MomentJ 1.07071853237000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 8.67000000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 3 3407692 "Beam Property 3"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 9.34000000000000E-1
MomentI11 6.78983753330000E-2
MomentI22 7.78333333330000E-2
MomentJ 1.24102616742000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 9.34000000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 4 3407846 "Beam Property 4"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2

InstantAlpha FALSE
Area 1.00100000000000E+0
MomentI11 8.35835834170000E-2
MomentI22 8.34166666670000E-2
MomentJ 1.40982683983000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.00100000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 5 16757299 "Beam Property 5"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.06800000000000E+0
MomentI11 1.01515536000000E-1
MomentI22 8.90000000000000E-2
MomentJ 1.62229712859000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.06800000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 6 16724966 "Beam Property 6"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.13500000000000E+0
MomentI11 1.21844614583000E-1
MomentI22 9.45833333330000E-2
MomentJ 1.83604992658000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.13500000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 7 6750003 "Beam Property 7"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4

Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.20200000000000E+0
MomentI11 1.44721200667000E-1
MomentI22 1.00166666667000E-1
MomentJ 2.05087077094000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.20200000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 8 3375359 "Beam Property 8"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.26900000000000E+0
MomentI11 1.70295675750000E-1
MomentI22 1.05750000000000E-1
MomentJ 2.26659049120000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.26900000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 9 16724812 "Beam Property 9"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.33600000000000E+0
MomentI11 1.98718421333000E-1
MomentI22 1.11333333330000E-1
MomentJ 2.48307385230000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.33600000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic

Hardening Isotropic

BeamProp 10 8401919 "Beam Property 10"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.40300000000000E+0
MomentI11 2.30139818917000E-1
MomentI22 1.16916666667000E-1
MomentJ 2.70021145165000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.40300000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 11 11730739 "Beam Property 11"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.47000000000000E+0
MomentI11 2.64710250000000E-1
MomentI22 1.22500000000000E-1
MomentJ 2.91791383220000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.47000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 12 3394815 "Beam Property 12"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 6.00000000000000E-1
MomentI11 1.80000000000000E-2
MomentI22 5.00000000000000E-2
MomentJ 4.61318400000000E-2
SectionType SolidRect

B 1.0000000000000E+0
D 6.0000000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 13 16724889 "Beam Property 13"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 6.8330000000000E-1
MomentI11 2.6586000961000E-2
MomentI22 5.6941666667000E-2
MomentJ 6.3147042077000E-2
SectionType SolidRect
B 1.0000000000000E+0
D 6.8330000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 14 13382655 "Beam Property 14"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 7.6667000000000E-1
MomentI11 3.7552958953000E-2
MomentI22 6.3889166667000E-2
MomentJ 8.2250384903000E-2
SectionType SolidRect
B 1.0000000000000E+0
D 7.6667000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 15 16777011 "Beam Property 15"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2

InstantAlpha FALSE
Area 8.50000000000000E-1
MomentI11 5.11770833330000E-2
MomentI22 7.08333333330000E-2
MomentJ 1.02777912917000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 8.50000000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 16 3407769 "Beam Property 16"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 9.33330000000000E-1
MomentI11 6.77523604960000E-2
MomentI22 7.77775000000000E-2
MomentJ 1.23932497010000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 9.33330000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 17 15096878 "Beam Property 17"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.01667000000000E+0
MomentI11 8.75706915920000E-2
MomentI22 8.47225000000000E-2
MomentJ 1.45939124429000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.01667000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 18 3026662 "Beam Property 18"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4

Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.10000000000000E+0
MomentI11 1.10916666667000E-1
MomentI22 9.16666666670000E-2
MomentJ 1.72424242424000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.10000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 19 3073605 "Beam Property 19"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.18333000000000E+0
MomentI11 1.38081780636000E-1
MomentI22 9.86108333330000E-2
MomentJ 1.99091261919000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.18333000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 20 3073743 "Beam Property 20"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.26667000000000E+0
MomentI11 1.69359361732000E-1
MomentI22 1.05558333330000E-1
MomentJ 2.25907507849000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.26667000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic

Hardening Isotropic

BeamProp 21 15114542 "Beam Property 21"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.35000000000000E+0
MomentI11 2.05031250000000E-1
MomentI22 1.12500000000000E-1
MomentJ 2.52839506173000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.35000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 22 15085263 "Beam Property 22"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.43333000000000E+0
MomentI11 2.45390263276000E-1
MomentI22 1.19444166667000E-1
MomentJ 2.79869718046000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.43333000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 23 6088238 "Beam Property 23"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.51667000000000E+0
MomentI11 2.90731469371000E-1
MomentI22 1.26389166667000E-1
MomentJ 3.06985212978000E-1
SectionType SolidRect

B 1.0000000000000E+0
D 1.5166700000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 24 3044326 "Beam Property 24"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.6000000000000E+0
MomentI11 3.4133333333000E-1
MomentI22 1.3333333333000E-1
MomentJ 3.3416666667000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.6000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 25 15085125 "Beam Property 25"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.6833000000000E+0
MomentI11 3.97469056795000E-1
MomentI22 1.4027500000000E-1
MomentJ 3.61397233609000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.6833000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 26 7548646 "Beam Property 26"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2

InstantAlpha FALSE
Area 1.76666700000000E+0
MomentI11 4.59497173673000E-1
MomentI22 1.47222250000000E-1
MomentJ 3.88700318904000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.76666700000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 27 10610222 "Beam Property 27"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.54000000000000E+0
MomentI11 3.04355333333000E-1
MomentI22 1.28333333333000E-1
MomentJ 3.14588744589000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.54000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 28 3061990 "Beam Property 28"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.41000000000000E+0
MomentI11 2.33601750000000E-1
MomentI22 1.17500000000000E-1
MomentJ 2.72293144208000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.41000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 29 15085194 "Beam Property 29"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4

Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.3300000000000E+0
MomentI11 1.96053083333000E-1
MomentI22 1.10833333333000E-1
MomentJ 2.46365914787000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.3300000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 30 12070630 "Beam Property 30"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.2000000000000E+0
MomentI11 1.4400000000000E-1
MomentI22 1.0000000000000E-1
MomentJ 2.04444444444000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.2000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 31 15132206 "Beam Property 31"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.0700000000000E+0
MomentI11 1.02086916667000E-1
MomentI22 8.9166666670000E-2
MomentJ 1.62866043614000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.0700000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic

Hardening Isotropic

BeamProp 32 3073674 "Beam Property 32"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.00000000000000E+0
MomentI11 8.33333333330000E-2
MomentI22 8.33333333330000E-2
MomentJ 1.40666666667000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.00000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 33 13390377 "Beam Property 33"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 8.38947000000000E-1
MomentI11 4.92064835530000E-2
MomentI22 6.99122500000000E-2
MomentJ 9.99999072150000E-2
SectionType SolidRect
B 1.00000000000000E+0
D 8.38947000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 34 2697676 "Beam Property 34"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 8.77895000000000E-1
MomentI11 5.63827793820000E-2
MomentI22 7.31579166670000E-2
MomentJ 1.09834225012000E-1
SectionType SolidRect

B 1.0000000000000E+0
D 8.7789500000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 35 2739261 "Beam Property 35"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 9.1684200000000E-1
MomentI11 6.4224725024000E-2
MomentI22 7.6403500000000E-2
MomentJ 1.1974075746000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 9.1684200000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 36 2739384 "Beam Property 36"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 9.5578900000000E-1
MomentI11 7.2762035182000E-2
MomentI22 7.9649083333000E-2
MomentJ 1.2962021791600E-1
SectionType SolidRect
B 1.0000000000000E+0
D 9.5578900000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 37 13405993 "Beam Property 37"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2

InstantAlpha FALSE
Area 9.94737000000000E-1
MomentI11 8.20244959770000E-2
MomentI22 8.28947500000000E-2
MomentJ 1.39366107904000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 9.94737000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 38 13380024 "Beam Property 38"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.03368400000000E+0
MomentI11 9.20411711530000E-2
MomentI22 8.61403333330000E-2
MomentJ 1.51329836409000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.03368400000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 39 5426217 "Beam Property 39"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.07263200000000E+0
MomentI11 1.02842115472000E-1
MomentI22 8.93860000000000E-2
MomentJ 1.63703627284000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.07263200000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 40 2713292 "Beam Property 40"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4

Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.1115790000000E+0
MomentI11 1.14456313677000E-1
MomentI22 9.26315833330000E-2
MomentJ 1.76119766938000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.1115790000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 41 13379901 "Beam Property 41"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.1505260000000E+0
MomentI11 1.26913571640000E-1
MomentI22 9.58771666670000E-2
MomentJ 1.88574239573000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.1505260000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 42 6695372 "Beam Property 42"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.1894740000000E+0
MomentI11 1.40243781816000E-1
MomentI22 9.91228333330000E-2
MomentJ 2.01063600851000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.1894740000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic

Hardening Isotropic

BeamProp 43 9423913 "Beam Property 43"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.22842100000000E+0
MomentI11 1.54475799069000E-1
MomentI22 1.02368416667000E-1
MomentJ 2.13583921484000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.22842100000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 44 2728908 "Beam Property 44"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.26736800000000E+0
MomentI11 1.69639493071000E-1
MomentI22 1.05614000000000E-1
MomentJ 2.26132637988000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.26736800000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 45 13379962 "Beam Property 45"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.30631600000000E+0
MomentI11 1.85764829183000E-1
MomentI22 1.08859666667000E-1
MomentJ 2.38707533720000E-1
SectionType SolidRect

B 1.0000000000000E+0
D 1.3063160000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 46 10693068 "Beam Property 46"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.3452630000000E+0
MomentI11 2.02880518737000E-1
MomentI22 1.1210525000000E-1
MomentJ 2.51305717214000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.3452630000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 47 13421609 "Beam Property 47"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.3842110000000E+0
MomentI11 2.21016981042000E-1
MomentI22 1.15350916667000E-1
MomentJ 2.63925842356000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.3842110000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 48 2739322 "Beam Property 48"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2

InstantAlpha FALSE
Area 1.42315800000000E+0
MomentI11 2.40202824160000E-1
MomentI22 1.18596500000000E-1
MomentJ 2.76565486279000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.42315800000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 49 11683620 "Beam Property 49"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.46210500000000E+0
MomentI11 2.60468039268000E-1
MomentI22 1.21842083333000E-1
MomentJ 2.89223387063000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.46210500000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 50 2368690 "Beam Property 50"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.50105300000000E+0
MomentI11 2.81842728401000E-1
MomentI22 1.25087750000000E-1
MomentJ 3.01898449246000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.50105300000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

LoadFreedomSetLSA 1 ON
1 2 3 4 5 6 7 8
9

/
/ LINEAR BUCKLING SOLVER DATA

BuckNumModes 4
BuckShift 0.0000000000000E+0

/
/ LOAD INFLUENCE SOLVER DATA

LoadFreedomSetLIA 1 ON
1

/
/ NON-LINEAR STATIC SOLVER DATA

NonLinearIncrement 0 Yes "SLU1"
LON1 1.0000000000000E+0
LON2 1.0000000000000E+0
LON3 1.0000000000000E+0
LON4 1.0000000000000E+0
LON5 2.0000000000000E-1
LON6 2.0000000000000E-1
LON7 2.0000000000000E-1
LON8 1.0000000000000E+0
LON9 -3.0000000000000E-1
FON1 1.0000000000000E+0

NonLinearIncrement 0 Yes "SLU2"
LON1 1.0000000000000E+0
LON2 1.0000000000000E+0
LON3 1.0000000000000E+0
LON4 1.0000000000000E+0
LON5 2.0000000000000E-1
LON6 2.0000000000000E-1
LON7 2.0000000000000E-1
LON8 -1.0000000000000E+0
LON9 -3.0000000000000E-1
FON1 -1.0000000000000E+0

NonLinearIncrement 0 Yes "SLU3"
LON1 1.0000000000000E+0
LON2 1.0000000000000E+0
LON3 1.0000000000000E+0
LON4 1.0000000000000E+0
LON5 2.0000000000000E-1
LON6 2.0000000000000E-1
LON7 2.0000000000000E-1
LON8 1.0000000000000E+0
LON9 3.0000000000000E-1
FON1 1.0000000000000E+0

NonLinearIncrement 0 Yes "SLU4"
LON1 1.0000000000000E+0
LON2 1.0000000000000E+0
LON3 1.0000000000000E+0
LON4 1.0000000000000E+0
LON5 2.0000000000000E-1
LON6 2.0000000000000E-1

LON7 2.00000000000000E-1
LON8 -1.00000000000000E+0
LON9 3.00000000000000E-1
FON1 -1.00000000000000E+0

NonLinearIncrement 0 Yes "SLU5"

LON1 1.00000000000000E+0
LON2 1.00000000000000E+0
LON3 1.00000000000000E+0
LON4 1.00000000000000E+0
LON5 2.00000000000000E-1
LON6 2.00000000000000E-1
LON7 2.00000000000000E-1
LON8 3.00000000000000E-1
LON9 -1.00000000000000E+0
FON1 3.00000000000000E-1

NonLinearIncrement 0 Yes "SLU6"

LON1 1.00000000000000E+0
LON2 1.00000000000000E+0
LON3 1.00000000000000E+0
LON4 1.00000000000000E+0
LON5 2.00000000000000E-1
LON6 2.00000000000000E-1
LON7 2.00000000000000E-1
LON8 -3.00000000000000E-1
LON9 -1.00000000000000E+0
FON1 -3.00000000000000E-1

NonLinearIncrement 0 Yes "SLU7"

LON1 1.00000000000000E+0
LON2 1.00000000000000E+0
LON3 1.00000000000000E+0
LON4 1.00000000000000E+0
LON5 2.00000000000000E-1
LON6 2.00000000000000E-1
LON7 2.00000000000000E-1
LON8 3.00000000000000E-1
LON9 1.00000000000000E+0
FON1 3.00000000000000E-1

NonLinearIncrement 0 Yes "SLU8"

LON1 1.00000000000000E+0
LON2 1.00000000000000E+0
LON3 1.00000000000000E+0
LON4 1.00000000000000E+0
LON5 2.00000000000000E-1
LON6 2.00000000000000E-1
LON7 2.00000000000000E-1
LON8 -3.00000000000000E-1
LON9 1.00000000000000E+0
FON1 -3.00000000000000E-1

NonLinearIncrement 0 Yes "SLU9"

LON1 1.00000000000000E+0
LON2 1.00000000000000E+0
LON3 1.00000000000000E+0
LON4 1.00000000000000E+0
LON5 2.00000000000000E-1
LON6 2.00000000000000E-1
LON7 2.00000000000000E-1
LON8 1.00000000000000E+0
LON9 -3.00000000000000E-1
FON1 -1.00000000000000E+0

NonLinearIncrement 0 Yes "SLU10"

LON1 1.0000000000000E+0
LON2 1.0000000000000E+0
LON3 1.0000000000000E+0
LON4 1.0000000000000E+0
LON5 2.0000000000000E-1
LON6 2.0000000000000E-1
LON7 2.0000000000000E-1
LON8 -1.0000000000000E+0
LON9 -3.0000000000000E-1
FON1 1.0000000000000E+0

NonLinearIncrement 0 Yes "SLU11"

LON1 1.0000000000000E+0
LON2 1.0000000000000E+0
LON3 1.0000000000000E+0
LON4 1.0000000000000E+0
LON5 2.0000000000000E-1
LON6 2.0000000000000E-1
LON7 2.0000000000000E-1
LON8 1.0000000000000E+0
LON9 3.0000000000000E-1
FON1 -1.0000000000000E+0

NonLinearIncrement 0 Yes "SLU12"

LON1 1.0000000000000E+0
LON2 1.0000000000000E+0
LON3 1.0000000000000E+0
LON4 1.0000000000000E+0
LON5 2.0000000000000E-1
LON6 2.0000000000000E-1
LON7 2.0000000000000E-1
LON8 -1.0000000000000E+0
LON9 3.0000000000000E-1
FON1 1.0000000000000E+0

NonLinearIncrement 0 Yes "SLU13"

LON1 1.0000000000000E+0
LON2 1.0000000000000E+0
LON3 1.0000000000000E+0
LON4 1.0000000000000E+0
LON5 2.0000000000000E-1
LON6 2.0000000000000E-1
LON7 2.0000000000000E-1
LON8 3.0000000000000E-1
LON9 -1.0000000000000E+0
FON1 -3.0000000000000E-1

NonLinearIncrement 0 Yes "SLU14"

LON1 1.0000000000000E+0
LON2 1.0000000000000E+0
LON3 1.0000000000000E+0
LON4 1.0000000000000E+0
LON5 2.0000000000000E-1
LON6 2.0000000000000E-1
LON7 2.0000000000000E-1
LON8 -3.0000000000000E-1
LON9 -1.0000000000000E+0
FON1 3.0000000000000E-1

NonLinearIncrement 0 Yes "SLU15"

LON1 1.0000000000000E+0
LON2 1.0000000000000E+0
LON3 1.0000000000000E+0
LON4 1.0000000000000E+0
LON5 2.0000000000000E-1
LON6 2.0000000000000E-1

LON7 2.00000000000000E-1
LON8 3.00000000000000E-1
LON9 1.00000000000000E+0
FON1 -3.00000000000000E-1

NonLinearIncrement 0 Yes "SLU16"

LON1 1.00000000000000E+0
LON2 1.00000000000000E+0
LON3 1.00000000000000E+0
LON4 1.00000000000000E+0
LON5 2.00000000000000E-1
LON6 2.00000000000000E-1
LON7 2.00000000000000E-1
LON8 -3.00000000000000E-1
LON9 1.00000000000000E+0
FON1 3.00000000000000E-1

NonLinearStage Unstaged

/ NATURAL FREQUENCY SOLVER DATA

FreqNumModes 4

FreqShift 0.00000000000000E+0

FreqIncludeNSMass 1 2 3 4 5 6 7 8
9

FreqModeParticipation FALSE

0.00000000000000E+0	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	0.00000000000000E+0

/ HEAT SOLVER DATA

LoadSetHeat 1 2 3 4 5 6 7 8
9

HeatTempLoadCase 1

HeatNonlinear FALSE

/ GENERAL SOLVER DATA

SolverTempDependence None

SolverLoadCaseTempDependence 0

SolverActiveStage 0

SturmCheck FALSE

SolverFreedomCase 1

ModalLoadType BaseAcceleration

ModalNodeReactType Element

DampingType Rayleigh

RayleighFactors Frequency
1.00000000000000E+0 1.00000000000000E+1 1.00000000000000E+0 1.00000000000000E+1 1.00000000000000E-2
1.00000000000000E-2

NonLinearGeometry TRUE

NonLinearMaterial TRUE

IncludeCreep FALSE

SolverDefaultsGeneral

SolDefMatrixZeroDiag 1.00000000000000E-20
SolDefConjGradTol 1.00000000000000E-5
SolDefMaxConjGradIter 5000
SolDefMaxNumWarnings 10
SolDefWindowState 3
SolDefReducedLogFile TRUE
SolDefDoResidualsCheck FALSE
SolDefSuppressAllSingularities FALSE

SolverDefaultsElements

SolDefMinDimension 1.00000000000000E-9
SolDefMinInternalAngle 1.50000000000000E+1
SolDefZeroPointForce 1.00000000000000E-6
SolDefZeroDiagonal 1.00000000000000E-20
SolDefBeamMass Lumped
SolDefPlateMass Lumped
SolDefBrickMass Lumped
SolDefBeamLoads Consistent
SolDefPlateLoads Consistent
SolDefBeamSlices 5
SolDefIncludeLinkReactions TRUE

SolverDefaultsDrilling

SolDefZeroTrans 1.00000000000000E-8
SolDefZeroRot 1.00000000000000E-6
SolDrillStiffMult 1.00000000000000E-4
SolDrillZeroEig 1.00000000000000E-6
SolDefMaxNormalsAngle 5.00000000000000E+0
SolDefForceDrillingCheck FALSE

SolverDefaultsIteration

SolDefZeroDisp 1.00000000000000E-8
SolDefDispNormTol 1.00000000000000E-4
SolDefResidualsNormTol 1.00000000000000E-3
SolDefNonlinIterLimit 20
SolDefAddIterations TRUE
SolDefMaxUpdateInterval 5
SolDefMaxDispChange 1.00000000000000E+0
SolDefMaxResidualChange 1.00000000000000E-1
SolDefFormStiffnessMatrix 0
SolDefFormHeatStiffnessMatrix 2
SolDefHeatConvergenceTol 1.00000000000000E-5
SolDefHeatRelaxationFactor 6.66670000000000E-1
SolDefNonlinHeatIterLimit 20

SolverDefaultsSubSteps

SolDefSubStepping 0
SolDefMinLoadReductionFactor 1.00000000000000E-1
SolDefMaxRot 3.00000000000000E+1
SolDefMaxDispRatio 1.00000000000000E-1
SolDefMinArcLength 1.00000000000000E-3
SolDefMaxFibreInc 1.00000000000000E-2
SolDefSaveSubIncrements FALSE
SolDefDynamicAutoSteppingMode 0

SolDefMinTimeStep 1.00000000000000E-3
SolDefConsiderTableSteps FALSE
SolDefSingleShotRestart FALSE
SolDefAutoAssignPathDiv FALSE

SolverDefaultsNonlinear

SolDefIncludeKG TRUE
SolDefAutoScaleKg TRUE
SolDefIgnoreCompressiveBeamKg FALSE
SolDefBeamKgType Simplified
SolDefFiniteStrainDefinition Nominal
SolDefBeamLength Initial
SolDefRatioMNL 5.00000000000000E-1
SolDefZeroContactFactor 1.00000000000000E-6
SolDefSlidingFriction 1.00000000000000E-15
SolDefStickingFriction 1.00000000000000E+0
SolDefFrictionCutoffStrain 1.00000000000000E-5
SolDefScaleSupports TRUE

SolverDefaultsCreep

SolDefTimeStepParam 5.00000000000000E-1
SolDefMinViscoUnits 3
SolDefMaxViscoUnits 6
SolDefCurveFitTime 1.00000000000000E+4
SolDefCurveFitTimeUnit d
SolDefSpacingBias 5.00000000000000E-1
SolDefDoInstantNTA TRUE

SolverDefaultsEigenvalue

SolDefZeroFreq 1.00000000000000E-6
SolDefZeroBuckEigenvalue 1.00000000000000E-10
SolDefExpandWorkingSetBy 6
SolDefEigIterLimit 20
SolDefEigIterTol 1.00000000000000E-5
SolDefEigAutoShift FALSE

SolverDefaultsDynamics

SolDefWilsonTheta 1.37000000000000E+0
SolDefNewmarkBeta 5.00000000000000E-1
SolDefTransientMethod Newmark
SolDefExcludeMassComponents
SolDefIncludeRotMass TRUE

/ _____

/ RESULT OPTIONS

ResultOptions

ResOptsRotationUnit Degrees
ResOptsHRADisplacement Total
ResOptsHRAVelocity Total
ResOptsHRAAcceleration Relative
ResOptsBeamForceMoment Principal
ResOptsStageDisplacement BirthStage

/ _____

/ Straus7 MODEL EXCHANGE FILE

/ TIMESTAMP: 6:17:19 pm, 05 giugno 2019

/ _____

/ MODEL INFORMATION

FileFormat Straus7.2.4.6
ModelName "GA_open_SLE_C"
Title ""

Project ""
Author ""
Reference ""
Comments ""

/ _____
/ UNITS

LengthUnit m
MassUnit kg
EnergyUnit J
PressureUnit MPa
ForceUnit kN
TemperatureUnit C

/ _____
/ GROUP DEFINITIONS

Group 1 16711680 "\\Model"
Group 2 3355647 "calotta"
Group 3 16757299 "calotta\curvilinea"
Group 4 6750003 "calotta\rettilinea"
Group 5 3407692 "piedritto"
Group 6 3375359 "piedritto\piedritto_alto"
Group 7 16724812 "piedritto\piedritto_basso"
Group 8 3407846 "arco rovescio"

/ _____
/ FREEDOM CASE DEFINITIONS

FreedomCase 1 0 1 "Freedom Case 1"

/ _____
/ LOAD CASE DEFINITIONS

LoadCase 1 1 "PP"
Gravity 2 -9.806650000000000E+0
LCInclude 3

LoadCase 2 0 "P_cop"
LCInclude 3

LoadCase 3 0 "SP_sx"
LCInclude 3

LoadCase 4 0 "SP_dx"
LCInclude 3

LoadCase 5 0 "V"
LCInclude 3

LoadCase 6 0 "SV_sx"
LCInclude 3

LoadCase 7 0 "SV_dx"
LCInclude 3

LoadCase 8 0 "dS_h"
LCInclude 3

LoadCase 9 0 "dS_V"
LCInclude 3

/ _____

/ INCREMENT ENVELOPES

IncrementEnvelope	"Envelope Case" Abs
ON	1
ON	2
ON	3
ON	4
ON	5
ON	6
ON	7
ON	8
ON	9
ON	10
ON	11
ON	12
ON	13
ON	14
ON	15
ON	16

/

 / COORDINATE SYSTEM DEFINITIONS

CoordSys	1	"Global XYZ" GlobalXYZ
CoordSys	2	"carichi" RectXYZ
		0.0000000000000E+0 1.0860000000000E+1 0.0000000000000E+0

/

 / NODE COORDINATES

Node	1	0	-1.9483000000000E+0	3.3329000000000E+0	0.0000000000000E+0
Node	2	0	-1.85947466801228E+0	3.38326015242999E+0	0.0000000000000E+0
Node	3	0	-1.76934854991663E+0	3.43125356231625E+0	0.0000000000000E+0
Node	4	0	-1.67798469298355E+0	3.47684665611138E+0	0.0000000000000E+0
Node	5	0	-1.58544701033748E+0	3.52000753939703E+0	0.0000000000000E+0
Node	6	0	-1.49180023624673E+0	3.56070601919538E+0	0.0000000000000E+0
Node	7	0	-1.39710988083890E+0	3.59891362509054E+0	0.0000000000000E+0
Node	8	0	-1.30144218427364E+0	3.63460362914487E+0	0.0000000000000E+0
Node	9	0	-1.20486407040466E+0	3.66775106459638E+0	0.0000000000000E+0
Node	10	0	-1.10744309996351E+0	3.69833274332411E+0	0.0000000000000E+0
Node	11	0	-1.00924742329778E+0	3.72632727206921E+0	0.0000000000000E+0
Node	12	0	-9.10345732696894E-1	3.75171506740058E+0	0.0000000000000E+0
Node	13	0	-8.10807214338750E-1	3.77447836941427E+0	0.0000000000000E+0
Node	14	0	-7.10701499890891E-1	3.79460125415739E+0	0.0000000000000E+0
Node	15	0	-6.10098617800016E-1	3.81206964476759E+0	0.0000000000000E+0
Node	16	0	-5.09068944303938E-1	3.82687132132050E+0	0.0000000000000E+0
Node	17	0	-4.07683154200238E-1	3.83899592937806E+0	0.0000000000000E+0
Node	18	0	-3.06012171406074E-1	3.84843498723200E+0	0.0000000000000E+0
Node	19	0	-2.04127119343708E-1	3.85518189183707E+0	0.0000000000000E+0
Node	20	0	-1.02099271186475E-1	3.85923192343026E+0	0.0000000000000E+0
Node	21	0	-3.80446542325164E-16	3.86058224883242E+0	0.0000000000000E+0
Node	22	0	1.02099271186474E-1	3.85923192343026E+0	0.0000000000000E+0
Node	23	0	2.04127119343707E-1	3.85518189183707E+0	0.0000000000000E+0
Node	24	0	3.06012171406073E-1	3.84843498723200E+0	0.0000000000000E+0
Node	25	0	4.07683154200237E-1	3.83899592937806E+0	0.0000000000000E+0
Node	26	0	5.09068944303936E-1	3.82687132132050E+0	0.0000000000000E+0
Node	27	0	6.10098617800015E-1	3.81206964476759E+0	0.0000000000000E+0
Node	28	0	7.10701499890890E-1	3.79460125415739E+0	0.0000000000000E+0
Node	29	0	8.10807214338749E-1	3.77447836941427E+0	0.0000000000000E+0
Node	30	0	9.10345732696893E-1	3.75171506740058E+0	0.0000000000000E+0
Node	31	0	1.00924742329778E+0	3.72632727206921E+0	0.0000000000000E+0
Node	32	0	1.10744309996351E+0	3.69833274332411E+0	0.0000000000000E+0
Node	33	0	1.20486407040466E+0	3.66775106459638E+0	0.0000000000000E+0

Node	34	0	1.30144218427364E+0	3.63460362914487E+0	0.0000000000000E+0
Node	35	0	1.39710988083890E+0	3.59891362509054E+0	0.0000000000000E+0
Node	36	0	1.49180023624673E+0	3.56070601919538E+0	0.0000000000000E+0
Node	37	0	1.58544701033748E+0	3.52000753939703E+0	0.0000000000000E+0
Node	38	0	1.67798469298354E+0	3.47684665611138E+0	0.0000000000000E+0
Node	39	0	1.76934854991663E+0	3.43125356231625E+0	0.0000000000000E+0
Node	40	0	1.85947466801228E+0	3.38326015242999E+0	0.0000000000000E+0
Node	41	0	1.94830000000000E+0	3.33290000000000E+0	0.0000000000000E+0
Node	42	0	2.11546000000000E+0	3.20923000000000E+0	0.0000000000000E+0
Node	43	0	2.28262000000000E+0	3.08556000000000E+0	0.0000000000000E+0
Node	44	0	2.44978000000000E+0	2.96189000000000E+0	0.0000000000000E+0
Node	45	0	2.61694000000000E+0	2.83822000000000E+0	0.0000000000000E+0
Node	46	0	2.78410000000000E+0	2.71455000000000E+0	0.0000000000000E+0
Node	47	0	2.95126000000000E+0	2.59088000000000E+0	0.0000000000000E+0
Node	48	0	3.11842000000000E+0	2.46721000000000E+0	0.0000000000000E+0
Node	49	0	3.28558000000000E+0	2.34354000000000E+0	0.0000000000000E+0
Node	50	0	3.45274000000000E+0	2.21987000000000E+0	0.0000000000000E+0
Node	51	0	3.61990000000000E+0	2.09620000000000E+0	0.0000000000000E+0
Node	52	0	0.00000000000000E+0	0.00000000000000E+0	0.0000000000000E+0
Node	53	0	-2.11546000000000E+0	3.20923000000000E+0	0.0000000000000E+0
Node	54	0	-2.28262000000000E+0	3.08556000000000E+0	0.0000000000000E+0
Node	55	0	-2.44978000000000E+0	2.96189000000000E+0	0.0000000000000E+0
Node	56	0	-2.61694000000000E+0	2.83822000000000E+0	0.0000000000000E+0
Node	57	0	-2.78410000000000E+0	2.71455000000000E+0	0.0000000000000E+0
Node	58	0	-2.95126000000000E+0	2.59088000000000E+0	0.0000000000000E+0
Node	59	0	-3.11842000000000E+0	2.46721000000000E+0	0.0000000000000E+0
Node	60	0	-3.28558000000000E+0	2.34354000000000E+0	0.0000000000000E+0
Node	61	0	-3.45274000000000E+0	2.21987000000000E+0	0.0000000000000E+0
Node	62	0	-3.61990000000000E+0	2.09620000000000E+0	0.0000000000000E+0
Node	63	0	3.66914272971283E+0	1.89024296185021E+0	0.0000000000000E+0
Node	64	0	3.71328302196233E+0	1.68313240539995E+0	0.0000000000000E+0
Node	65	0	3.75229394019274E+0	1.47499471959599E+0	0.0000000000000E+0
Node	66	0	3.78615167804214E+0	1.26595692018946E+0	0.0000000000000E+0
Node	67	0	3.81483557387019E+0	1.05614657222461E+0	0.0000000000000E+0
Node	68	0	3.83832812336690E+0	8.45691712192458E-1	0.0000000000000E+0
Node	69	0	3.85661499023460E+0	6.34720769896678E-1	0.0000000000000E+0
Node	70	0	3.86968501493665E+0	4.23362490079458E-1	0.0000000000000E+0
Node	71	0	3.87753022150753E+0	2.11745853855208E-1	0.0000000000000E+0
Node	72	0	3.88015000000000E+0	0.00000000000000E+0	0.0000000000000E+0
Node	73	0	-3.66914272971283E+0	1.89024296185021E+0	0.0000000000000E+0
Node	74	0	-3.71328302196233E+0	1.68313240539995E+0	0.0000000000000E+0
Node	75	0	-3.75229394019274E+0	1.47499471959599E+0	0.0000000000000E+0
Node	76	0	-3.78615167804214E+0	1.26595692018946E+0	0.0000000000000E+0
Node	77	0	-3.81483557387019E+0	1.05614657222461E+0	0.0000000000000E+0
Node	78	0	-3.83832812336690E+0	8.45691712192458E-1	0.0000000000000E+0
Node	79	0	-3.85661499023460E+0	6.34720769896678E-1	0.0000000000000E+0
Node	80	0	-3.86968501493665E+0	4.23362490079458E-1	0.0000000000000E+0
Node	81	0	-3.87753022150753E+0	2.11745853855208E-1	0.0000000000000E+0
Node	82	0	-3.88015000000000E+0	0.00000000000000E+0	0.0000000000000E+0
Node	83	0	-3.49550000000000E+0	-3.56270000000000E+0	0.0000000000000E+0
Node	84	0	-3.33230782624253E+0	-3.60057547048123E+0	0.0000000000000E+0
Node	85	0	-3.16879248559635E+0	-3.63703051420949E+0	0.0000000000000E+0
Node	86	0	-3.00496634122818E+0	-3.67206237486980E+0	0.0000000000000E+0
Node	87	0	-2.84084177980416E+0	-3.70566840375206E+0	0.0000000000000E+0
Node	88	0	-2.67643121055332E+0	-3.73784605995134E+0	0.0000000000000E+0
Node	89	0	-2.51174706432936E+0	-3.76859291055994E+0	0.0000000000000E+0
Node	90	0	-2.34680179267073E+0	-3.79790663085141E+0	0.0000000000000E+0
Node	91	0	-2.18160786685924E+0	-3.79790000000000E+0	0.0000000000000E+0
Node	92	0	-2.01617777697708E+0	-3.79790000000000E+0	0.0000000000000E+0
Node	93	0	-1.85052403096246E+0	-3.79790000000000E+0	0.0000000000000E+0
Node	94	0	-1.68465915366393E+0	-3.79790000000000E+0	0.0000000000000E+0
Node	95	0	-1.51859568589340E+0	-3.79790000000000E+0	0.0000000000000E+0
Node	96	0	-1.35234618347790E+0	-3.79790000000000E+0	0.0000000000000E+0
Node	97	0	-1.18592321631029E+0	-3.79790000000000E+0	0.0000000000000E+0
Node	98	0	-1.01933936739887E+0	-3.79790000000000E+0	0.0000000000000E+0
Node	99	0	-8.52607231915959E-1	-3.79790000000000E+0	0.0000000000000E+0

Node	100	0	-6.85739416245641E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	101	0	-5.18748537030578E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	102	0	-3.51647220218097E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	103	0	-1.84448100105556E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	104	0	-1.71638183850854E-2	-3.79790000000000E+0	0.00000000000000E+0
Node	105	0	3.49550000000000E+0	-3.56270000000000E+0	0.00000000000000E+0
Node	106	0	3.53876190604596E+0	-3.38827494401322E+0	0.00000000000000E+0
Node	107	0	3.57939848608508E+0	-3.21321963551490E+0	0.00000000000000E+0
Node	108	0	3.61740056791651E+0	-3.03757358674864E+0	0.00000000000000E+0
Node	109	0	3.65275957397965E+0	-2.86137644329578E+0	0.00000000000000E+0
Node	110	0	3.68546752329024E+0	-2.68466797512683E+0	0.00000000000000E+0
Node	111	0	3.71551703324176E+0	-2.50748806762490E+0	0.00000000000000E+0
Node	112	0	3.74290132127180E+0	-2.32987671258303E+0	0.00000000000000E+0
Node	113	0	3.76761420639292E+0	-2.15187399917756E+0	0.00000000000000E+0
Node	114	0	3.78965011058784E+0	-1.97352010491945E+0	0.00000000000000E+0
Node	115	0	3.81400406006844E+0	-1.79485528658573E+0	0.00000000000000E+0
Node	116	0	3.83567168639838E+0	-1.61591987113298E+0	0.00000000000000E+0
Node	117	0	3.84464922747919E+0	-1.43675424659509E+0	0.00000000000000E+0
Node	118	0	3.85593352839935E+0	-1.25739885296706E+0	0.00000000000000E+0
Node	119	0	3.86452204214643E+0	-1.07789417307727E+0	0.00000000000000E+0
Node	120	0	3.87541283018197E+0	-8.98280723449910E-1	0.00000000000000E+0
Node	121	0	3.87860456287904E+0	-7.18599045159911E-1	0.00000000000000E+0
Node	122	0	3.87909651982237E+0	-5.38889694682297E-1	0.00000000000000E+0
Node	123	0	3.87688858997090E+0	-3.59193234738058E-1	0.00000000000000E+0
Node	124	0	3.88198127168293E+0	-1.79550225138629E-1	0.00000000000000E+0
Node	125	0	3.33230782624253E+0	-3.60057547048123E+0	0.00000000000000E+0
Node	126	0	3.16879248559635E+0	-3.63703051420949E+0	0.00000000000000E+0
Node	127	0	3.00496634122818E+0	-3.67206237486980E+0	0.00000000000000E+0
Node	128	0	2.84084177980416E+0	-3.70566840375206E+0	0.00000000000000E+0
Node	129	0	2.67643121055332E+0	-3.73784605995134E+0	0.00000000000000E+0
Node	130	0	2.51174706432936E+0	-3.76859291055994E+0	0.00000000000000E+0
Node	131	0	2.34680179267073E+0	-3.79790663085141E+0	0.00000000000000E+0
Node	132	0	2.18160786685924E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	133	0	2.01617777697708E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	134	0	1.85052403096246E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	135	0	1.68465915366393E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	136	0	1.51859568589340E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	137	0	1.35234618347790E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	138	0	1.18592321631029E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	139	0	1.01933936739887E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	140	0	8.52607231915959E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	141	0	6.85739416245641E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	142	0	5.18748537030578E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	143	0	3.51647220218097E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	144	0	1.84448100105556E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	145	0	1.71638183850854E-2	-3.79790000000000E+0	0.00000000000000E+0
Node	146	0	-3.53876190604596E+0	-3.38827494401322E+0	0.00000000000000E+0
Node	147	0	-3.57939848608508E+0	-3.21321963551490E+0	0.00000000000000E+0
Node	148	0	-3.61740056791651E+0	-3.03757358674864E+0	0.00000000000000E+0
Node	149	0	-3.65275957397965E+0	-2.86137644329578E+0	0.00000000000000E+0
Node	150	0	-3.68546752329024E+0	-2.68466797512683E+0	0.00000000000000E+0
Node	151	0	-3.71551703324176E+0	-2.50748806762490E+0	0.00000000000000E+0
Node	152	0	-3.74290132127180E+0	-2.32987671258303E+0	0.00000000000000E+0
Node	153	0	-3.76761420639292E+0	-2.15187399917756E+0	0.00000000000000E+0
Node	154	0	-3.78965011058784E+0	-1.97352010491945E+0	0.00000000000000E+0
Node	155	0	-3.81400406006844E+0	-1.79485528658573E+0	0.00000000000000E+0
Node	156	0	-3.83567168639838E+0	-1.61591987113298E+0	0.00000000000000E+0
Node	157	0	-3.84464922747919E+0	-1.43675424659509E+0	0.00000000000000E+0
Node	158	0	-3.85593352839935E+0	-1.25739885296706E+0	0.00000000000000E+0
Node	159	0	-3.86452204214643E+0	-1.07789417307727E+0	0.00000000000000E+0
Node	160	0	-3.87541283018197E+0	-8.98280723449910E-1	0.00000000000000E+0
Node	161	0	-3.87860456287904E+0	-7.18599045159911E-1	0.00000000000000E+0
Node	162	0	-3.87909651982237E+0	-5.38889694682297E-1	0.00000000000000E+0
Node	163	0	-3.87688858997090E+0	-3.59193234738058E-1	0.00000000000000E+0
Node	164	0	-3.88198127168293E+0	-1.79550225138629E-1	0.00000000000000E+0

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/ BEAM ELEMENTS

Beam	1	0	3	1	2	1
Beam	2	0	3	1	3	2
Beam	3	0	3	1	4	3
Beam	4	0	3	1	5	4
Beam	5	0	3	1	6	5
Beam	6	0	3	1	7	6
Beam	7	0	3	1	8	7
Beam	8	0	3	1	9	8
Beam	9	0	3	1	10	9
Beam	10	0	3	1	11	10
Beam	11	0	3	1	12	11
Beam	12	0	3	1	13	12
Beam	13	0	3	1	14	13
Beam	14	0	3	1	15	14
Beam	15	0	3	1	16	15
Beam	16	0	3	1	17	16
Beam	17	0	3	1	18	17
Beam	18	0	3	1	19	18
Beam	19	0	3	1	20	19
Beam	20	0	3	1	21	20
Beam	21	0	3	1	22	21
Beam	22	0	3	1	23	22
Beam	23	0	3	1	24	23
Beam	24	0	3	1	25	24
Beam	25	0	3	1	26	25
Beam	26	0	3	1	27	26
Beam	27	0	3	1	28	27
Beam	28	0	3	1	29	28
Beam	29	0	3	1	30	29
Beam	30	0	3	1	31	30
Beam	31	0	3	1	32	31
Beam	32	0	3	1	33	32
Beam	33	0	3	1	34	33
Beam	34	0	3	1	35	34
Beam	35	0	3	1	36	35
Beam	36	0	3	1	37	36
Beam	37	0	3	1	38	37
Beam	38	0	3	1	39	38
Beam	39	0	3	1	40	39
Beam	40	0	3	1	41	40
Beam	41	0	4	2	42	41
Beam	42	0	4	3	43	42
Beam	43	0	4	4	44	43
Beam	44	0	4	5	45	44
Beam	45	0	4	6	46	45
Beam	46	0	4	7	47	46
Beam	47	0	4	8	48	47
Beam	48	0	4	9	49	48
Beam	49	0	4	10	50	49
Beam	50	0	4	11	51	50
Beam	51	0	4	2	1	53
Beam	52	0	4	3	53	54
Beam	53	0	4	4	54	55
Beam	54	0	4	5	55	56
Beam	55	0	4	6	56	57
Beam	56	0	4	7	57	58
Beam	57	0	4	8	58	59
Beam	58	0	4	9	59	60
Beam	59	0	4	10	60	61
Beam	60	0	4	11	61	62
Beam	61	0	6	10	63	51
Beam	62	0	6	9	64	63
Beam	63	0	6	8	65	64

Beam	64	0	6	7	66	65
Beam	65	0	6	6	67	66
Beam	66	0	6	5	68	67
Beam	67	0	6	4	69	68
Beam	68	0	6	3	70	69
Beam	69	0	6	2	71	70
Beam	70	0	6	1	72	71
Beam	71	0	6	10	62	73
Beam	72	0	6	9	73	74
Beam	73	0	6	8	74	75
Beam	74	0	6	7	75	76
Beam	75	0	6	6	76	77
Beam	76	0	6	5	77	78
Beam	77	0	6	4	78	79
Beam	78	0	6	3	79	80
Beam	79	0	6	2	80	81
Beam	80	0	6	1	81	82
Beam	81	0	8	27	83	84
Beam	82	0	8	28	84	85
Beam	83	0	8	29	85	86
Beam	84	0	8	30	86	87
Beam	85	0	8	31	87	88
Beam	86	0	8	32	88	89
Beam	87	0	8	1	89	90
Beam	88	0	8	1	90	91
Beam	89	0	8	1	91	92
Beam	90	0	8	1	92	93
Beam	91	0	8	1	93	94
Beam	92	0	8	1	94	95
Beam	93	0	8	1	95	96
Beam	94	0	8	1	96	97
Beam	95	0	8	1	97	98
Beam	96	0	8	1	98	99
Beam	97	0	8	1	99	100
Beam	98	0	8	1	100	101
Beam	99	0	8	1	101	102
Beam	100	0	8	1	102	103
Beam	101	0	8	1	103	104
Beam	102	0	7	27	105	106
Beam	103	0	7	50	106	107
Beam	104	0	7	49	107	108
Beam	105	0	7	48	108	109
Beam	106	0	7	47	109	110
Beam	107	0	7	46	110	111
Beam	108	0	7	45	111	112
Beam	109	0	7	44	112	113
Beam	110	0	7	43	113	114
Beam	111	0	7	42	114	115
Beam	112	0	7	41	115	116
Beam	113	0	7	40	116	117
Beam	114	0	7	39	117	118
Beam	115	0	7	38	118	119
Beam	116	0	7	37	119	120
Beam	117	0	7	36	120	121
Beam	118	0	7	35	121	122
Beam	119	0	7	34	122	123
Beam	120	0	7	33	123	124
Beam	121	0	7	1	124	72
Beam	122	0	8	27	125	105
Beam	123	0	8	28	126	125
Beam	124	0	8	29	127	126
Beam	125	0	8	30	128	127
Beam	126	0	8	31	129	128
Beam	127	0	8	32	130	129
Beam	128	0	8	1	131	130
Beam	129	0	8	1	132	131

Beam	130	0	8	1	133	132
Beam	131	0	8	1	134	133
Beam	132	0	8	1	135	134
Beam	133	0	8	1	136	135
Beam	134	0	8	1	137	136
Beam	135	0	8	1	138	137
Beam	136	0	8	1	139	138
Beam	137	0	8	1	140	139
Beam	138	0	8	1	141	140
Beam	139	0	8	1	142	141
Beam	140	0	8	1	143	142
Beam	141	0	8	1	144	143
Beam	142	0	8	1	145	144
Beam	143	0	7	27	146	83
Beam	144	0	7	50	147	146
Beam	145	0	7	49	148	147
Beam	146	0	7	48	149	148
Beam	147	0	7	47	150	149
Beam	148	0	7	46	151	150
Beam	149	0	7	45	152	151
Beam	150	0	7	44	153	152
Beam	151	0	7	43	154	153
Beam	152	0	7	42	155	154
Beam	153	0	7	41	156	155
Beam	154	0	7	40	157	156
Beam	155	0	7	39	158	157
Beam	156	0	7	38	159	158
Beam	157	0	7	37	160	159
Beam	158	0	7	36	161	160
Beam	159	0	7	35	162	161
Beam	160	0	7	34	163	162
Beam	161	0	7	33	164	163
Beam	162	0	7	1	82	164
Beam	163	0	8	1	104	145

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/ BEAM SUPPORTS

/ Freedom Case 1

BmSupport	1	1	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	2	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	3	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	4	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	5	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	6	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	7	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	8	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	9	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	10	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	11	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	12	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	13	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	14	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	15	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	16	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	17	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	18	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	19	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	20	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	21	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	22	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	23	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	24	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	25	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	26	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	27	0.00000000000000E+0	8.14000000000000E+2	CompOnly
BmSupport	1	28	0.00000000000000E+0	8.14000000000000E+2	CompOnly

BmSupport	1	161	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	162	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	163	0.00000000000000E+0	8.20646364281200E+5	CompOnly

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/ BEAM GLOBAL DISTRIBUTED LOADS

/ P_cop

BmDistLoadG	2	1	Y	1	-1.50038398475700E+2	-1.50038398475700E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	2	Y	1	-1.49054862852538E+2	-1.49054862852538E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	3	Y	1	-1.48118997815724E+2	-1.48118997815724E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	4	Y	1	-1.47231458044916E+2	-1.47231458044916E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	5	Y	1	-1.46392864414076E+2	-1.46392864414076E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	6	Y	1	-1.45603803557141E+2	-1.45603803557141E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	7	Y	1	-1.44864827457646E+2	-1.44864827457646E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	8	Y	1	-1.44176453062587E+2	-1.44176453062587E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	9	Y	1	-1.43539161920795E+2	-1.43539161920795E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	10	Y	1	-1.42953399846067E+2	-1.42953399846067E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	11	Y	1	-1.42419576605302E+2	-1.42419576605302E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	12	Y	1	-1.41938065631851E+2	-1.41938065631851E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	13	Y	1	-1.41509203764283E+2	-1.41509203764283E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	14	Y	1	-1.41133291010750E+2	-1.41133291010750E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	15	Y	1	-1.40810590339119E+2	-1.40810590339119E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	16	Y	1	-1.40541327493014E+2	-1.40541327493014E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	17	Y	1	-1.40325690833899E+2	-1.40325690833899E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	18	Y	1	-1.40163831209309E+2	-1.40163831209309E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	19	Y	1	-1.40055861847327E+2	-1.40055861847327E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	20	Y	1	-1.40001858277373E+2	-1.40001858277373E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	21	Y	1	-1.40001858277373E+2	-1.40001858277373E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	22	Y	1	-1.40055861847327E+2	-1.40055861847327E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	23	Y	1	-1.40163831209309E+2	-1.40163831209309E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	24	Y	1	-1.40325690833899E+2	-1.40325690833899E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	25	Y	1	-1.40541327493014E+2	-1.40541327493014E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	26	Y	1	-1.40810590339119E+2	-1.40810590339119E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	27	Y	1	-1.41133291010750E+2	-1.41133291010750E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	28	Y	1	-1.41509203764283E+2	-1.41509203764283E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								
BmDistLoadG	2	29	Y	1	-1.41938065631851E+2	-1.41938065631851E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0								

BmDistLoadG	3	1	X	1	8.70222711159060E+1	8.70222711159060E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	2	X	1	8.64518204544718E+1	8.64518204544718E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	3	X	1	8.59090187331197E+1	8.59090187331197E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	4	X	1	8.53942456660512E+1	8.53942456660512E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	5	X	1	8.49078613601640E+1	8.49078613601640E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	6	X	1	8.44502060631416E+1	8.44502060631416E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	7	X	1	8.40215999254346E+1	8.40215999254346E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	8	X	1	8.36223427763007E+1	8.36223427763007E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	9	X	1	8.32527139140611E+1	8.32527139140611E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	10	X	1	8.29129719107187E+1	8.29129719107187E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	11	X	1	8.26033544310752E+1	8.26033544310752E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	12	X	1	8.23240780664738E+1	8.23240780664738E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	13	X	1	8.20753381832843E+1	8.20753381832843E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	14	X	1	8.18573087862351E+1	8.18573087862351E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	15	X	1	8.16701423966891E+1	8.16701423966891E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	16	X	1	8.15139699459483E+1	8.15139699459483E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	17	X	1	8.13889006836616E+1	8.13889006836616E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	18	X	1	8.12950221013994E+1	8.12950221013994E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	19	X	1	8.12323998714495E+1	8.12323998714495E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	20	X	1	8.12010778008764E+1	8.12010778008764E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	51	X	1	8.80316460000000E+1	8.80316460000000E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	52	X	1	8.94662180000000E+1	8.94662180000000E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	53	X	1	9.09007900000000E+1	9.09007900000000E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	54	X	1	9.23353620000000E+1	9.23353620000000E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	55	X	1	9.37699340000000E+1	9.37699340000000E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	56	X	1	9.52045060000000E+1	9.52045060000000E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	57	X	1	9.66390780000000E+1	9.66390780000000E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	58	X	1	9.80736500000000E+1	9.80736500000000E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	59	X	1	9.95082220000000E+1	9.95082220000000E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	60	X	1	1.00942794000000E+2	1.00942794000000E+2	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	71	X	1	1.02854630821268E+2	1.02854630821268E+2	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	72	X	1	1.05250422869949E+2	1.05250422869949E+2	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							
BmDistLoadG	3	73	X	1	1.07658862675023E+2	1.07658862675023E+2	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0	0.000000000000E+0							

BmDistLoadG	3	74	X	1	1.10078480489244E+2	1.10078480489244E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	75	X	1	1.12507799743998E+2	1.12507799743998E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	76	X	1	1.14945337950381E+2	1.14945337950381E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	77	X	1	1.17389607603883E+2	1.17389607603883E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	78	X	1	1.19839117092138E+2	1.19839117092138E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	79	X	1	1.22292371605178E+2	1.22292371605178E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	80	X	1	1.24747874047639E+2	1.24747874047639E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	143	X	1	1.66291654675277E+2	1.66291654675277E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	144	X	1	1.64264668561263E+2	1.64264668561263E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	145	X	1	1.62230600689128E+2	1.62230600689128E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	146	X	1	1.60189910174258E+2	1.60189910174258E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	147	X	1	1.58143057626851E+2	1.58143057626851E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	148	X	1	1.56090505047960E+2	1.56090505047960E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	149	X	1	1.54032715725206E+2	1.54032715725206E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	150	X	1	1.51970154128211E+2	1.51970154128211E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	151	X	1	1.49903285803763E+2	1.49903285803763E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	152	X	1	1.47832577270730E+2	1.47832577270730E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	153	X	1	1.45758495914769E+2	1.45758495914769E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	154	X	1	1.43681509882823E+2	1.43681509882823E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	155	X	1	1.41602087977460E+2	1.41602087977460E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	156	X	1	1.39520699551057E+2	1.39520699551057E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	157	X	1	1.37437814399858E+2	1.37437814399858E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	158	X	1	1.35353902657937E+2	1.35353902657937E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	159	X	1	1.33269434691085E+2	1.33269434691085E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	160	X	1	1.31184880990638E+2	1.31184880990638E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	161	X	1	1.29100712067285E+2	1.29100712067285E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	162	X	1	1.27017391305804E+2	1.27017391305804E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0

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/ BEAM GLOBAL DISTRIBUTED LOADS

/ SP_dx

BmDistLoadG	4	21	X	1	-8.12010778008764E+1	-8.12010778008764E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	22	X	1	-8.12323998714495E+1	-8.12323998714495E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	23	X	1	-8.12950221013994E+1	-8.12950221013994E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	24	X	1	-8.13889006836616E+1	-8.13889006836616E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	0.00000000000000E+0

BmDistLoadG	4	25	X	1	-8.15139699459483E+1	-8.15139699459483E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	26	X	1	-8.16701423966891E+1	-8.16701423966891E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	27	X	1	-8.18573087862351E+1	-8.18573087862351E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	28	X	1	-8.20753381832843E+1	-8.20753381832843E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	29	X	1	-8.23240780664738E+1	-8.23240780664738E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	30	X	1	-8.26033544310752E+1	-8.26033544310752E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	31	X	1	-8.29129719107187E+1	-8.29129719107187E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	32	X	1	-8.32527139140611E+1	-8.32527139140611E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	33	X	1	-8.36223427763007E+1	-8.36223427763007E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	34	X	1	-8.40215999254346E+1	-8.40215999254346E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	35	X	1	-8.44502060631416E+1	-8.44502060631416E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	36	X	1	-8.49078613601640E+1	-8.49078613601640E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	37	X	1	-8.53942456660512E+1	-8.53942456660512E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	38	X	1	-8.59090187331197E+1	-8.59090187331197E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	39	X	1	-8.64518204544718E+1	-8.64518204544718E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	40	X	1	-8.70222711159060E+1	-8.70222711159060E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	41	X	1	-8.80316460000000E+1	-8.80316460000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	42	X	1	-8.94662180000000E+1	-8.94662180000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	43	X	1	-9.09007900000000E+1	-9.09007900000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	44	X	1	-9.23353620000000E+1	-9.23353620000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	45	X	1	-9.37699340000000E+1	-9.37699340000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	46	X	1	-9.52045060000000E+1	-9.52045060000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	47	X	1	-9.66390780000000E+1	-9.66390780000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	48	X	1	-9.80736500000000E+1	-9.80736500000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	49	X	1	-9.95082220000000E+1	-9.95082220000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	50	X	1	-1.00942794000000E+2	-1.00942794000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	61	X	1	-1.02854630821268E+2	-1.02854630821268E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	62	X	1	-1.05250422869949E+2	-1.05250422869949E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	63	X	1	-1.07658862675023E+2	-1.07658862675023E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	64	X	1	-1.10078480489244E+2	-1.10078480489244E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	65	X	1	-1.12507799743998E+2	-1.12507799743998E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	66	X	1	-1.14945337950381E+2	-1.14945337950381E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	67	X	1	-1.17389607603883E+2	-1.17389607603883E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							

BmDistLoadG	4	68	X	1	-1.19839117092138E+2	-1.19839117092138E+2	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	4	69	X	1	-1.22292371605178E+2	-1.22292371605178E+2	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	4	70	X	1	-1.24747874047639E+2	-1.24747874047639E+2	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	4	102	X	1	-1.66291654675277E+2	-1.66291654675277E+2	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	4	103	X	1	-1.64264668561263E+2	-1.64264668561263E+2	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	4	104	X	1	-1.62230600689128E+2	-1.62230600689128E+2	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	4	105	X	1	-1.60189910174258E+2	-1.60189910174258E+2	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	4	106	X	1	-1.58143057626851E+2	-1.58143057626851E+2	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	4	107	X	1	-1.56090505047960E+2	-1.56090505047960E+2	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	4	108	X	1	-1.54032715725206E+2	-1.54032715725206E+2	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	4	109	X	1	-1.51970154128211E+2	-1.51970154128211E+2	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	4	110	X	1	-1.49903285803763E+2	-1.49903285803763E+2	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	4	111	X	1	-1.47832577270730E+2	-1.47832577270730E+2	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	4	112	X	1	-1.45758495914769E+2	-1.45758495914769E+2	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	4	113	X	1	-1.43681509882823E+2	-1.43681509882823E+2	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	4	114	X	1	-1.41602087977460E+2	-1.41602087977460E+2	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	4	115	X	1	-1.39520699551057E+2	-1.39520699551057E+2	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	4	116	X	1	-1.37437814399858E+2	-1.37437814399858E+2	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	4	117	X	1	-1.35353902657937E+2	-1.35353902657937E+2	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	4	118	X	1	-1.33269434691085E+2	-1.33269434691085E+2	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	4	119	X	1	-1.31184880990638E+2	-1.31184880990638E+2	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	4	120	X	1	-1.29100712067285E+2	-1.29100712067285E+2	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	4	121	X	1	-1.27017391305804E+2	-1.27017391305804E+2	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0

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/ BEAM GLOBAL DISTRIBUTED LOADS

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BmDistLoadG	5	1	Y	1	-2.000000000000E+1	-2.000000000000E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	5	2	Y	1	-2.000000000000E+1	-2.000000000000E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	5	3	Y	1	-2.000000000000E+1	-2.000000000000E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	5	4	Y	1	-2.000000000000E+1	-2.000000000000E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	5	5	Y	1	-2.000000000000E+1	-2.000000000000E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	5	6	Y	1	-2.000000000000E+1	-2.000000000000E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	5	7	Y	1	-2.000000000000E+1	-2.000000000000E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0
BmDistLoadG	5	8	Y	1	-2.000000000000E+1	-2.000000000000E+1	0.000000000000E+0	0.000000000000E+0
0.000000000000E+0							0.000000000000E+0	0.000000000000E+0

BmDistLoadG	8	156	X	1	3.34400000000000E+1	3.34400000000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	8	157	X	1	3.34400000000000E+1	3.34400000000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	8	158	X	1	3.34400000000000E+1	3.34400000000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	8	159	X	1	3.34400000000000E+1	3.34400000000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	8	160	X	1	3.34400000000000E+1	3.34400000000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	8	161	X	1	3.34400000000000E+1	3.34400000000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	8	162	X	1	3.34400000000000E+1	3.34400000000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								

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/ BEAM GLOBAL DISTRIBUTED LOADS

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BmDistLoadG	9	1	Y	1	-1.56790126407106E+1	-1.56790126407106E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	9	2	Y	1	-1.55762331680901E+1	-1.55762331680901E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	9	3	Y	1	-1.54784352717431E+1	-1.54784352717431E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	9	4	Y	1	-1.53856873656937E+1	-1.53856873656937E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	9	5	Y	1	-1.52980543312709E+1	-1.52980543312709E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	9	6	Y	1	-1.52155974717212E+1	-1.52155974717212E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	9	7	Y	1	-1.51383744693239E+1	-1.51383744693239E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	9	8	Y	1	-1.50664393450403E+1	-1.50664393450403E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	9	9	Y	1	-1.49998424207230E+1	-1.49998424207230E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	9	10	Y	1	-1.49386302839139E+1	-1.49386302839139E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	9	11	Y	1	-1.48828457552540E+1	-1.48828457552540E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	9	12	Y	1	-1.48325278585284E+1	-1.48325278585284E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	9	13	Y	1	-1.47877117933676E+1	-1.47877117933676E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	9	14	Y	1	-1.47484289106233E+1	-1.47484289106233E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	9	15	Y	1	-1.47147066904379E+1	-1.47147066904379E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	9	16	Y	1	-1.46865687230200E+1	-1.46865687230200E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	9	17	Y	1	-1.46640346921424E+1	-1.46640346921424E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	9	18	Y	1	-1.46471203613728E+1	-1.46471203613728E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	9	19	Y	1	-1.46358375630456E+1	-1.46358375630456E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	9	20	Y	1	-1.46301941899855E+1	-1.46301941899855E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	9	21	Y	1	-1.46301941899855E+1	-1.46301941899855E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	9	22	Y	1	-1.46358375630456E+1	-1.46358375630456E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	9	23	Y	1	-1.46471203613728E+1	-1.46471203613728E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								
BmDistLoadG	9	24	Y	1	-1.46640346921424E+1	-1.46640346921424E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0 0.00000000000000E+0 Projected								

BmDistLoadG	9	25	Y	1	-1.46865687230200E+1	-1.46865687230200E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	26	Y	1	-1.47147066904379E+1	-1.47147066904379E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	27	Y	1	-1.47484289106233E+1	-1.47484289106233E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	28	Y	1	-1.47877117933676E+1	-1.47877117933676E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	29	Y	1	-1.48325278585284E+1	-1.48325278585284E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	30	Y	1	-1.48828457552540E+1	-1.48828457552540E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	31	Y	1	-1.49386302839139E+1	-1.49386302839139E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	32	Y	1	-1.49998424207230E+1	-1.49998424207230E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	33	Y	1	-1.50664393450403E+1	-1.50664393450403E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	34	Y	1	-1.51383744693239E+1	-1.51383744693239E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	35	Y	1	-1.52155974717212E+1	-1.52155974717212E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	36	Y	1	-1.52980543312709E+1	-1.52980543312709E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	37	Y	1	-1.53856873656937E+1	-1.53856873656937E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	38	Y	1	-1.54784352717431E+1	-1.54784352717431E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	39	Y	1	-1.55762331680901E+1	-1.55762331680901E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	40	Y	1	-1.56790126407106E+1	-1.56790126407106E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	41	Y	1	-1.58608741500000E+1	-1.58608741500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	42	Y	1	-1.61193444500000E+1	-1.61193444500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	43	Y	1	-1.63778147500000E+1	-1.63778147500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	44	Y	1	-1.66362850500000E+1	-1.66362850500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	45	Y	1	-1.68947553500000E+1	-1.68947553500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	46	Y	1	-1.71532256500000E+1	-1.71532256500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	47	Y	1	-1.74116959500000E+1	-1.74116959500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	48	Y	1	-1.76701662500000E+1	-1.76701662500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	49	Y	1	-1.79286365500000E+1	-1.79286365500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	50	Y	1	-1.81871068500000E+1	-1.81871068500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	51	Y	1	-1.58608741500000E+1	-1.58608741500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	52	Y	1	-1.61193444500000E+1	-1.61193444500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	53	Y	1	-1.63778147500000E+1	-1.63778147500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	54	Y	1	-1.66362850500000E+1	-1.66362850500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	55	Y	1	-1.68947553500000E+1	-1.68947553500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	56	Y	1	-1.71532256500000E+1	-1.71532256500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected
BmDistLoadG	9	57	Y	1	-1.74116959500000E+1	-1.74116959500000E+1	0.00000000000000E+0	0.00000000000000E+0	Projected

BmDistLoadG	9	58	Y	1	-1.76701662500000E+1	-1.76701662500000E+1	0.00000000000000E+0	0.00000000000000E+0
							Projected	
BmDistLoadG	9	59	Y	1	-1.79286365500000E+1	-1.79286365500000E+1	0.00000000000000E+0	0.00000000000000E+0
							Projected	
BmDistLoadG	9	60	Y	1	-1.81871068500000E+1	-1.81871068500000E+1	0.00000000000000E+0	0.00000000000000E+0
							Projected	

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/ BEAM PROPERTIES

BeamProp 1 16737843 "Beam Property 1"

MaterialName "Concrete: Compressive Strength fc = 25 MPa"

Modulus 2.74600000000000E+4

ShearMod 1.14420000000000E+4

Poisson 2.00000000000000E-1

UsePoisson TRUE

Density 2.40000000000000E+3

Expansion 1.00000000000000E-5

ThermalCond 1.37000000000000E+0

SpecificHeat 8.80000000000000E+2

InstantAlpha FALSE

Area 8.00000000000000E-1

MomentI11 4.26666666670000E-2

MomentI22 6.66666666670000E-2

MomentJ 9.03304533330000E-2

SectionType SolidRect

B 1.00000000000000E+0

D 8.00000000000000E-1

CT FALSE

TimeDependentMod Elastic

UseMomCurv FALSE

NonLinType Elasticplastic

Hardening Isotropic

BeamProp 2 3355647 "Beam Property 2"

MaterialName "Concrete: Compressive Strength fc = 25 MPa"

Modulus 2.74600000000000E+4

ShearMod 1.14420000000000E+4

Poisson 2.00000000000000E-1

UsePoisson TRUE

Density 2.40000000000000E+3

Expansion 1.00000000000000E-5

ThermalCond 1.37000000000000E+0

SpecificHeat 8.80000000000000E+2

InstantAlpha FALSE

Area 8.67000000000000E-1

MomentI11 5.43095302500000E-2

MomentI22 7.22500000000000E-2

MomentJ 1.07071853237000E-1

SectionType SolidRect

B 1.00000000000000E+0

D 8.67000000000000E-1

CT FALSE

TimeDependentMod Elastic

UseMomCurv FALSE

NonLinType Elasticplastic

Hardening Isotropic

BeamProp 3 3407692 "Beam Property 3"

MaterialName "Concrete: Compressive Strength fc = 25 MPa"

Modulus 2.74600000000000E+4

ShearMod 1.14420000000000E+4

Poisson 2.00000000000000E-1

UsePoisson TRUE

Density 2.40000000000000E+3

Expansion 1.00000000000000E-5

ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 9.34000000000000E-1
MomentI11 6.78983753330000E-2
MomentI22 7.78333333330000E-2
MomentJ 1.24102616742000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 9.34000000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 4 3407846 "Beam Property 4"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.00100000000000E+0
MomentI11 8.35835834170000E-2
MomentI22 8.34166666670000E-2
MomentJ 1.40982683983000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.00100000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 5 16757299 "Beam Property 5"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.06800000000000E+0
MomentI11 1.01515536000000E-1
MomentI22 8.90000000000000E-2
MomentJ 1.62229712859000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.06800000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 6 16724966 "Beam Property 6"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"

Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.1350000000000E+0
MomentI11 1.21844614583000E-1
MomentI22 9.4583333333000E-2
MomentJ 1.83604992658000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.1350000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 7 6750003 "Beam Property 7"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.2020000000000E+0
MomentI11 1.44721200667000E-1
MomentI22 1.00166666667000E-1
MomentJ 2.05087077094000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.2020000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 8 3375359 "Beam Property 8"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.2690000000000E+0
MomentI11 1.70295675750000E-1
MomentI22 1.0575000000000E-1
MomentJ 2.26659049120000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.2690000000000E+0
CT FALSE
TimeDependentMod Elastic

UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 9 16724812 "Beam Property 9"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.3360000000000E+0
MomentI11 1.98718421333000E-1
MomentI22 1.11333333333000E-1
MomentJ 2.48307385230000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.3360000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 10 8401919 "Beam Property 10"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.4030000000000E+0
MomentI11 2.30139818917000E-1
MomentI22 1.16916666667000E-1
MomentJ 2.70021145165000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.4030000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 11 11730739 "Beam Property 11"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.4700000000000E+0
MomentI11 2.64710250000000E-1
MomentI22 1.22500000000000E-1

MomentJ 2.91791383220000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.47000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 12 3394815 "Beam Property 12"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 6.00000000000000E-1
MomentI11 1.80000000000000E-2
MomentI22 5.00000000000000E-2
MomentJ 4.61318400000000E-2
SectionType SolidRect
B 1.00000000000000E+0
D 6.00000000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 13 16724889 "Beam Property 13"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 6.83300000000000E-1
MomentI11 2.65860009610000E-2
MomentI22 5.69416666670000E-2
MomentJ 6.31470420770000E-2
SectionType SolidRect
B 1.00000000000000E+0
D 6.83300000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 14 13382655 "Beam Property 14"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5

ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 7.6667000000000E-1
MomentI11 3.7552958953000E-2
MomentI22 6.3889166667000E-2
MomentJ 8.2250384903000E-2
SectionType SolidRect
B 1.0000000000000E+0
D 7.6667000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 15 16777011 "Beam Property 15"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 8.5000000000000E-1
MomentI11 5.1177083333000E-2
MomentI22 7.0833333333000E-2
MomentJ 1.0277791291700E-1
SectionType SolidRect
B 1.0000000000000E+0
D 8.5000000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 16 3407769 "Beam Property 16"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 9.3333000000000E-1
MomentI11 6.7752360496000E-2
MomentI22 7.7777500000000E-2
MomentJ 1.2393249701000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 9.3333000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 17 15096878 "Beam Property 17"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"

Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.0166700000000E+0
MomentI11 8.7570691592000E-2
MomentI22 8.4722500000000E-2
MomentJ 1.4593912442900E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.0166700000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 18 3026662 "Beam Property 18"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.1000000000000E+0
MomentI11 1.10916666667000E-1
MomentI22 9.1666666667000E-2
MomentJ 1.7242424242400E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.1000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 19 3073605 "Beam Property 19"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.1833300000000E+0
MomentI11 1.3808178063600E-1
MomentI22 9.8610833333000E-2
MomentJ 1.9909126191900E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.1833300000000E+0
CT FALSE
TimeDependentMod Elastic

UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 20 3073743 "Beam Property 20"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.2666700000000E+0
MomentI11 1.69359361732000E-1
MomentI22 1.0555833333000E-1
MomentJ 2.25907507849000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.2666700000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 21 15114542 "Beam Property 21"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.3500000000000E+0
MomentI11 2.0503125000000E-1
MomentI22 1.1250000000000E-1
MomentJ 2.52839506173000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.3500000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 22 15085263 "Beam Property 22"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.4333300000000E+0
MomentI11 2.45390263276000E-1
MomentI22 1.19444166667000E-1

MomentJ 2.79869718046000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.43333000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 23 6088238 "Beam Property 23"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.51667000000000E+0
MomentI11 2.90731469371000E-1
MomentI22 1.26389166667000E-1
MomentJ 3.06985212978000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.51667000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 24 3044326 "Beam Property 24"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.60000000000000E+0
MomentI11 3.41333333333000E-1
MomentI22 1.33333333333000E-1
MomentJ 3.34166666667000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.60000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 25 15085125 "Beam Property 25"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5

ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.6833000000000E+0
MomentI11 3.97469056795000E-1
MomentI22 1.4027500000000E-1
MomentJ 3.61397233609000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.6833000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 26 7548646 "Beam Property 26"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.7666670000000E+0
MomentI11 4.59497173673000E-1
MomentI22 1.4722225000000E-1
MomentJ 3.88700318904000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.7666670000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 27 10610222 "Beam Property 27"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.5400000000000E+0
MomentI11 3.04355333333000E-1
MomentI22 1.28333333333000E-1
MomentJ 3.14588744589000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.5400000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 28 3061990 "Beam Property 28"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"

Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.4100000000000E+0
MomentI11 2.3360175000000E-1
MomentI22 1.1750000000000E-1
MomentJ 2.7229314420800E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.4100000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 29 15085194 "Beam Property 29"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.3300000000000E+0
MomentI11 1.9605308333300E-1
MomentI22 1.1083333333300E-1
MomentJ 2.4636591478700E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.3300000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 30 12070630 "Beam Property 30"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.2000000000000E+0
MomentI11 1.4400000000000E-1
MomentI22 1.0000000000000E-1
MomentJ 2.0444444444400E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.2000000000000E+0
CT FALSE
TimeDependentMod Elastic

UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 31 15132206 "Beam Property 31"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.0700000000000E+0
MomentI11 1.02086916667000E-1
MomentI22 8.9166666667000E-2
MomentJ 1.62866043614000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.0700000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 32 3073674 "Beam Property 32"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.0000000000000E+0
MomentI11 8.3333333333000E-2
MomentI22 8.3333333333000E-2
MomentJ 1.4066666667000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.0000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 33 13390377 "Beam Property 33"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 8.3894700000000E-1
MomentI11 4.9206483553000E-2
MomentI22 6.9912250000000E-2

MomentJ 9.9999072150000E-2
SectionType SolidRect
B 1.0000000000000E+0
D 8.3894700000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 34 2697676 "Beam Property 34"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 8.7789500000000E-1
MomentI11 5.6382779382000E-2
MomentI22 7.3157916667000E-2
MomentJ 1.0983422501200E-1
SectionType SolidRect
B 1.0000000000000E+0
D 8.7789500000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 35 2739261 "Beam Property 35"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 9.1684200000000E-1
MomentI11 6.4224725024000E-2
MomentI22 7.6403500000000E-2
MomentJ 1.1974075746000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 9.1684200000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 36 2739384 "Beam Property 36"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5

ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 9.55789000000000E-1
MomentI11 7.27620351820000E-2
MomentI22 7.96490833330000E-2
MomentJ 1.29620217916000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 9.55789000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 37 13405993 "Beam Property 37"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 9.94737000000000E-1
MomentI11 8.20244959770000E-2
MomentI22 8.28947500000000E-2
MomentJ 1.39366107904000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 9.94737000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 38 13380024 "Beam Property 38"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.03368400000000E+0
MomentI11 9.20411711530000E-2
MomentI22 8.61403333330000E-2
MomentJ 1.51329836409000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.03368400000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 39 5426217 "Beam Property 39"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"

Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.0726320000000E+0
MomentI11 1.02842115472000E-1
MomentI22 8.9386000000000E-2
MomentJ 1.63703627284000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.0726320000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 40 2713292 "Beam Property 40"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.1115790000000E+0
MomentI11 1.14456313677000E-1
MomentI22 9.26315833330000E-2
MomentJ 1.76119766938000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.1115790000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 41 13379901 "Beam Property 41"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.1505260000000E+0
MomentI11 1.26913571640000E-1
MomentI22 9.58771666670000E-2
MomentJ 1.88574239573000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.1505260000000E+0
CT FALSE
TimeDependentMod Elastic

UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 42 6695372 "Beam Property 42"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.1894740000000E+0
MomentI11 1.40243781816000E-1
MomentI22 9.91228333330000E-2
MomentJ 2.01063600851000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.1894740000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 43 9423913 "Beam Property 43"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.2284210000000E+0
MomentI11 1.54475799069000E-1
MomentI22 1.02368416667000E-1
MomentJ 2.13583921484000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.2284210000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 44 2728908 "Beam Property 44"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.2673680000000E+0
MomentI11 1.69639493071000E-1
MomentI22 1.0561400000000E-1

MomentJ 2.26132637988000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.26736800000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 45 13379962 "Beam Property 45"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.30631600000000E+0
MomentI11 1.85764829183000E-1
MomentI22 1.08859666667000E-1
MomentJ 2.38707533720000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.30631600000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 46 10693068 "Beam Property 46"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.34526300000000E+0
MomentI11 2.02880518737000E-1
MomentI22 1.12105250000000E-1
MomentJ 2.51305717214000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.34526300000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 47 13421609 "Beam Property 47"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5

ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.38421100000000E+0
MomentI11 2.21016981042000E-1
MomentI22 1.15350916667000E-1
MomentJ 2.63925842356000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.38421100000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 48 2739322 "Beam Property 48"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.42315800000000E+0
MomentI11 2.40202824160000E-1
MomentI22 1.18596500000000E-1
MomentJ 2.76565486279000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.42315800000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 49 11683620 "Beam Property 49"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.46210500000000E+0
MomentI11 2.60468039268000E-1
MomentI22 1.21842083333000E-1
MomentJ 2.89223387063000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.46210500000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 50 2368690 "Beam Property 50"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"

Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.5010530000000E+0
MomentI11 2.8184272840100E-1
MomentI22 1.2508775000000E-1
MomentJ 3.0189844924600E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.5010530000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

/

/ LINEAR STATIC SOLVER DATA

LoadFreedomSetLSA 1 ON
1 2 3 4 5 6 7 8
9

/

/ LINEAR BUCKLING SOLVER DATA

BuckNumModes 4

BuckShift 0.0000000000000E+0

/

/ LOAD INFLUENCE SOLVER DATA

LoadFreedomSetLIA 1 ON
1

/

/ NON-LINEAR STATIC SOLVER DATA

NonLinearIncrement 0 Yes "SLE_C"
LON1 1.0000000000000E+0
LON2 1.0000000000000E+0
LON3 1.0000000000000E+0
LON4 1.0000000000000E+0
LON5 1.0000000000000E+0
LON6 1.0000000000000E+0
LON7 1.0000000000000E+0
FON1 1.0000000000000E+0

NonLinearStage Unstaged

/

/ NATURAL FREQUENCY SOLVER DATA

FreqNumModes 4

FreqShift 0.0000000000000E+0

FreqIncludeNSMass 1 2 3 4 5 6 7 8
9

FreqModeParticipation FALSE
0.0000000000000E+0 0.0000000000000E+0 0.0000000000000E+0
0.0000000000000E+0 0.0000000000000E+0 0.0000000000000E+0
0.0000000000000E+0 0.0000000000000E+0 0.0000000000000E+0

/ HEAT SOLVER DATA

LoadSetHeat 1 2 3 4 5 6 7 8
9

HeatTempLoadCase 1

HeatNonlinear FALSE

/ GENERAL SOLVER DATA

SolverTempDependence None

SolverLoadCaseTempDependence 0

SolverActiveStage 0

SturmCheck FALSE

SolverFreedomCase 1

ModalLoadType BaseAcceleration

ModalNodeReactType Element

DampingType Rayleigh

RayleighFactors Frequency
1.0000000000000E+0 1.0000000000000E+1 1.0000000000000E+0 1.0000000000000E+1 1.0000000000000E-2
1.0000000000000E-2

NonLinearGeometry TRUE

NonLinearMaterial TRUE

IncludeCreep FALSE

SolverDefaultsGeneral

SolDefMatrixZeroDiag 1.0000000000000E-20
SolDefConjGradTol 1.0000000000000E-5
SolDefMaxConjGradIter 5000
SolDefMaxNumWarnings 10
SolDefWindowState 3
SolDefReducedLogFile TRUE
SolDefDoResidualsCheck FALSE
SolDefSuppressAllSingularities FALSE

SolverDefaultsElements

SolDefMinDimension 1.0000000000000E-9
SolDefMinInternalAngle 1.5000000000000E+1

SolDefZeroPointForce 1.0000000000000000E-6
SolDefZeroDiagonal 1.0000000000000000E-20
SolDefBeamMass Lumped
SolDefPlateMass Lumped
SolDefBrickMass Lumped
SolDefBeamLoads Consistent
SolDefPlateLoads Consistent
SolDefBeamSlices 5
SolDefIncludeLinkReactions TRUE

SolverDefaultsDrilling

SolDefZeroTrans 1.0000000000000000E-8
SolDefZeroRot 1.0000000000000000E-6
SolDrillStiffMult 1.0000000000000000E-4
SolDrillZeroEig 1.0000000000000000E-6
SolDefMaxNormalsAngle 5.0000000000000000E+0
SolDefForceDrillingCheck FALSE

SolverDefaultsIteration

SolDefZeroDisp 1.0000000000000000E-8
SolDefDispNormTol 1.0000000000000000E-4
SolDefResidualsNormTol 1.0000000000000000E-3
SolDefNonlinIterLimit 20
SolDefAddIterations TRUE
SolDefMaxUpdateInterval 5
SolDefMaxDispChange 1.0000000000000000E+0
SolDefMaxResidualChange 1.0000000000000000E-1
SolDefFormStiffnessMatrix 0
SolDefFormHeatStiffnessMatrix 2
SolDefHeatConvergenceTol 1.0000000000000000E-5
SolDefHeatRelaxationFactor 6.6667000000000000E-1
SolDefNonlinHeatIterLimit 20

SolverDefaultsSubSteps

SolDefSubStepping 0
SolDefMinLoadReductionFactor 1.0000000000000000E-1
SolDefMaxRot 3.0000000000000000E+1
SolDefMaxDispRatio 1.0000000000000000E-1
SolDefMinArcLength 1.0000000000000000E-3
SolDefMaxFibreInc 1.0000000000000000E-2
SolDefSaveSubIncrements FALSE
SolDefDynamicAutoSteppingMode 0
SolDefMinTimeStep 1.0000000000000000E-3
SolDefConsiderTableSteps FALSE
SolDefSingleShotRestart FALSE
SolDefAutoAssignPathDiv FALSE

SolverDefaultsNonlinear

SolDefIncludeKG TRUE
SolDefAutoScaleKg TRUE
SolDefIgnoreCompressiveBeamKg FALSE
SolDefBeamKgType Simplified
SolDefFiniteStrainDefinition Nominal
SolDefBeamLength Initial
SolDefRatioMNL 5.0000000000000000E-1
SolDefZeroContactFactor 1.0000000000000000E-6
SolDefSlidingFriction 1.0000000000000000E-15
SolDefStickingFriction 1.0000000000000000E+0
SolDefFrictionCutoffStrain 1.0000000000000000E-5
SolDefScaleSupports TRUE

SolverDefaultsCreep

SolDefTimeStepParam 5.0000000000000000E-1
SolDefMinViscoUnits 3
SolDefMaxViscoUnits 6
SolDefCurveFitTime 1.0000000000000000E+4

SolDefCurveFitTimeUnit d
SolDefSpacingBias 5.000000000000000E-1
SolDefDoInstantNTA TRUE

SolverDefaultsEigenvalue
SolDefZeroFreq 1.000000000000000E-6
SolDefZeroBuckEigenvalue 1.000000000000000E-10
SolDefExpandWorkingSetBy 6
SolDefEigIterLimit 20
SolDefEigIterTol 1.000000000000000E-5
SolDefEigAutoShift FALSE

SolverDefaultsDynamics
SolDefWilsonTheta 1.370000000000000E+0
SolDefNewmarkBeta 5.000000000000000E-1
SolDefTransientMethod Newmark
SolDefExcludeMassComponents
SolDefIncludeRotMass TRUE

/ RESULT OPTIONS

ResultOptions
ResOptsRotationUnit Degrees
ResOptsHRADisplacement Total
ResOptsHRAVelocity Total
ResOptsHRAAcceleration Relative
ResOptsBeamForceMoment Principal
ResOptsStageDisplacement BirthStage

/ Straus7 MODEL EXCHANGE FILE
/ TIMESTAMP: 6:17:51 pm, 05 giugno 2019

/ MODEL INFORMATION

FileFormat Straus7.2.4.6
ModelName "GA_open_SLE_F"
Title ""
Project ""
Author ""
Reference ""
Comments ""

/ UNITS

LengthUnit m
MassUnit kg
EnergyUnit J
PressureUnit MPa
ForceUnit kN
TemperatureUnit C

/ GROUP DEFINITIONS

Group 1 16711680 "\\Model"
Group 2 3355647 "calotta"
Group 3 16757299 "calotta\curvilinea"
Group 4 6750003 "calotta\rettilinea"
Group 5 3407692 "piedritto"
Group 6 3375359 "piedritto\piedritto_alto"

Group 7 16724812 "piedritto\piedritto_basso"
Group 8 3407846 "arco rovescio"

/ FREEDOM CASE DEFINITIONS

FreedomCase 1 0 1 "Freedom Case 1"

/ LOAD CASE DEFINITIONS

LoadCase 1 1 "PP"
Gravity 2 -9.806650000000000E+0
LCInclude 3

LoadCase 2 0 "P_cop"
LCInclude 3

LoadCase 3 0 "SP_sx"
LCInclude 3

LoadCase 4 0 "SP_dx"
LCInclude 3

LoadCase 5 0 "V"
LCInclude 3

LoadCase 6 0 "SV_sx"
LCInclude 3

LoadCase 7 0 "SV_dx"
LCInclude 3

LoadCase 8 0 "dS_h"
LCInclude 3

LoadCase 9 0 "dS_V"
LCInclude 3

/ INCREMENT ENVELOPES

IncrementEnvelope "Envelope Case" Abs
ON 1
ON 2
ON 3
ON 4
ON 5
ON 6
ON 7
ON 8
ON 9
ON 10
ON 11
ON 12
ON 13
ON 14
ON 15
ON 16

/ COORDINATE SYSTEM DEFINITIONS

CoordSys 1 "Global XYZ" GlobalXYZ

CoordSys 2 "carichi" RectXYZ

0.00000000000000E+0 1.08600000000000E+1 0.00000000000000E+0

/

 / NODE COORDINATES

Node	1	0	-1.94830000000000E+0	3.33290000000000E+0	0.00000000000000E+0
Node	2	0	-1.85947466801228E+0	3.38326015242999E+0	0.00000000000000E+0
Node	3	0	-1.76934854991663E+0	3.43125356231625E+0	0.00000000000000E+0
Node	4	0	-1.67798469298355E+0	3.47684665611138E+0	0.00000000000000E+0
Node	5	0	-1.58544701033748E+0	3.52000753939703E+0	0.00000000000000E+0
Node	6	0	-1.49180023624673E+0	3.56070601919538E+0	0.00000000000000E+0
Node	7	0	-1.39710988083890E+0	3.59891362509054E+0	0.00000000000000E+0
Node	8	0	-1.30144218427364E+0	3.63460362914487E+0	0.00000000000000E+0
Node	9	0	-1.20486407040466E+0	3.66775106459638E+0	0.00000000000000E+0
Node	10	0	-1.10744309996351E+0	3.69833274332411E+0	0.00000000000000E+0
Node	11	0	-1.00924742329778E+0	3.72632727206921E+0	0.00000000000000E+0
Node	12	0	-9.10345732696894E-1	3.75171506740058E+0	0.00000000000000E+0
Node	13	0	-8.10807214338750E-1	3.77447836941427E+0	0.00000000000000E+0
Node	14	0	-7.10701499890891E-1	3.79460125415739E+0	0.00000000000000E+0
Node	15	0	-6.10098617800016E-1	3.81206964476759E+0	0.00000000000000E+0
Node	16	0	-5.09068944303938E-1	3.82687132132050E+0	0.00000000000000E+0
Node	17	0	-4.07683154200238E-1	3.83899592937806E+0	0.00000000000000E+0
Node	18	0	-3.06012171406074E-1	3.84843498723200E+0	0.00000000000000E+0
Node	19	0	-2.04127119343708E-1	3.85518189183707E+0	0.00000000000000E+0
Node	20	0	-1.02099271186475E-1	3.85923192343026E+0	0.00000000000000E+0
Node	21	0	-3.80446542325164E-16	3.86058224883242E+0	0.00000000000000E+0
Node	22	0	1.02099271186474E-1	3.85923192343026E+0	0.00000000000000E+0
Node	23	0	2.04127119343707E-1	3.85518189183707E+0	0.00000000000000E+0
Node	24	0	3.06012171406073E-1	3.84843498723200E+0	0.00000000000000E+0
Node	25	0	4.07683154200237E-1	3.83899592937806E+0	0.00000000000000E+0
Node	26	0	5.09068944303936E-1	3.82687132132050E+0	0.00000000000000E+0
Node	27	0	6.10098617800015E-1	3.81206964476759E+0	0.00000000000000E+0
Node	28	0	7.10701499890890E-1	3.79460125415739E+0	0.00000000000000E+0
Node	29	0	8.10807214338749E-1	3.77447836941427E+0	0.00000000000000E+0
Node	30	0	9.10345732696893E-1	3.75171506740058E+0	0.00000000000000E+0
Node	31	0	1.00924742329778E+0	3.72632727206921E+0	0.00000000000000E+0
Node	32	0	1.10744309996351E+0	3.69833274332411E+0	0.00000000000000E+0
Node	33	0	1.20486407040466E+0	3.66775106459638E+0	0.00000000000000E+0
Node	34	0	1.30144218427364E+0	3.63460362914487E+0	0.00000000000000E+0
Node	35	0	1.39710988083890E+0	3.59891362509054E+0	0.00000000000000E+0
Node	36	0	1.49180023624673E+0	3.56070601919538E+0	0.00000000000000E+0
Node	37	0	1.58544701033748E+0	3.52000753939703E+0	0.00000000000000E+0
Node	38	0	1.67798469298354E+0	3.47684665611138E+0	0.00000000000000E+0
Node	39	0	1.76934854991663E+0	3.43125356231625E+0	0.00000000000000E+0
Node	40	0	1.85947466801228E+0	3.38326015242999E+0	0.00000000000000E+0
Node	41	0	1.94830000000000E+0	3.33290000000000E+0	0.00000000000000E+0
Node	42	0	2.11546000000000E+0	3.20923000000000E+0	0.00000000000000E+0
Node	43	0	2.28262000000000E+0	3.08556000000000E+0	0.00000000000000E+0
Node	44	0	2.44978000000000E+0	2.96189000000000E+0	0.00000000000000E+0
Node	45	0	2.61694000000000E+0	2.83822000000000E+0	0.00000000000000E+0
Node	46	0	2.78410000000000E+0	2.71455000000000E+0	0.00000000000000E+0
Node	47	0	2.95126000000000E+0	2.59088000000000E+0	0.00000000000000E+0
Node	48	0	3.11842000000000E+0	2.46721000000000E+0	0.00000000000000E+0
Node	49	0	3.28580000000000E+0	2.34354000000000E+0	0.00000000000000E+0
Node	50	0	3.45274000000000E+0	2.21987000000000E+0	0.00000000000000E+0
Node	51	0	3.61990000000000E+0	2.09620000000000E+0	0.00000000000000E+0
Node	52	0	0.00000000000000E+0	0.00000000000000E+0	0.00000000000000E+0
Node	53	0	-2.11546000000000E+0	3.20923000000000E+0	0.00000000000000E+0
Node	54	0	-2.28262000000000E+0	3.08556000000000E+0	0.00000000000000E+0
Node	55	0	-2.44978000000000E+0	2.96189000000000E+0	0.00000000000000E+0
Node	56	0	-2.61694000000000E+0	2.83822000000000E+0	0.00000000000000E+0
Node	57	0	-2.78410000000000E+0	2.71455000000000E+0	0.00000000000000E+0

Node	58	0	-2.9512600000000E+0	2.5908800000000E+0	0.0000000000000E+0
Node	59	0	-3.1184200000000E+0	2.4672100000000E+0	0.0000000000000E+0
Node	60	0	-3.2855800000000E+0	2.3435400000000E+0	0.0000000000000E+0
Node	61	0	-3.4527400000000E+0	2.2198700000000E+0	0.0000000000000E+0
Node	62	0	-3.6199000000000E+0	2.0962000000000E+0	0.0000000000000E+0
Node	63	0	3.66914272971283E+0	1.89024296185021E+0	0.0000000000000E+0
Node	64	0	3.71328302196233E+0	1.68313240539995E+0	0.0000000000000E+0
Node	65	0	3.75229394019274E+0	1.47499471959599E+0	0.0000000000000E+0
Node	66	0	3.78615167804214E+0	1.26595692018946E+0	0.0000000000000E+0
Node	67	0	3.81483557387019E+0	1.05614657222461E+0	0.0000000000000E+0
Node	68	0	3.83832812336690E+0	8.45691712192458E-1	0.0000000000000E+0
Node	69	0	3.85661499023460E+0	6.34720769896678E-1	0.0000000000000E+0
Node	70	0	3.86968501493665E+0	4.23362490079458E-1	0.0000000000000E+0
Node	71	0	3.87753022150753E+0	2.11745853855208E-1	0.0000000000000E+0
Node	72	0	3.8801500000000E+0	0.0000000000000E+0	0.0000000000000E+0
Node	73	0	-3.66914272971283E+0	1.89024296185021E+0	0.0000000000000E+0
Node	74	0	-3.71328302196233E+0	1.68313240539995E+0	0.0000000000000E+0
Node	75	0	-3.75229394019274E+0	1.47499471959599E+0	0.0000000000000E+0
Node	76	0	-3.78615167804214E+0	1.26595692018946E+0	0.0000000000000E+0
Node	77	0	-3.81483557387019E+0	1.05614657222461E+0	0.0000000000000E+0
Node	78	0	-3.83832812336690E+0	8.45691712192458E-1	0.0000000000000E+0
Node	79	0	-3.85661499023460E+0	6.34720769896678E-1	0.0000000000000E+0
Node	80	0	-3.86968501493665E+0	4.23362490079458E-1	0.0000000000000E+0
Node	81	0	-3.87753022150753E+0	2.11745853855208E-1	0.0000000000000E+0
Node	82	0	-3.8801500000000E+0	0.0000000000000E+0	0.0000000000000E+0
Node	83	0	-3.4955000000000E+0	-3.5627000000000E+0	0.0000000000000E+0
Node	84	0	-3.33230782624253E+0	-3.60057547048123E+0	0.0000000000000E+0
Node	85	0	-3.16879248559635E+0	-3.63703051420949E+0	0.0000000000000E+0
Node	86	0	-3.00496634122818E+0	-3.67206237486980E+0	0.0000000000000E+0
Node	87	0	-2.84084177980416E+0	-3.70566840375206E+0	0.0000000000000E+0
Node	88	0	-2.67643121055332E+0	-3.73784605995134E+0	0.0000000000000E+0
Node	89	0	-2.51174706432936E+0	-3.76859291055994E+0	0.0000000000000E+0
Node	90	0	-2.34680179267073E+0	-3.79790663085141E+0	0.0000000000000E+0
Node	91	0	-2.18160786685924E+0	-3.7979000000000E+0	0.0000000000000E+0
Node	92	0	-2.0161777697708E+0	-3.7979000000000E+0	0.0000000000000E+0
Node	93	0	-1.85052403096246E+0	-3.7979000000000E+0	0.0000000000000E+0
Node	94	0	-1.68465915366393E+0	-3.7979000000000E+0	0.0000000000000E+0
Node	95	0	-1.51859568589340E+0	-3.7979000000000E+0	0.0000000000000E+0
Node	96	0	-1.35234618347790E+0	-3.7979000000000E+0	0.0000000000000E+0
Node	97	0	-1.18592321631029E+0	-3.7979000000000E+0	0.0000000000000E+0
Node	98	0	-1.01933936739887E+0	-3.7979000000000E+0	0.0000000000000E+0
Node	99	0	-8.52607231915959E-1	-3.7979000000000E+0	0.0000000000000E+0
Node	100	0	-6.85739416245641E-1	-3.7979000000000E+0	0.0000000000000E+0
Node	101	0	-5.18748537030578E-1	-3.7979000000000E+0	0.0000000000000E+0
Node	102	0	-3.51647220218097E-1	-3.7979000000000E+0	0.0000000000000E+0
Node	103	0	-1.84448100105556E-1	-3.7979000000000E+0	0.0000000000000E+0
Node	104	0	-1.71638183850854E-2	-3.7979000000000E+0	0.0000000000000E+0
Node	105	0	3.4955000000000E+0	-3.5627000000000E+0	0.0000000000000E+0
Node	106	0	3.53876190604596E+0	-3.38827494401322E+0	0.0000000000000E+0
Node	107	0	3.57939848608508E+0	-3.21321963551490E+0	0.0000000000000E+0
Node	108	0	3.61740056791651E+0	-3.03757358674864E+0	0.0000000000000E+0
Node	109	0	3.65275957397965E+0	-2.86137644329578E+0	0.0000000000000E+0
Node	110	0	3.68546752329024E+0	-2.68466797512683E+0	0.0000000000000E+0
Node	111	0	3.71551703324176E+0	-2.50748806762490E+0	0.0000000000000E+0
Node	112	0	3.74290132127180E+0	-2.32987671258303E+0	0.0000000000000E+0
Node	113	0	3.76761420639292E+0	-2.15187399917756E+0	0.0000000000000E+0
Node	114	0	3.78965011058784E+0	-1.97352010491945E+0	0.0000000000000E+0
Node	115	0	3.81400406006844E+0	-1.79485528658573E+0	0.0000000000000E+0
Node	116	0	3.83567168639838E+0	-1.61591987113298E+0	0.0000000000000E+0
Node	117	0	3.84464922747919E+0	-1.43675424659509E+0	0.0000000000000E+0
Node	118	0	3.85593352839935E+0	-1.25739885296706E+0	0.0000000000000E+0
Node	119	0	3.86452204214643E+0	-1.07789417307727E+0	0.0000000000000E+0
Node	120	0	3.87541283018197E+0	-8.98280723449910E-1	0.0000000000000E+0
Node	121	0	3.87860456287904E+0	-7.18599045159911E-1	0.0000000000000E+0
Node	122	0	3.87909651982237E+0	-5.38889694682297E-1	0.0000000000000E+0
Node	123	0	3.87688858997090E+0	-3.59193234738058E-1	0.0000000000000E+0

Node	124	0	3.88198127168293E+0	-1.79550225138629E-1	0.00000000000000E+0
Node	125	0	3.33230782624253E+0	-3.60057547048123E+0	0.00000000000000E+0
Node	126	0	3.16879248559635E+0	-3.63703051420949E+0	0.00000000000000E+0
Node	127	0	3.00496634122818E+0	-3.67206237486980E+0	0.00000000000000E+0
Node	128	0	2.84084177980416E+0	-3.70566840375206E+0	0.00000000000000E+0
Node	129	0	2.67643121055332E+0	-3.73784605995134E+0	0.00000000000000E+0
Node	130	0	2.51174706432936E+0	-3.76859291055994E+0	0.00000000000000E+0
Node	131	0	2.34680179267073E+0	-3.79790663085141E+0	0.00000000000000E+0
Node	132	0	2.18160786685924E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	133	0	2.01617777697708E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	134	0	1.85052403096246E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	135	0	1.68465915366393E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	136	0	1.51859568589340E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	137	0	1.35234618347790E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	138	0	1.18592321631029E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	139	0	1.01933936739887E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	140	0	8.52607231915959E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	141	0	6.85739416245641E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	142	0	5.18748537030578E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	143	0	3.51647220218097E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	144	0	1.84448100105556E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	145	0	1.71638183850854E-2	-3.79790000000000E+0	0.00000000000000E+0
Node	146	0	-3.53876190604596E+0	-3.38827494401322E+0	0.00000000000000E+0
Node	147	0	-3.57939848608508E+0	-3.21321963551490E+0	0.00000000000000E+0
Node	148	0	-3.61740056791651E+0	-3.03757358674864E+0	0.00000000000000E+0
Node	149	0	-3.65275957397965E+0	-2.86137644329578E+0	0.00000000000000E+0
Node	150	0	-3.68546752329024E+0	-2.68466797512683E+0	0.00000000000000E+0
Node	151	0	-3.71551703324176E+0	-2.50748806762490E+0	0.00000000000000E+0
Node	152	0	-3.74290132127180E+0	-2.32987671258303E+0	0.00000000000000E+0
Node	153	0	-3.76761420639292E+0	-2.15187399917756E+0	0.00000000000000E+0
Node	154	0	-3.78965011058784E+0	-1.97352010491945E+0	0.00000000000000E+0
Node	155	0	-3.81400406006844E+0	-1.79485528658573E+0	0.00000000000000E+0
Node	156	0	-3.83567168639838E+0	-1.61591987113298E+0	0.00000000000000E+0
Node	157	0	-3.84464922747919E+0	-1.43675424659509E+0	0.00000000000000E+0
Node	158	0	-3.85593352839935E+0	-1.25739885296706E+0	0.00000000000000E+0
Node	159	0	-3.86452204214643E+0	-1.07789417307727E+0	0.00000000000000E+0
Node	160	0	-3.87541283018197E+0	-8.98280723449910E-1	0.00000000000000E+0
Node	161	0	-3.87860456287904E+0	-7.18599045159911E-1	0.00000000000000E+0
Node	162	0	-3.87909651982237E+0	-5.38889694682297E-1	0.00000000000000E+0
Node	163	0	-3.87688858997090E+0	-3.59193234738058E-1	0.00000000000000E+0
Node	164	0	-3.88198127168293E+0	-1.79550225138629E-1	0.00000000000000E+0

/

/ BEAM ELEMENTS

Beam	1	0	3	1	2	1
Beam	2	0	3	1	3	2
Beam	3	0	3	1	4	3
Beam	4	0	3	1	5	4
Beam	5	0	3	1	6	5
Beam	6	0	3	1	7	6
Beam	7	0	3	1	8	7
Beam	8	0	3	1	9	8
Beam	9	0	3	1	10	9
Beam	10	0	3	1	11	10
Beam	11	0	3	1	12	11
Beam	12	0	3	1	13	12
Beam	13	0	3	1	14	13
Beam	14	0	3	1	15	14
Beam	15	0	3	1	16	15
Beam	16	0	3	1	17	16
Beam	17	0	3	1	18	17
Beam	18	0	3	1	19	18
Beam	19	0	3	1	20	19
Beam	20	0	3	1	21	20
Beam	21	0	3	1	22	21

Beam	22	0	3	1	23	22
Beam	23	0	3	1	24	23
Beam	24	0	3	1	25	24
Beam	25	0	3	1	26	25
Beam	26	0	3	1	27	26
Beam	27	0	3	1	28	27
Beam	28	0	3	1	29	28
Beam	29	0	3	1	30	29
Beam	30	0	3	1	31	30
Beam	31	0	3	1	32	31
Beam	32	0	3	1	33	32
Beam	33	0	3	1	34	33
Beam	34	0	3	1	35	34
Beam	35	0	3	1	36	35
Beam	36	0	3	1	37	36
Beam	37	0	3	1	38	37
Beam	38	0	3	1	39	38
Beam	39	0	3	1	40	39
Beam	40	0	3	1	41	40
Beam	41	0	4	2	42	41
Beam	42	0	4	3	43	42
Beam	43	0	4	4	44	43
Beam	44	0	4	5	45	44
Beam	45	0	4	6	46	45
Beam	46	0	4	7	47	46
Beam	47	0	4	8	48	47
Beam	48	0	4	9	49	48
Beam	49	0	4	10	50	49
Beam	50	0	4	11	51	50
Beam	51	0	4	2	1	53
Beam	52	0	4	3	53	54
Beam	53	0	4	4	54	55
Beam	54	0	4	5	55	56
Beam	55	0	4	6	56	57
Beam	56	0	4	7	57	58
Beam	57	0	4	8	58	59
Beam	58	0	4	9	59	60
Beam	59	0	4	10	60	61
Beam	60	0	4	11	61	62
Beam	61	0	6	10	63	51
Beam	62	0	6	9	64	63
Beam	63	0	6	8	65	64
Beam	64	0	6	7	66	65
Beam	65	0	6	6	67	66
Beam	66	0	6	5	68	67
Beam	67	0	6	4	69	68
Beam	68	0	6	3	70	69
Beam	69	0	6	2	71	70
Beam	70	0	6	1	72	71
Beam	71	0	6	10	62	73
Beam	72	0	6	9	73	74
Beam	73	0	6	8	74	75
Beam	74	0	6	7	75	76
Beam	75	0	6	6	76	77
Beam	76	0	6	5	77	78
Beam	77	0	6	4	78	79
Beam	78	0	6	3	79	80
Beam	79	0	6	2	80	81
Beam	80	0	6	1	81	82
Beam	81	0	8	27	83	84
Beam	82	0	8	28	84	85
Beam	83	0	8	29	85	86
Beam	84	0	8	30	86	87
Beam	85	0	8	31	87	88
Beam	86	0	8	32	88	89
Beam	87	0	8	1	89	90

Beam	88	0	8	1	90	91
Beam	89	0	8	1	91	92
Beam	90	0	8	1	92	93
Beam	91	0	8	1	93	94
Beam	92	0	8	1	94	95
Beam	93	0	8	1	95	96
Beam	94	0	8	1	96	97
Beam	95	0	8	1	97	98
Beam	96	0	8	1	98	99
Beam	97	0	8	1	99	100
Beam	98	0	8	1	100	101
Beam	99	0	8	1	101	102
Beam	100	0	8	1	102	103
Beam	101	0	8	1	103	104
Beam	102	0	7	27	105	106
Beam	103	0	7	50	106	107
Beam	104	0	7	49	107	108
Beam	105	0	7	48	108	109
Beam	106	0	7	47	109	110
Beam	107	0	7	46	110	111
Beam	108	0	7	45	111	112
Beam	109	0	7	44	112	113
Beam	110	0	7	43	113	114
Beam	111	0	7	42	114	115
Beam	112	0	7	41	115	116
Beam	113	0	7	40	116	117
Beam	114	0	7	39	117	118
Beam	115	0	7	38	118	119
Beam	116	0	7	37	119	120
Beam	117	0	7	36	120	121
Beam	118	0	7	35	121	122
Beam	119	0	7	34	122	123
Beam	120	0	7	33	123	124
Beam	121	0	7	1	124	72
Beam	122	0	8	27	125	105
Beam	123	0	8	28	126	125
Beam	124	0	8	29	127	126
Beam	125	0	8	30	128	127
Beam	126	0	8	31	129	128
Beam	127	0	8	32	130	129
Beam	128	0	8	1	131	130
Beam	129	0	8	1	132	131
Beam	130	0	8	1	133	132
Beam	131	0	8	1	134	133
Beam	132	0	8	1	135	134
Beam	133	0	8	1	136	135
Beam	134	0	8	1	137	136
Beam	135	0	8	1	138	137
Beam	136	0	8	1	139	138
Beam	137	0	8	1	140	139
Beam	138	0	8	1	141	140
Beam	139	0	8	1	142	141
Beam	140	0	8	1	143	142
Beam	141	0	8	1	144	143
Beam	142	0	8	1	145	144
Beam	143	0	7	27	146	83
Beam	144	0	7	50	147	146
Beam	145	0	7	49	148	147
Beam	146	0	7	48	149	148
Beam	147	0	7	47	150	149
Beam	148	0	7	46	151	150
Beam	149	0	7	45	152	151
Beam	150	0	7	44	153	152
Beam	151	0	7	43	154	153
Beam	152	0	7	42	155	154
Beam	153	0	7	41	156	155

BmSupport	1	119	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	120	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	121	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	122	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	123	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	124	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	125	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	126	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	127	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	128	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	129	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	130	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	131	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	132	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	133	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	134	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	135	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	136	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	137	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	138	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	139	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	140	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	141	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	142	0.00000000000000E+0	8.20646364281200E+5	CompOnly
BmSupport	1	143	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	144	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	145	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	146	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	147	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	148	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	149	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	150	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	151	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	152	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	153	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	154	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	155	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	156	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	157	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	158	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	159	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	160	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	161	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	162	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	163	0.00000000000000E+0	8.20646364281200E+5	CompOnly

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/ BEAM GLOBAL DISTRIBUTED LOADS

/ P_cop

BmDistLoadG	2	1	Y	1	-1.50038398475700E+2	-1.50038398475700E+2	0.00000000000000E+0	0.00000000000000E+0
							0.00000000000000E+0	
BmDistLoadG	2	2	Y	1	-1.49054862852538E+2	-1.49054862852538E+2	0.00000000000000E+0	0.00000000000000E+0
							0.00000000000000E+0	
BmDistLoadG	2	3	Y	1	-1.48118997815724E+2	-1.48118997815724E+2	0.00000000000000E+0	0.00000000000000E+0
							0.00000000000000E+0	
BmDistLoadG	2	4	Y	1	-1.47231458044916E+2	-1.47231458044916E+2	0.00000000000000E+0	0.00000000000000E+0
							0.00000000000000E+0	
BmDistLoadG	2	5	Y	1	-1.46392864414076E+2	-1.46392864414076E+2	0.00000000000000E+0	0.00000000000000E+0
							0.00000000000000E+0	
BmDistLoadG	2	6	Y	1	-1.45603803557141E+2	-1.45603803557141E+2	0.00000000000000E+0	0.00000000000000E+0
							0.00000000000000E+0	
BmDistLoadG	2	7	Y	1	-1.44864827457646E+2	-1.44864827457646E+2	0.00000000000000E+0	0.00000000000000E+0
							0.00000000000000E+0	
BmDistLoadG	2	8	Y	1	-1.44176453062587E+2	-1.44176453062587E+2	0.00000000000000E+0	0.00000000000000E+0
							0.00000000000000E+0	

BmDistLoadG	4	37	X	1	-8.53942456660512E+1	-8.53942456660512E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	38	X	1	-8.59090187331197E+1	-8.59090187331197E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	39	X	1	-8.64518204544718E+1	-8.64518204544718E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	40	X	1	-8.70222711159060E+1	-8.70222711159060E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	41	X	1	-8.80316460000000E+1	-8.80316460000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	42	X	1	-8.94662180000000E+1	-8.94662180000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	43	X	1	-9.09007900000000E+1	-9.09007900000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	44	X	1	-9.23353620000000E+1	-9.23353620000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	45	X	1	-9.37699340000000E+1	-9.37699340000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	46	X	1	-9.52045060000000E+1	-9.52045060000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	47	X	1	-9.66390780000000E+1	-9.66390780000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	48	X	1	-9.80736500000000E+1	-9.80736500000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	49	X	1	-9.95082220000000E+1	-9.95082220000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	50	X	1	-1.00942794000000E+2	-1.00942794000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	61	X	1	-1.02854630821268E+2	-1.02854630821268E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	62	X	1	-1.05250422869949E+2	-1.05250422869949E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	63	X	1	-1.07658862675023E+2	-1.07658862675023E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	64	X	1	-1.10078480489244E+2	-1.10078480489244E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	65	X	1	-1.12507799743998E+2	-1.12507799743998E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	66	X	1	-1.14945337950381E+2	-1.14945337950381E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	67	X	1	-1.17389607603883E+2	-1.17389607603883E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	68	X	1	-1.19839117092138E+2	-1.19839117092138E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	69	X	1	-1.22292371605178E+2	-1.22292371605178E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	70	X	1	-1.24747874047639E+2	-1.24747874047639E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	102	X	1	-1.66291654675277E+2	-1.66291654675277E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	103	X	1	-1.64264668561263E+2	-1.64264668561263E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	104	X	1	-1.62230600689128E+2	-1.62230600689128E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	105	X	1	-1.60189910174258E+2	-1.60189910174258E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	106	X	1	-1.58143057626851E+2	-1.58143057626851E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	107	X	1	-1.56090505047960E+2	-1.56090505047960E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	108	X	1	-1.54032715725206E+2	-1.54032715725206E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	109	X	1	-1.51970154128211E+2	-1.51970154128211E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	110	X	1	-1.49903285803763E+2	-1.49903285803763E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							

BmDistLoadG	9	37	Y	1	-1.53856873656937E+1	-1.53856873656937E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	38	Y	1	-1.54784352717431E+1	-1.54784352717431E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	39	Y	1	-1.55762331680901E+1	-1.55762331680901E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	40	Y	1	-1.56790126407106E+1	-1.56790126407106E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	41	Y	1	-1.58608741500000E+1	-1.58608741500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	42	Y	1	-1.61193444500000E+1	-1.61193444500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	43	Y	1	-1.63778147500000E+1	-1.63778147500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	44	Y	1	-1.66362850500000E+1	-1.66362850500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	45	Y	1	-1.68947553500000E+1	-1.68947553500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	46	Y	1	-1.71532256500000E+1	-1.71532256500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	47	Y	1	-1.74116959500000E+1	-1.74116959500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	48	Y	1	-1.76701662500000E+1	-1.76701662500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	49	Y	1	-1.79286365500000E+1	-1.79286365500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	50	Y	1	-1.81871068500000E+1	-1.81871068500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	51	Y	1	-1.58608741500000E+1	-1.58608741500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	52	Y	1	-1.61193444500000E+1	-1.61193444500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	53	Y	1	-1.63778147500000E+1	-1.63778147500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	54	Y	1	-1.66362850500000E+1	-1.66362850500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	55	Y	1	-1.68947553500000E+1	-1.68947553500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	56	Y	1	-1.71532256500000E+1	-1.71532256500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	57	Y	1	-1.74116959500000E+1	-1.74116959500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	58	Y	1	-1.76701662500000E+1	-1.76701662500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	59	Y	1	-1.79286365500000E+1	-1.79286365500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	60	Y	1	-1.81871068500000E+1	-1.81871068500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						

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/ BEAM PROPERTIES

BeamProp	1	16737843	"Beam Property 1"
MaterialName		"Concrete: Compressive Strength $f_c = 25$ MPa"	
Modulus		2.74600000000000E+4	
ShearMod		1.14420000000000E+4	
Poisson		2.00000000000000E-1	
UsePoisson		TRUE	
Density		2.40000000000000E+3	
Expansion		1.00000000000000E-5	
ThermalCond		1.37000000000000E+0	
SpecificHeat		8.80000000000000E+2	
InstantAlpha		FALSE	
Area		8.00000000000000E-1	
MomentI11		4.26666666670000E-2	
MomentI22		6.66666666670000E-2	

MomentJ 9.03304533330000E-2
SectionType SolidRect
B 1.00000000000000E+0
D 8.00000000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 2 3355647 "Beam Property 2"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 8.67000000000000E-1
MomentI11 5.43095302500000E-2
MomentI22 7.22500000000000E-2
MomentJ 1.07071853237000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 8.67000000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 3 3407692 "Beam Property 3"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 9.34000000000000E-1
MomentI11 6.78983753330000E-2
MomentI22 7.78333333330000E-2
MomentJ 1.24102616742000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 9.34000000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 4 3407846 "Beam Property 4"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5

ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.0010000000000E+0
MomentI11 8.3583583417000E-2
MomentI22 8.3416666670000E-2
MomentJ 1.40982683983000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.0010000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 5 16757299 "Beam Property 5"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.0680000000000E+0
MomentI11 1.0151553600000E-1
MomentI22 8.9000000000000E-2
MomentJ 1.62229712859000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.0680000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 6 16724966 "Beam Property 6"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.1350000000000E+0
MomentI11 1.21844614583000E-1
MomentI22 9.45833333330000E-2
MomentJ 1.83604992658000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.1350000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 7 6750003 "Beam Property 7"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"

Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.2020000000000E+0
MomentI11 1.44721200667000E-1
MomentI22 1.00166666667000E-1
MomentJ 2.05087077094000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.2020000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 8 3375359 "Beam Property 8"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.2690000000000E+0
MomentI11 1.70295675750000E-1
MomentI22 1.05750000000000E-1
MomentJ 2.26659049120000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.2690000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 9 16724812 "Beam Property 9"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.3360000000000E+0
MomentI11 1.98718421333000E-1
MomentI22 1.11333333333000E-1
MomentJ 2.48307385230000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.3360000000000E+0
CT FALSE
TimeDependentMod Elastic

UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 10 8401919 "Beam Property 10"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.40300000000000E+0
MomentI11 2.30139818917000E-1
MomentI22 1.16916666667000E-1
MomentJ 2.70021145165000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.40300000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 11 11730739 "Beam Property 11"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.47000000000000E+0
MomentI11 2.64710250000000E-1
MomentI22 1.22500000000000E-1
MomentJ 2.91791383220000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.47000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 12 3394815 "Beam Property 12"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 6.00000000000000E-1
MomentI11 1.80000000000000E-2
MomentI22 5.00000000000000E-2

MomentJ 4.61318400000000E-2
SectionType SolidRect
B 1.00000000000000E+0
D 6.00000000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 13 16724889 "Beam Property 13"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 6.83300000000000E-1
MomentI11 2.65860009610000E-2
MomentI22 5.69416666670000E-2
MomentJ 6.31470420770000E-2
SectionType SolidRect
B 1.00000000000000E+0
D 6.83300000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 14 13382655 "Beam Property 14"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 7.66670000000000E-1
MomentI11 3.75529589530000E-2
MomentI22 6.38891666670000E-2
MomentJ 8.22503849030000E-2
SectionType SolidRect
B 1.00000000000000E+0
D 7.66670000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 15 16777011 "Beam Property 15"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5

ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 8.5000000000000E-1
MomentI11 5.1177083333000E-2
MomentI22 7.0833333330000E-2
MomentJ 1.0277791291700E-1
SectionType SolidRect
B 1.0000000000000E+0
D 8.5000000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 16 3407769 "Beam Property 16"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 9.3333000000000E-1
MomentI11 6.7752360496000E-2
MomentI22 7.7777500000000E-2
MomentJ 1.2393249701000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 9.3333000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 17 15096878 "Beam Property 17"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.0166700000000E+0
MomentI11 8.7570691592000E-2
MomentI22 8.4722500000000E-2
MomentJ 1.4593912442900E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.0166700000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 18 3026662 "Beam Property 18"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"

Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.1000000000000E+0
MomentI11 1.10916666667000E-1
MomentI22 9.1666666667000E-2
MomentJ 1.7242424242400E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.1000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 19 3073605 "Beam Property 19"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.1833300000000E+0
MomentI11 1.38081780636000E-1
MomentI22 9.8610833333000E-2
MomentJ 1.99091261919000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.1833300000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 20 3073743 "Beam Property 20"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.2666700000000E+0
MomentI11 1.69359361732000E-1
MomentI22 1.0555833333000E-1
MomentJ 2.25907507849000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.2666700000000E+0
CT FALSE
TimeDependentMod Elastic

UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 21 15114542 "Beam Property 21"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.35000000000000E+0
MomentI11 2.05031250000000E-1
MomentI22 1.12500000000000E-1
MomentJ 2.52839506173000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.35000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 22 15085263 "Beam Property 22"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.43333000000000E+0
MomentI11 2.45390263276000E-1
MomentI22 1.19444166667000E-1
MomentJ 2.79869718046000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.43333000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 23 6088238 "Beam Property 23"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.51667000000000E+0
MomentI11 2.90731469371000E-1
MomentI22 1.26389166667000E-1

MomentJ 3.06985212978000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.51667000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 24 3044326 "Beam Property 24"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.60000000000000E+0
MomentI11 3.41333333333000E-1
MomentI22 1.33333333333000E-1
MomentJ 3.34166666667000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.60000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 25 15085125 "Beam Property 25"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.68330000000000E+0
MomentI11 3.97469056795000E-1
MomentI22 1.40275000000000E-1
MomentJ 3.61397233609000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.68330000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 26 7548646 "Beam Property 26"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5

ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.7666670000000E+0
MomentI11 4.59497173673000E-1
MomentI22 1.4722225000000E-1
MomentJ 3.88700318904000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.7666670000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 27 10610222 "Beam Property 27"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.5400000000000E+0
MomentI11 3.04355333333000E-1
MomentI22 1.28333333333000E-1
MomentJ 3.14588744589000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.5400000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 28 3061990 "Beam Property 28"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.4100000000000E+0
MomentI11 2.3360175000000E-1
MomentI22 1.1750000000000E-1
MomentJ 2.72293144208000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.4100000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 29 15085194 "Beam Property 29"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"

Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.3300000000000E+0
MomentI11 1.9605308333300E-1
MomentI22 1.1083333333300E-1
MomentJ 2.4636591478700E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.3300000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 30 12070630 "Beam Property 30"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.2000000000000E+0
MomentI11 1.4400000000000E-1
MomentI22 1.0000000000000E-1
MomentJ 2.0444444444400E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.2000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 31 15132206 "Beam Property 31"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.0700000000000E+0
MomentI11 1.0208691666700E-1
MomentI22 8.9166666667000E-2
MomentJ 1.6286604361400E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.0700000000000E+0
CT FALSE
TimeDependentMod Elastic

UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 32 3073674 "Beam Property 32"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.0000000000000E+0
MomentI11 8.3333333330000E-2
MomentI22 8.3333333330000E-2
MomentJ 1.4066666667000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.0000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 33 13390377 "Beam Property 33"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 8.3894700000000E-1
MomentI11 4.9206483553000E-2
MomentI22 6.9912250000000E-2
MomentJ 9.9999907215000E-2
SectionType SolidRect
B 1.0000000000000E+0
D 8.3894700000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 34 2697676 "Beam Property 34"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 8.7789500000000E-1
MomentI11 5.6382779382000E-2
MomentI22 7.3157916667000E-2

MomentJ 1.09834225012000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 8.77895000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 35 2739261 "Beam Property 35"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 9.16842000000000E-1
MomentI11 6.42247250240000E-2
MomentI22 7.64035000000000E-2
MomentJ 1.19740757460000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 9.16842000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 36 2739384 "Beam Property 36"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 9.55789000000000E-1
MomentI11 7.27620351820000E-2
MomentI22 7.96490833330000E-2
MomentJ 1.29620217916000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 9.55789000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 37 13405993 "Beam Property 37"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5

ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 9.9473700000000E-1
MomentI11 8.2024495977000E-2
MomentI22 8.2894750000000E-2
MomentJ 1.3936610790400E-1
SectionType SolidRect
B 1.0000000000000E+0
D 9.9473700000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 38 13380024 "Beam Property 38"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.0336840000000E+0
MomentI11 9.2041171153000E-2
MomentI22 8.6140333333000E-2
MomentJ 1.5132983640900E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.0336840000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 39 5426217 "Beam Property 39"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.0726320000000E+0
MomentI11 1.0284211547200E-1
MomentI22 8.9386000000000E-2
MomentJ 1.6370362728400E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.0726320000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 40 2713292 "Beam Property 40"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"

Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.1115790000000E+0
MomentI11 1.14456313677000E-1
MomentI22 9.2631583333000E-2
MomentJ 1.7611976693800E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.1115790000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 41 13379901 "Beam Property 41"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.1505260000000E+0
MomentI11 1.2691357164000E-1
MomentI22 9.5877166667000E-2
MomentJ 1.8857423957300E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.1505260000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 42 6695372 "Beam Property 42"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.1894740000000E+0
MomentI11 1.4024378181600E-1
MomentI22 9.9122833333000E-2
MomentJ 2.0106360085100E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.1894740000000E+0
CT FALSE
TimeDependentMod Elastic

UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 43 9423913 "Beam Property 43"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.2284210000000E+0
MomentI11 1.54475799069000E-1
MomentI22 1.02368416667000E-1
MomentJ 2.13583921484000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.2284210000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 44 2728908 "Beam Property 44"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.2673680000000E+0
MomentI11 1.69639493071000E-1
MomentI22 1.0561400000000E-1
MomentJ 2.26132637988000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.2673680000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 45 13379962 "Beam Property 45"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.3063160000000E+0
MomentI11 1.85764829183000E-1
MomentI22 1.0885966667000E-1

MomentJ 2.38707533720000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.30631600000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 46 10693068 "Beam Property 46"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.34526300000000E+0
MomentI11 2.02880518737000E-1
MomentI22 1.12105250000000E-1
MomentJ 2.51305717214000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.34526300000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 47 13421609 "Beam Property 47"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.38421100000000E+0
MomentI11 2.21016981042000E-1
MomentI22 1.15350916667000E-1
MomentJ 2.63925842356000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.38421100000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 48 2739322 "Beam Property 48"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5

ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.42315800000000E+0
MomentI11 2.40202824160000E-1
MomentI22 1.18596500000000E-1
MomentJ 2.76565486279000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.42315800000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 49 11683620 "Beam Property 49"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.46210500000000E+0
MomentI11 2.60468039268000E-1
MomentI22 1.21842083333000E-1
MomentJ 2.89223387063000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.46210500000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 50 2368690 "Beam Property 50"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.50105300000000E+0
MomentI11 2.81842728401000E-1
MomentI22 1.25087750000000E-1
MomentJ 3.01898449246000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.50105300000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

/ LINEAR STATIC SOLVER DATA

LoadFreedomSetLSA 1 ON
1 2 3 4 5 6 7 8
9

/

/ LINEAR BUCKLING SOLVER DATA

BuckNumModes 4
BuckShift 0.0000000000000E+0

/

/ LOAD INFLUENCE SOLVER DATA

LoadFreedomSetLIA 1 ON
1

/

/ NON-LINEAR STATIC SOLVER DATA

NonLinearIncrement 0 Yes "SLE-F1"
LON1 1.0000000000000E+0
LON2 1.0000000000000E+0
LON3 1.0000000000000E+0
LON4 1.0000000000000E+0
LON5 8.0000000000000E-1
FON1 1.0000000000000E+0

NonLinearIncrement 0 Yes "SLE-F2"
LON1 1.0000000000000E+0
LON2 1.0000000000000E+0
LON3 1.0000000000000E+0
LON4 1.0000000000000E+0
LON6 8.0000000000000E-1
FON1 1.0000000000000E+0

NonLinearIncrement 0 Yes "SLE-F3"
LON1 1.0000000000000E+0
LON2 1.0000000000000E+0
LON3 1.0000000000000E+0
LON4 1.0000000000000E+0
LON7 8.0000000000000E-1
FON1 1.0000000000000E+0

NonLinearStage Unstaged

/

/ NATURAL FREQUENCY SOLVER DATA

FreqNumModes 4
FreqShift 0.0000000000000E+0
FreqIncludeNSMass 1 2 3 4 5 6 7 8
9

FreqModeParticipation FALSE
0.0000000000000E+0 0.0000000000000E+0 0.0000000000000E+0
0.0000000000000E+0 0.0000000000000E+0 0.0000000000000E+0
0.0000000000000E+0 0.0000000000000E+0 0.0000000000000E+0

/ _____

/ HEAT SOLVER DATA

LoadSetHeat 1 2 3 4 5 6 7 8
9

HeatTempLoadCase 1

HeatNonlinear FALSE

/ _____

/ GENERAL SOLVER DATA

SolverTempDependence None

SolverLoadCaseTempDependence 0

SolverActiveStage 0

SturmCheck FALSE

SolverFreedomCase 1

ModalLoadType BaseAcceleration

ModalNodeReactType Element

DampingType Rayleigh

RayleighFactors Frequency

1.00000000000000E+0 1.00000000000000E+1 1.00000000000000E+0 1.00000000000000E+1 1.00000000000000E-2
1.00000000000000E-2

NonLinearGeometry TRUE

NonLinearMaterial TRUE

IncludeCreep FALSE

SolverDefaultsGeneral

SolDefMatrixZeroDiag 1.00000000000000E-20

SolDefConjGradTol 1.00000000000000E-5

SolDefMaxConjGradIter 5000

SolDefMaxNumWarnings 10

SolDefWindowState 3

SolDefReducedLogFile TRUE

SolDefDoResidualsCheck FALSE

SolDefSuppressAllSingularities FALSE

SolverDefaultsElements

SolDefMinDimension 1.00000000000000E-9

SolDefMinInternalAngle 1.50000000000000E+1

SolDefZeroPointForce 1.00000000000000E-6

SolDefZeroDiagonal 1.00000000000000E-20

SolDefBeamMass Lumped

SolDefPlateMass Lumped

SolDefBrickMass Lumped

SolDefBeamLoads Consistent

SolDefPlateLoads Consistent

SolDefBeamSlices 5

SolDefIncludeLinkReactions TRUE

SolverDefaultsDrilling

SolDefZeroTrans 1.0000000000000000E-8
SolDefZeroRot 1.0000000000000000E-6
SolDrillStiffMult 1.0000000000000000E-4
SolDrillZeroEig 1.0000000000000000E-6
SolDefMaxNormalsAngle 5.0000000000000000E+0
SolDefForceDrillingCheck FALSE

SolverDefaultsIteration

SolDefZeroDisp 1.0000000000000000E-8
SolDefDispNormTol 1.0000000000000000E-4
SolDefResidualsNormTol 1.0000000000000000E-3
SolDefNonlinIterLimit 20
SolDefAddIterations TRUE
SolDefMaxUpdateInterval 5
SolDefMaxDispChange 1.0000000000000000E+0
SolDefMaxResidualChange 1.0000000000000000E-1
SolDefFormStiffnessMatrix 0
SolDefFormHeatStiffnessMatrix 2
SolDefHeatConvergenceTol 1.0000000000000000E-5
SolDefHeatRelaxationFactor 6.6667000000000000E-1
SolDefNonlinHeatIterLimit 20

SolverDefaultsSubSteps

SolDefSubStepping 0
SolDefMinLoadReductionFactor 1.0000000000000000E-1
SolDefMaxRot 3.0000000000000000E+1
SolDefMaxDispRatio 1.0000000000000000E-1
SolDefMinArcLength 1.0000000000000000E-3
SolDefMaxFibreInc 1.0000000000000000E-2
SolDefSaveSubIncrements FALSE
SolDefDynamicAutoSteppingMode 0
SolDefMinTimeStep 1.0000000000000000E-3
SolDefConsiderTableSteps FALSE
SolDefSingleShotRestart FALSE
SolDefAutoAssignPathDiv FALSE

SolverDefaultsNonlinear

SolDefIncludeKG TRUE
SolDefAutoScaleKg TRUE
SolDefIgnoreCompressiveBeamKg FALSE
SolDefBeamKgType Simplified
SolDefFiniteStrainDefinition Nominal
SolDefBeamLength Initial
SolDefRatioMNL 5.0000000000000000E-1
SolDefZeroContactFactor 1.0000000000000000E-6
SolDefSlidingFriction 1.0000000000000000E-15
SolDefStickingFriction 1.0000000000000000E+0
SolDefFrictionCutoffStrain 1.0000000000000000E-5
SolDefScaleSupports TRUE

SolverDefaultsCreep

SolDefTimeStepParam 5.0000000000000000E-1
SolDefMinViscoUnits 3
SolDefMaxViscoUnits 6
SolDefCurveFitTime 1.0000000000000000E+4
SolDefCurveFitTimeUnit d
SolDefSpacingBias 5.0000000000000000E-1
SolDefDoInstantNTA TRUE

SolverDefaultsEigenvalue

SolDefZeroFreq 1.0000000000000000E-6
SolDefZeroBuckEigenvalue 1.0000000000000000E-10
SolDefExpandWorkingSetBy 6
SolDefEigIterLimit 20
SolDefEigIterTol 1.0000000000000000E-5

SolDefEigAutoShift FALSE

SolverDefaultsDynamics

SolDefWilsonTheta 1.37000000000000E+0
SolDefNewmarkBeta 5.00000000000000E-1
SolDefTransientMethod Newmark
SolDefExcludeMassComponents
SolDefIncludeRotMass TRUE

/ RESULT OPTIONS

ResultOptions

ResOptsRotationUnit Degrees
ResOptsHRADisplacement Total
ResOptsHRAVelocity Total
ResOptsHRAAcceleration Relative
ResOptsBeamForceMoment Principal
ResOptsStageDisplacement BirthStage

/ Straus7 MODEL EXCHANGE FILE
/ TIMESTAMP: 6:18:36 pm, 05 giugno 2019

/ MODEL INFORMATION

FileFormat Straus7.2.4.6
ModelName "GA_open_SLE_QP"
Title ""
Project ""
Author ""
Reference ""
Comments ""

/ UNITS

LengthUnit m
MassUnit kg
EnergyUnit J
PressureUnit MPa
ForceUnit kN
TemperatureUnit C

/ GROUP DEFINITIONS

Group 1 16711680 "\\Model"
Group 2 3355647 "calotta"
Group 3 16757299 "calotta\curvilinea"
Group 4 6750003 "calotta\rettilinea"
Group 5 3407692 "piedritto"
Group 6 3375359 "piedritto\piedritto_alto"
Group 7 16724812 "piedritto\piedritto_basso"
Group 8 3407846 "arco rovescio"

/ FREEDOM CASE DEFINITIONS

FreedomCase 1 0 1 "Freedom Case 1"

/ LOAD CASE DEFINITIONS

LoadCase	1	1	"PP"
Gravity	2		-9.80665000000000E+0
LCInclude	3		
LoadCase	2	0	"P_cop"
LCInclude	3		
LoadCase	3	0	"SP_sx"
LCInclude	3		
LoadCase	4	0	"SP_dx"
LCInclude	3		
LoadCase	5	0	"V"
LCInclude	3		
LoadCase	6	0	"SV_sx"
LCInclude	3		
LoadCase	7	0	"SV_dx"
LCInclude	3		
LoadCase	8	0	"dS_h"
LCInclude	3		
LoadCase	9	0	"dS_v"
LCInclude	3		

/ INCREMENT ENVELOPES

IncrementEnvelope	"Envelope Case"	Abs
ON	1	
ON	2	
ON	3	
ON	4	
ON	5	
ON	6	
ON	7	
ON	8	
ON	9	
ON	10	
ON	11	
ON	12	
ON	13	
ON	14	
ON	15	
ON	16	

/ COORDINATE SYSTEM DEFINITIONS

CoordSys	1	"Global XYZ"	GlobalXYZ
CoordSys	2	"carichi"	RectXYZ
		0.00000000000000E+0	1.08600000000000E+1 0.00000000000000E+0

/ NODE COORDINATES

Node	1	0	-1.94830000000000E+0	3.33290000000000E+0	0.00000000000000E+0
Node	2	0	-1.85947466801228E+0	3.38326015242999E+0	0.00000000000000E+0
Node	3	0	-1.76934854991663E+0	3.43125356231625E+0	0.00000000000000E+0

Node	4	0	-1.67798469298355E+0	3.47684665611138E+0	0.0000000000000E+0
Node	5	0	-1.58544701033748E+0	3.52000753939703E+0	0.0000000000000E+0
Node	6	0	-1.49180023624673E+0	3.56070601919538E+0	0.0000000000000E+0
Node	7	0	-1.39710988083890E+0	3.59891362509054E+0	0.0000000000000E+0
Node	8	0	-1.30144218427364E+0	3.63460362914487E+0	0.0000000000000E+0
Node	9	0	-1.20486407040466E+0	3.66775106459638E+0	0.0000000000000E+0
Node	10	0	-1.10744309996351E+0	3.69833274332411E+0	0.0000000000000E+0
Node	11	0	-1.00924742329778E+0	3.72632727206921E+0	0.0000000000000E+0
Node	12	0	-9.10345732696894E-1	3.75171506740058E+0	0.0000000000000E+0
Node	13	0	-8.10807214338750E-1	3.77447836941427E+0	0.0000000000000E+0
Node	14	0	-7.10701499890891E-1	3.79460125415739E+0	0.0000000000000E+0
Node	15	0	-6.10098617800016E-1	3.81206964476759E+0	0.0000000000000E+0
Node	16	0	-5.09068944303938E-1	3.82687132132050E+0	0.0000000000000E+0
Node	17	0	-4.07683154200238E-1	3.83899592937806E+0	0.0000000000000E+0
Node	18	0	-3.06012171406074E-1	3.84843498723200E+0	0.0000000000000E+0
Node	19	0	-2.04127119343708E-1	3.85518189183707E+0	0.0000000000000E+0
Node	20	0	-1.02099271186475E-1	3.85923192343026E+0	0.0000000000000E+0
Node	21	0	-3.80446542325164E-16	3.86058224883242E+0	0.0000000000000E+0
Node	22	0	1.02099271186474E-1	3.85923192343026E+0	0.0000000000000E+0
Node	23	0	2.04127119343707E-1	3.85518189183707E+0	0.0000000000000E+0
Node	24	0	3.06012171406073E-1	3.84843498723200E+0	0.0000000000000E+0
Node	25	0	4.07683154200237E-1	3.83899592937806E+0	0.0000000000000E+0
Node	26	0	5.09068944303936E-1	3.82687132132050E+0	0.0000000000000E+0
Node	27	0	6.10098617800015E-1	3.81206964476759E+0	0.0000000000000E+0
Node	28	0	7.10701499890890E-1	3.79460125415739E+0	0.0000000000000E+0
Node	29	0	8.10807214338749E-1	3.77447836941427E+0	0.0000000000000E+0
Node	30	0	9.10345732696893E-1	3.75171506740058E+0	0.0000000000000E+0
Node	31	0	1.00924742329778E+0	3.72632727206921E+0	0.0000000000000E+0
Node	32	0	1.10744309996351E+0	3.69833274332411E+0	0.0000000000000E+0
Node	33	0	1.20486407040466E+0	3.66775106459638E+0	0.0000000000000E+0
Node	34	0	1.30144218427364E+0	3.63460362914487E+0	0.0000000000000E+0
Node	35	0	1.39710988083890E+0	3.59891362509054E+0	0.0000000000000E+0
Node	36	0	1.49180023624673E+0	3.56070601919538E+0	0.0000000000000E+0
Node	37	0	1.58544701033748E+0	3.52000753939703E+0	0.0000000000000E+0
Node	38	0	1.67798469298354E+0	3.47684665611138E+0	0.0000000000000E+0
Node	39	0	1.76934854991663E+0	3.43125356231625E+0	0.0000000000000E+0
Node	40	0	1.85947466801228E+0	3.38326015242999E+0	0.0000000000000E+0
Node	41	0	1.94830000000000E+0	3.33290000000000E+0	0.0000000000000E+0
Node	42	0	2.11546000000000E+0	3.20923000000000E+0	0.0000000000000E+0
Node	43	0	2.28262000000000E+0	3.08556000000000E+0	0.0000000000000E+0
Node	44	0	2.44978000000000E+0	2.96189000000000E+0	0.0000000000000E+0
Node	45	0	2.61694000000000E+0	2.83822000000000E+0	0.0000000000000E+0
Node	46	0	2.78410000000000E+0	2.71455000000000E+0	0.0000000000000E+0
Node	47	0	2.95126000000000E+0	2.59088000000000E+0	0.0000000000000E+0
Node	48	0	3.11842000000000E+0	2.46721000000000E+0	0.0000000000000E+0
Node	49	0	3.28558000000000E+0	2.34354000000000E+0	0.0000000000000E+0
Node	50	0	3.45274000000000E+0	2.21987000000000E+0	0.0000000000000E+0
Node	51	0	3.61990000000000E+0	2.09620000000000E+0	0.0000000000000E+0
Node	52	0	0.00000000000000E+0	0.00000000000000E+0	0.0000000000000E+0
Node	53	0	-2.11546000000000E+0	3.20923000000000E+0	0.0000000000000E+0
Node	54	0	-2.28262000000000E+0	3.08556000000000E+0	0.0000000000000E+0
Node	55	0	-2.44978000000000E+0	2.96189000000000E+0	0.0000000000000E+0
Node	56	0	-2.61694000000000E+0	2.83822000000000E+0	0.0000000000000E+0
Node	57	0	-2.78410000000000E+0	2.71455000000000E+0	0.0000000000000E+0
Node	58	0	-2.95126000000000E+0	2.59088000000000E+0	0.0000000000000E+0
Node	59	0	-3.11842000000000E+0	2.46721000000000E+0	0.0000000000000E+0
Node	60	0	-3.28558000000000E+0	2.34354000000000E+0	0.0000000000000E+0
Node	61	0	-3.45274000000000E+0	2.21987000000000E+0	0.0000000000000E+0
Node	62	0	-3.61990000000000E+0	2.09620000000000E+0	0.0000000000000E+0
Node	63	0	3.66914272971283E+0	1.89024296185021E+0	0.0000000000000E+0
Node	64	0	3.71328302196233E+0	1.68313240539995E+0	0.0000000000000E+0
Node	65	0	3.75229394019274E+0	1.47499471959599E+0	0.0000000000000E+0
Node	66	0	3.78615167804214E+0	1.26595692018946E+0	0.0000000000000E+0
Node	67	0	3.81483557387019E+0	1.05614657222461E+0	0.0000000000000E+0
Node	68	0	3.83832812336690E+0	8.45691712192458E-1	0.0000000000000E+0
Node	69	0	3.85661499023460E+0	6.34720769896678E-1	0.0000000000000E+0

Node	70	0	3.86968501493665E+0	4.23362490079458E-1	0.0000000000000E+0
Node	71	0	3.87753022150753E+0	2.11745853855208E-1	0.0000000000000E+0
Node	72	0	3.8801500000000E+0	0.0000000000000E+0	0.0000000000000E+0
Node	73	0	-3.66914272971283E+0	1.89024296185021E+0	0.0000000000000E+0
Node	74	0	-3.71328302196233E+0	1.68313240539995E+0	0.0000000000000E+0
Node	75	0	-3.75229394019274E+0	1.47499471959599E+0	0.0000000000000E+0
Node	76	0	-3.78615167804214E+0	1.26595692018946E+0	0.0000000000000E+0
Node	77	0	-3.81483557387019E+0	1.05614657222461E+0	0.0000000000000E+0
Node	78	0	-3.83832812336690E+0	8.45691712192458E-1	0.0000000000000E+0
Node	79	0	-3.85661499023460E+0	6.34720769896678E-1	0.0000000000000E+0
Node	80	0	-3.86968501493665E+0	4.23362490079458E-1	0.0000000000000E+0
Node	81	0	-3.87753022150753E+0	2.11745853855208E-1	0.0000000000000E+0
Node	82	0	-3.8801500000000E+0	0.0000000000000E+0	0.0000000000000E+0
Node	83	0	-3.4955000000000E+0	-3.5627000000000E+0	0.0000000000000E+0
Node	84	0	-3.33230782624253E+0	-3.60057547048123E+0	0.0000000000000E+0
Node	85	0	-3.16879248559635E+0	-3.63703051420949E+0	0.0000000000000E+0
Node	86	0	-3.00496634122818E+0	-3.67206237486980E+0	0.0000000000000E+0
Node	87	0	-2.84084177980416E+0	-3.70566840375206E+0	0.0000000000000E+0
Node	88	0	-2.67643121055332E+0	-3.73784605995134E+0	0.0000000000000E+0
Node	89	0	-2.51174706432936E+0	-3.76859291055994E+0	0.0000000000000E+0
Node	90	0	-2.34680179267073E+0	-3.79790663085141E+0	0.0000000000000E+0
Node	91	0	-2.18160786685924E+0	-3.7979000000000E+0	0.0000000000000E+0
Node	92	0	-2.0161777697708E+0	-3.7979000000000E+0	0.0000000000000E+0
Node	93	0	-1.85052403096246E+0	-3.7979000000000E+0	0.0000000000000E+0
Node	94	0	-1.68465915366393E+0	-3.7979000000000E+0	0.0000000000000E+0
Node	95	0	-1.51859568589340E+0	-3.7979000000000E+0	0.0000000000000E+0
Node	96	0	-1.35234618347790E+0	-3.7979000000000E+0	0.0000000000000E+0
Node	97	0	-1.18592321631029E+0	-3.7979000000000E+0	0.0000000000000E+0
Node	98	0	-1.01933936739887E+0	-3.7979000000000E+0	0.0000000000000E+0
Node	99	0	-8.52607231915959E-1	-3.7979000000000E+0	0.0000000000000E+0
Node	100	0	-6.85739416245641E-1	-3.7979000000000E+0	0.0000000000000E+0
Node	101	0	-5.18748537030578E-1	-3.7979000000000E+0	0.0000000000000E+0
Node	102	0	-3.51647220218097E-1	-3.7979000000000E+0	0.0000000000000E+0
Node	103	0	-1.84448100105556E-1	-3.7979000000000E+0	0.0000000000000E+0
Node	104	0	-1.71638183850854E-2	-3.7979000000000E+0	0.0000000000000E+0
Node	105	0	3.4955000000000E+0	-3.5627000000000E+0	0.0000000000000E+0
Node	106	0	3.53876190604596E+0	-3.38827494401322E+0	0.0000000000000E+0
Node	107	0	3.57939848608508E+0	-3.21321963551490E+0	0.0000000000000E+0
Node	108	0	3.61740056791651E+0	-3.03757358674864E+0	0.0000000000000E+0
Node	109	0	3.65275957397965E+0	-2.86137644329578E+0	0.0000000000000E+0
Node	110	0	3.68546752329024E+0	-2.68466797512683E+0	0.0000000000000E+0
Node	111	0	3.71551703324176E+0	-2.50748806762490E+0	0.0000000000000E+0
Node	112	0	3.74290132127180E+0	-2.32987671258303E+0	0.0000000000000E+0
Node	113	0	3.76761420639292E+0	-2.15187399917756E+0	0.0000000000000E+0
Node	114	0	3.78965011058784E+0	-1.97352010491945E+0	0.0000000000000E+0
Node	115	0	3.81400406006844E+0	-1.79485528658573E+0	0.0000000000000E+0
Node	116	0	3.83567168639838E+0	-1.61591987113298E+0	0.0000000000000E+0
Node	117	0	3.84464922747919E+0	-1.43675424659509E+0	0.0000000000000E+0
Node	118	0	3.85593352839935E+0	-1.25739885296706E+0	0.0000000000000E+0
Node	119	0	3.86452204214643E+0	-1.07789417307727E+0	0.0000000000000E+0
Node	120	0	3.87541283018197E+0	-8.98280723449910E-1	0.0000000000000E+0
Node	121	0	3.87860456287904E+0	-7.18599045159911E-1	0.0000000000000E+0
Node	122	0	3.87909651982237E+0	-5.38889694682297E-1	0.0000000000000E+0
Node	123	0	3.87688858997090E+0	-3.59193234738058E-1	0.0000000000000E+0
Node	124	0	3.88198127168293E+0	-1.79550225138629E-1	0.0000000000000E+0
Node	125	0	3.33230782624253E+0	-3.60057547048123E+0	0.0000000000000E+0
Node	126	0	3.16879248559635E+0	-3.63703051420949E+0	0.0000000000000E+0
Node	127	0	3.00496634122818E+0	-3.67206237486980E+0	0.0000000000000E+0
Node	128	0	2.84084177980416E+0	-3.70566840375206E+0	0.0000000000000E+0
Node	129	0	2.67643121055332E+0	-3.73784605995134E+0	0.0000000000000E+0
Node	130	0	2.51174706432936E+0	-3.76859291055994E+0	0.0000000000000E+0
Node	131	0	2.34680179267073E+0	-3.79790663085141E+0	0.0000000000000E+0
Node	132	0	2.18160786685924E+0	-3.7979000000000E+0	0.0000000000000E+0
Node	133	0	2.0161777697708E+0	-3.7979000000000E+0	0.0000000000000E+0
Node	134	0	1.85052403096246E+0	-3.7979000000000E+0	0.0000000000000E+0
Node	135	0	1.68465915366393E+0	-3.7979000000000E+0	0.0000000000000E+0

Node	136	0	1.51859568589340E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	137	0	1.35234618347790E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	138	0	1.18592321631029E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	139	0	1.01933936739887E+0	-3.79790000000000E+0	0.00000000000000E+0
Node	140	0	8.52607231915959E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	141	0	6.85739416245641E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	142	0	5.18748537030578E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	143	0	3.51647220218097E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	144	0	1.84448100105556E-1	-3.79790000000000E+0	0.00000000000000E+0
Node	145	0	1.71638183850854E-2	-3.79790000000000E+0	0.00000000000000E+0
Node	146	0	-3.53876190604596E+0	-3.38827494401322E+0	0.00000000000000E+0
Node	147	0	-3.57939848608508E+0	-3.21321963551490E+0	0.00000000000000E+0
Node	148	0	-3.61740056791651E+0	-3.03757358674864E+0	0.00000000000000E+0
Node	149	0	-3.65275957397965E+0	-2.86137644329578E+0	0.00000000000000E+0
Node	150	0	-3.68546752329024E+0	-2.68466797512683E+0	0.00000000000000E+0
Node	151	0	-3.71551703324176E+0	-2.50748806762490E+0	0.00000000000000E+0
Node	152	0	-3.74290132127180E+0	-2.32987671258303E+0	0.00000000000000E+0
Node	153	0	-3.76761420639292E+0	-2.15187399917756E+0	0.00000000000000E+0
Node	154	0	-3.78965011058784E+0	-1.97352010491945E+0	0.00000000000000E+0
Node	155	0	-3.81400406006844E+0	-1.79485528658573E+0	0.00000000000000E+0
Node	156	0	-3.83567168639838E+0	-1.61591987113298E+0	0.00000000000000E+0
Node	157	0	-3.84464922747919E+0	-1.43675424659509E+0	0.00000000000000E+0
Node	158	0	-3.85593352839935E+0	-1.25739885296706E+0	0.00000000000000E+0
Node	159	0	-3.86452204214643E+0	-1.07789417307727E+0	0.00000000000000E+0
Node	160	0	-3.87541283018197E+0	-8.98280723449910E-1	0.00000000000000E+0
Node	161	0	-3.87860456287904E+0	-7.18599045159911E-1	0.00000000000000E+0
Node	162	0	-3.87909651982237E+0	-5.38889694682297E-1	0.00000000000000E+0
Node	163	0	-3.87688858997090E+0	-3.59193234738058E-1	0.00000000000000E+0
Node	164	0	-3.88198127168293E+0	-1.79550225138629E-1	0.00000000000000E+0

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/ BEAM ELEMENTS

Beam	1	0	3	1	2	1
Beam	2	0	3	1	3	2
Beam	3	0	3	1	4	3
Beam	4	0	3	1	5	4
Beam	5	0	3	1	6	5
Beam	6	0	3	1	7	6
Beam	7	0	3	1	8	7
Beam	8	0	3	1	9	8
Beam	9	0	3	1	10	9
Beam	10	0	3	1	11	10
Beam	11	0	3	1	12	11
Beam	12	0	3	1	13	12
Beam	13	0	3	1	14	13
Beam	14	0	3	1	15	14
Beam	15	0	3	1	16	15
Beam	16	0	3	1	17	16
Beam	17	0	3	1	18	17
Beam	18	0	3	1	19	18
Beam	19	0	3	1	20	19
Beam	20	0	3	1	21	20
Beam	21	0	3	1	22	21
Beam	22	0	3	1	23	22
Beam	23	0	3	1	24	23
Beam	24	0	3	1	25	24
Beam	25	0	3	1	26	25
Beam	26	0	3	1	27	26
Beam	27	0	3	1	28	27
Beam	28	0	3	1	29	28
Beam	29	0	3	1	30	29
Beam	30	0	3	1	31	30
Beam	31	0	3	1	32	31
Beam	32	0	3	1	33	32
Beam	33	0	3	1	34	33

Beam	34	0	3	1	35	34
Beam	35	0	3	1	36	35
Beam	36	0	3	1	37	36
Beam	37	0	3	1	38	37
Beam	38	0	3	1	39	38
Beam	39	0	3	1	40	39
Beam	40	0	3	1	41	40
Beam	41	0	4	2	42	41
Beam	42	0	4	3	43	42
Beam	43	0	4	4	44	43
Beam	44	0	4	5	45	44
Beam	45	0	4	6	46	45
Beam	46	0	4	7	47	46
Beam	47	0	4	8	48	47
Beam	48	0	4	9	49	48
Beam	49	0	4	10	50	49
Beam	50	0	4	11	51	50
Beam	51	0	4	2	1	53
Beam	52	0	4	3	53	54
Beam	53	0	4	4	54	55
Beam	54	0	4	5	55	56
Beam	55	0	4	6	56	57
Beam	56	0	4	7	57	58
Beam	57	0	4	8	58	59
Beam	58	0	4	9	59	60
Beam	59	0	4	10	60	61
Beam	60	0	4	11	61	62
Beam	61	0	6	10	63	51
Beam	62	0	6	9	64	63
Beam	63	0	6	8	65	64
Beam	64	0	6	7	66	65
Beam	65	0	6	6	67	66
Beam	66	0	6	5	68	67
Beam	67	0	6	4	69	68
Beam	68	0	6	3	70	69
Beam	69	0	6	2	71	70
Beam	70	0	6	1	72	71
Beam	71	0	6	10	62	73
Beam	72	0	6	9	73	74
Beam	73	0	6	8	74	75
Beam	74	0	6	7	75	76
Beam	75	0	6	6	76	77
Beam	76	0	6	5	77	78
Beam	77	0	6	4	78	79
Beam	78	0	6	3	79	80
Beam	79	0	6	2	80	81
Beam	80	0	6	1	81	82
Beam	81	0	8	27	83	84
Beam	82	0	8	28	84	85
Beam	83	0	8	29	85	86
Beam	84	0	8	30	86	87
Beam	85	0	8	31	87	88
Beam	86	0	8	32	88	89
Beam	87	0	8	1	89	90
Beam	88	0	8	1	90	91
Beam	89	0	8	1	91	92
Beam	90	0	8	1	92	93
Beam	91	0	8	1	93	94
Beam	92	0	8	1	94	95
Beam	93	0	8	1	95	96
Beam	94	0	8	1	96	97
Beam	95	0	8	1	97	98
Beam	96	0	8	1	98	99
Beam	97	0	8	1	99	100
Beam	98	0	8	1	100	101
Beam	99	0	8	1	101	102

Beam	100	0	8	1	102	103
Beam	101	0	8	1	103	104
Beam	102	0	7	27	105	106
Beam	103	0	7	50	106	107
Beam	104	0	7	49	107	108
Beam	105	0	7	48	108	109
Beam	106	0	7	47	109	110
Beam	107	0	7	46	110	111
Beam	108	0	7	45	111	112
Beam	109	0	7	44	112	113
Beam	110	0	7	43	113	114
Beam	111	0	7	42	114	115
Beam	112	0	7	41	115	116
Beam	113	0	7	40	116	117
Beam	114	0	7	39	117	118
Beam	115	0	7	38	118	119
Beam	116	0	7	37	119	120
Beam	117	0	7	36	120	121
Beam	118	0	7	35	121	122
Beam	119	0	7	34	122	123
Beam	120	0	7	33	123	124
Beam	121	0	7	1	124	72
Beam	122	0	8	27	125	105
Beam	123	0	8	28	126	125
Beam	124	0	8	29	127	126
Beam	125	0	8	30	128	127
Beam	126	0	8	31	129	128
Beam	127	0	8	32	130	129
Beam	128	0	8	1	131	130
Beam	129	0	8	1	132	131
Beam	130	0	8	1	133	132
Beam	131	0	8	1	134	133
Beam	132	0	8	1	135	134
Beam	133	0	8	1	136	135
Beam	134	0	8	1	137	136
Beam	135	0	8	1	138	137
Beam	136	0	8	1	139	138
Beam	137	0	8	1	140	139
Beam	138	0	8	1	141	140
Beam	139	0	8	1	142	141
Beam	140	0	8	1	143	142
Beam	141	0	8	1	144	143
Beam	142	0	8	1	145	144
Beam	143	0	7	27	146	83
Beam	144	0	7	50	147	146
Beam	145	0	7	49	148	147
Beam	146	0	7	48	149	148
Beam	147	0	7	47	150	149
Beam	148	0	7	46	151	150
Beam	149	0	7	45	152	151
Beam	150	0	7	44	153	152
Beam	151	0	7	43	154	153
Beam	152	0	7	42	155	154
Beam	153	0	7	41	156	155
Beam	154	0	7	40	157	156
Beam	155	0	7	39	158	157
Beam	156	0	7	38	159	158
Beam	157	0	7	37	160	159
Beam	158	0	7	36	161	160
Beam	159	0	7	35	162	161
Beam	160	0	7	34	163	162
Beam	161	0	7	33	164	163
Beam	162	0	7	1	82	164
Beam	163	0	8	1	104	145

BmSupport	1	131	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	132	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	133	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	134	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	135	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	136	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	137	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	138	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	139	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	140	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	141	0.00000000000000E+0	8.20646364281163E+5	CompOnly
BmSupport	1	142	0.00000000000000E+0	8.20646364281200E+5	CompOnly
BmSupport	1	143	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	144	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	145	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	146	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	147	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	148	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	149	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	150	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	151	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	152	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	153	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	154	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	155	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	156	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	157	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	158	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	159	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	160	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	161	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	162	0.00000000000000E+0	1.49579927300000E+6	CompOnly
BmSupport	1	163	0.00000000000000E+0	8.20646364281200E+5	CompOnly

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/ BEAM GLOBAL DISTRIBUTED LOADS

/ P_cop

BmDistLoadG	2	1	Y	1	-1.50038398475700E+2	-1.50038398475700E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	
BmDistLoadG	2	2	Y	1	-1.49054862852538E+2	-1.49054862852538E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	
BmDistLoadG	2	3	Y	1	-1.48118997815724E+2	-1.48118997815724E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	
BmDistLoadG	2	4	Y	1	-1.47231458044916E+2	-1.47231458044916E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	
BmDistLoadG	2	5	Y	1	-1.46392864414076E+2	-1.46392864414076E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	
BmDistLoadG	2	6	Y	1	-1.45603803557141E+2	-1.45603803557141E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	
BmDistLoadG	2	7	Y	1	-1.44864827457646E+2	-1.44864827457646E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	
BmDistLoadG	2	8	Y	1	-1.44176453062587E+2	-1.44176453062587E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	
BmDistLoadG	2	9	Y	1	-1.43539161920795E+2	-1.43539161920795E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	
BmDistLoadG	2	10	Y	1	-1.42953399846067E+2	-1.42953399846067E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	
BmDistLoadG	2	11	Y	1	-1.42419576605302E+2	-1.42419576605302E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	
BmDistLoadG	2	12	Y	1	-1.41938065631851E+2	-1.41938065631851E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	
BmDistLoadG	2	13	Y	1	-1.41509203764283E+2	-1.41509203764283E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	
BmDistLoadG	2	14	Y	1	-1.41133291010750E+2	-1.41133291010750E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0							0.00000000000000E+0	

BmDistLoadG	2	48	Y	1	-1.69092500000000E+2	-1.69092500000000E+2	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	2	49	Y	1	-1.71565900000000E+2	-1.71565900000000E+2	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	2	50	Y	1	-1.74039300000000E+2	-1.74039300000000E+2	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	2	51	Y	1	-1.51778700000000E+2	-1.51778700000000E+2	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	2	52	Y	1	-1.54252100000000E+2	-1.54252100000000E+2	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	2	53	Y	1	-1.56725500000000E+2	-1.56725500000000E+2	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	2	54	Y	1	-1.59198900000000E+2	-1.59198900000000E+2	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	2	55	Y	1	-1.61672300000000E+2	-1.61672300000000E+2	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	2	56	Y	1	-1.64145700000000E+2	-1.64145700000000E+2	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	2	57	Y	1	-1.66619100000000E+2	-1.66619100000000E+2	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	2	58	Y	1	-1.69092500000000E+2	-1.69092500000000E+2	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	2	59	Y	1	-1.71565900000000E+2	-1.71565900000000E+2	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	2	60	Y	1	-1.74039300000000E+2	-1.74039300000000E+2	0.00000000000000E+0	0.00000000000000E+0

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/ BEAM GLOBAL DISTRIBUTED LOADS

/ SP_sx

BmDistLoadG	3	1	X	1	8.70222711159060E+1	8.70222711159060E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	2	X	1	8.64518204544718E+1	8.64518204544718E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	3	X	1	8.59090187331197E+1	8.59090187331197E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	4	X	1	8.53942456660512E+1	8.53942456660512E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	5	X	1	8.49078613601640E+1	8.49078613601640E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	6	X	1	8.44502060631416E+1	8.44502060631416E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	7	X	1	8.40215999254346E+1	8.40215999254346E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	8	X	1	8.36223427763007E+1	8.36223427763007E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	9	X	1	8.32527139140611E+1	8.32527139140611E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	10	X	1	8.29129719107187E+1	8.29129719107187E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	11	X	1	8.26033544310752E+1	8.26033544310752E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	12	X	1	8.23240780664738E+1	8.23240780664738E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	13	X	1	8.20753381832843E+1	8.20753381832843E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	14	X	1	8.18573087862351E+1	8.18573087862351E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	15	X	1	8.16701423966891E+1	8.16701423966891E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	16	X	1	8.15139699459483E+1	8.15139699459483E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	17	X	1	8.13889006836616E+1	8.13889006836616E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	18	X	1	8.12950221013994E+1	8.12950221013994E+1	0.00000000000000E+0	0.00000000000000E+0

BmDistLoadG	3	19	X	1	8.12323998714495E+1	8.12323998714495E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	20	X	1	8.12010778008764E+1	8.12010778008764E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	51	X	1	8.80316460000000E+1	8.80316460000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	52	X	1	8.94662180000000E+1	8.94662180000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	53	X	1	9.09007900000000E+1	9.09007900000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	54	X	1	9.23353620000000E+1	9.23353620000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	55	X	1	9.37699340000000E+1	9.37699340000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	56	X	1	9.52045060000000E+1	9.52045060000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	57	X	1	9.66390780000000E+1	9.66390780000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	58	X	1	9.80736500000000E+1	9.80736500000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	59	X	1	9.95082220000000E+1	9.95082220000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	60	X	1	1.00942794000000E+2	1.00942794000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	71	X	1	1.02854630821268E+2	1.02854630821268E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	72	X	1	1.05250422869949E+2	1.05250422869949E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	73	X	1	1.07658862675023E+2	1.07658862675023E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	74	X	1	1.10078480489244E+2	1.10078480489244E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	75	X	1	1.12507799743998E+2	1.12507799743998E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	76	X	1	1.14945337950381E+2	1.14945337950381E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	77	X	1	1.17389607603883E+2	1.17389607603883E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	78	X	1	1.19839117092138E+2	1.19839117092138E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	79	X	1	1.22292371605178E+2	1.22292371605178E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	80	X	1	1.24747874047639E+2	1.24747874047639E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	143	X	1	1.66291654675277E+2	1.66291654675277E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	144	X	1	1.64264668561263E+2	1.64264668561263E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	145	X	1	1.62230600689128E+2	1.62230600689128E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	146	X	1	1.60189910174258E+2	1.60189910174258E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	147	X	1	1.58143057626851E+2	1.58143057626851E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	148	X	1	1.56090505047960E+2	1.56090505047960E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	149	X	1	1.54032715725206E+2	1.54032715725206E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	150	X	1	1.51970154128211E+2	1.51970154128211E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	151	X	1	1.49903285803763E+2	1.49903285803763E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	152	X	1	1.47832577270730E+2	1.47832577270730E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	3	153	X	1	1.45758495914769E+2	1.45758495914769E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							

BmDistLoadG	3	154	X	1	1.43681509882823E+2	1.43681509882823E+2	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	155	X	1	1.41602087977460E+2	1.41602087977460E+2	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	156	X	1	1.39520699551057E+2	1.39520699551057E+2	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	157	X	1	1.37437814399858E+2	1.37437814399858E+2	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	158	X	1	1.35353902657937E+2	1.35353902657937E+2	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	159	X	1	1.33269434691085E+2	1.33269434691085E+2	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	160	X	1	1.31184880990638E+2	1.31184880990638E+2	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	161	X	1	1.29100712067285E+2	1.29100712067285E+2	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	3	162	X	1	1.27017391305804E+2	1.27017391305804E+2	0.00000000000000E+0	0.00000000000000E+0

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/ BEAM GLOBAL DISTRIBUTED LOADS

/ SP_dx

BmDistLoadG	4	21	X	1	-8.12010778008764E+1	-8.12010778008764E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	22	X	1	-8.12323998714495E+1	-8.12323998714495E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	23	X	1	-8.12950221013994E+1	-8.12950221013994E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	24	X	1	-8.13889006836616E+1	-8.13889006836616E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	25	X	1	-8.15139699459483E+1	-8.15139699459483E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	26	X	1	-8.16701423966891E+1	-8.16701423966891E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	27	X	1	-8.18573087862351E+1	-8.18573087862351E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	28	X	1	-8.20753381832843E+1	-8.20753381832843E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	29	X	1	-8.23240780664738E+1	-8.23240780664738E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	30	X	1	-8.26033544310752E+1	-8.26033544310752E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	31	X	1	-8.29129719107187E+1	-8.29129719107187E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	32	X	1	-8.32527139140611E+1	-8.32527139140611E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	33	X	1	-8.36223427763007E+1	-8.36223427763007E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	34	X	1	-8.40215999254346E+1	-8.40215999254346E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	35	X	1	-8.44502060631416E+1	-8.44502060631416E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	36	X	1	-8.49078613601640E+1	-8.49078613601640E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	37	X	1	-8.53942456660512E+1	-8.53942456660512E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	38	X	1	-8.59090187331197E+1	-8.59090187331197E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	39	X	1	-8.64518204544718E+1	-8.64518204544718E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	40	X	1	-8.70222711159060E+1	-8.70222711159060E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	41	X	1	-8.80316460000000E+1	-8.80316460000000E+1	0.00000000000000E+0	0.00000000000000E+0
BmDistLoadG	4	42	X	1	-8.94662180000000E+1	-8.94662180000000E+1	0.00000000000000E+0	0.00000000000000E+0

BmDistLoadG	4	43	X	1	-9.09007900000000E+1	-9.09007900000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	44	X	1	-9.23353620000000E+1	-9.23353620000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	45	X	1	-9.37699340000000E+1	-9.37699340000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	46	X	1	-9.52045060000000E+1	-9.52045060000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	47	X	1	-9.66390780000000E+1	-9.66390780000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	48	X	1	-9.80736500000000E+1	-9.80736500000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	49	X	1	-9.95082220000000E+1	-9.95082220000000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	50	X	1	-1.00942794000000E+2	-1.00942794000000E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	61	X	1	-1.02854630821268E+2	-1.02854630821268E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	62	X	1	-1.05250422869949E+2	-1.05250422869949E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	63	X	1	-1.07658862675023E+2	-1.07658862675023E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	64	X	1	-1.10078480489244E+2	-1.10078480489244E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	65	X	1	-1.12507799743998E+2	-1.12507799743998E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	66	X	1	-1.14945337950381E+2	-1.14945337950381E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	67	X	1	-1.17389607603883E+2	-1.17389607603883E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	68	X	1	-1.19839117092138E+2	-1.19839117092138E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	69	X	1	-1.22292371605178E+2	-1.22292371605178E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	70	X	1	-1.24747874047639E+2	-1.24747874047639E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	102	X	1	-1.66291654675277E+2	-1.66291654675277E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	103	X	1	-1.64264668561263E+2	-1.64264668561263E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	104	X	1	-1.62230600689128E+2	-1.62230600689128E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	105	X	1	-1.60189910174258E+2	-1.60189910174258E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	106	X	1	-1.58143057626851E+2	-1.58143057626851E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	107	X	1	-1.56090505047960E+2	-1.56090505047960E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	108	X	1	-1.54032715725206E+2	-1.54032715725206E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	109	X	1	-1.51970154128211E+2	-1.51970154128211E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	110	X	1	-1.49903285803763E+2	-1.49903285803763E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	111	X	1	-1.47832577270730E+2	-1.47832577270730E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	112	X	1	-1.45758495914769E+2	-1.45758495914769E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	113	X	1	-1.43681509882823E+2	-1.43681509882823E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	114	X	1	-1.41602087977460E+2	-1.41602087977460E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	115	X	1	-1.39520699551057E+2	-1.39520699551057E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							
BmDistLoadG	4	116	X	1	-1.37437814399858E+2	-1.37437814399858E+2	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0							

BmDistLoadG	9	43	Y	1	-1.63778147500000E+1	-1.63778147500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	44	Y	1	-1.66362850500000E+1	-1.66362850500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	45	Y	1	-1.68947553500000E+1	-1.68947553500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	46	Y	1	-1.71532256500000E+1	-1.71532256500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	47	Y	1	-1.74116959500000E+1	-1.74116959500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	48	Y	1	-1.76701662500000E+1	-1.76701662500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	49	Y	1	-1.79286365500000E+1	-1.79286365500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	50	Y	1	-1.81871068500000E+1	-1.81871068500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	51	Y	1	-1.58608741500000E+1	-1.58608741500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	52	Y	1	-1.61193444500000E+1	-1.61193444500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	53	Y	1	-1.63778147500000E+1	-1.63778147500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	54	Y	1	-1.66362850500000E+1	-1.66362850500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	55	Y	1	-1.68947553500000E+1	-1.68947553500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	56	Y	1	-1.71532256500000E+1	-1.71532256500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	57	Y	1	-1.74116959500000E+1	-1.74116959500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	58	Y	1	-1.76701662500000E+1	-1.76701662500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	59	Y	1	-1.79286365500000E+1	-1.79286365500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						
BmDistLoadG	9	60	Y	1	-1.81871068500000E+1	-1.81871068500000E+1	0.00000000000000E+0	0.00000000000000E+0
0.00000000000000E+0	0.00000000000000E+0	Projected						

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/ BEAM PROPERTIES

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BeamProp      1 16737843 "Beam Property 1"
MaterialName  "Concrete: Compressive Strength fc = 25 MPa"
Modulus       2.74600000000000E+4
ShearMod      1.14420000000000E+4
Poisson       2.00000000000000E-1
UsePoisson    TRUE
Density       2.40000000000000E+3
Expansion     1.00000000000000E-5
ThermalCond   1.37000000000000E+0
SpecificHeat   8.80000000000000E+2
InstantAlpha  FALSE
Area          8.00000000000000E-1
MomentI11     4.26666666670000E-2
MomentI22     6.66666666670000E-2
MomentJ       9.03304533330000E-2
SectionType   SolidRect
  B           1.00000000000000E+0
  D           8.00000000000000E-1
  CT          FALSE
TimeDependentMod Elastic
UseMomCurv   FALSE
NonLinType    Elasticplastic
Hardening     Isotropic

```

```

BeamProp      2 3355647 "Beam Property 2"
MaterialName  "Concrete: Compressive Strength fc = 25 MPa"

```

Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 8.6700000000000E-1
MomentI11 5.4309530250000E-2
MomentI22 7.2250000000000E-2
MomentJ 1.0707185323700E-1
SectionType SolidRect
B 1.0000000000000E+0
D 8.6700000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 3 3407692 "Beam Property 3"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 9.3400000000000E-1
MomentI11 6.7898375333000E-2
MomentI22 7.7833333330000E-2
MomentJ 1.2410261674200E-1
SectionType SolidRect
B 1.0000000000000E+0
D 9.3400000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 4 3407846 "Beam Property 4"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.0010000000000E+0
MomentI11 8.3583583417000E-2
MomentI22 8.3416666670000E-2
MomentJ 1.4098268398300E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.0010000000000E+0
CT FALSE
TimeDependentMod Elastic

UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 5 16757299 "Beam Property 5"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.06800000000000E+0
MomentI11 1.01515536000000E-1
MomentI22 8.90000000000000E-2
MomentJ 1.62229712859000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.06800000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 6 16724966 "Beam Property 6"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.13500000000000E+0
MomentI11 1.21844614583000E-1
MomentI22 9.45833333330000E-2
MomentJ 1.83604992658000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.13500000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 7 6750003 "Beam Property 7"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.20200000000000E+0
MomentI11 1.44721200667000E-1
MomentI22 1.00166666667000E-1

MomentJ 2.05087077094000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.20200000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 8 3375359 "Beam Property 8"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.26900000000000E+0
MomentI11 1.70295675750000E-1
MomentI22 1.05750000000000E-1
MomentJ 2.26659049120000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.26900000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 9 16724812 "Beam Property 9"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.33600000000000E+0
MomentI11 1.98718421333000E-1
MomentI22 1.11333333333000E-1
MomentJ 2.48307385230000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.33600000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 10 8401919 "Beam Property 10"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5

ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.4030000000000E+0
MomentI11 2.30139818917000E-1
MomentI22 1.16916666667000E-1
MomentJ 2.70021145165000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.4030000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 11 11730739 "Beam Property 11"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.4700000000000E+0
MomentI11 2.6471025000000E-1
MomentI22 1.2250000000000E-1
MomentJ 2.91791383220000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.4700000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 12 3394815 "Beam Property 12"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 6.0000000000000E-1
MomentI11 1.8000000000000E-2
MomentI22 5.0000000000000E-2
MomentJ 4.6131840000000E-2
SectionType SolidRect
B 1.0000000000000E+0
D 6.0000000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 13 16724889 "Beam Property 13"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"

Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 6.8330000000000E-1
MomentI11 2.6586000961000E-2
MomentI22 5.6941666667000E-2
MomentJ 6.3147042077000E-2
SectionType SolidRect
B 1.0000000000000E+0
D 6.8330000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 14 13382655 "Beam Property 14"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 7.6667000000000E-1
MomentI11 3.7552958953000E-2
MomentI22 6.3889166667000E-2
MomentJ 8.2250384903000E-2
SectionType SolidRect
B 1.0000000000000E+0
D 7.6667000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 15 16777011 "Beam Property 15"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 8.5000000000000E-1
MomentI11 5.1177083333000E-2
MomentI22 7.0833333333000E-2
MomentJ 1.0277791291700E-1
SectionType SolidRect
B 1.0000000000000E+0
D 8.5000000000000E-1
CT FALSE
TimeDependentMod Elastic

UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 16 3407769 "Beam Property 16"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 9.3333000000000E-1
MomentI11 6.7752360496000E-2
MomentI22 7.7777500000000E-2
MomentJ 1.2393249701000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 9.3333000000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 17 15096878 "Beam Property 17"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.0166700000000E+0
MomentI11 8.7570691592000E-2
MomentI22 8.4722500000000E-2
MomentJ 1.4593912442900E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.0166700000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 18 3026662 "Beam Property 18"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.1000000000000E+0
MomentI11 1.1091666666700E-1
MomentI22 9.1666666667000E-2

MomentJ 1.72424242424000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.10000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 19 3073605 "Beam Property 19"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.18333000000000E+0
MomentI11 1.38081780636000E-1
MomentI22 9.86108333330000E-2
MomentJ 1.99091261919000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.18333000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 20 3073743 "Beam Property 20"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.26667000000000E+0
MomentI11 1.69359361732000E-1
MomentI22 1.05558333330000E-1
MomentJ 2.25907507849000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.26667000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 21 15114542 "Beam Property 21"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5

ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.3500000000000E+0
MomentI11 2.0503125000000E-1
MomentI22 1.1250000000000E-1
MomentJ 2.52839506173000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.3500000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 22 15085263 "Beam Property 22"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.4333300000000E+0
MomentI11 2.45390263276000E-1
MomentI22 1.19444166667000E-1
MomentJ 2.79869718046000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.4333300000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 23 6088238 "Beam Property 23"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.5166700000000E+0
MomentI11 2.90731469371000E-1
MomentI22 1.26389166667000E-1
MomentJ 3.06985212978000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.5166700000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 24 3044326 "Beam Property 24"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"

Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.6000000000000E+0
MomentI11 3.4133333333000E-1
MomentI22 1.3333333333000E-1
MomentJ 3.3416666667000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.6000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 25 15085125 "Beam Property 25"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.6833000000000E+0
MomentI11 3.97469056795000E-1
MomentI22 1.4027500000000E-1
MomentJ 3.61397233609000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.6833000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 26 7548646 "Beam Property 26"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.7666670000000E+0
MomentI11 4.59497173673000E-1
MomentI22 1.4722225000000E-1
MomentJ 3.88700318904000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.7666670000000E+0
CT FALSE
TimeDependentMod Elastic

UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 27 10610222 "Beam Property 27"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.54000000000000E+0
MomentI11 3.04355333333000E-1
MomentI22 1.28333333333000E-1
MomentJ 3.14588744589000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.54000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 28 3061990 "Beam Property 28"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.41000000000000E+0
MomentI11 2.33601750000000E-1
MomentI22 1.17500000000000E-1
MomentJ 2.72293144208000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.41000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 29 15085194 "Beam Property 29"
MaterialName "Concrete: Compressive Strength $f_c = 25$ MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.33000000000000E+0
MomentI11 1.96053083333000E-1
MomentI22 1.10833333333000E-1

MomentJ 2.46365914787000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.33000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 30 12070630 "Beam Property 30"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.20000000000000E+0
MomentI11 1.44000000000000E-1
MomentI22 1.00000000000000E-1
MomentJ 2.04444444444000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.20000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 31 15132206 "Beam Property 31"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.07000000000000E+0
MomentI11 1.02086916667000E-1
MomentI22 8.91666666670000E-2
MomentJ 1.62866043614000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.07000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 32 3073674 "Beam Property 32"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5

ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.0000000000000E+0
MomentI11 8.3333333333000E-2
MomentI22 8.3333333333000E-2
MomentJ 1.4066666666700E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.0000000000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 33 13390377 "Beam Property 33"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 8.3894700000000E-1
MomentI11 4.9206483553000E-2
MomentI22 6.9912250000000E-2
MomentJ 9.9999907215000E-2
SectionType SolidRect
B 1.0000000000000E+0
D 8.3894700000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 34 2697676 "Beam Property 34"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 8.7789500000000E-1
MomentI11 5.6382779382000E-2
MomentI22 7.3157916667000E-2
MomentJ 1.0983422501200E-1
SectionType SolidRect
B 1.0000000000000E+0
D 8.7789500000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 35 2739261 "Beam Property 35"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"

Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 9.1684200000000E-1
MomentI11 6.4224725024000E-2
MomentI22 7.6403500000000E-2
MomentJ 1.1974075746000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 9.1684200000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 36 2739384 "Beam Property 36"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 9.5578900000000E-1
MomentI11 7.2762035182000E-2
MomentI22 7.9649083333000E-2
MomentJ 1.2962021791600E-1
SectionType SolidRect
B 1.0000000000000E+0
D 9.5578900000000E-1
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 37 13405993 "Beam Property 37"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 9.9473700000000E-1
MomentI11 8.2024495977000E-2
MomentI22 8.2894750000000E-2
MomentJ 1.3936610790400E-1
SectionType SolidRect
B 1.0000000000000E+0
D 9.9473700000000E-1
CT FALSE
TimeDependentMod Elastic

UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 38 13380024 "Beam Property 38"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.0336840000000E+0
MomentI11 9.2041171153000E-2
MomentI22 8.6140333330000E-2
MomentJ 1.5132983640900E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.0336840000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 39 5426217 "Beam Property 39"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.0726320000000E+0
MomentI11 1.0284211547200E-1
MomentI22 8.9386000000000E-2
MomentJ 1.6370362728400E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.0726320000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 40 2713292 "Beam Property 40"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.1115790000000E+0
MomentI11 1.1445631367700E-1
MomentI22 9.2631583330000E-2

MomentJ 1.76119766938000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.11157900000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 41 13379901 "Beam Property 41"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.15052600000000E+0
MomentI11 1.26913571640000E-1
MomentI22 9.58771666670000E-2
MomentJ 1.88574239573000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.15052600000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 42 6695372 "Beam Property 42"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5
ThermalCond 1.37000000000000E+0
SpecificHeat 8.80000000000000E+2
InstantAlpha FALSE
Area 1.18947400000000E+0
MomentI11 1.40243781816000E-1
MomentI22 9.91228333330000E-2
MomentJ 2.01063600851000E-1
SectionType SolidRect
B 1.00000000000000E+0
D 1.18947400000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 43 9423913 "Beam Property 43"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.74600000000000E+4
ShearMod 1.14420000000000E+4
Poisson 2.00000000000000E-1
UsePoisson TRUE
Density 2.40000000000000E+3
Expansion 1.00000000000000E-5

ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.2284210000000E+0
MomentI11 1.5447579906900E-1
MomentI22 1.0236841666700E-1
MomentJ 2.1358392148400E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.2284210000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 44 2728908 "Beam Property 44"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.2673680000000E+0
MomentI11 1.6963949307100E-1
MomentI22 1.0561400000000E-1
MomentJ 2.2613263798800E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.2673680000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 45 13379962 "Beam Property 45"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.3063160000000E+0
MomentI11 1.8576482918300E-1
MomentI22 1.0885966666700E-1
MomentJ 2.3870753372000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.3063160000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 46 10693068 "Beam Property 46"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"

Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.3452630000000E+0
MomentI11 2.02880518737000E-1
MomentI22 1.12105250000000E-1
MomentJ 2.51305717214000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.3452630000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 47 13421609 "Beam Property 47"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.3842110000000E+0
MomentI11 2.21016981042000E-1
MomentI22 1.15350916667000E-1
MomentJ 2.63925842356000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.3842110000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 48 2739322 "Beam Property 48"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.4231580000000E+0
MomentI11 2.40202824160000E-1
MomentI22 1.18596500000000E-1
MomentJ 2.76565486279000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.4231580000000E+0
CT FALSE
TimeDependentMod Elastic

UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 49 11683620 "Beam Property 49"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.4621050000000E+0
MomentI11 2.60468039268000E-1
MomentI22 1.21842083333000E-1
MomentJ 2.89223387063000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.4621050000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

BeamProp 50 2368690 "Beam Property 50"
MaterialName "Concrete: Compressive Strength fc = 25 MPa"
Modulus 2.7460000000000E+4
ShearMod 1.1442000000000E+4
Poisson 2.0000000000000E-1
UsePoisson TRUE
Density 2.4000000000000E+3
Expansion 1.0000000000000E-5
ThermalCond 1.3700000000000E+0
SpecificHeat 8.8000000000000E+2
InstantAlpha FALSE
Area 1.5010530000000E+0
MomentI11 2.81842728401000E-1
MomentI22 1.25087750000000E-1
MomentJ 3.01898449246000E-1
SectionType SolidRect
B 1.0000000000000E+0
D 1.5010530000000E+0
CT FALSE
TimeDependentMod Elastic
UseMomCurv FALSE
NonLinType Elasticplastic
Hardening Isotropic

/

/ LINEAR STATIC SOLVER DATA

LoadFreedomSetLSA 1 ON
1 2 3 4 5 6 7 8
9

/

/ LINEAR BUCKLING SOLVER DATA

BuckNumModes 4

BuckShift 0.000000000000000E+0

/ _____

/ LOAD INFLUENCE SOLVER DATA

LoadFreedomSetLIA 1 ON
1

/ _____

/ NON-LINEAR STATIC SOLVER DATA

NonLinearIncrement 0 Yes "SLE-QP"

LON1 1.000000000000000E+0
LON2 1.000000000000000E+0
LON3 1.000000000000000E+0
LON4 1.000000000000000E+0
FON1 1.000000000000000E+0
LON5 0.000000000000000E+0
LON6 0.000000000000000E+0
LON7 0.000000000000000E+0

NonLinearStage Unstaged

/ _____

/ NATURAL FREQUENCY SOLVER DATA

FreqNumModes 4

FreqShift 0.000000000000000E+0

FreqIncludeNSMass 1 2 3 4 5 6 7 8
9

FreqModeParticipation FALSE

0.000000000000000E+0 0.000000000000000E+0 0.000000000000000E+0
0.000000000000000E+0 0.000000000000000E+0 0.000000000000000E+0
0.000000000000000E+0 0.000000000000000E+0 0.000000000000000E+0

/ _____

/ HEAT SOLVER DATA

LoadSetHeat 1 2 3 4 5 6 7 8
9

HeatTempLoadCase 1

HeatNonlinear FALSE

/ _____

/ GENERAL SOLVER DATA

SolverTempDependence None

SolverLoadCaseTempDependence 0

SolverActiveStage 0

SturmCheck FALSE

SolverFreedomCase 1

ModalLoadType BaseAcceleration

ModalNodeReactType Element

DampingType Rayleigh

RayleighFactors Frequency

1.00000000000000E+0 1.00000000000000E+1 1.00000000000000E+0 1.00000000000000E+1 1.00000000000000E-2
1.00000000000000E-2

NonLinearGeometry TRUE

NonLinearMaterial TRUE

IncludeCreep FALSE

SolverDefaultsGeneral

SolDefMatrixZeroDiag 1.00000000000000E-20
SolDefConjGradTol 1.00000000000000E-5
SolDefMaxConjGradIter 5000
SolDefMaxNumWarnings 10
SolDefWindowState 3
SolDefReducedLogFile TRUE
SolDefDoResidualsCheck FALSE
SolDefSuppressAllSingularities FALSE

SolverDefaultsElements

SolDefMinDimension 1.00000000000000E-9
SolDefMinInternalAngle 1.50000000000000E+1
SolDefZeroPointForce 1.00000000000000E-6
SolDefZeroDiagonal 1.00000000000000E-20
SolDefBeamMass Lumped
SolDefPlateMass Lumped
SolDefBrickMass Lumped
SolDefBeamLoads Consistent
SolDefPlateLoads Consistent
SolDefBeamSlices 5
SolDefIncludeLinkReactions TRUE

SolverDefaultsDrilling

SolDefZeroTrans 1.00000000000000E-8
SolDefZeroRot 1.00000000000000E-6
SolDrillStiffMult 1.00000000000000E-4
SolDrillZeroEig 1.00000000000000E-6
SolDefMaxNormalsAngle 5.00000000000000E+0
SolDefForceDrillingCheck FALSE

SolverDefaultsIteration

SolDefZeroDisp 1.00000000000000E-8
SolDefDispNormTol 1.00000000000000E-4
SolDefResidualsNormTol 1.00000000000000E-3
SolDefNonlinIterLimit 20
SolDefAddIterations TRUE
SolDefMaxUpdateInterval 5
SolDefMaxDispChange 1.00000000000000E+0
SolDefMaxResidualChange 1.00000000000000E-1
SolDefFormStiffnessMatrix 0
SolDefFormHeatStiffnessMatrix 2
SolDefHeatConvergenceTol 1.00000000000000E-5
SolDefHeatRelaxationFactor 6.66670000000000E-1
SolDefNonlinHeatIterLimit 20

SolverDefaultsSubSteps

SolDefSubStepping 0
SolDefMinLoadReductionFactor 1.00000000000000E-1

SolDefMaxRot 3.0000000000000E+1
SolDefMaxDispRatio 1.0000000000000E-1
SolDefMinArcLength 1.0000000000000E-3
SolDefMaxFibreInc 1.0000000000000E-2
SolDefSaveSubIncrements FALSE
SolDefDynamicAutoSteppingMode 0
SolDefMinTimeStep 1.0000000000000E-3
SolDefConsiderTableSteps FALSE
SolDefSingleShotRestart FALSE
SolDefAutoAssignPathDiv FALSE

SolverDefaultsNonlinear

SolDefIncludeKG TRUE
SolDefAutoScaleKg TRUE
SolDefIgnoreCompressiveBeamKg FALSE
SolDefBeamKgType Simplified
SolDefFiniteStrainDefinition Nominal
SolDefBeamLength Initial
SolDefRatioMNL 5.0000000000000E-1
SolDefZeroContactFactor 1.0000000000000E-6
SolDefSlidingFriction 1.0000000000000E-15
SolDefStickingFriction 1.0000000000000E+0
SolDefFrictionCutoffStrain 1.0000000000000E-5
SolDefScaleSupports TRUE

SolverDefaultsCreep

SolDefTimeStepParam 5.0000000000000E-1
SolDefMinViscoUnits 3
SolDefMaxViscoUnits 6
SolDefCurveFitTime 1.0000000000000E+4
SolDefCurveFitTimeUnit d
SolDefSpacingBias 5.0000000000000E-1
SolDefDoInstantNTA TRUE

SolverDefaultsEigenvalue

SolDefZeroFreq 1.0000000000000E-6
SolDefZeroBuckEigenvalue 1.0000000000000E-10
SolDefExpandWorkingSetBy 6
SolDefEigIterLimit 20
SolDefEigIterTol 1.0000000000000E-5
SolDefEigAutoShift FALSE

SolverDefaultsDynamics

SolDefWilsonTheta 1.3700000000000E+0
SolDefNewmarkBeta 5.0000000000000E-1
SolDefTransientMethod Newmark
SolDefExcludeMassComponents
SolDefIncludeRotMass TRUE

/

/ RESULT OPTIONS

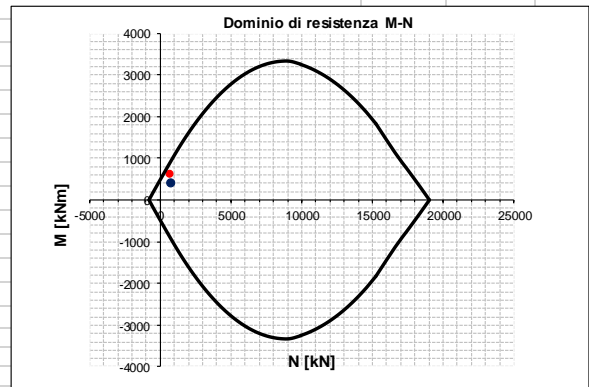
ResultOptions

ResOptsRotationUnit Degrees
ResOptsHRADisplacement Total
ResOptsHRAVelocity Total
ResOptsHRAAcceleration Relative
ResOptsBeamForceMoment Principal
ResOptsStageDisplacement BirthStage

Dettaglio verifiche strutturali nuova galleria artificiale

R20190604_GA_calotta_Mmax

INPUT				OUTPUT				
SOLLECITAZIONI DI VERIFICA				VERIFICHE IN ESERCIZIO				
Combinazione	N_{sd} [kN]	M_{sd} [kNm]	V_{sd} [kN]	Verifica Tensionale			σ limit	
SLE Quasi Permanente	-704.0	289.0	-	Calcestruzzo SLE Quasi Permanente	σ_c [Mpa] =	1.76	11.250	
SLE Frequente	-684.0	337.0	-	Calcestruzzo SLE Rara	σ_c [Mpa] =	2.00	15.000	
SLE Rara	-786.0	327.0	-	Acciaio SLE Rara	σ_s [Mpa] =	17.88	360.000	
SLU	-642.0	640.0	540.0	Verifica di fessurazione			w limit	
SLV	-782.0	401.0	374.0	Combinazione SLE Quasi permanente	w_d [mm] =	0.000	0.200	
				Combinazione SLE Frequente	w_d [mm] =	0.000	0.300	
CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.				VERIFICA DI RESISTENZA A TAGLIO				
Geometria della sezione				Sollecitazioni di progetto				
Base (ortogonale al Taglio)		B [cm]	100	Taglio sollecitante = max Taglio(SLU,SLV)	V_{sd} [kN]	540.0		
Altezza (parallela al Taglio)		H [cm]	129	Sforzo Normale concomitante al massimo taglio	N_{sd} [kN]	-642.0		
Altezza utile della sezione		d [cm]	124	Verifica di resistenza in assenza di armatura specifica				
Area di calcestruzzo		A_c [cm ²]	12900	Resistenza di progetto senza armatura specifica	V_{Rd1} [kN]	452.65		
				Coefficiente di sicurezza	V_{Rd1}/V_{sd}	0.84		
Armatura longitudinale tesa		1° STRATO	2° STRATO	3° STRATO	Verifica di resistenza dell'armatura specifica			
Numero Barre	n	5	0	0	CoTan(θ) di progetto	cotan(θ)	2.5	
Diametro	ϕ [mm]	16	0	0	Resistenza a taglio delle bielle compresse in cls	$V_{Rd2}(\theta)$ [kN]	3047	
Posizione dal lembo esterno	c' [cm]	5.0	0.0	0.0	Resistenza a taglio dell'armatura	$V_{Rd3}(\theta)$ [kN]	857	
Area strato	A_s [cm ²]	10.05	0.00	0.00	Resistenza a taglio di progetto	V_{Rd} [kN]	857	
Rapporto di armatura	ρ [%]		0.081%		Coefficiente di sicurezza	V_{Rd}/V_{sd}	1.59	
Armatura longitudinale compressa		1° STRATO	2° STRATO	3° STRATO	VERIFICA DI RESISTENZA A PRESSO-FLESSIONE			
Numero Barre	n	5	0	0	Sollecitazioni di progetto		SLU	SLV
Diametro	ϕ [mm]	16	0	0	Momento sollecitante	M_{sd} [kNm]	640.0	401.0
Posizione dal lembo esterno	c' [cm]	5.0	0.0	0.0	Sforzo Normale concomitante	N_{sd} [kN]	-642.0	-782.0
Area strato	A_s ' [cm ²]	10.05	0.00	0.00	Verifica di resistenza in termini di momento		SLU	SLV
Rapporto di armatura	ρ' [%]		0.081%		Momento resistente	M_{Rd} [kNm]	866.4	948.2
Armatura trasversale		1° TIPO	2° TIPO	3° TIPO	Coefficiente di sicurezza	M_{Rd}/M_{sd}	1.35	2.36
Diametro	ϕ [mm]	10	0	0	Verifica di resistenza in termini di sforzo normale		SLU	SLV
Numero bracci	n_{bi}	2	0	0	Sforzo normale resistente	N_{Rd} [kN]	-	-
Passo	s_w [cm]	20	0	0	Coefficiente di sicurezza	N_{Rd}/N_{sd}	-	-
Inclinazione	α [deg]	90	90	90	CARATTERISTICHE REOLOGICHE DEI MATERIALI			
Area armatura a metro	A_{sw}/s_w [cm ² /m]	7.85	0.00	0.00	Concrete			
					Resistenza cubica a compressione	RCK	30	
					Resistenza cilindrica caratteristica a compressione	f_{ck} [Mpa]	25.00	
					Resistenza cilindrica media a compressione	f_{cm} [Mpa]	33.00	
					Resistenza media a trazione per flessione	f_{ctm} [Mpa]	2.56	
					Resistenza caratteristica a trazione per flessione	f_{ctk} [Mpa]	1.80	
					Resistenza di progetto a compressione	f_{cd} [Mpa]	14.17	
					Resistenza di progetto delle bielle compresse	f_{cd} ' [Mpa]	7.65	
					Acciaio			
					Resistenza di progetto a snervamento	f_{yd} [Mpa]	391.30	



R20190604_GA_calotta_Nmax

INPUT

SOLLECITAZIONI DI VERIFICA

Combinazione	N _{sd} [kN]	M _{sd} [kNm]	V _{sd} [kN]
SLE Quasi Permanente	-704.0	289.0	-
SLE Frequente	-684.0	337.0	-
SLE Rara	-786.0	327.0	-
SLU	-1151.0	66.0	540.0
SLV	-796.0	239.0	374.0

CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.

Geometria della sezione				
Base (ortogonale al Taglio)		B [cm]	100	
Altezza (parallela al Taglio)		H [cm]	129	
Altezza utile della sezione		d [cm]	124	
Area di calcestruzzo		A _c [cm ²]	12900	
Armatura longitudinale tesa				
	1° STRATO	2° STRATO	3° STRATO	
Numero Barre	n	5	0	0
Diametro	φ [mm]	16	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	A _s [cm ²]	10.05	0.00	0.00
Rapporto di armatura	ρ [%]	0.081%		
Armatura longitudinale compressa				
	1° STRATO	2° STRATO	3° STRATO	
Numero Barre	n	5	0	0
Diametro	φ [mm]	16	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	A _s ' [cm ²]	10.05	0.00	0.00
Rapporto di armatura	ρ' [%]	0.081%		
Armatura trasversale				
	1° TIPO	2° TIPO	3° TIPO	
Diametro	φ [mm]	10	0	0
Numero bracci	n _{bi}	2	0	0
Passo	s _w [cm]	20	0	0
Inclinazione	α [deg]	90	90	90
Area armatura a metro	A _{sw} /s _w [cm ² /m]	7.85	0.00	0.00

CARATTERISTICHE REOLOGICHE DEI MATERIALI

Concrete			
Resistenza cubica a compressione		RCK	30
Resistenza cilindrica caratteristica a compressione		f _{ck} [Mpa]	25.00
Resistenza cilindrica media a compressione		f _{cm} [Mpa]	33.00
Resistenza media a trazione per flessione		f _{ctm} [Mpa]	2.56
Resistenza caratteristica a trazione per flessione		f _{ctk} [Mpa]	1.80
Resistenza di progetto a compressione		f _{cd} [Mpa]	14.17
Resistenza di progetto delle bielle compresse		f _{cd} ' [Mpa]	7.65
Acciaio			
Resistenza di progetto a snervamento		f _{yd} [Mpa]	391.30

OUTPUT

VERIFICHE IN ESERCIZIO

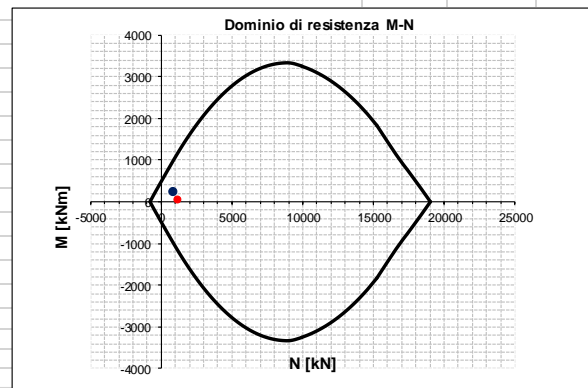
Verifica Tensionale			
Calcestruzzo SLE Quasi Permanente	σ _c [Mpa] =	1.76	σ limit 11.250
Calcestruzzo SLE Rara	σ _c [Mpa] =	2.00	15.000
Acciaio SLE Rara	σ _s [Mpa] =	17.88	360.000
Verifica di fessurazione			
			w limit
Combinazione SLE Quasi permanente	w _d [mm] =	0.000	0.200
Combinazione SLE Frequente	w _d [mm] =	0.000	0.300

VERIFICA DI RESISTENZA A TAGLIO

Sollecitazioni di progetto			
Taglio sollecitante = max Taglio(SLU,SLV)		V _{sd} [kN]	540.0
Sforzo Normale concomitante al massimo taglio		N _{sd} [kN]	-1151.0
Verifica di resistenza in assenza di armatura specifica			
Resistenza di progetto senza armatura specifica		V _{Rd1} [kN]	526.04
Coefficiente di sicurezza		V _{Rd1} /V _{sd}	0.97
Verifica di resistenza dell'armatura specifica			
CoTan(θ) di progetto		cotan(θ)	2.5
Resistenza a taglio delle bielle compresse in cls		V _{Rd2} (θ) [kN]	3129
Resistenza a taglio dell'armatura		V _{Rd3} (θ) [kN]	857
Resistenza a taglio di progetto		V _{Rd} [kN]	857
Coefficiente di sicurezza		V _{Rd} /V _{sd}	1.59

VERIFICA DI RESISTENZA A PRESSO-FLESSIONE

Sollecitazioni di progetto			
		SLU	SLV
Momento sollecitante	M _{sd} [kNm]	66.0	239.0
Sforzo Normale concomitante	N _{sd} [kN]	-1151.0	-796.0
Verifica di resistenza in termini di momento			
		SLU	SLV
Momento resistente	M _{Rd} [kNm]	1160.8	956.3
Coefficiente di sicurezza	M _{Rd} /M _{sd}	17.59	4.00
Verifica di resistenza in termini di sforzo normale			
		SLU	SLV
Sforzo normale resistente	N _{Rd} [kN]	-	-
Coefficiente di sicurezza	N _{Rd} /N _{sd}	-	-



R20190604_GA_calotta_sp.0.70m

INPUT

SOLLECITAZIONI DI VERIFICA

Combinazione	N _{sd} [kN]	M _{sd} [kNm]	V _{sd} [kN]
SLE Quasi Permanente	-706.0	31.0	-
SLE Frequente	-734.0	48.0	-
SLE Rara	-791.0	37.0	-
SLU	-1045.0	113.0	90.0
SLV	-782.0	52.0	120.0

CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.

Geometria della sezione				
Base (ortogonale al Taglio)		B [cm]	100	
Altezza (parallela al Taglio)		H [cm]	70	
Altezza utile della sezione		d [cm]	65	
Area di calcestruzzo		A _c [cm ²]	7000	
Armatura longitudinale tesa				
	1° STRATO	2° STRATO	3° STRATO	
Numero Barre	n	5	0	0
Diametro	φ [mm]	16	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	A _s [cm ²]	10.05	0.00	0.00
Rapporto di armatura	ρ [%]	0.155%		
Armatura longitudinale compressa				
	1° STRATO	2° STRATO	3° STRATO	
Numero Barre	n	5	0	0
Diametro	φ [mm]	16	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	A _s ' [cm ²]	10.05	0.00	0.00
Rapporto di armatura	ρ' [%]	0.155%		
Armatura trasversale				
	1° TIPO	2° TIPO	3° TIPO	
Diametro	φ [mm]	10	0	0
Numero bracci	n _{bi}	2	0	0
Passo	s _w [cm]	20	0	0
Inclinazione	α [deg]	90	90	90
Area armatura a metro	A _{sw} /s _w [cm ² /m]	7.85	0.00	0.00

CARATTERISTICHE REOLOGICHE DEI MATERIALI

Concrete		
Resistenza cubica a compressione	RCK	30
Resistenza cilindrica caratteristica a compressione	f _{ck} [Mpa]	25.00
Resistenza cilindrica media a compressione	f _{cm} [Mpa]	33.00
Resistenza media a trazione per flessione	f _{ctm} [Mpa]	2.56
Resistenza caratteristica a trazione per flessione	f _{ctk} [Mpa]	1.80
Resistenza di progetto a compressione	f _{cd} [Mpa]	14.17
Resistenza di progetto delle bielle compresse	f _{cd'} [Mpa]	7.65
Acciaio		
Resistenza di progetto a snervamento	f _{yd} [Mpa]	391.30

OUTPUT

VERIFICHE IN ESERCIZIO

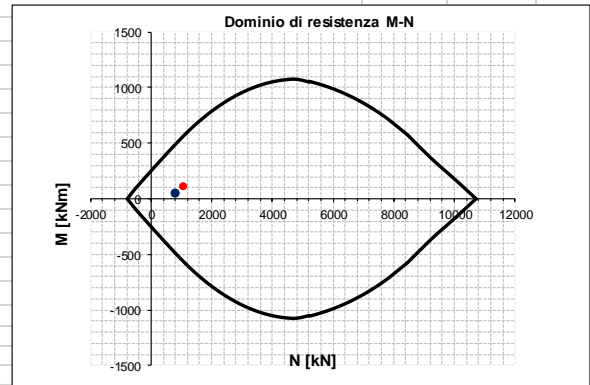
Verifica Tensionale			σ limit
Calcestruzzo SLE Quasi Permanente	σ _c [Mpa] =	1.31	11.250
Calcestruzzo SLE Rara	σ _c [Mpa] =	1.50	15.000
Acciaio SLE Rara	σ _s [Mpa] =	-10.93	360.000
Verifica di fessurazione			w limit
Combinazione SLE Quasi permanente	w _d [mm] =	0.000	0.200
Combinazione SLE Frequente	w _d [mm] =	0.000	0.300

VERIFICA DI RESISTENZA A TAGLIO

Sollecitazioni di progetto			
Taglio sollecitante = max Taglio(SLU,SLV)		V _{sd} [kN]	120.0
Sforzo Normale concomitante al massimo taglio		N _{sd} [kN]	-782.0
Verifica di resistenza in assenza di armatura specifica			
Resistenza di progetto senza armatura specifica		V _{Rd1} [kN]	329.43
Coefficiente di sicurezza		V _{Rd1} /V _{sd}	2.75
Verifica di resistenza dell'armatura specifica			
CoTan(θ) di progetto		cotan(θ)	2.5
Resistenza a taglio delle bielle compresse in cls		V _{Rd2} (θ) [kN]	1665
Resistenza a taglio dell'armatura		V _{Rd3} (θ) [kN]	449
Resistenza a taglio di progetto		V _{Rd} [kN]	449
Coefficiente di sicurezza		V _{Rd} /V _{sd}	3.75

VERIFICA DI RESISTENZA A PRESSO-FLESSIONE

Sollecitazioni di progetto			
		SLU	SLV
Momento sollecitante	M _{sd} [kNm]	113.0	52.0
Sforzo Normale concomitante	N _{sd} [kN]	-1045.0	-782.0
Verifica di resistenza in termini di momento			
		SLU	SLV
Momento resistente	M _{Rd} [kNm]	560.4	485.9
Coefficiente di sicurezza	M _{Rd} /M _{sd}	4.96	9.34
Verifica di resistenza in termini di sforzo normale			
		SLU	SLV
Sforzo normale resistente	N _{Rd} [kN]	-	-
Coefficiente di sicurezza	N _{Rd} /N _{sd}	-	-



R20190604_GA_piedritti_Mmax

INPUT

SOLLECITAZIONI DI VERIFICA

Combinazione	N _{sd} [kN]	M _{sd} [kNm]	V _{sd} [kN]
SLE Quasi Permanente	-982.0	636.0	-
SLE Frequente	-1052.0	677.0	-
SLE Rara	-1075.0	694.0	-
SLU	-951.0	929.0	695.0
SLV	-936.0	723.0	578.0

CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.

Geometria della sezione				
Base (ortogonale al Taglio)	B [cm]	100		
Altezza (parallela al Taglio)	H [cm]	135		
Altezza utile della sezione	d [cm]	130		
Area di calcestruzzo	A _c [cm ²]	13500		
Armatura longitudinale tesa				
	1° STRATO	2° STRATO	3° STRATO	
Numero Barre	n	5	0	0
Diametro	φ [mm]	18	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	A _s [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ [%]	0.098%		
Armatura longitudinale compressa				
	1° STRATO	2° STRATO	3° STRATO	
Numero Barre	n	5	0	0
Diametro	φ [mm]	18	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	A _s ' [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ' [%]	0.098%		
Armatura trasversale				
	1° TIPO	2° TIPO	3° TIPO	
Diametro	φ [mm]	10	0	0
Numero bracci	n _{bi}	2	0	0
Passo	s _w [cm]	20	0	0
Inclinazione	α [deg]	90	90	90
Area armatura a metro	A _{sw} /s _w [cm ² /m]	7.85	0.00	0.00

CARATTERISTICHE REOLOGICHE DEI MATERIALI

Concrete			
Resistenza cubica a compressione	RCK	30	
Resistenza cilindrica caratteristica a compressione	f _{ck} [Mpa]	25.00	
Resistenza cilindrica media a compressione	f _{cm} [Mpa]	33.00	
Resistenza media a trazione per flessione	f _{ctm} [Mpa]	2.56	
Resistenza caratteristica a trazione per flessione	f _{ctk} [Mpa]	1.80	
Resistenza di progetto a compressione	f _{cd} [Mpa]	14.17	
Resistenza di progetto delle bielle compresse	f _{cd} ' [Mpa]	7.65	
Acciaio			
Resistenza di progetto a snervamento	f _{yd} [Mpa]	391.30	

OUTPUT

VERIFICHE IN ESERCIZIO

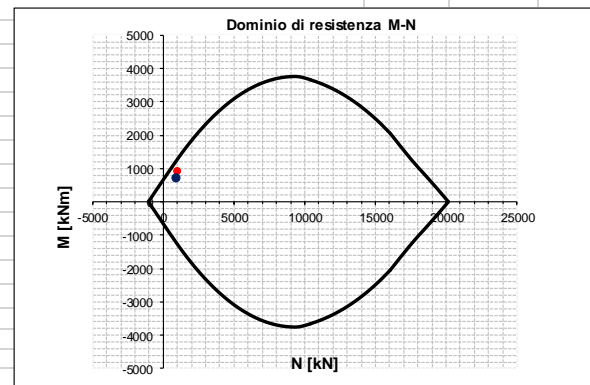
Verifica Tensionale			
Calcestruzzo SLE Quasi Permanente	σ _c [Mpa] =	4.02	σ limit 11.250
Calcestruzzo SLE Rara	σ _c [Mpa] =	4.38	15.000
Acciaio SLE Rara	σ _s [Mpa] =	100.10	360.000
Verifica di fessurazione			
			w limit
Combinazione SLE Quasi permanente	w _d [mm] =	0.000	0.200
Combinazione SLE Frequente	w _d [mm] =	0.000	0.300

VERIFICA DI RESISTENZA A TAGLIO

Sollecitazioni di progetto			
Taglio sollecitante = max Taglio(SLU,SLV)	V _{sd} [kN]	695.0	
Sforzo Normale concomitante al massimo taglio	N _{sd} [kN]	-951.0	
Verifica di resistenza in assenza di armatura specifica			
Resistenza di progetto senza armatura specifica	V _{Rd1} [kN]	511.09	
Coefficiente di sicurezza	V _{Rd1} /V _{sd}	0.74	
Verifica di resistenza dell'armatura specifica			
CoTan(θ) di progetto	cotan(θ)	2.5	
Resistenza a taglio delle bielle compresse in cls	V _{Rd2} (θ) [kN]	3240	
Resistenza a taglio dell'armatura	V _{Rd3} (θ) [kN]	899	
Resistenza a taglio di progetto	V _{Rd} [kN]	899	
Coefficiente di sicurezza	V _{Rd} /V _{sd}	1.29	

VERIFICA DI RESISTENZA A PRESSO-FLESSIONE

Sollecitazioni di progetto			
		SLU	SLV
Momento sollecitante	M _{sd} [kNm]	929.0	723.0
Sforzo Normale concomitante	N _{sd} [kN]	-951.0	-936.0
Verifica di resistenza in termini di momento			
		SLU	SLV
Momento resistente	M _{Rd} [kNm]	1228.3	1219.2
Coefficiente di sicurezza	M _{Rd} /M _{sd}	1.32	1.69
Verifica di resistenza in termini di sforzo normale			
		SLU	SLV
Sforzo normale resistente	N _{Rd} [kN]	-	-
Coefficiente di sicurezza	N _{Rd} /N _{sd}	-	-



R20190604_GA_piedritti_Nmax

INPUT

SOLLECITAZIONI DI VERIFICA

Combinazione	N _{sd} [kN]	M _{sd} [kNm]	V _{sd} [kN]
SLE Quasi Permanente	-982.0	636.0	-
SLE Frequente	-1052.0	677.0	-
SLE Rara	-1075.0	694.0	-
SLU	-1476.0	653.0	695.0
SLV	-1070.0	612.0	578.0

CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.

Geometria della sezione				
Base (ortogonale al Taglio)		B [cm]	100	
Altezza (parallela al Taglio)		H [cm]	135	
Altezza utile della sezione		d [cm]	130	
Area di calcestruzzo		A _c [cm ²]	13500	
Armatura longitudinale tesa				
	1° STRATO	2° STRATO	3° STRATO	
Numero Barre	n	5	0	0
Diametro	φ [mm]	18	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	A _s [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ [%]	0.098%		
Armatura longitudinale compressa				
	1° STRATO	2° STRATO	3° STRATO	
Numero Barre	n	5	0	0
Diametro	φ [mm]	18	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	A _s ' [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ' [%]	0.098%		
Armatura trasversale				
	1° TIPO	2° TIPO	3° TIPO	
Diametro	φ [mm]	10	0	0
Numero bracci	n _{bi}	2	0	0
Passo	s _w [cm]	20	0	0
Inclinazione	α [deg]	90	90	90
Area armatura a metro	A _{sw} /s _w [cm ² /m]	7.85	0.00	0.00

CARATTERISTICHE REOLOGICHE DEI MATERIALI

Concrete			
Resistenza cubica a compressione		RCK	30
Resistenza cilindrica caratteristica a compressione		f _{ck} [Mpa]	25.00
Resistenza cilindrica media a compressione		f _{cm} [Mpa]	33.00
Resistenza media a trazione per flessione		f _{ctm} [Mpa]	2.56
Resistenza caratteristica a trazione per flessione		f _{ctk} [Mpa]	1.80
Resistenza di progetto a compressione		f _{cd} [Mpa]	14.17
Resistenza di progetto delle bielle compresse		f _{cd} ' [Mpa]	7.65
Acciaio			
Resistenza di progetto a snervamento		f _{yd} [Mpa]	391.30

OUTPUT

VERIFICHE IN ESERCIZIO

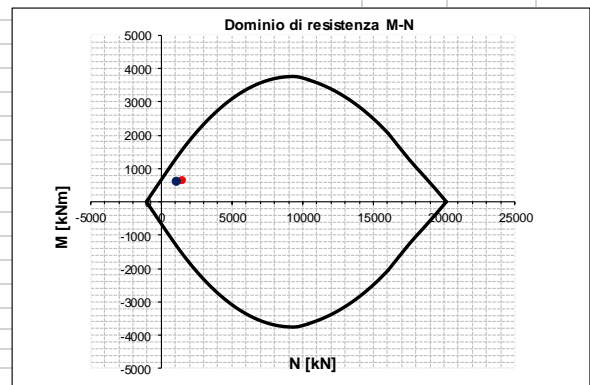
Verifica Tensionale				σ limit
Calcestruzzo SLE Quasi Permanente	σ _c [Mpa] =	4.02		11.250
Calcestruzzo SLE Rara	σ _c [Mpa] =	4.38		15.000
Acciaio SLE Rara	σ _s [Mpa] =	100.10		360.000
Verifica di fessurazione				w limit
Combinazione SLE Quasi permanente	w _d [mm] =	0.000	0.200	
Combinazione SLE Frequente	w _d [mm] =	0.000	0.300	

VERIFICA DI RESISTENZA A TAGLIO

Sollecitazioni di progetto			
Taglio sollecitante = max Taglio(SLU,SLV)		V _{sd} [kN]	695.0
Sforzo Normale concomitante al massimo taglio		N _{sd} [kN]	-1476.0
Verifica di resistenza in assenza di armatura specifica			
Resistenza di progetto senza armatura specifica		V _{Rd1} [kN]	586.92
Coefficiente di sicurezza		V _{Rd1} /V _{sd}	0.84
Verifica di resistenza dell'armatura specifica			
CoTan(θ) di progetto		cotan(θ)	2.5
Resistenza a taglio delle bielle compresse in cls		V _{Rd2} (θ) [kN]	3325
Resistenza a taglio dell'armatura		V _{Rd3} (θ) [kN]	899
Resistenza a taglio di progetto		V _{Rd} [kN]	899
Coefficiente di sicurezza		V _{Rd} /V _{sd}	1.29

VERIFICA DI RESISTENZA A PRESSO-FLESSIONE

Sollecitazioni di progetto			
		SLU	SLV
Momento sollecitante	M _{sd} [kNm]	653.0	612.0
Sforzo Normale concomitante	N _{sd} [kN]	-1476.0	-1070.0
Verifica di resistenza in termini di momento			
		SLU	SLV
Momento resistente	M _{Rd} [kNm]	1539.4	1300.6
Coefficiente di sicurezza	M _{Rd} /M _{sd}	2.36	2.13
Verifica di resistenza in termini di sforzo normale			
		SLU	SLV
Sforzo normale resistente	N _{Rd} [kN]	-	-
Coefficiente di sicurezza	N _{Rd} /N _{sd}	-	-



R20190604_GA_piedritti_sp min.0.70m

INPUT

SOLLECITAZIONI DI VERIFICA

Combinazione	N _{sd} [kN]	M _{sd} [kNm]	V _{sd} [kN]
SLE Quasi Permanente	-791.0	23.0	-
SLE Frequente	-776.0	48.0	-
SLE Rara	-873.0	25.0	-
SLU	-1226.0	247.0	120.0
SLV	-866.0	66.0	146.0

CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.

Geometria della sezione			
Base (ortogonale al Taglio)	B [cm]	100	
Altezza (parallela al Taglio)	H [cm]	70	
Altezza utile della sezione	d [cm]	65	
Area di calcestruzzo	A _c [cm ²]	7000	

Armatura longitudinale tesa				
	1° STRATO	2° STRATO	3° STRATO	
Numero Barre	n	5	0	0
Diametro	φ [mm]	18	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	A _s [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ [%]	0.196%		

Armatura longitudinale compressa				
	1° STRATO	2° STRATO	3° STRATO	
Numero Barre	n	5	0	0
Diametro	φ [mm]	18	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	A _s ' [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ' [%]	0.196%		

Armatura trasversale				
	1° TIPO	2° TIPO	3° TIPO	
Diametro	φ [mm]	10	0	0
Numero bracci	n _{bi}	2	0	0
Passo	s _w [cm]	20	0	0
Inclinazione	α [deg]	90	90	90
Area armatura a metro	A _{sw} /s _w [cm ² /m]	7.85	0.00	0.00

CARATTERISTICHE REOLOGICHE DEI MATERIALI

Concrete		
Resistenza cubica a compressione	RCK	30
Resistenza cilindrica caratteristica a compressione	f _{ck} [Mpa]	25.00
Resistenza cilindrica media a compressione	f _{cm} [Mpa]	33.00
Resistenza media a trazione per flessione	f _{ctm} [Mpa]	2.56
Resistenza caratteristica a trazione per flessione	f _{ctk} [Mpa]	1.80
Resistenza di progetto a compressione	f _{cd} [Mpa]	14.17
Resistenza di progetto delle bielle compresse	f _{cd'} [Mpa]	7.65
Acciaio		
Resistenza di progetto a snervamento	f _{yd} [Mpa]	391.30

OUTPUT

VERIFICHE IN ESERCIZIO

Verifica Tensionale			σ limit
Calcestruzzo SLE Quasi Permanente	σ _c [Mpa] =	1.32	11.250
Calcestruzzo SLE Rara	σ _c [Mpa] =	1.46	15.000
Acciaio SLE Rara	σ _s [Mpa] =	-14.23	360.000

Verifica di fessurazione			w limit
Combinazione SLE Quasi permanente	w _d [mm] =	0.000	0.200
Combinazione SLE Frequente	w _d [mm] =	0.000	0.300

VERIFICA DI RESISTENZA A TAGLIO

Sollecitazioni di progetto			
Taglio sollecitante = max Taglio(SLU,SLV)		V _{sd} [kN]	146.0
Sforzo Normale concomitante al massimo taglio		N _{sd} [kN]	-866.0

Verifica di resistenza in assenza di armatura specifica			
Resistenza di progetto senza armatura specifica		V _{Rd1} [kN]	341.13
Coefficiente di sicurezza		V _{Rd1} /V _{sd}	2.34

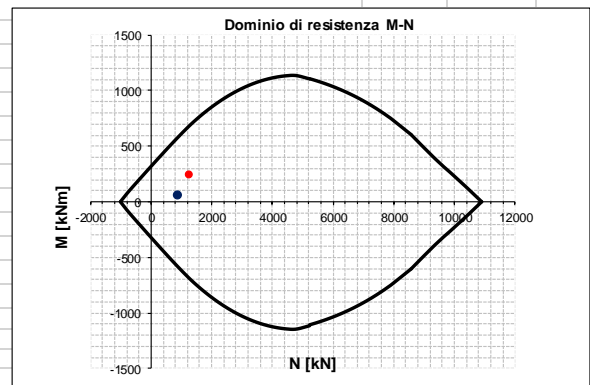
Verifica di resistenza dell'armatura specifica			
CoTan(θ) di progetto		cotan(θ)	2.5
Resistenza a taglio delle bielle compresse in cls		V _{Rd2} (θ) [kN]	1678
Resistenza a taglio dell'armatura		V _{Rd3} (θ) [kN]	449
Resistenza a taglio di progetto		V _{Rd} [kN]	449
Coefficiente di sicurezza		V _{Rd} /V _{sd}	3.08

VERIFICA DI RESISTENZA A PRESSO-FLESSIONE

Sollecitazioni di progetto			
		SLU	SLV
Momento sollecitante		M _{sd} [kNm]	247.0 66.0
Sforzo Normale concomitante		N _{sd} [kN]	-1226.0 -866.0

Verifica di resistenza in termini di momento			
		SLU	SLV
Momento resistente		M _{Rd} [kNm]	672.2 572.3
Coefficiente di sicurezza		M _{Rd} /M _{sd}	2.72 8.67

Verifica di resistenza in termini di sforzo normale			
		SLU	SLV
Sforzo normale resistente		N _{Rd} [kN]	- -
Coefficiente di sicurezza		N _{Rd} /N _{sd}	- -



R20190604_GA_arco rovescio_Mmax

INPUT

SOLLECITAZIONI DI VERIFICA

Combinazione	N _{sd} [kN]	M _{sd} [kNm]	V _{sd} [kN]
SLE Quasi Permanente	-901.0	636.0	0
SLE Frequente	-961.0	677.0	0
SLE Rara	-983.0	694.0	0
SLU	-933.0	929.0	958.0
SLV	-861.0	723.0	748.0

CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.

Geometria della sezione				
Base (ortogonale al Taglio)		B [cm]	100	
Altezza (parallela al Taglio)		H [cm]	134	
Altezza utile della sezione		d [cm]	129	
Area di calcestruzzo		A _c [cm ²]	13400	
Armatura longitudinale tesa				
	1° STRATO	2° STRATO	3° STRATO	
Numero Barre	n	5	0	0
Diametro	φ [mm]	18	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	A _s [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ [%]	0.099%		
Armatura longitudinale compressa				
	1° STRATO	2° STRATO	3° STRATO	
Numero Barre	n	5	0	0
Diametro	φ [mm]	18	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	A _s ' [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ' [%]	0.099%		
Armatura trasversale				
	1° TIPO	2° TIPO	3° TIPO	
Diametro	φ [mm]	10	0	0
Numero bracci	n _{bi}	2	0	0
Passo	s _w [cm]	20	0	0
Inclinazione	α [deg]	90	90	90
Area armatura a metro	A _{sw} /s _w [cm ² /m]	7.85	0.00	0.00

CARATTERISTICHE REOLOGICHE DEI MATERIALI

Concrete			
Resistenza cubica a compressione		RCK	30
Resistenza cilindrica caratteristica a compressione		f _{ck} [Mpa]	25.00
Resistenza cilindrica media a compressione		f _{cm} [Mpa]	33.00
Resistenza media a trazione per flessione		f _{ctm} [Mpa]	2.56
Resistenza caratteristica a trazione per flessione		f _{ctk} [Mpa]	1.80
Resistenza di progetto a compressione		f _{cd} [Mpa]	14.17
Resistenza di progetto delle bielle compresse		f _{cd} ' [Mpa]	7.65
Acciaio			
Resistenza di progetto a snervamento		f _{yd} [Mpa]	391.30

OUTPUT

VERIFICHE IN ESERCIZIO

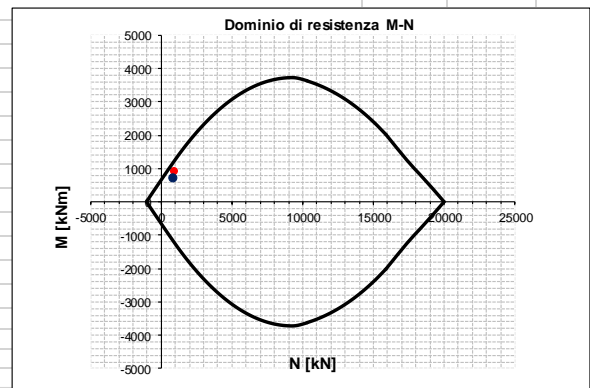
Verifica Tensionale				σ limit
Calcestruzzo SLE Quasi Permanente	σ _c [Mpa] =	4.21		11.250
Calcestruzzo SLE Rara	σ _c [Mpa] =	4.60		15.000
Acciaio SLE Rara	σ _s [Mpa] =	123.59		360.000
Verifica di fessurazione				w limit
Combinazione SLE Quasi permanente	w _d [mm] =	0.000		0.200
Combinazione SLE Frequente	w _d [mm] =	0.000		0.300

VERIFICA DI RESISTENZA A TAGLIO

Sollecitazioni di progetto			
Taglio sollecitante = max Taglio(SLU,SLV)		V _{sd} [kN]	958.0
Sforzo Normale concomitante al massimo taglio		N _{sd} [kN]	-933.0
Verifica di resistenza in assenza di armatura specifica			
Resistenza di progetto senza armatura specifica		V _{Rd1} [kN]	506.18
Coefficiente di sicurezza		V _{Rd1} /V _{sd}	0.53
Verifica di resistenza dell'armatura specifica			
CoTan(θ) di progetto		cotan(θ)	2.5
Resistenza a taglio delle bielle compresse in cls		V _{Rd2} (θ) [kN]	3213
Resistenza a taglio dell'armatura		V _{Rd3} (θ) [kN]	892
Resistenza a taglio di progetto		V _{Rd} [kN]	892
Coefficiente di sicurezza		V _{Rd} /V _{sd}	0.93

VERIFICA DI RESISTENZA A PRESSO-FLESSIONE

Sollecitazioni di progetto			
		SLU	SLV
Momento sollecitante	M _{sd} [kNm]	929.0	723.0
Sforzo Normale concomitante	N _{sd} [kN]	-933.0	-861.0
Verifica di resistenza in termini di momento			
		SLU	SLV
Momento resistente	M _{Rd} [kNm]	1207.8	1164.4
Coefficiente di sicurezza	M _{Rd} /M _{sd}	1.30	1.61
Verifica di resistenza in termini di sforzo normale			
		SLU	SLV
Sforzo normale resistente	N _{Rd} [kN]	-	-
Coefficiente di sicurezza	N _{Rd} /N _{sd}	-	-



R20190604_GA_arco rovescio_Nmax

INPUT

SOLLECITAZIONI DI VERIFICA

Combinazione	N _{sd} [kN]	M _{sd} [kNm]	V _{sd} [kN]
SLE Quasi Permanente	-901.0	636.0	0
SLE Frequente	-961.0	677.0	0
SLE Rara	-983.0	694.0	0
SLU	-1294.0	653.0	958.0
SLV	-973.0	612.0	748.0

CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.

Geometria della sezione				
Base (ortogonale al Taglio)		B [cm]	100	
Altezza (parallela al Taglio)		H [cm]	134	
Altezza utile della sezione		d [cm]	129	
Area di calcestruzzo		A _c [cm ²]	13400	
Armatura longitudinale tesa				
	1° STRATO	2° STRATO	3° STRATO	
Numero Barre	n	5	0	0
Diametro	φ [mm]	18	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	A _s [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ [%]	0.099%		
Armatura longitudinale compressa				
	1° STRATO	2° STRATO	3° STRATO	
Numero Barre	n	5	0	0
Diametro	φ [mm]	18	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	A _s ' [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ' [%]	0.099%		
Armatura trasversale				
	1° TIPO	2° TIPO	3° TIPO	
Diametro	φ [mm]	10	0	0
Numero bracci	n _{bi}	2	0	0
Passo	s _w [cm]	20	0	0
Inclinazione	α [deg]	90	90	90
Area armatura a metro	A _{sw} /s _w [cm ² /m]	7.85	0.00	0.00

CARATTERISTICHE REOLOGICHE DEI MATERIALI

Concrete			
Resistenza cubica a compressione		RCK	30
Resistenza cilindrica caratteristica a compressione		f _{ck} [Mpa]	25.00
Resistenza cilindrica media a compressione		f _{cm} [Mpa]	33.00
Resistenza media a trazione per flessione		f _{ctm} [Mpa]	2.56
Resistenza caratteristica a trazione per flessione		f _{ctk} [Mpa]	1.80
Resistenza di progetto a compressione		f _{cd} [Mpa]	14.17
Resistenza di progetto delle bielle compresse		f _{cd} ' [Mpa]	7.65
Acciaio			
Resistenza di progetto a snervamento		f _{yd} [Mpa]	391.30

OUTPUT

VERIFICHE IN ESERCIZIO

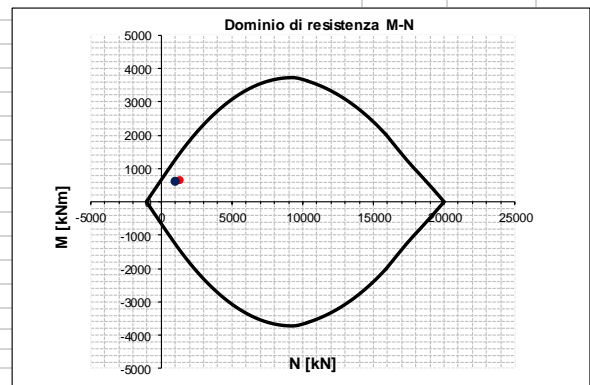
Verifica Tensionale			
Calcestruzzo SLE Quasi Permanente	σ _c [Mpa] =	4.21	σ limit 11.250
Calcestruzzo SLE Rara	σ _c [Mpa] =	4.60	15.000
Acciaio SLE Rara	σ _s [Mpa] =	123.59	360.000
Verifica di fessurazione			
			w limit
Combinazione SLE Quasi permanente	w _d [mm] =	0.000	0.200
Combinazione SLE Frequente	w _d [mm] =	0.000	0.300

VERIFICA DI RESISTENZA A TAGLIO

Sollecitazioni di progetto			
Taglio sollecitante = max Taglio(SLU,SLV)		V _{sd} [kN]	958.0
Sforzo Normale concomitante al massimo taglio		N _{sd} [kN]	-1294.0
Verifica di resistenza in assenza di armatura specifica			
Resistenza di progetto senza armatura specifica		V _{Rd1} [kN]	558.31
Coefficiente di sicurezza		V _{Rd1} /V _{sd}	0.58
Verifica di resistenza dell'armatura specifica			
CoTan(θ) di progetto		cotan(θ)	2.5
Resistenza a taglio delle bielle compresse in cls		V _{Rd2} (θ) [kN]	3271
Resistenza a taglio dell'armatura		V _{Rd3} (θ) [kN]	892
Resistenza a taglio di progetto		V _{Rd} [kN]	892
Coefficiente di sicurezza		V _{Rd} /V _{sd}	0.93

VERIFICA DI RESISTENZA A PRESSO-FLESSIONE

Sollecitazioni di progetto			
		SLU	SLV
Momento sollecitante	M _{sd} [kNm]	653.0	612.0
Sforzo Normale concomitante	N _{sd} [kN]	-1294.0	-973.0
Verifica di resistenza in termini di momento			
		SLU	SLV
Momento resistente	M _{Rd} [kNm]	1421.9	1231.9
Coefficiente di sicurezza	M _{Rd} /M _{sd}	2.18	2.01
Verifica di resistenza in termini di sforzo normale			
		SLU	SLV
Sforzo normale resistente	N _{Rd} [kN]	-	-
Coefficiente di sicurezza	N _{Rd} /N _{sd}	-	-



R20190604_GA_arco rovescio_sp.0.70m

INPUT

SOLLECITAZIONI DI VERIFICA

Combinazione	N _{sd} [kN]	M _{sd} [kNm]	V _{sd} [kN]
SLE Quasi Permanente	-830.0	186.0	0
SLE Frequente	-885.0	199.0	0
SLE Rara	-904.0	203.0	0
SLU	-1190.0	272.0	70.0
SLV	-895.0	201.0	102.0

CARATTERISTICHE GEOMETRICHE DELLA SEZIONE IN C.A.

Geometria della sezione				
Base (ortogonale al Taglio)		B [cm]	100	
Altezza (parallela al Taglio)		H [cm]	70	
Altezza utile della sezione		d [cm]	65	
Area di calcestruzzo		A _c [cm ²]	7000	
Armatura longitudinale tesa				
	1° STRATO	2° STRATO	3° STRATO	
Numero Barre	n	5	0	0
Diametro	φ [mm]	18	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	A _s [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ [%]	0.196%		
Armatura longitudinale compressa				
	1° STRATO	2° STRATO	3° STRATO	
Numero Barre	n	5	0	0
Diametro	φ [mm]	18	0	0
Posizione dal lembo esterno	c [cm]	5.0	0.0	0.0
Area strato	A _s ' [cm ²]	12.72	0.00	0.00
Rapporto di armatura	ρ' [%]	0.196%		
Armatura trasversale				
	1° TIPO	2° TIPO	3° TIPO	
Diametro	φ [mm]	10	0	0
Numero bracci	n _{bi}	2	0	0
Passo	s _w [cm]	20	0	0
Inclinazione	α [deg]	90	90	90
Area armatura a metro	A _{sw} /s _w [cm ² /m]	7.85	0.00	0.00

CARATTERISTICHE REOLOGICHE DEI MATERIALI

Concrete		
Resistenza cubica a compressione	RCK	30
Resistenza cilindrica caratteristica a compressione	f _{ck} [Mpa]	25.00
Resistenza cilindrica media a compressione	f _{cm} [Mpa]	33.00
Resistenza media a trazione per flessione	f _{ctm} [Mpa]	2.56
Resistenza caratteristica a trazione per flessione	f _{ctk} [Mpa]	1.80
Resistenza di progetto a compressione	f _{cd} [Mpa]	14.17
Resistenza di progetto delle bielle compresse	f _{cd'} [Mpa]	7.65
Acciaio		
Resistenza di progetto a snervamento	f _{yd} [Mpa]	391.30

OUTPUT

VERIFICHE IN ESERCIZIO

Verifica Tensionale				σ limit
Calcestruzzo SLE Quasi Permanente	σ _c [Mpa] =	3.53		11.250
Calcestruzzo SLE Rara	σ _c [Mpa] =	3.86		15.000
Acciaio SLE Rara	σ _s [Mpa] =	25.39		360.000
Verifica di fessurazione				w limit
Combinazione SLE Quasi permanente	w _d [mm] =	0.000		0.200
Combinazione SLE Frequente	w _d [mm] =	0.000		0.300

VERIFICA DI RESISTENZA A TAGLIO

Sollecitazioni di progetto			
Taglio sollecitante = max Taglio(SLU,SLV)		V _{sd} [kN]	102.0
Sforzo Normale concomitante al massimo taglio		N _{sd} [kN]	-895.0
Verifica di resistenza in assenza di armatura specifica			
Resistenza di progetto senza armatura specifica		V _{Rd1} [kN]	345.17
Coefficiente di sicurezza		V _{Rd1} /V _{sd}	3.38
Verifica di resistenza dell'armatura specifica			
CoTan(θ) di progetto		cotan(θ)	2.5
Resistenza a taglio delle bielle compresse in cls		V _{Rd2} (θ) [kN]	1682
Resistenza a taglio dell'armatura		V _{Rd3} (θ) [kN]	449
Resistenza a taglio di progetto		V _{Rd} [kN]	449
Coefficiente di sicurezza		V _{Rd} /V _{sd}	4.41

VERIFICA DI RESISTENZA A PRESSO-FLESSIONE

Sollecitazioni di progetto			
		SLU	SLV
Momento sollecitante	M _{sd} [kNm]	272.0	201.0
Sforzo Normale concomitante	N _{sd} [kN]	-1190.0	-895.0
Verifica di resistenza in termini di momento			
		SLU	SLV
Momento resistente	M _{Rd} [kNm]	662.7	580.6
Coefficiente di sicurezza	M _{Rd} /M _{sd}	2.44	2.89
Verifica di resistenza in termini di sforzo normale			
		SLU	SLV
Sforzo normale resistente	N _{Rd} [kN]	-	-
Coefficiente di sicurezza	N _{Rd} /N _{sd}	-	-

