Comune

GENOVA

Provincia

GENOVA

Titolo del progetto

REALIZZAZIONE DEL NUOVO IMPIANTO DI DEPURAZIONE AREA CENTRALE DI GENOVA - D.A.C.

Livello di progettazione	Settore di business	Disciplina
D - DEFINITIVO	I2 - DEPURAZIONE	STR - STRUTTURALE

Numero	Titolo	Scala
RT−009	ALLEGATO 3 COMPARTO ISPESSIMENTO E DISIDRATAZIONE RELAZIONE DI CALCOLO STRUTTURALE	-

ID Progetto	Titolo sintetico (nome file di stampa)	Codifica WBS
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1. OGGETTO DELLA RELAZIONE

Il comparto ispessimento e disidratazione è composto da un fabbricato, che si estende su due piani e contiene i macchinari necessari ai trattamenti dei singoli comparti. E' pertanto stato realizzato un modello di calcolo agli elementi finiti, di cui si riportano di seguito i dati inseriti, i risultati del calcolo, del progetto e della verifica degli elementi strutturali.

2. FABBRICATO

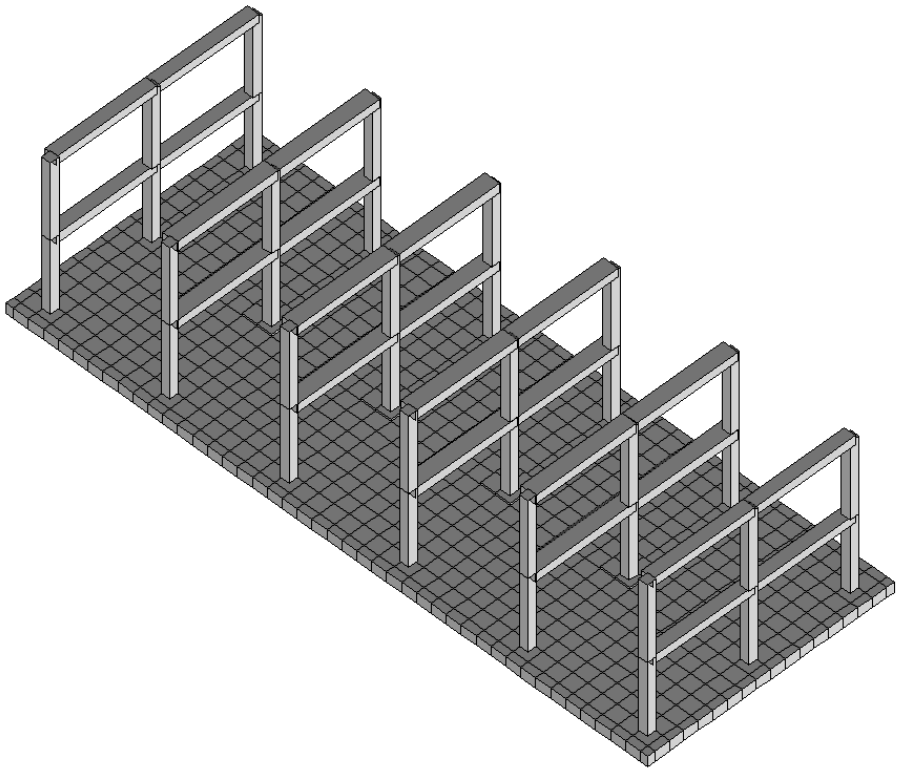
La struttura portante del fabbricato è composta da colonne isostatiche incastrate alla base (sezione 60 cm x 60 cm), disposte su due maniche con maglia 6,9 m x 8,1 m, travi isostatiche semplicemente appoggiate agli estremi, ad altezza costante. Il solaio del primo piano ed il solaio di copertura sono realizzata con tegoli precompressi e sono schematizzati con elementi solaio allo scopo di applicare i carichi alle travi ed applicare il piano rigido conseguente alla realizzazione del getto in opera della soletta collaborante.

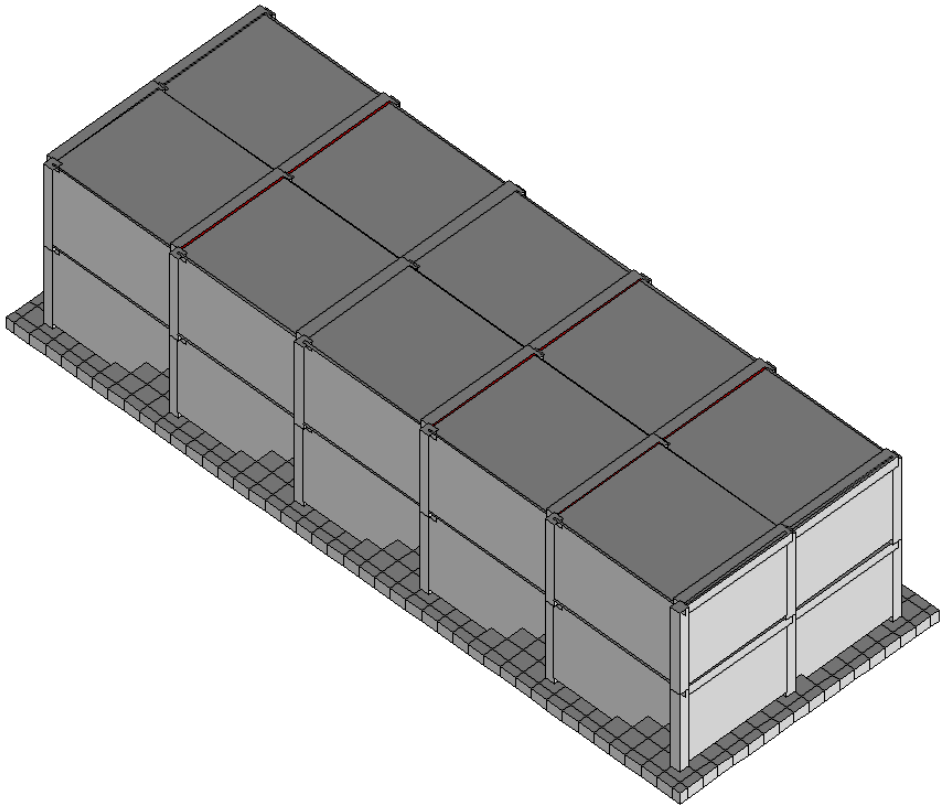
Le colonne sono fissate alla base in bicchieri ricavati da ringrossi nella platea di fondazione.

Il tamponamento perimetrale è realizzato con pannelli prefabbricati orizzontali fissati ai pilastri che sono schematizzati elementi pannello al solo scopo di applicare i pesi e le masse in modo il più possibile aderente alla realtà.

I tamponamenti interni sono in muratura intelaiata realizzata con blocchi di cls sp. 25 cm.

Per progettare e verificare l'armatura, sia in condizione statica sia in condizione sismica, con le assunzioni descritte nella relazione generale sulle strutture, è stato realizzato un modello agli elementi finiti, le cui immagini sono di seguito riportate.





Si riportano di seguito i tabulati relativi ai dati inseriti, ai principali risultati ottenuti ed alla progettazione degli elementi portanti.

2.1 DESCRIZIONE DELLA MODELLAZIONE

Tipo di analisi strutturale	
Statica lineare	SI
Statica non lineare	NO
Sismica statica lineare	NO
Sismica dinamica lineare	SI

Modellazione della geometria e proprietà meccaniche:	
nodi	891
elementi D2 (per aste, travi, pilastri…)	60
elementi D3 (per pareti, platee, gusci…)	792
elementi solaio	60
elementi solidi	0
Dimensione del modello strutturale [cm]:	
X min =	-150.00
Xmax =	4215.00
Ymin =	-150.00
Ymax =	1530.00
Zmin =	0.00
Zmax =	1030.00
Strutture verticali:	
Elementi di tipo asta	NO
Pilastri	SI
Pareti	NO
Setti (a comportamento membranale)	NO
Strutture non verticali:	
Elementi di tipo asta	NO
Travi	SI
Gusci	NO
Membrane	NO
Orizzontamenti:	
Solai con la proprietà piano rigido	SI
Solai senza la proprietà piano rigido	SI
Tipo di vincoli:	
Nodi vincolati rigidamente	NO
Nodi vincolati elasticamente	NO
Nodi con isolatori sismici	NO
Fondazioni puntuali (plinti/plinti su palo)	NO
Fondazioni di tipo trave	NO
Fondazioni di tipo platea	SI

2.2 CARATTERISTICHE MATERIALI UTILIZZATI

LEGENDA TABELLA DATI MATERIALI

Il programma consente l'uso di materiali diversi. Sono previsti i seguenti tipi di materiale:

1	materiale tipo cemento armato
2	materiale tipo acciaio
3	materiale tipo muratura
4	materiale tipo legno
5	materiale tipo generico

I materiali utilizzati nella modellazione sono individuati da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni materiale vengono riportati in tabella i seguenti dati:

Young	modulo di elasticità normale
Poisson	coefficiente di contrazione trasversale
G	modulo di elasticità tangenziale
Gamma	peso specifico
Alfa	coefficiente di dilatazione termica

I dati soprariportati vengono utilizzati per la modellazione dello schema statico e per la determinazione dei carichi inerziali e termici. In relazione al tipo di materiale vengono riportati inoltre:

1	***cemento armato***		
		Rck	resistenza caratteristica cubica
		Fctm	resistenza media a trazione semplice
2	***acciaio***		
		Ft	tensione di rottura a trazione
		Fy	tensione di snervamento
		Fd	resistenza di calcolo
		Fdt	resistenza di calcolo per spess. t>40 mm
		Sadm	tensione ammissibile
		Sadmt	tensione ammissibile per spess. t>40 mm

TABELLA DATI MATERIALI

Id	Tipo / Note		Young	Poisson	G	Gamma	Alfa
		daN/cm2	daN/cm2		daN/cm2	daN/cm3	
1	Calcestruzzo Classe C25/30		3.145e+05	0.20	1.310e+05	2.50e-03	1.00e-05
	Rck	300.0					
	fctm	25.6					
4	Calcestruzzo Classe C32/40		3.360e+05	0.20	1.400e+05	2.50e-03	1.00e-05
	Rck	400.0					
	fctm	31.0					
7	Calcestruzzo Classe C45/55		3.640e+05	0.20	1.517e+05	2.50e-03	1.00e-05
	Rck	550.0					
	fctm	38.3					
38	Muratura in blocchi di calcestruzzo (perc. foratura tra 45 % e 65%) E = 1.400e+04		1.400e+04	0.0	3500.0	1.20e-03	1.00e-05
	Resist. fk	15.0					
	Resist. fvko	0.9					

Il calcestruzzo C25/30 è stato applicato ai pannelli di parete ma non ha influenza sul calcolo in quanto i pannelli applicano solo i carichi ai pilastri.

Il calcestruzzo C32/40 è per gli elementi strutturali gettati in opera.

Il calcestruzzo C45/55 è per gli elementi strutturali prefabbricati.

La muratura in blocchi di calcestruzzo è stata applicata ai pannelli di parete interni ma non ha influenza sul calcolo in quanto i pannelli applicano solo i carichi alle strutture portanti di piano.

Di seguito si riportano i dati di progettazione degli elementi in calcestruzzo armato.

Gusci c.a.	1
Armatura	
Inclinazione Ax [gradi]	0.0
Angolo Ax-Ay [gradi]	90.00
Minima tesa	0.20
Massima tesa	0.78
Maglia unica centrale	No
Copriferro [cm]	4.00
Maglia x	
diametro	20
passo	20
diametro aggiuntivi	20
Maglia y	
diametro	20
passo	20
diametro aggiuntivi	20
Stati limite ultimi	
Tensione fy [daN/cm2]	4500.00
Tipo acciaio	tipo C
Coefficiente gamma s	1.15
Coefficiente gamma c	1.50
Fattore di confidenza FC	0.0
Verifiche con N costante	Si
Applica SLU da DIN	No

Travi c.a.	1
Generalità	
Progetta a filo	No
Af inf: da q*L*L /	0.0

Travi c.a.	1
Armatura	
Minima tesa	0.31
Minima compressa	0.31
Massima tesa	1.50
Da sezione	Si
Usa armatura teorica	No
Stati limite ultimi	
Tensione fy [daN/cm2]	4500.00
Tensione fy staffe [daN/cm2]	4500.00
Tipo acciaio	tipo C
Coefficiente gamma s	1.15
Coefficiente gamma c	1.50
Fattore di confidenza FC	0.0
Verifiche con N costante	Si
Fattore di ridistribuzione	0.0
Modello per il confinamento	
Relazione tensio-deformativa	Mander
Incrudimento acciaio	5.000e-03
Fattore lambda	1.00
epsilon max,s	4.000e-02
epsilon cu2	4.500e-03
epsilon c2	0.0
epsilon cy	0.0
Staffe	
Diametro staffe	0.0
Passo minimo [cm]	4.00
Passo massimo [cm]	30.00
Passo raffittito [cm]	15.00
Lunghezza zona raffittita [cm]	0.0
Ctg(Teta) Max	2.50
Percentuale sagomati	0.0
Luce di taglio per GR [cm]	0.0
Adotta scorrimento medio	No
Torsione non essenziale inclusa	No

Pilastri c.a.	1
Generalità	
Progetto armatura	Privilegia lati
Progetta a filo	No
Effetti del 2 ordine	Si
Beta per 2-2	1.00
Beta per 3-3	1.00
Armatura	
Massima tesa	4.00
Minima tesa	1.00
Stati limite ultimi	
Tensione fy [daN/cm2]	4500.00
Tensione fy staffe [daN/cm2]	4500.00
Tipo acciaio	tipo C
Coefficiente gamma s	1.15
Coefficiente gamma c	1.50
Fattore di confidenza FC	0.0
Verifiche con N costante	Si
Modello per il confinamento	
Relazione tensio-deformativa	Mander
Incrudimento acciaio	5.000e-03
Fattore lambda	1.00
epsilon max,s	4.000e-02
epsilon cu2	4.500e-03
epsilon c2	0.0
epsilon cy	0.0
Staffe	
Diametro staffe	0.0
Passo minimo [cm]	5.00
Passo massimo [cm]	25.00
Passo raffittito [cm]	15.00
Lunghezza zona raffittita [cm]	45.00
Ctg(Teta) Max	2.50
Luce di taglio per GR [cm]	0.0
Massimizza gerarchia	Si

2.3 MODELLAZIONE DELLE SEZIONI

LEGENDA TABELLA DATI SEZIONI

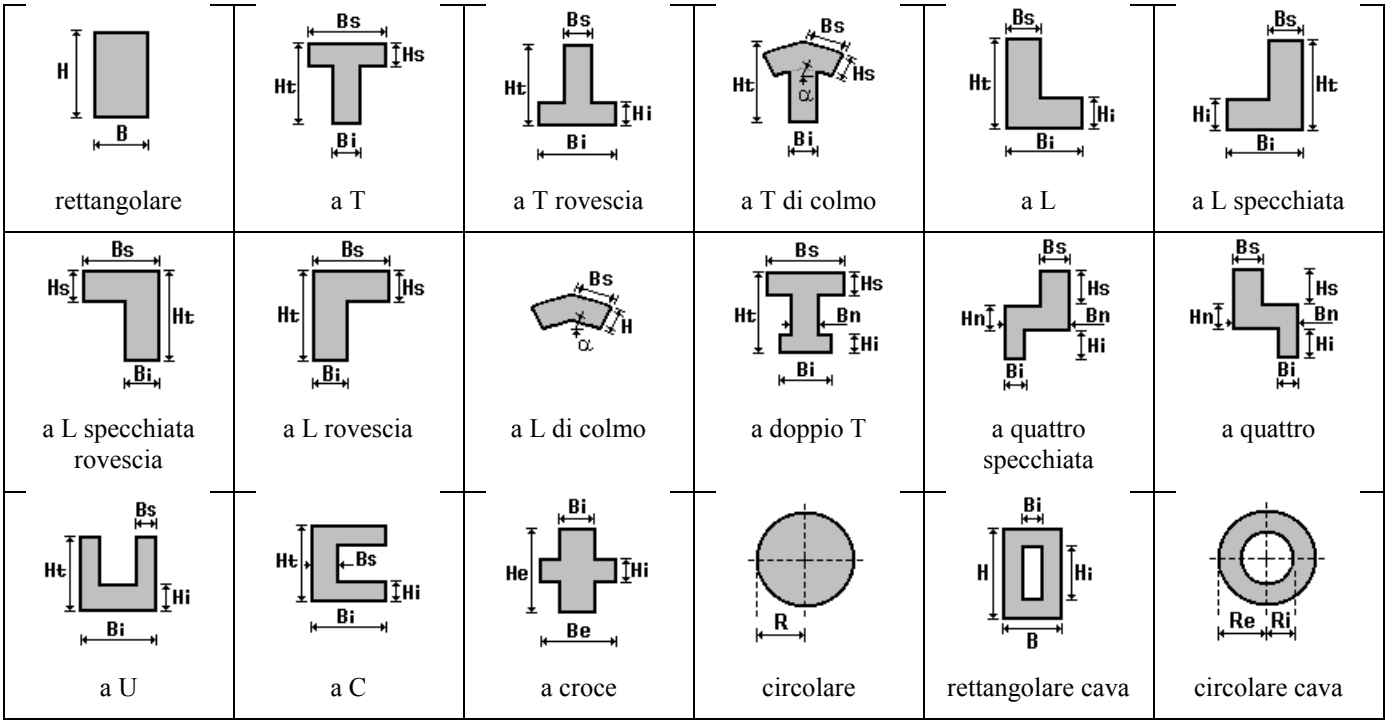
Il programma consente l'uso di sezioni diverse. Sono previsti i seguenti tipi di sezione:

1 sezione di tipo generico
2 profilati semplici
3 profilati accoppiati e speciali

Le sezioni utilizzate nella modellazione sono individuate da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni sezione vengono riportati in tabella i seguenti dati:

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

I dati soprariportati vengono utilizzati per la determinazione dei carichi inerziali e per la definizione delle rigidezze degli elementi strutturali; qualora il valore di Area V2 (e/o Area V3) sia nullo la deformabilità per taglio V2 (e/o V3) è trascurata. La valutazione delle caratteristiche inerziali delle sezioni è condotta nel riferimento 2-3 dell'elemento.



Per quanto concerne i profilati semplici ed accoppiati l'asse 2 del riferimento coincide con l'asse x riportato nei più diffusi profilari.

Per quanto concerne le sezioni di tipo generico (tipo 1.):
i valori dimensionali con prefisso B sono riferiti all'asse 2
i valori dimensionali con prefisso H sono riferiti all'asse 3

TABELLA DATI SEZIONI

Id	Tipo	Area	A V2	A V3	Jt	J 2-2	J 3-3	W 2-2	W 3-3	Wp 2-2	Wp 3-3
		cm2	cm2	cm2	cm4	cm4	cm4	cm3	cm3	cm3	cm3
1	Pilastri 60x60	3600	3000	3000	1.822e+06	1.080e+06	1.080e+06	3.600e+04	3.600e+04	5.400e+04	5.400e+04
2	Trave 100x60	6000	5000	5000	4.478e+06	5.000e+06	1.800e+06	1.000e+05	6.000e+04	1.500e+05	9.000e+04
3	Trave 80x60	4800	4000	4000	3.114e+06	2.560e+06	1.440e+06	6.400e+04	4.800e+04	9.600e+04	7.200e+04

2.4 MODELLAZIONE DELLA STRUTTURA: ELEMENTI SOLAIO

LEGENDA TABELLA DATI SOLAI

Il programma utilizza per la modellazione di elementi a tre o più nodi denominati in generale solaio.
Ogni elemento solaio è individuato da una poligonale di nodi 1,2, ..., N.

L'elemento solaio è utilizzato in primo luogo per la modellazione dei carichi agenti sugli elementi strutturali. In secondo luogo può essere utilizzato per la corretta ripartizione delle forze orizzontali agenti nel proprio piano. L'elemento balcone è derivato dall'elemento solaio.

I carichi agenti sugli elementi, raccolti in un archivio, sono direttamente assegnati agli elementi utilizzando le informazioni raccolte nell' archivio (es. i coefficienti combinatori).

L'elemento pannello è utilizzato solo per l'applicazione dei carichi, quali pesi delle tamponature o spinte dovute al vento o terre. In questo caso i carichi sono applicati in analogia agli altri elementi strutturali

La tabella seguente riporta i dati utilizzati per la definizione dei carichi e delle masse.

Id.Arch.	Identificativo dell' archivio
Tipo	Tipo di carico ***Variab.*** Carico variabile generico ***Var. rid.*** Carico variabile generico con riduzione in funzione dell' area (c.5.5. …) ***Neve*** Carico di neve
G1k	carico permanente (comprensivo del peso proprio)
G2k	carico permanente non strutturale e non compiutamente definito
Qk	carico variabile
Fatt. A	fattore di riduzione del carico variabile (0.5 o 0.75) per tipo "Var.rid."
S sis.	fattore di riduzione del carico variabile per la definizione delle masse sismiche per D.M. 96 (vedi NOTA sul capitolo "normativa di riferimento")
Psi 0	Coefficiente combinatorio dei valori caratteristici delle azioni variabili: ***per valore raro***
Psi 1	Coefficiente combinatorio dei valori caratteristici delle azioni variabili: ***per valore frequente***
Psi 2	Coefficiente combinatorio dei valori caratteristici delle azioni variabili: ***per valore quasi permanente***
Psi S 2	Coefficiente di combinazione che fornisce il valore quasi-permanente dell'azione variabile: ***per la definizione delle masse sismiche***
Fatt. Fi	Coefficiente di correlazione dei carichi per edifici

Ogni elemento è caratterizzato da un insieme di proprietà riportate in tabella che ne completano la modellazione. In particolare per ogni elemento viene indicato in tabella:

Elem	numero dell'elemento
Tipo	codice di comportamento ***S*** elemento utilizzato solo per scarico ***C*** elemento utilizzato per scarico e per modellazione piano rigido ***M*** scarico monodirezionale ***B*** scarico bidirezionale
Id.Arch.	Identificativo dell' archivio
Mat	codice del materiale assegnato all'elemento
Spessore	spessore dell'elemento (costante)

Orditura	angolo (rispetto all'asse X) della direzione dei travetti principali
Gk	carico permanente (comprensivo del peso proprio)
Qk	carico variabile
Nodi	numero dei nodi che definiscono l'elemento (5 per riga)

TABELLA DATI SOLAI

ID Arch.	Tipo	G1k	G2k	Qk	Fatt. A	s sis.	Psi 0	Psi 1	Psi 2	Psi S 2	Fatt. Fi
		daN/cm2	daN/cm2	daN/cm2							
1	Variab.	5.40e-02	2.00e-02	5.00e-02		1.00	1.00	0.90	0.80	0.80	1.00
2	Variab.	5.40e-02		0.10		1.00	1.00	0.90	0.80	0.80	1.00

Elem.	Tipo	ID Arch.	Mat.	Spessore	Orditura	G1k	G2k	Qk	Nodo 1/6..	Nodo 2/7..	Nodo 3/8..	Nodo..	Nodo..
						daN/cm2	daN/cm2	daN/cm2					
1	CM	2	m=1	5.0	0.0	5.40e-02		0.10	863	862	856	857	
2	CM	2	m=1	5.0	0.0	5.40e-02		0.10	864	863	857	858	
3	CM	2	m=1	5.0	0.0	5.40e-02		0.10	865	864	858	859	
4	CM	2	m=1	5.0	0.0	5.40e-02		0.10	866	865	859	860	
5	CM	2	m=1	5.0	0.0	5.40e-02		0.10	867	866	860	861	
6	CM	2	m=1	5.0	0.0	5.40e-02		0.10	869	868	862	863	
7	CM	2	m=1	5.0	0.0	5.40e-02		0.10	870	869	863	864	
8	CM	2	m=1	5.0	0.0	5.40e-02		0.10	871	870	864	865	
9	CM	2	m=1	5.0	0.0	5.40e-02		0.10	872	871	865	866	
10	CM	2	m=1	5.0	0.0	5.40e-02		0.10	873	872	866	867	
11	CM	1	m=1	5.0	0.0	5.40e-02	2.00e-02	5.00e-02	881	880	874	875	
12	CM	1	m=1	5.0	0.0	5.40e-02	2.00e-02	5.00e-02	882	881	875	876	
13	CM	1	m=1	5.0	0.0	5.40e-02	2.00e-02	5.00e-02	883	882	876	877	
14	CM	1	m=1	5.0	0.0	5.40e-02	2.00e-02	5.00e-02	884	883	877	878	
15	CM	1	m=1	5.0	0.0	5.40e-02	2.00e-02	5.00e-02	885	884	878	879	
16	CM	1	m=1	5.0	0.0	5.40e-02	2.00e-02	5.00e-02	887	886	880	881	
17	CM	1	m=1	5.0	0.0	5.40e-02	2.00e-02	5.00e-02	888	887	881	882	
18	CM	1	m=1	5.0	0.0	5.40e-02	2.00e-02	5.00e-02	889	888	882	883	
19	CM	1	m=1	5.0	0.0	5.40e-02	2.00e-02	5.00e-02	890	889	883	884	
20	CM	1	m=1	5.0	0.0	5.40e-02	2.00e-02	5.00e-02	891	890	884	885	

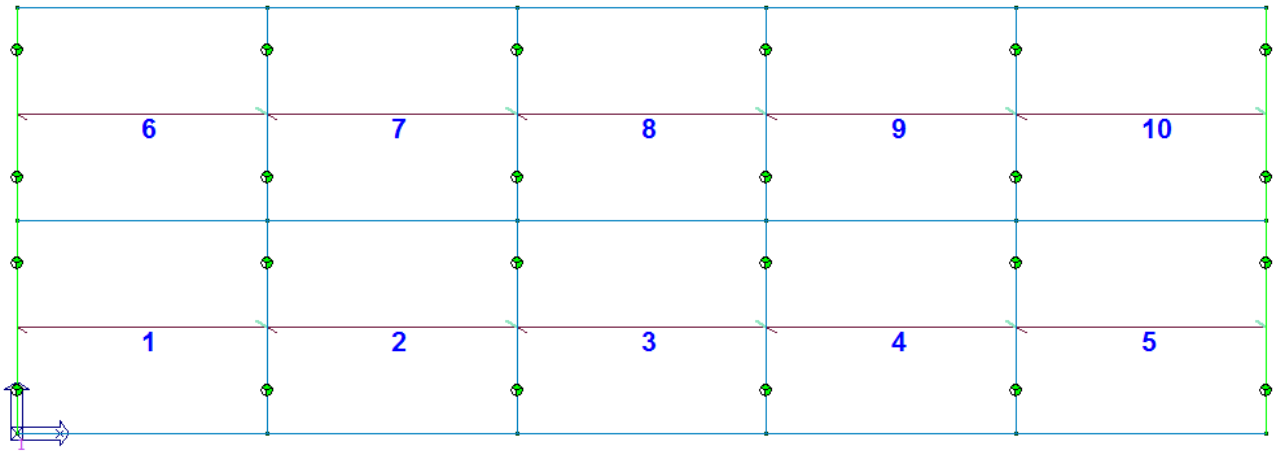
I carichi applicati al solaio del 1° piano sono:

- Peso proprio: 540 daN/m^2
- Variabile (comprensivo di perm. n.c.d.): 1000 daN/m^2

I carichi applicati alla copertura sono:

- Peso proprio: 540 daN/m^2
- Permanente: 200 daN/m^2
- Variabile (comprensivo di neve): 500 daN/m^2

Numerazione elementi solaio 1° piano



Numerazione elementi solaio copertura

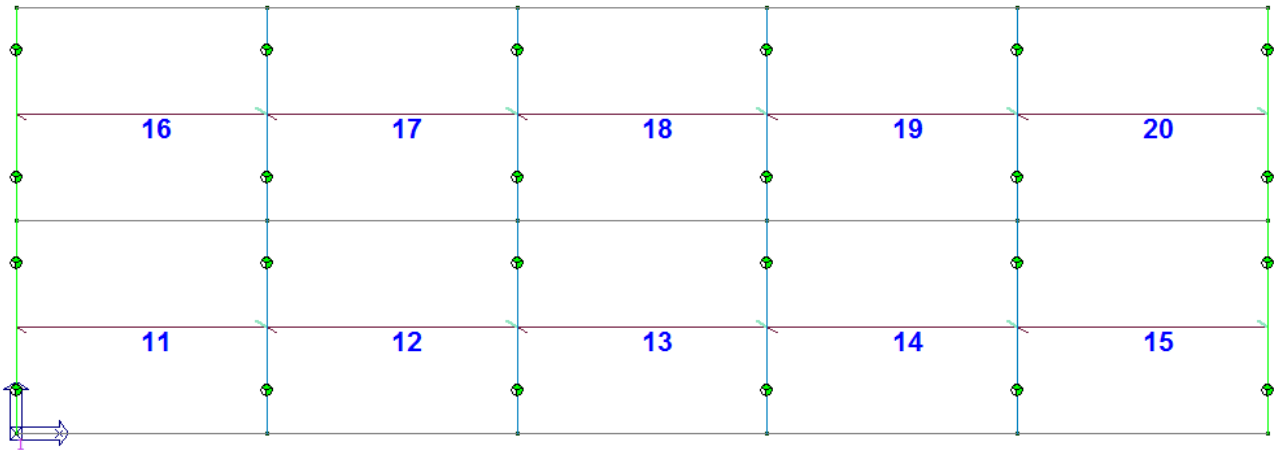
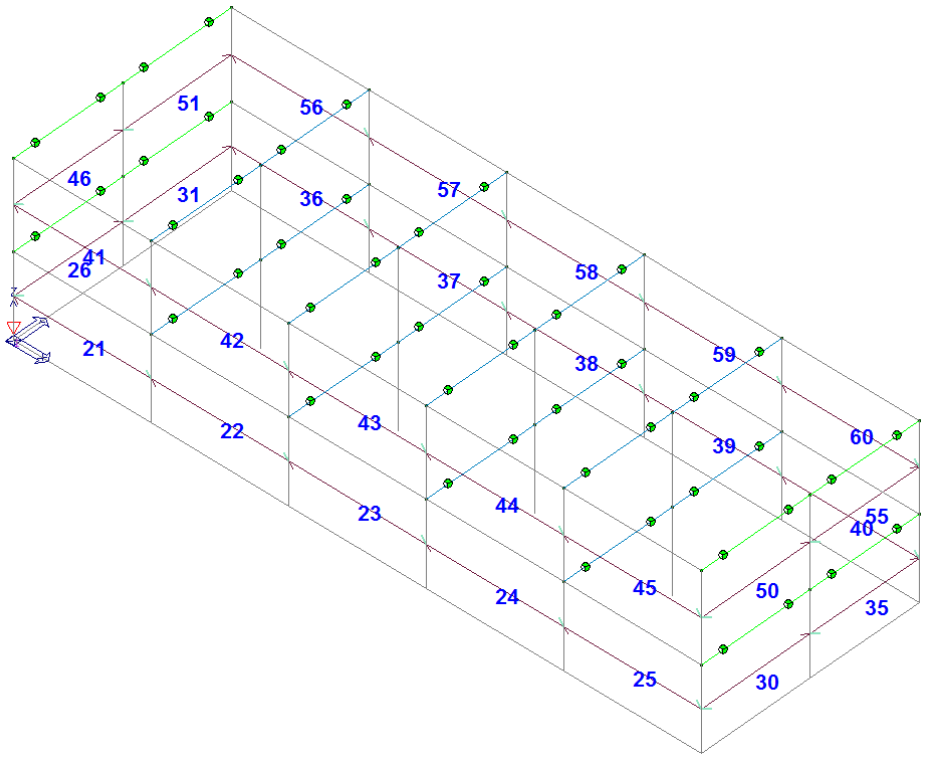


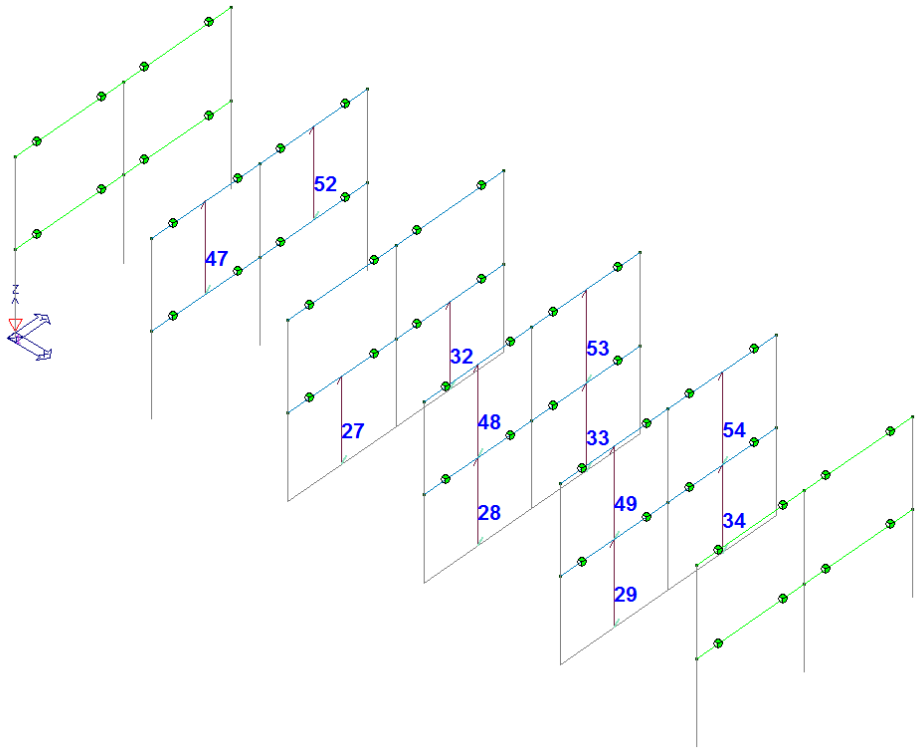
TABELLA DATI PENNELLI

Elem.	Tipo	ID Arch.	Mat.	Spessore	Orditura	G1k daN/cm2	G2k daN/cm2	Qk daN/cm2	Nodo 1	Nodo 2	Nodo 3	Nodo 4
21	PM		m=1	12.0	0.0				101	93	856	857
22	PM		m=1	12.0	0.0				109	101	857	858
23	PM		m=1	12.0	0.0				117	109	858	859
24	PM		m=1	12.0	0.0				125	117	859	860
25	PM		m=1	12.0	0.0				133	125	860	861
26	PM		m=1	12.0	0.0				862	856	93	408
27	PM		m=38	25.0	90.0				858	109	424	864
28	PM		m=38	25.0	90.0				859	117	432	865
29	PM		m=38	25.0	90.0				860	125	440	866
30	PM		m=1	12.0	0.0				867	861	133	448
31	PM		m=1	12.0	0.0				862	408	723	868
32	PM		m=38	25.0	90.0				864	424	739	870
33	PM		m=38	25.0	90.0				865	432	747	871
34	PM		m=38	25.0	90.0				866	440	755	872
35	PM		m=1	12.0	0.0				867	448	763	873
36	PM		m=1	12.0	0.0				731	723	868	869
37	PM		m=1	12.0	0.0				739	731	869	870
38	PM		m=1	12.0	0.0				747	739	870	871
39	PM		m=1	12.0	0.0				755	747	871	872
40	PM		m=1	12.0	0.0				763	755	872	873
41	PM		m=1	12.0	0.0				857	856	874	875
42	PM		m=1	12.0	0.0				858	857	875	876
43	PM		m=1	12.0	0.0				859	858	876	877
44	PM		m=1	12.0	0.0				860	859	877	878
45	PM		m=1	12.0	0.0				861	860	878	879
46	PM		m=1	12.0	0.0				880	874	856	862
47	PM		m=38	25.0	90.0				863	881	875	857
48	PM		m=38	25.0	90.0				865	883	877	859
49	PM		m=38	25.0	90.0				866	884	878	860
50	PM		m=1	12.0	0.0				885	879	861	867
51	PM		m=1	12.0	0.0				886	880	862	868
52	PM		m=38	25.0	90.0				869	887	881	863
53	PM		m=38	25.0	90.0				871	889	883	865
54	PM		m=38	25.0	90.0				872	890	884	866
55	PM		m=1	12.0	0.0				891	885	867	873
56	PM		m=1	12.0	0.0				869	868	886	887
57	PM		m=1	12.0	0.0				870	869	887	888
58	PM		m=1	12.0	0.0				871	870	888	889
59	PM		m=1	12.0	0.0				872	871	889	890
60	PM		m=1	12.0	0.0				873	872	890	891

Numerazione elementi pannello perimetrali



Numerazione elementi pannello interni



2.5 MODELLAZIONE DELLE AZIONI

LEGENDA TABELLA DATI AZIONI

Il programma consente l'uso di diverse tipologie di carico (azioni). Le azioni utilizzate nella modellazione sono individuate da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni azione applicata alla struttura viene di riportato il codice, il tipo e la sigla identificativa. Le tabelle successive dettagliano i valori caratteristici di ogni azione in relazione al tipo. Le tabelle riportano infatti i seguenti dati in relazione al tipo:

1	**carico concentrato nodale** 6 dati (forza Fx, Fy, Fz, momento Mx, My, Mz)
2	**spostamento nodale impresso** 6 dati (spostamento Tx,Ty,Tz, rotazione Rx,Ry,Rz)
3	**carico distribuito globale su elemento tipo trave** 7 dati (fx,fy,fz,mx,my,mz,ascissa di inizio carico) 7 dati (fx,fy,fz,mx,my,mz,ascissa di fine carico)
4	**carico distribuito locale su elemento tipo trave** 7 dati (f1,f2,f3,m1,m2,m3,ascissa di inizio carico) 7 dati (f1,f2,f3,m1,m2,m3,ascissa di fine carico)
5	**carico concentrato globale su elemento tipo trave** 7 dati (Fx,Fy,Fz,Mx,My,Mz,ascissa di carico)
6	**carico concentrato locale su elemento tipo trave** 7 dati (F1, F2, F3, M1, M2, M3, ascissa di carico)
7	**variazione termica applicata ad elemento tipo trave** 7 dati (variazioni termiche: uniforme, media e differenza in altezza e larghezza al nodo iniziale e finale)
8	**carico di pressione uniforme su elemento tipo piastra** 1 dato (pressione)
9	**carico di pressione variabile su elemento tipo piastra** 4 dati (pressione, quota, pressione, quota)
10	**variazione termica applicata ad elemento tipo piastra** 2 dati (variazioni termiche: media e differenza nello spessore)
11	**carico variabile generale su elementi tipo trave e piastra** 1 dato descrizione della tipologia 4 dati per segmento (posizione, valore, posizione, valore) la tipologia precisa l'ascissa di definizione, la direzione del carico, la modalità di carico e la larghezza d'influenza per gli elementi tipo trave
12	**gruppo di carichi con impronta su piastra** 9 dati (numero di ripetizioni in direzione X e Y, valore di ciascun carico, posizione centrale del primo, dimensioni dell' impronta, interasse tra i carichi

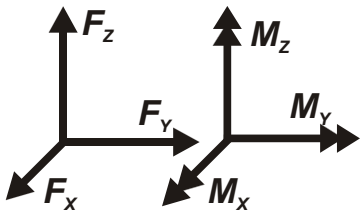
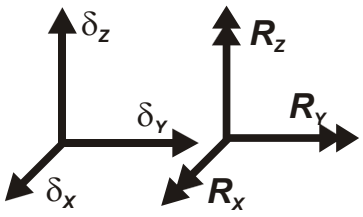
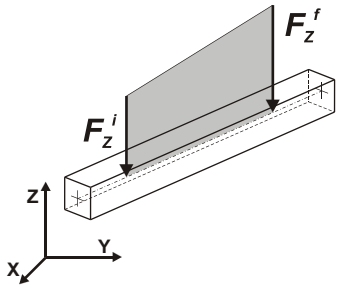
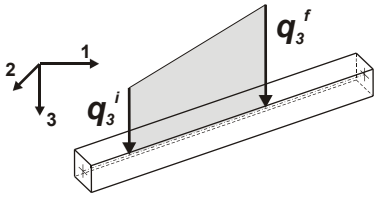
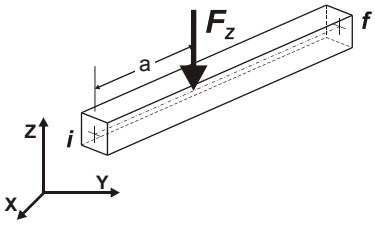
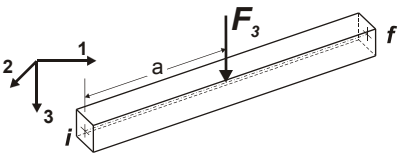
 Carico concentrato nodale	 Spostamento impresso
 Carico distribuito globale	 Carico distribuito locale
 Carico concentrato globale	 Carico concentrato locale

TABELLA DATI AZIONI

Tipo	carico variabile generale

Id	Tipo	ascissa	valore	ascissa	valore
		cm	daN/cm2	cm	daN/cm2
1	Carico platea 1000 daN/m²				

I carichi applicati sono descritti nella relazione generale sulle strutture.

2.6 SCHEMATIZZAZIONE DEI CASI DI CARICO

LEGENDA TABELLA CASI DI CARICO

Il programma consente l'applicazione di diverse tipologie di casi di carico.

Sono previsti i seguenti 11 tipi di casi di carico:

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

Sono di tipo automatico A (ossia non prevedono introduzione dati da parte dell'utente) i seguenti casi di carico: 1-Ggk; 4-Gsk; 5-Qsk; 6-Qnk.

Sono di tipo semi-automatico SA (ossia prevedono una minima introduzione dati da parte dell'utente) i seguenti casi di carico:

7-Qtk, in quanto richiede solo il valore della variazione termica;

9-Esk e 10-Edk, in quanto richiedono il valore dell'angolo di ingresso del sisma e l'individuazione dei casi di carico partecipanti alla definizione delle masse.

Sono di tipo non automatico NA ossia prevedono la diretta applicazione di carichi generici agli elementi strutturali (si veda il precedente punto Modellazione delle Azioni) i restanti casi di carico.

Nella tabella successiva vengono riportati i casi di carico agenti sulla struttura, con l'indicazione dei dati relativi al caso di carico stesso:

Numero Tipo e *Sigla identificativa*, *Valore di riferimento* del caso di carico (se previsto).

In successione, per i casi di carico non automatici, viene riportato l'elenco di nodi ed elementi direttamente caricati con la sigla identificativa del carico.

Per i casi di carico di tipo sismico (9-Esk e 10-Edk), viene riportata la tabella di definizione delle masse: per ogni caso di carico partecipante alla definizione delle masse viene indicata la relativa aliquota (partecipazione) considerata. Si precisa che per i caso di carico 5-Qsk e 6-Qnk la partecipazione è prevista localmente per ogni elemento solaio o copertura presente nel modello (si confronti il valore Sksol nel capitolo relativo agli elementi solaio) e pertanto la loro partecipazione è di norma pari a uno.

TABELLA CASI DI CARICO

CDC	Tipo	Sigla Id	Note
1	Ggk	CDC=Ggk (peso proprio della struttura)	
2	Gsk	CDC=G1sk (permanente solai-coperture)	
3	Gsk	CDC=G2sk (permanente solai-coperture n.c.d.)	
4	Gsk	CDC=G2pk (permanente pannelli n.c.d.)	
5	Qsk	CDC=Qsk (variabile solai 1)	
6	Qsk	CDC=Qsk (variabile solai 2)	
7	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. +)	partecipazione:1.00 per 1 CDC=Ggk (peso proprio della struttura)
			partecipazione:1.00 per 2 CDC=G1sk (permanente solai-coperture)
			partecipazione:1.00 per 3 CDC=G2sk (permanente solai-coperture n.c.d.)
			partecipazione:1.00 per 4 CDC=G2pk (permanente pannelli n.c.d.)
			partecipazione:1.00 per 5 CDC=Qsk (variabile solai 1)
			partecipazione:1.00 per 6 CDC=Qsk (variabile solai 2)
			partecipazione:0.80 per 15 CDC=Qk (variabile platea)
8	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. -)	come precedente CDC sismico
9	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. +)	come precedente CDC sismico
10	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. -)	come precedente CDC sismico
11	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. +)	come precedente CDC sismico
12	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. -)	come precedente CDC sismico
13	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. +)	come precedente CDC sismico
14	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. -)	come precedente CDC sismico
15	Qk	CDC=Qk (variabile platea)	D3 :da 91 a 130 Azione : Carico platea 1000 daN/m²
			D3 :da 135 a 174 Azione : Carico platea 1000 daN/m²
			D3 :da 179 a 218 Azione : Carico platea 1000 daN/m²
			D3 :da 223 a 262 Azione : Carico platea 1000 daN/m²
			D3 :da 267 a 306 Azione : Carico platea 1000 daN/m²
			D3 :da 311 a 350 Azione : Carico platea 1000 daN/m²
			D3 :da 355 a 394 Azione : Carico platea 1000 daN/m²
			D3 :da 399 a 438 Azione : Carico platea 1000 daN/m²
			D3 :da 443 a 482 Azione : Carico platea 1000 daN/m²
			D3 :da 487 a 526 Azione : Carico platea 1000 daN/m²
			D3 :da 531 a 570 Azione : Carico platea 1000 daN/m²
			D3 :da 575 a 614 Azione : Carico platea 1000 daN/m²
			D3 :da 619 a 658 Azione : Carico platea 1000 daN/m²
			D3 :da 663 a 702 Azione : Carico platea 1000 daN/m²

2.7 DEFINIZIONE DELLE COMBINAZIONI

LEGENDA TABELLA COMBINAZIONI DI CARICO

Il programma combina i diversi tipi di casi di carico (CDC) secondo le regole previste dalla normativa vigente.
Le combinazioni previste sono destinate al controllo di sicurezza della struttura ed alla verifica degli spostamenti e delle sollecitazioni.

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

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

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

Combinazione caratteristica (rara) SLE

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

Combinazione sismica, impiegata per gli stati limite ultimi e di esercizio connessi all'azione sismica E

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

Combinazione eccezionale, impiegata per gli stati limite connessi alle azioni eccezionali

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

Dove:

NTC 2008 Tabella 2.5.I

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

Nelle verifiche si adotta l'approccio 2 dove si definisce un'unica combinazione per le azioni, per la resistenza dei materiali e per la resistenza globale (con coefficienti A1).

NTC 2008 Tabella 2.6.I

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

TABELLA COMBINAZIONI DI CARICO

Cmb	Tipo	Sigla Id	effetto P-delta
1	SLU	Comb. SLU A1 1	
2	SLU	Comb. SLU A1 2	
3	SLU	Comb. SLU A1 3	
4	SLU	Comb. SLU A1 4	
5	SLU	Comb. SLU A1 5	
6	SLU	Comb. SLU A1 6	
7	SLU	Comb. SLU A1 7	
8	SLU	Comb. SLU A1 8	
9	SLU	Comb. SLU A1 9	
10	SLU	Comb. SLU A1 10	
11	SLU	Comb. SLU A1 11	
12	SLU	Comb. SLU A1 12	
13	SLU	Comb. SLU A1 13	
14	SLU	Comb. SLU A1 14	
15	SLU	Comb. SLU A1 15	
16	SLU	Comb. SLU A1 16	
17	SLU	Comb. SLU A1 (SLV sism.) 17	Si
18	SLU	Comb. SLU A1 (SLV sism.) 18	Si
19	SLU	Comb. SLU A1 (SLV sism.) 19	Si
20	SLU	Comb. SLU A1 (SLV sism.) 20	Si
21	SLU	Comb. SLU A1 (SLV sism.) 21	Si
22	SLU	Comb. SLU A1 (SLV sism.) 22	Si
23	SLU	Comb. SLU A1 (SLV sism.) 23	Si
24	SLU	Comb. SLU A1 (SLV sism.) 24	Si
25	SLU	Comb. SLU A1 (SLV sism.) 25	Si
26	SLU	Comb. SLU A1 (SLV sism.) 26	Si
27	SLU	Comb. SLU A1 (SLV sism.) 27	Si
28	SLU	Comb. SLU A1 (SLV sism.) 28	Si
29	SLU	Comb. SLU A1 (SLV sism.) 29	Si
30	SLU	Comb. SLU A1 (SLV sism.) 30	Si
31	SLU	Comb. SLU A1 (SLV sism.) 31	Si
32	SLU	Comb. SLU A1 (SLV sism.) 32	Si
33	SLU	Comb. SLU A1 (SLV sism.) 33	Si
34	SLU	Comb. SLU A1 (SLV sism.) 34	Si
35	SLU	Comb. SLU A1 (SLV sism.) 35	Si
36	SLU	Comb. SLU A1 (SLV sism.) 36	Si
37	SLU	Comb. SLU A1 (SLV sism.) 37	Si
38	SLU	Comb. SLU A1 (SLV sism.) 38	Si
39	SLU	Comb. SLU A1 (SLV sism.) 39	Si
40	SLU	Comb. SLU A1 (SLV sism.) 40	Si
41	SLU	Comb. SLU A1 (SLV sism.) 41	Si
42	SLU	Comb. SLU A1 (SLV sism.) 42	Si
43	SLU	Comb. SLU A1 (SLV sism.) 43	Si
44	SLU	Comb. SLU A1 (SLV sism.) 44	Si
45	SLU	Comb. SLU A1 (SLV sism.) 45	Si
46	SLU	Comb. SLU A1 (SLV sism.) 46	Si
47	SLU	Comb. SLU A1 (SLV sism.) 47	Si
48	SLU	Comb. SLU A1 (SLV sism.) 48	Si
49	SLD(sis)	Comb. SLE (SLD Danno sism.) 49	Si
50	SLD(sis)	Comb. SLE (SLD Danno sism.) 50	Si
51	SLD(sis)	Comb. SLE (SLD Danno sism.) 51	Si
52	SLD(sis)	Comb. SLE (SLD Danno sism.) 52	Si
53	SLD(sis)	Comb. SLE (SLD Danno sism.) 53	Si
54	SLD(sis)	Comb. SLE (SLD Danno sism.) 54	Si
55	SLD(sis)	Comb. SLE (SLD Danno sism.) 55	Si
56	SLD(sis)	Comb. SLE (SLD Danno sism.) 56	Si
57	SLD(sis)	Comb. SLE (SLD Danno sism.) 57	Si
58	SLD(sis)	Comb. SLE (SLD Danno sism.) 58	Si
59	SLD(sis)	Comb. SLE (SLD Danno sism.) 59	Si
60	SLD(sis)	Comb. SLE (SLD Danno sism.) 60	Si
61	SLD(sis)	Comb. SLE (SLD Danno sism.) 61	Si
62	SLD(sis)	Comb. SLE (SLD Danno sism.) 62	Si
63	SLD(sis)	Comb. SLE (SLD Danno sism.) 63	Si
64	SLD(sis)	Comb. SLE (SLD Danno sism.) 64	Si
65	SLD(sis)	Comb. SLE (SLD Danno sism.) 65	Si
66	SLD(sis)	Comb. SLE (SLD Danno sism.) 66	Si
67	SLD(sis)	Comb. SLE (SLD Danno sism.) 67	Si
68	SLD(sis)	Comb. SLE (SLD Danno sism.) 68	Si

Cmb	Tipo	Sigla Id	effetto P-delta
69	SLD(sis)	Comb. SLE (SLD Danno sism.) 69	Si
70	SLD(sis)	Comb. SLE (SLD Danno sism.) 70	Si
71	SLD(sis)	Comb. SLE (SLD Danno sism.) 71	Si
72	SLD(sis)	Comb. SLE (SLD Danno sism.) 72	Si
73	SLD(sis)	Comb. SLE (SLD Danno sism.) 73	Si
74	SLD(sis)	Comb. SLE (SLD Danno sism.) 74	Si
75	SLD(sis)	Comb. SLE (SLD Danno sism.) 75	Si
76	SLD(sis)	Comb. SLE (SLD Danno sism.) 76	Si
77	SLD(sis)	Comb. SLE (SLD Danno sism.) 77	Si
78	SLD(sis)	Comb. SLE (SLD Danno sism.) 78	Si
79	SLD(sis)	Comb. SLE (SLD Danno sism.) 79	Si
80	SLD(sis)	Comb. SLE (SLD Danno sism.) 80	Si
81	SLE(r)	Comb. SLE(rara) 81	
82	SLE(r)	Comb. SLE(rara) 82	
83	SLE(r)	Comb. SLE(rara) 83	
84	SLE(r)	Comb. SLE(rara) 84	
85	SLE(r)	Comb. SLE(rara) 85	
86	SLE(r)	Comb. SLE(rara) 86	
87	SLE(r)	Comb. SLE(rara) 87	
88	SLE(r)	Comb. SLE(rara) 88	
89	SLE(f)	Comb. SLE(freq.) 89	
90	SLE(f)	Comb. SLE(freq.) 90	
91	SLE(f)	Comb. SLE(freq.) 91	
92	SLE(f)	Comb. SLE(freq.) 92	
93	SLE(f)	Comb. SLE(freq.) 93	
94	SLE(f)	Comb. SLE(freq.) 94	
95	SLE(f)	Comb. SLE(freq.) 95	
96	SLE(f)	Comb. SLE(freq.) 96	
97	SLE(f)	Comb. SLE(freq.) 97	
98	SLE(f)	Comb. SLE(freq.) 98	
99	SLE(f)	Comb. SLE(freq.) 99	
100	SLE(f)	Comb. SLE(freq.) 100	
101	SLE(f)	Comb. SLE(freq.) 101	
102	SLE(f)	Comb. SLE(freq.) 102	
103	SLE(f)	Comb. SLE(freq.) 103	
104	SLE(f)	Comb. SLE(freq.) 104	
105	SLE(f)	Comb. SLE(freq.) 105	
106	SLE(f)	Comb. SLE(freq.) 106	
107	SLE(f)	Comb. SLE(freq.) 107	
108	SLE(p)	Comb. SLE(perm.) 108	
109	SLE(p)	Comb. SLE(perm.) 109	
110	SLE(p)	Comb. SLE(perm.) 110	
111	SLE(p)	Comb. SLE(perm.) 111	
112	SLE(p)	Comb. SLE(perm.) 112	
113	SLE(p)	Comb. SLE(perm.) 113	
114	SLE(p)	Comb. SLE(perm.) 114	
115	SLE(p)	Comb. SLE(perm.) 115	

Cmb	CDC 1/15	CDC 2	CDC 3	CDC 4	CDC 5	CDC 6	CDC 7	CDC 8	CDC 9/	CDC 10/	CDC 11/	CDC 12	CDC 13	CDC 14
1	1.30	1.30	1.50	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0													
2	1.30	1.30	1.50	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1.50													
3	1.30	1.30	1.50	1.50	0.0	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0													
4	1.30	1.30	1.50	1.50	0.0	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1.50													
5	1.30	1.30	1.50	1.50	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0													
6	1.30	1.30	1.50	1.50	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1.50													
7	1.30	1.30	1.50	1.50	1.50	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0													
8	1.30	1.30	1.50	1.50	1.50	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1.50													
9	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0													
10	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1.50													
11	1.00	1.00	0.0	0.0	0.0	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cmb	CDC 1/15	CDC 2	CDC 3	CDC 4	CDC 5	CDC 6	CDC 7	CDC 8	CDC 9/	CDC 10/	CDC 11/	CDC 12	CDC 13	CDC 14
	0.0													
12	1.00	1.00	0.0	0.0	0.0	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1.50													
13	1.00	1.00	0.0	0.0	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0													
14	1.00	1.00	0.0	0.0	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1.50													
15	1.00	1.00	0.0	0.0	1.50	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0													
16	1.00	1.00	0.0	0.0	1.50	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1.50													
17	1.00	1.00	1.00	1.00	0.80	0.80	-1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0
	0.80													
18	1.00	1.00	1.00	1.00	0.80	0.80	-1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0
	0.80													
19	1.00	1.00	1.00	1.00	0.80	0.80	1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0
	0.80													
20	1.00	1.00	1.00	1.00	0.80	0.80	1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0
	0.80													
21	1.00	1.00	1.00	1.00	0.80	0.80	-1.00	0.0	0.0	-0.30	0.0	0.0	0.0	0.0
	0.80													
22	1.00	1.00	1.00	1.00	0.80	0.80	-1.00	0.0	0.0	0.30	0.0	0.0	0.0	0.0
	0.80													
23	1.00	1.00	1.00	1.00	0.80	0.80	1.00	0.0	0.0	-0.30	0.0	0.0	0.0	0.0
	0.80													
24	1.00	1.00	1.00	1.00	0.80	0.80	1.00	0.0	0.0	0.30	0.0	0.0	0.0	0.0
	0.80													
25	1.00	1.00	1.00	1.00	0.80	0.80	0.0	-1.00	-0.30	0.0	0.0	0.0	0.0	0.0
	0.80													
26	1.00	1.00	1.00	1.00	0.80	0.80	0.0	-1.00	0.30	0.0	0.0	0.0	0.0	0.0
	0.80													
27	1.00	1.00	1.00	1.00	0.80	0.80	0.0	1.00	-0.30	0.0	0.0	0.0	0.0	0.0
	0.80													
28	1.00	1.00	1.00	1.00	0.80	0.80	0.0	1.00	0.30	0.0	0.0	0.0	0.0	0.0
	0.80													
29	1.00	1.00	1.00	1.00	0.80	0.80	0.0	-1.00	0.0	-0.30	0.0	0.0	0.0	0.0
	0.80													
30	1.00	1.00	1.00	1.00	0.80	0.80	0.0	-1.00	0.0	0.30	0.0	0.0	0.0	0.0
	0.80													
31	1.00	1.00	1.00	1.00	0.80	0.80	0.0	1.00	0.0	-0.30	0.0	0.0	0.0	0.0
	0.80													
32	1.00	1.00	1.00	1.00	0.80	0.80	0.0	1.00	0.0	0.30	0.0	0.0	0.0	0.0
	0.80													
33	1.00	1.00	1.00	1.00	0.80	0.80	-0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0
	0.80													
34	1.00	1.00	1.00	1.00	0.80	0.80	-0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0
	0.80													
35	1.00	1.00	1.00	1.00	0.80	0.80	0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0
	0.80													
36	1.00	1.00	1.00	1.00	0.80	0.80	0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0
	0.80													
37	1.00	1.00	1.00	1.00	0.80	0.80	0.0	-0.30	-1.00	0.0	0.0	0.0	0.0	0.0
	0.80													
38	1.00	1.00	1.00	1.00	0.80	0.80	0.0	-0.30	1.00	0.0	0.0	0.0	0.0	0.0
	0.80													
39	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.30	-1.00	0.0	0.0	0.0	0.0	0.0
	0.80													
40	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.30	1.00	0.0	0.0	0.0	0.0	0.0
	0.80													
41	1.00	1.00	1.00	1.00	0.80	0.80	-0.30	0.0	0.0	-1.00	0.0	0.0	0.0	0.0
	0.80													
42	1.00	1.00	1.00	1.00	0.80	0.80	-0.30	0.0	0.0	1.00	0.0	0.0	0.0	0.0
	0.80													
43	1.00	1.00	1.00	1.00	0.80	0.80	0.30	0.0	0.0	-1.00	0.0	0.0	0.0	0.0
	0.80													
44	1.00	1.00	1.00	1.00	0.80	0.80	0.30	0.0	0.0	1.00	0.0	0.0	0.0	0.0
	0.80													
45	1.00	1.00	1.00	1.00	0.80	0.80	0.0	-0.30	0.0	-1.00	0.0	0.0	0.0	0.0
	0.80													
46	1.00	1.00	1.00	1.00	0.80	0.80	0.0	-0.30	0.0	1.00	0.0	0.0	0.0	0.0
	0.80													
47	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.30	0.0	-1.00	0.0	0.0	0.0	0.0

Cmb	CDC 1/15	CDC 2	CDC 3	CDC 4	CDC 5	CDC 6	CDC 7	CDC 8	CDC 9/	CDC 10/	CDC 11/	CDC 12	CDC 13	CDC 14
	0.80													
48	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.30	0.0	1.00	0.0	0.0	0.0	0.0
	0.80													
49	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	-1.00	0.0	-0.30	0.0
	0.80													
50	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	-1.00	0.0	0.30	0.0
	0.80													
51	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	1.00	0.0	-0.30	0.0
	0.80													
52	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	1.00	0.0	0.30	0.0
	0.80													
53	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	-0.30
	0.80													
54	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.30
	0.80													
55	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	1.00	0.0	0.0	-0.30
	0.80													
56	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.30
	0.80													
57	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.0	-1.00	-0.30	0.0
	0.80													
58	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.0	-1.00	0.30	0.0
	0.80													
59	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.0	1.00	-0.30	0.0
	0.80													
60	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.0	1.00	0.30	0.0
	0.80													
61	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	-0.30
	0.80													
62	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.30
	0.80													
63	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.0	1.00	0.0	-0.30
	0.80													
64	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.30
	0.80													
65	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	-0.30	0.0	-1.00	0.0
	0.80													
66	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	-0.30	0.0	1.00	0.0
	0.80													
67	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.30	0.0	-1.00	0.0
	0.80													
68	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.30	0.0	1.00	0.0
	0.80													
69	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.0	-0.30	-1.00	0.0
	0.80													
70	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.0	-0.30	1.00	0.0
	0.80													
71	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.0	0.30	-1.00	0.0
	0.80													
72	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.0	0.30	1.00	0.0
	0.80													
73	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	-1.00
	0.80													
74	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	1.00
	0.80													
75	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.30	0.0	0.0	-1.00
	0.80													
76	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.30	0.0	0.0	1.00
	0.80													
77	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	-1.00
	0.80													
78	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	1.00
	0.80													
79	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.0	0.30	0.0	-1.00
	0.80													
80	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.0	0.30	0.0	1.00
	0.80													
81	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0													
82	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1.00													
83	1.00	1.00	1.00	1.00	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cmb	CDC 1/15	CDC 2	CDC 3	CDC 4	CDC 5	CDC 6	CDC 7	CDC 8	CDC 9/	CDC 10/	CDC 11/	CDC 12	CDC 13	CDC 14
	0.0													
84	1.00	1.00	1.00	1.00	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1.00													
85	1.00	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0													
86	1.00	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1.00													
87	1.00	1.00	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0													
88	1.00	1.00	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1.00													
89	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0													
90	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.80													
91	1.00	1.00	1.00	1.00	0.0	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0													
92	1.00	1.00	1.00	1.00	0.0	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.80													
93	1.00	1.00	1.00	1.00	0.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0													
94	1.00	1.00	1.00	1.00	0.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.80													
95	1.00	1.00	1.00	1.00	0.90	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0													
96	1.00	1.00	1.00	1.00	0.90	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.80													
97	1.00	1.00	1.00	1.00	0.0	0.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0													
98	1.00	1.00	1.00	1.00	0.0	0.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.80													
99	1.00	1.00	1.00	1.00	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0													
100	1.00	1.00	1.00	1.00	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.80													
101	1.00	1.00	1.00	1.00	0.80	0.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0													
102	1.00	1.00	1.00	1.00	0.80	0.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.80													
103	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.90													
104	1.00	1.00	1.00	1.00	0.0	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.90													
105	1.00	1.00	1.00	1.00	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.90													
106	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0													
107	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.90													
108	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0													
109	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.80													
110	1.00	1.00	1.00	1.00	0.0	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0													
111	1.00	1.00	1.00	1.00	0.0	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.80													
112	1.00	1.00	1.00	1.00	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0													
113	1.00	1.00	1.00	1.00	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.80													
114	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0													
115	1.00	1.00	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.80													

2.8 AZIONE SISMICA

VALUTAZIONE DELL' AZIONE SISMICA

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

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

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

ag: accelerazione orizzontale massima del terreno;

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

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

Parametri della struttura					
Classe d'uso	Vita Vn [anni]	Coeff. Uso	Periodo Vr [anni]	Tipo di suolo	Categoria topografica
IV	100.0	2.0	200.0	C	T1

Individuati su reticolo di riferimento i parametri di pericolosità sismica si valutano i parametri spettrali riportati in tabella:

S è il coefficiente che tiene conto della categoria di sottosuolo e delle condizioni topografiche

mediante la relazione seguente S = Ss*St (3.2.5)

Fo è il fattore che quantifica l'amplificazione spettrale massima, su sito di riferimento rigido orizzontale

Fv è il fattore che quantifica l'amplificazione spettrale massima verticale, in termini di accelerazione orizzontale massima del terreno ag su sito di riferimento rigido orizzontale

Tb è il periodo corrispondente all'inizio del tratto dello spettro ad accelerazione costante.

Tc è il periodo corrispondente all'inizio del tratto dello spettro a velocità costante.

Td è il periodo corrispondente all'inizio del tratto dello spettro a spostamento costante.

Id nodo	Longitudine	Latitudine	Distanza
			Km
Loc.	8.872	44.410	
16917	8.872	44.395	1.662
16918	8.942	44.398	5.700
16696	8.938	44.448	6.710
16695	8.868	44.445	3.892

SL	Pver	Tr	ag	Fo	T*c
		Anni	g		sec
SLO	81.0	120.0	0.040	2.540	0.250
SLD	63.0	201.0	0.049	2.530	0.270
SLV	10.0	1898.0	0.105	2.540	0.310
SLC	5.0	2475.0	0.115	2.540	0.310

SL	ag	S	Fo	Fv	Tb	Tc	Td
	g				sec	sec	sec
SLO	0.040	1.500	2.540	0.689	0.138	0.415	1.762
SLD	0.049	1.500	2.530	0.758	0.146	0.437	1.797
SLV	0.105	1.500	2.540	1.111	0.160	0.479	2.020
SLC	0.115	1.500	2.540	1.161	0.160	0.479	2.059

2.9 RISULTATI ANALISI SISMICHE

LEGENDA TABELLA ANALISI SISMICHE

Il programma consente l'analisi di diverse configurazioni sismiche.

Sono previsti, infatti, i seguenti casi di carico:
9. Esk caso di carico sismico con analisi statica equivalente
10. Edk caso di carico sismico con analisi dinamica

Ciascun caso di carico è caratterizzato da un angolo di ingresso e da una configurazione di masse determinante la forza sismica complessiva (si rimanda al capitolo relativo ai casi di carico per chiarimenti inerenti questo aspetto).

Nella colonna Note, in funzione della norma in uso sono riportati i parametri fondamentali che caratterizzano l' azione sismica: in particolare possono essere presenti i seguenti valori:

Angolo di ingresso	Angolo di ingresso dell'azione sismica orizzontale
Fattore di importanza	Fattore di importanza dell'edificio, in base alla categoria di appartenenza
Zona sismica	Zona sismica
Accelerazione ag	Accelerazione orizzontale massima sul suolo
Categoria suolo	Categoria di profilo stratigrafico del suolo di fondazione
Fattore di struttura q	Fattore dipendente dalla tipologia strutturale
Fattore di sito S	Fattore dipendente dalla stratigrafia e dal profilo topografico
Classe di duttilità CD	Classe di duttilità della struttura – "A" duttilità alta, "B" duttilità bassa
Fattore riduz. SLD	Fattore di riduzione dello spettro elastico per lo stato limite di danno
Periodo proprio T1	Periodo proprio di vibrazione della struttura
Coefficiente Lambda	Coefficiente dipendente dal periodo proprio T1 e dal numero di piani della struttura
Ordinata spettro Sd(T1)	Valore delle ordinate dello spettro di progetto per lo stato limite ultimo, componente orizzontale (verticale Svd)
Ordinata spettro Se(T1)	Valore delle ordinate dello spettro elastico ridotta del fattore SLD per lo stato limite di danno, componente orizzontale (verticale Sve)
Ordinata spettro S (Tb-Tc)	Valore dell' ordinata dello spettro in uso nel tratto costante
numero di modi considerati	Numero di modi di vibrare della struttura considerati nell'analisi dinamica

Per ciascun caso di carico sismico viene riportato l'insieme di dati sotto riportati (le masse sono espresse in unità di forza):

a) **analisi sismica statica equivalente**:
- quota, posizione del centro di applicazione e azione orizzontale risultante, posizione del baricentro delle rigidezze, rapporto r/Ls (per strutture a nucleo), indici di regolarità e/r secondo EC8 4.2.3.2
- azione sismica complessiva

b) **analisi sismica dinamica con spettro di risposta**:
- quota, posizione del centro di massa e massa risultante, posizione del baricentro delle rigidezze, rapporto r/Ls (per strutture a nucleo) **,** indici di regolarità e/r secondo EC8 4.2.3.2
- frequenza, periodo, accelerazione spettrale, massa eccitata nelle tre direzioni globali per tutti i modi
- massa complessiva ed aliquota di massa complessiva eccitata.

TABELLA ANALISI SISMICHE

CDC	Tipo	Sigla Id	Note
7	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. +)	
			categoria suolo: C
			fattore di sito S = 1.500
			ordinata spettro (tratto Tb-Tc) = 0.267 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 1.509 sec.
			fattore di struttura q: 1.500
			fattore per spost. mu d: 1.500
			classe di duttilità CD: B
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1030.00	9.178e+05	2037.36	690.00	0.0	-69.00	2032.50	690.00	1.209	0.003	0.0
500.00	1.183e+06	2046.94	690.00	0.0	-69.00	2032.50	690.00	1.209	0.010	0.0
Risulta	2.101e+06									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	0.661	1.512	0.084	1.625e+04	0.8	1.601e+06	76.2	3.32e-06	0.0	0.0	0.0
2	0.663	1.509	0.085	1.587e+06	75.5	1.656e+04	0.8	3.25e-04	0.0	0.0	0.0
3	0.835	1.198	0.107	1.200e+04	0.6	60.07	2.86e-03	6.37e-06	0.0	0.0	0.0
4	3.841	0.260	0.267	1.830e+04	0.9	4.567e+05	21.7	1.56e-03	0.0	0.0	0.0
5	3.860	0.259	0.267	4.459e+05	21.2	2.034e+04	1.0	0.02	0.0	0.0	0.0
6	4.305	0.232	0.267	2.007e+04	1.0	732.12	3.48e-02	2.26e-03	0.0	0.0	0.0
7	5.773	0.173	0.267	0.09	4.07e-06	418.46	1.99e-02	0.07	3.39e-06	0.0	0.0
8	6.940	0.144	0.256	0.22	1.03e-05	2193.81	0.1	1.51	7.18e-05	0.0	0.0
9	7.855	0.127	0.244	69.98	3.33e-03	0.17	8.24e-06	4.430e+05	21.1	0.0	0.0
Risulta				2.099e+06		2.098e+06		4.430e+05			
In percentuale				99.92		99.83		21.08			

CDC	Tipo	Sigla Id	Note
8	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. -)	
			categoria suolo: C
			fattore di sito S = 1.500
			ordinata spettro (tratto Tb-Tc) = 0.267 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 1.509 sec.
			fattore di struttura q: 1.500
			fattore per spost. mu d: 1.500
			classe di duttilità CD: B
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1030.00	9.178e+05	2037.36	690.00	0.0	69.00	2032.50	690.00	1.209	0.003	0.0
500.00	1.183e+06	2046.94	690.00	0.0	69.00	2032.50	690.00	1.209	0.010	0.0
Risulta	2.101e+06									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	0.661	1.512	0.084	1.625e+04	0.8	1.601e+06	76.2	3.29e-06	0.0	0.0	0.0
2	0.663	1.509	0.085	1.587e+06	75.5	1.656e+04	0.8	3.25e-04	0.0	0.0	0.0
3	0.835	1.198	0.107	1.200e+04	0.6	60.07	2.86e-03	6.37e-06	0.0	0.0	0.0
4	3.841	0.260	0.267	1.830e+04	0.9	4.567e+05	21.7	1.55e-03	0.0	0.0	0.0
5	3.860	0.259	0.267	4.459e+05	21.2	2.034e+04	1.0	0.02	0.0	0.0	0.0
6	4.305	0.232	0.267	2.007e+04	1.0	732.12	3.48e-02	2.27e-03	0.0	0.0	0.0
7	5.773	0.173	0.267	0.09	4.08e-06	418.46	1.99e-02	0.07	3.28e-06	0.0	0.0
8	6.940	0.144	0.256	0.23	1.08e-05	2194.25	0.1	0.71	3.36e-05	0.0	0.0
9	7.855	0.127	0.244	65.23	3.10e-03	5.10	2.43e-04	4.303e+05	20.5	0.0	0.0
Risulta				2.099e+06		2.098e+06		4.303e+05			
In percentuale				99.92		99.83		20.48			

CDC	Tipo	Sigla Id	Note
9	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. +)	
			categoria suolo: C
			fattore di sito S = 1.500
			ordinata spettro (tratto Tb-Tc) = 0.267 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 1.540 sec.
			fattore di struttura q: 1.500
			fattore per spost. mu d: 1.500
			classe di duttilità CD: B
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1030.00	9.178e+05	2037.36	690.00	203.25	0.0	2032.50	690.00	1.209	0.003	0.0
500.00	1.183e+06	2046.94	690.00	203.25	0.0	2032.50	690.00	1.209	0.010	0.0
Risulta	2.101e+06									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	0.650	1.540	0.083	0.0	0.0	1.539e+06	73.2	0.0	0.0	0.0	0.0
2	0.664	1.506	0.085	1.615e+06	76.9	0.0	0.0	3.34e-04	0.0	0.0	0.0
3	0.857	1.166	0.110	0.0	0.0	7.813e+04	3.7	0.0	0.0	0.0	0.0
4	3.714	0.269	0.267	0.0	0.0	4.066e+05	19.4	0.0	0.0	0.0	0.0
5	3.880	0.258	0.267	4.843e+05	23.1	0.0	0.0	0.02	1.15e-06	0.0	0.0
6	4.451	0.225	0.267	0.0	0.0	7.005e+04	3.3	0.0	0.0	0.0	0.0
7	5.816	0.172	0.267	0.0	0.0	622.65	2.96e-02	1.84e-05	0.0	0.0	0.0
8	7.028	0.142	0.255	8.30e-05	0.0	2976.87	0.1	0.14	6.61e-06	0.0	0.0
9	7.855	0.127	0.244	68.35	3.25e-03	0.41	1.93e-05	4.462e+05	21.2	0.0	0.0
Risulta				2.099e+06		2.097e+06		4.462e+05			
In percentuale				99.92		99.82		21.24			

CDC	Tipo	Sigla Id	Note
10	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. -)	
			categoria suolo: C
			fattore di sito S = 1.500
			ordinata spettro (tratto Tb-Tc) = 0.267 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 1.537 sec.
			fattore di struttura q: 1.500
			fattore per spost. mu d: 1.500
			classe di duttilità CD: B

CDC	Tipo	Sigla Id	Note
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1030.00	9.178e+05	2037.36	690.00	-203.25	0.0	2032.50	690.00	1.209	0.003	0.0
500.00	1.183e+06	2046.94	690.00	-203.25	0.0	2032.50	690.00	1.209	0.010	0.0
Risulta	2.101e+06									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	0.651	1.537	0.083	0.0	0.0	1.543e+06	73.5	0.0	0.0	0.0	0.0
2	0.664	1.506	0.085	1.615e+06	76.9	0.0	0.0	3.34e-04	0.0	0.0	0.0
3	0.854	1.171	0.109	0.0	0.0	7.374e+04	3.5	0.0	0.0	0.0	0.0
4	3.740	0.267	0.267	0.0	0.0	4.147e+05	19.7	0.0	0.0	0.0	0.0
5	3.880	0.258	0.267	4.843e+05	23.1	0.0	0.0	0.02	1.15e-06	0.0	0.0
6	4.408	0.227	0.267	0.0	0.0	6.228e+04	3.0	0.0	0.0	0.0	0.0
7	5.818	0.172	0.267	0.0	0.0	560.13	2.67e-02	3.10e-06	0.0	0.0	0.0
8	7.024	0.142	0.255	3.87e-05	0.0	2761.14	0.1	0.04	2.08e-06	0.0	0.0
9	7.855	0.127	0.244	65.82	3.13e-03	3.92	1.86e-04	4.264e+05	20.3	0.0	0.0
Risulta				2.099e+06		2.097e+06		4.264e+05			
In percentuale				99.92		99.82		20.30			

CDC	Tipo	Sigla Id	Note
11	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. +)	
			categoria suolo: C
			fattore di sito S = 1.500
			ordinata spettro (tratto Tb-Tc) = 0.187 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 1.509 sec.
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1030.00	9.178e+05	2037.36	690.00	0.0	-69.00	2032.50	690.00	1.209	0.003	0.0
500.00	1.183e+06	2046.94	690.00	0.0	-69.00	2032.50	690.00	1.209	0.010	0.0
Risulta	2.101e+06									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	0.661	1.512	0.054	1.625e+04	0.8	1.601e+06	76.2	3.32e-06	0.0	0.0	0.0
2	0.663	1.509	0.054	1.587e+06	75.5	1.656e+04	0.8	3.25e-04	0.0	0.0	0.0
3	0.835	1.198	0.068	1.200e+04	0.6	60.07	2.86e-03	6.37e-06	0.0	0.0	0.0
4	3.841	0.260	0.187	1.830e+04	0.9	4.567e+05	21.7	1.56e-03	0.0	0.0	0.0
5	3.860	0.259	0.187	4.459e+05	21.2	2.034e+04	1.0	0.02	0.0	0.0	0.0
6	4.305	0.232	0.187	2.007e+04	1.0	732.12	3.48e-02	2.26e-03	0.0	0.0	0.0
7	5.773	0.173	0.187	0.09	4.07e-06	418.46	1.99e-02	0.07	3.39e-06	0.0	0.0
8	6.940	0.144	0.185	0.22	1.03e-05	2193.81	0.1	1.51	7.18e-05	0.0	0.0
9	7.855	0.127	0.172	69.98	3.33e-03	0.17	8.24e-06	4.430e+05	21.1	0.0	0.0
Risulta				2.099e+06		2.098e+06		4.430e+05			
In percentuale				99.92		99.83		21.08			

CDC	Tipo	Sigla Id	Note
12	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. -)	
			categoria suolo: C
			fattore di sito S = 1.500
			ordinata spettro (tratto Tb-Tc) = 0.187 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 1.509 sec.
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1030.00	9.178e+05	2037.36	690.00	0.0	69.00	2032.50	690.00	1.209	0.003	0.0
500.00	1.183e+06	2046.94	690.00	0.0	69.00	2032.50	690.00	1.209	0.010	0.0
Risulta	2.101e+06									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	0.661	1.512	0.054	1.625e+04	0.8	1.601e+06	76.2	3.29e-06	0.0	0.0	0.0
2	0.663	1.509	0.054	1.587e+06	75.5	1.656e+04	0.8	3.25e-04	0.0	0.0	0.0
3	0.835	1.198	0.068	1.200e+04	0.6	60.07	2.86e-03	6.37e-06	0.0	0.0	0.0
4	3.841	0.260	0.187	1.830e+04	0.9	4.567e+05	21.7	1.55e-03	0.0	0.0	0.0
5	3.860	0.259	0.187	4.459e+05	21.2	2.034e+04	1.0	0.02	0.0	0.0	0.0
6	4.305	0.232	0.187	2.007e+04	1.0	732.12	3.48e-02	2.27e-03	0.0	0.0	0.0
7	5.773	0.173	0.187	0.09	4.08e-06	418.46	1.99e-02	0.07	3.28e-06	0.0	0.0
8	6.940	0.144	0.185	0.23	1.08e-05	2194.25	0.1	0.71	3.36e-05	0.0	0.0
9	7.855	0.127	0.172	65.23	3.10e-03	5.10	2.43e-04	4.303e+05	20.5	0.0	0.0
Risulta				2.099e+06		2.098e+06		4.303e+05			
In percentuale				99.92		99.83		20.48			

CDC	Tipo	Sigla Id	Note
13	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. +)	
			categoria suolo: C
			fattore di sito S = 1.500
			ordinata spettro (tratto Tb-Tc) = 0.187 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 1.540 sec.
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1030.00	9.178e+05	2037.36	690.00	203.25	0.0	2032.50	690.00	1.209	0.003	0.0
500.00	1.183e+06	2046.94	690.00	203.25	0.0	2032.50	690.00	1.209	0.010	0.0
Risulta	2.101e+06									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	0.650	1.540	0.053	0.0	0.0	1.539e+06	73.2	0.0	0.0	0.0	0.0
2	0.664	1.506	0.054	1.615e+06	76.9	0.0	0.0	3.34e-04	0.0	0.0	0.0
3	0.857	1.166	0.070	0.0	0.0	7.813e+04	3.7	0.0	0.0	0.0	0.0
4	3.714	0.269	0.187	0.0	0.0	4.066e+05	19.4	0.0	0.0	0.0	0.0
5	3.880	0.258	0.187	4.843e+05	23.1	0.0	0.0	0.02	1.15e-06	0.0	0.0
6	4.451	0.225	0.187	0.0	0.0	7.005e+04	3.3	0.0	0.0	0.0	0.0
7	5.816	0.172	0.187	0.0	0.0	622.65	2.96e-02	1.84e-05	0.0	0.0	0.0
8	7.028	0.142	0.184	8.30e-05	0.0	2976.87	0.1	0.14	6.61e-06	0.0	0.0
9	7.855	0.127	0.172	68.35	3.25e-03	0.41	1.93e-05	4.462e+05	21.2	0.0	0.0

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
Risulta				2.099e+06		2.097e+06		4.462e+05			
In percentuale				99.92		99.82		21.24			

CDC	Tipo	Sigla Id	Note
14	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. -)	
			categoria suolo: C
			fattore di sito S = 1.500
			ordinata spettro (tratto Tb-Tc) = 0.187 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 1.537 sec.
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
cm	daN	cm	cm	cm	cm	cm	cm			
1030.00	9.178e+05	2037.36	690.00	-203.25	0.0	2032.50	690.00	1.209	0.003	0.0
500.00	1.183e+06	2046.94	690.00	-203.25	0.0	2032.50	690.00	1.209	0.010	0.0
Risulta	2.101e+06									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	0.651	1.537	0.053	0.0	0.0	1.543e+06	73.5	0.0	0.0	0.0	0.0
2	0.664	1.506	0.054	1.615e+06	76.9	0.0	0.0	3.34e-04	0.0	0.0	0.0
3	0.854	1.171	0.070	0.0	0.0	7.374e+04	3.5	0.0	0.0	0.0	0.0
4	3.740	0.267	0.187	0.0	0.0	4.147e+05	19.7	0.0	0.0	0.0	0.0
5	3.880	0.258	0.187	4.843e+05	23.1	0.0	0.0	0.02	1.15e-06	0.0	0.0
6	4.408	0.227	0.187	0.0	0.0	6.228e+04	3.0	0.0	0.0	0.0	0.0
7	5.818	0.172	0.187	0.0	0.0	560.13	2.67e-02	3.10e-06	0.0	0.0	0.0
8	7.024	0.142	0.184	3.87e-05	0.0	2761.14	0.1	0.04	2.08e-06	0.0	0.0
9	7.855	0.127	0.172	65.82	3.13e-03	3.92	1.86e-04	4.264e+05	20.3	0.0	0.0
Risulta				2.099e+06		2.097e+06		4.264e+05			
In percentuale				99.92		99.82		20.30			

Per ciascuna combinazione sismica definita SLD viene riportato il livello di deformazione etaT (dr) degli elementi strutturali verticali. Per semplicità di consultazione il livello è espresso anche in unità 1000*etaT/h da confrontare direttamente con i valori forniti nella norma (es. 5 per edifici con tamponamenti collegati rigidamente alla struttura o 10.0 per edifici con tamponamenti collegati elasticamente).

Cmb	Pilas.	1000 etaT/h	etaT	inter. h	Pilas.	1000 etaT/h	etaT	inter. h	Pilas.	1000 etaT/h	etaT	inter. h
			cm	cm			cm	cm			cm	cm
49	1	2.60	1.30	500.0	2	2.62	1.31	500.0	3	2.66	1.33	500.0
	4	2.73	1.36	500.0	5	2.81	1.41	500.0	6	2.92	1.46	500.0
	7	2.40	1.20	500.0	8	2.42	1.21	500.0	9	2.46	1.23	500.0
	10	2.53	1.27	500.0	11	2.63	1.31	500.0	12	2.74	1.37	500.0
	13	2.19	1.10	500.0	14	2.22	1.11	500.0	15	2.27	1.14	500.0
	16	2.35	1.17	500.0	17	2.45	1.22	500.0	18	2.57	1.28	500.0
	31	5.21	2.76	530.0	32	5.25	2.79	530.0	33	5.33	2.83	530.0
	34	5.44	2.89	530.0	35	5.59	2.96	530.0	36	5.77	3.06	530.0
	37	4.85	2.57	530.0	38	4.89	2.59	530.0	39	4.97	2.63	530.0
	40	5.09	2.70	530.0	41	5.25	2.78	530.0	42	5.45	2.89	530.0
	43	4.48	2.38	530.0	44	4.53	2.40	530.0	45	4.61	2.45	530.0
	46	4.75	2.52	530.0	47	4.92	2.61	530.0	48	5.13	2.72	530.0

Cmb	Pilas.	1000 etaT/h	etaT	inter. h	Pilas.	1000 etaT/h	etaT	inter. h	Pilas.	1000 etaT/h	etaT	inter. h
			cm	cm			cm	cm			cm	cm
50	1	2.55	1.28	500.0	2	2.52	1.26	500.0	3	2.50	1.25	500.0
	4	2.49	1.24	500.0	5	2.47	1.24	500.0	6	2.47	1.23	500.0
	7	2.56	1.28	500.0	8	2.53	1.26	500.0	9	2.51	1.25	500.0
	10	2.49	1.24	500.0	11	2.48	1.24	500.0	12	2.47	1.23	500.0
	13	2.56	1.28	500.0	14	2.53	1.27	500.0	15	2.51	1.26	500.0
	16	2.50	1.25	500.0	17	2.48	1.24	500.0	18	2.47	1.24	500.0
	31	5.14	2.72	530.0	32	5.08	2.69	530.0	33	5.04	2.67	530.0
	34	5.00	2.65	530.0	35	4.98	2.64	530.0	36	4.94	2.62	530.0
	37	5.15	2.73	530.0	38	5.09	2.70	530.0	39	5.05	2.68	530.0
	40	5.01	2.66	530.0	41	4.98	2.64	530.0	42	4.95	2.63	530.0
	43	5.16	2.73	530.0	44	5.10	2.70	530.0	45	5.06	2.68	530.0
	46	5.02	2.66	530.0	47	4.99	2.64	530.0	48	4.96	2.63	530.0
51	1	2.57	1.28	500.0	2	2.53	1.27	500.0	3	2.51	1.25	500.0
	4	2.49	1.24	500.0	5	2.47	1.24	500.0	6	2.45	1.23	500.0
	7	2.57	1.29	500.0	8	2.54	1.27	500.0	9	2.51	1.26	500.0
	10	2.49	1.25	500.0	11	2.47	1.24	500.0	12	2.46	1.23	500.0
	13	2.58	1.29	500.0	14	2.54	1.27	500.0	15	2.52	1.26	500.0
	16	2.50	1.25	500.0	17	2.48	1.24	500.0	18	2.46	1.23	500.0
	31	5.13	2.72	530.0	32	5.08	2.69	530.0	33	5.04	2.67	530.0
	34	5.01	2.66	530.0	35	4.98	2.64	530.0	36	4.96	2.63	530.0
	37	5.14	2.72	530.0	38	5.09	2.70	530.0	39	5.05	2.68	530.0
	40	5.02	2.66	530.0	41	4.99	2.64	530.0	42	4.97	2.63	530.0
	43	5.14	2.73	530.0	44	5.10	2.70	530.0	45	5.06	2.68	530.0
	46	5.03	2.66	530.0	47	5.00	2.65	530.0	48	4.98	2.64	530.0
52	1	2.61	1.31	500.0	2	2.63	1.31	500.0	3	2.67	1.33	500.0
	4	2.73	1.36	500.0	5	2.81	1.40	500.0	6	2.91	1.45	500.0
	7	2.41	1.21	500.0	8	2.43	1.21	500.0	9	2.47	1.23	500.0
	10	2.53	1.27	500.0	11	2.62	1.31	500.0	12	2.73	1.37	500.0
	13	2.21	1.11	500.0	14	2.23	1.12	500.0	15	2.28	1.14	500.0
	16	2.35	1.17	500.0	17	2.44	1.22	500.0	18	2.56	1.28	500.0
	31	5.20	2.76	530.0	32	5.25	2.78	530.0	33	5.33	2.83	530.0
	34	5.45	2.89	530.0	35	5.60	2.97	530.0	36	5.79	3.07	530.0
	37	4.84	2.56	530.0	38	4.89	2.59	530.0	39	4.97	2.64	530.0
	40	5.10	2.70	530.0	41	5.26	2.79	530.0	42	5.46	2.90	530.0
	43	4.47	2.37	530.0	44	4.52	2.40	530.0	45	4.62	2.45	530.0
	46	4.75	2.52	530.0	47	4.93	2.61	530.0	48	5.15	2.73	530.0
53	1	2.45	1.23	500.0	2	2.47	1.23	500.0	3	2.49	1.24	500.0
	4	2.51	1.25	500.0	5	2.53	1.27	500.0	6	2.57	1.29	500.0
	7	2.45	1.23	500.0	8	2.47	1.23	500.0	9	2.49	1.24	500.0
	10	2.51	1.25	500.0	11	2.54	1.27	500.0	12	2.57	1.28	500.0
	13	2.45	1.22	500.0	14	2.47	1.23	500.0	15	2.49	1.24	500.0
	16	2.51	1.26	500.0	17	2.54	1.27	500.0	18	2.57	1.29	500.0
	31	4.96	2.63	530.0	32	4.99	2.64	530.0	33	5.01	2.66	530.0
	34	5.05	2.67	530.0	35	5.08	2.69	530.0	36	5.13	2.72	530.0
	37	4.96	2.63	530.0	38	4.98	2.64	530.0	39	5.01	2.66	530.0
	40	5.05	2.67	530.0	41	5.09	2.70	530.0	42	5.14	2.72	530.0
	43	4.96	2.63	530.0	44	4.99	2.64	530.0	45	5.02	2.66	530.0
	46	5.05	2.68	530.0	47	5.09	2.70	530.0	48	5.14	2.72	530.0
54	1	2.90	1.45	500.0	2	2.80	1.40	500.0	3	2.72	1.36	500.0
	4	2.66	1.33	500.0	5	2.62	1.31	500.0	6	2.61	1.30	500.0
	7	2.73	1.36	500.0	8	2.62	1.31	500.0	9	2.53	1.27	500.0
	10	2.47	1.23	500.0	11	2.43	1.21	500.0	12	2.41	1.20	500.0
	13	2.56	1.28	500.0	14	2.44	1.22	500.0	15	2.35	1.18	500.0
	16	2.28	1.14	500.0	17	2.23	1.12	500.0	18	2.21	1.11	500.0
	31	5.78	3.06	530.0	32	5.59	2.96	530.0	33	5.44	2.88	530.0
	34	5.33	2.82	530.0	35	5.24	2.78	530.0	36	5.19	2.75	530.0
	37	5.46	2.89	530.0	38	5.26	2.79	530.0	39	5.10	2.70	530.0
	40	4.97	2.64	530.0	41	4.89	2.59	530.0	42	4.84	2.56	530.0
	43	5.15	2.73	530.0	44	4.94	2.62	530.0	45	4.76	2.52	530.0
	46	4.62	2.45	530.0	47	4.53	2.40	530.0	48	4.48	2.37	530.0
55	1	2.92	1.46	500.0	2	2.81	1.40	500.0	3	2.73	1.36	500.0
	4	2.66	1.33	500.0	5	2.62	1.31	500.0	6	2.60	1.30	500.0
	7	2.74	1.37	500.0	8	2.63	1.31	500.0	9	2.54	1.27	500.0
	10	2.47	1.24	500.0	11	2.42	1.21	500.0	12	2.40	1.20	500.0
	13	2.57	1.29	500.0	14	2.45	1.23	500.0	15	2.36	1.18	500.0
	16	2.28	1.14	500.0	17	2.23	1.12	500.0	18	2.20	1.10	500.0
	31	5.77	3.06	530.0	32	5.59	2.96	530.0	33	5.44	2.89	530.0
	34	5.33	2.83	530.0	35	5.25	2.78	530.0	36	5.21	2.76	530.0
	37	5.45	2.89	530.0	38	5.26	2.79	530.0	39	5.10	2.70	530.0
	40	4.98	2.64	530.0	41	4.90	2.60	530.0	42	4.85	2.57	530.0
	43	5.14	2.72	530.0	44	4.93	2.61	530.0	45	4.76	2.52	530.0
	46	4.63	2.45	530.0	47	4.54	2.41	530.0	48	4.49	2.38	530.0

Cmb	Pilas.	1000 etaT/h	etaT cm	inter. h cm	Pilas.	1000 etaT/h	etaT cm	inter. h cm	Pilas.	1000 etaT/h	etaT cm	inter. h cm
56	1	2.47	1.23	500.0	2	2.48	1.24	500.0	3	2.49	1.25	500.0
	4	2.51	1.25	500.0	5	2.53	1.27	500.0	6	2.56	1.28	500.0
	7	2.47	1.23	500.0	8	2.48	1.24	500.0	9	2.49	1.25	500.0
	10	2.51	1.25	500.0	11	2.53	1.27	500.0	12	2.56	1.28	500.0
	13	2.47	1.23	500.0	14	2.48	1.24	500.0	15	2.49	1.25	500.0
	16	2.51	1.26	500.0	17	2.53	1.27	500.0	18	2.56	1.28	500.0
	31	4.95	2.62	530.0	32	4.98	2.64	530.0	33	5.01	2.66	530.0
	34	5.05	2.68	530.0	35	5.09	2.70	530.0	36	5.15	2.73	530.0
	37	4.95	2.62	530.0	38	4.98	2.64	530.0	39	5.01	2.66	530.0
	40	5.05	2.68	530.0	41	5.10	2.70	530.0	42	5.15	2.73	530.0
	43	4.95	2.62	530.0	44	4.98	2.64	530.0	45	5.02	2.66	530.0
	46	5.06	2.68	530.0	47	5.10	2.70	530.0	48	5.16	2.73	530.0
57	1	2.56	1.28	500.0	2	2.53	1.27	500.0	3	2.51	1.26	500.0
	4	2.50	1.25	500.0	5	2.48	1.24	500.0	6	2.47	1.24	500.0
	7	2.56	1.28	500.0	8	2.53	1.26	500.0	9	2.51	1.25	500.0
	10	2.49	1.24	500.0	11	2.48	1.24	500.0	12	2.47	1.23	500.0
	13	2.55	1.28	500.0	14	2.52	1.26	500.0	15	2.50	1.25	500.0
	16	2.49	1.24	500.0	17	2.47	1.24	500.0	18	2.47	1.23	500.0
	31	5.16	2.73	530.0	32	5.10	2.70	530.0	33	5.06	2.68	530.0
	34	5.02	2.66	530.0	35	4.99	2.64	530.0	36	4.96	2.63	530.0
	37	5.15	2.73	530.0	38	5.09	2.70	530.0	39	5.05	2.68	530.0
	40	5.01	2.66	530.0	41	4.98	2.64	530.0	42	4.95	2.63	530.0
	43	5.14	2.72	530.0	44	5.08	2.69	530.0	45	5.04	2.67	530.0
	46	5.00	2.65	530.0	47	4.98	2.64	530.0	48	4.94	2.62	530.0
58	1	2.19	1.10	500.0	2	2.22	1.11	500.0	3	2.27	1.14	500.0
	4	2.35	1.17	500.0	5	2.45	1.22	500.0	6	2.57	1.28	500.0
	7	2.40	1.20	500.0	8	2.42	1.21	500.0	9	2.46	1.23	500.0
	10	2.53	1.27	500.0	11	2.63	1.31	500.0	12	2.74	1.37	500.0
	13	2.60	1.30	500.0	14	2.62	1.31	500.0	15	2.66	1.33	500.0
	16	2.73	1.36	500.0	17	2.81	1.41	500.0	18	2.92	1.46	500.0
	31	4.48	2.38	530.0	32	4.53	2.40	530.0	33	4.61	2.45	530.0
	34	4.75	2.52	530.0	35	4.92	2.61	530.0	36	5.13	2.72	530.0
	37	4.85	2.57	530.0	38	4.89	2.59	530.0	39	4.97	2.63	530.0
	40	5.09	2.70	530.0	41	5.25	2.78	530.0	42	5.45	2.89	530.0
	43	5.21	2.76	530.0	44	5.25	2.79	530.0	45	5.33	2.83	530.0
	46	5.44	2.89	530.0	47	5.59	2.96	530.0	48	5.77	3.06	530.0
59	1	2.21	1.11	500.0	2	2.23	1.12	500.0	3	2.28	1.14	500.0
	4	2.35	1.17	500.0	5	2.44	1.22	500.0	6	2.56	1.28	500.0
	7	2.41	1.21	500.0	8	2.43	1.21	500.0	9	2.47	1.23	500.0
	10	2.53	1.27	500.0	11	2.62	1.31	500.0	12	2.73	1.37	500.0
	13	2.61	1.31	500.0	14	2.63	1.31	500.0	15	2.67	1.33	500.0
	16	2.73	1.36	500.0	17	2.81	1.40	500.0	18	2.91	1.45	500.0
	31	4.47	2.37	530.0	32	4.52	2.40	530.0	33	4.62	2.45	530.0
	34	4.75	2.52	530.0	35	4.93	2.61	530.0	36	5.15	2.73	530.0
	37	4.84	2.56	530.0	38	4.89	2.59	530.0	39	4.97	2.64	530.0
	40	5.10	2.70	530.0	41	5.26	2.79	530.0	42	5.46	2.90	530.0
	43	5.20	2.76	530.0	44	5.25	2.78	530.0	45	5.33	2.83	530.0
	46	5.45	2.89	530.0	47	5.60	2.97	530.0	48	5.79	3.07	530.0
60	1	2.58	1.29	500.0	2	2.54	1.27	500.0	3	2.52	1.26	500.0
	4	2.50	1.25	500.0	5	2.48	1.24	500.0	6	2.46	1.23	500.0
	7	2.57	1.29	500.0	8	2.54	1.27	500.0	9	2.51	1.26	500.0
	10	2.49	1.25	500.0	11	2.47	1.24	500.0	12	2.46	1.23	500.0
	13	2.57	1.28	500.0	14	2.53	1.27	500.0	15	2.51	1.25	500.0
	16	2.49	1.24	500.0	17	2.47	1.24	500.0	18	2.45	1.23	500.0
	31	5.14	2.73	530.0	32	5.10	2.70	530.0	33	5.06	2.68	530.0
	34	5.03	2.66	530.0	35	5.00	2.65	530.0	36	4.98	2.64	530.0
	37	5.14	2.72	530.0	38	5.09	2.70	530.0	39	5.05	2.68	530.0
	40	5.02	2.66	530.0	41	4.99	2.64	530.0	42	4.97	2.63	530.0
	43	5.13	2.72	530.0	44	5.08	2.69	530.0	45	5.04	2.67	530.0
	46	5.01	2.66	530.0	47	4.98	2.64	530.0	48	4.96	2.63	530.0
61	1	2.56	1.28	500.0	2	2.44	1.22	500.0	3	2.35	1.18	500.0
	4	2.28	1.14	500.0	5	2.23	1.12	500.0	6	2.21	1.11	500.0
	7	2.73	1.36	500.0	8	2.62	1.31	500.0	9	2.53	1.27	500.0
	10	2.47	1.23	500.0	11	2.43	1.21	500.0	12	2.41	1.20	500.0
	13	2.90	1.45	500.0	14	2.80	1.40	500.0	15	2.72	1.36	500.0
	16	2.66	1.33	500.0	17	2.62	1.31	500.0	18	2.61	1.30	500.0
	31	5.15	2.73	530.0	32	4.94	2.62	530.0	33	4.76	2.52	530.0
	34	4.62	2.45	530.0	35	4.53	2.40	530.0	36	4.48	2.37	530.0
	37	5.46	2.89	530.0	38	5.26	2.79	530.0	39	5.10	2.70	530.0
	40	4.97	2.64	530.0	41	4.89	2.59	530.0	42	4.84	2.56	530.0
	43	5.78	3.06	530.0	44	5.59	2.96	530.0	45	5.44	2.88	530.0
	46	5.33	2.82	530.0	47	5.24	2.78	530.0	48	5.19	2.75	530.0

Cmb	Pilas.	1000 etaT/h	etaT	inter. h	Pilas.	1000 etaT/h	etaT	inter. h	Pilas.	1000 etaT/h	etaT	inter. h
			cm	cm			cm	cm			cm	cm
62	1	2.45	1.22	500.0	2	2.47	1.23	500.0	3	2.49	1.24	500.0
	4	2.51	1.26	500.0	5	2.54	1.27	500.0	6	2.57	1.29	500.0
	7	2.45	1.23	500.0	8	2.47	1.23	500.0	9	2.49	1.24	500.0
	10	2.51	1.25	500.0	11	2.54	1.27	500.0	12	2.57	1.28	500.0
	13	2.45	1.23	500.0	14	2.47	1.23	500.0	15	2.49	1.24	500.0
	16	2.51	1.25	500.0	17	2.53	1.27	500.0	18	2.57	1.29	500.0
	31	4.96	2.63	530.0	32	4.99	2.64	530.0	33	5.02	2.66	530.0
	34	5.05	2.68	530.0	35	5.09	2.70	530.0	36	5.14	2.72	530.0
	37	4.96	2.63	530.0	38	4.98	2.64	530.0	39	5.01	2.66	530.0
	40	5.05	2.67	530.0	41	5.09	2.70	530.0	42	5.14	2.72	530.0
	43	4.96	2.63	530.0	44	4.99	2.64	530.0	45	5.01	2.66	530.0
	46	5.05	2.67	530.0	47	5.08	2.69	530.0	48	5.13	2.72	530.0
63	1	2.47	1.23	500.0	2	2.48	1.24	500.0	3	2.49	1.25	500.0
	4	2.51	1.26	500.0	5	2.53	1.27	500.0	6	2.56	1.28	500.0
	7	2.47	1.23	500.0	8	2.48	1.24	500.0	9	2.49	1.25	500.0
	10	2.51	1.25	500.0	11	2.53	1.27	500.0	12	2.56	1.28	500.0
	13	2.47	1.23	500.0	14	2.48	1.24	500.0	15	2.49	1.25	500.0
	16	2.51	1.25	500.0	17	2.53	1.27	500.0	18	2.56	1.28	500.0
	31	4.95	2.62	530.0	32	4.98	2.64	530.0	33	5.02	2.66	530.0
	34	5.06	2.68	530.0	35	5.10	2.70	530.0	36	5.16	2.73	530.0
	37	4.95	2.62	530.0	38	4.98	2.64	530.0	39	5.01	2.66	530.0
	40	5.05	2.68	530.0	41	5.10	2.70	530.0	42	5.15	2.73	530.0
	43	4.95	2.62	530.0	44	4.98	2.64	530.0	45	5.01	2.66	530.0
	46	5.05	2.68	530.0	47	5.09	2.70	530.0	48	5.15	2.73	530.0
64	1	2.57	1.29	500.0	2	2.45	1.23	500.0	3	2.36	1.18	500.0
	4	2.28	1.14	500.0	5	2.23	1.12	500.0	6	2.20	1.10	500.0
	7	2.74	1.37	500.0	8	2.63	1.31	500.0	9	2.54	1.27	500.0
	10	2.47	1.24	500.0	11	2.42	1.21	500.0	12	2.40	1.20	500.0
	13	2.92	1.46	500.0	14	2.81	1.40	500.0	15	2.73	1.36	500.0
	16	2.66	1.33	500.0	17	2.62	1.31	500.0	18	2.60	1.30	500.0
	31	5.14	2.72	530.0	32	4.93	2.61	530.0	33	4.76	2.52	530.0
	34	4.63	2.45	530.0	35	4.54	2.41	530.0	36	4.49	2.38	530.0
	37	5.45	2.89	530.0	38	5.26	2.79	530.0	39	5.10	2.70	530.0
	40	4.98	2.64	530.0	41	4.90	2.60	530.0	42	4.85	2.57	530.0
	43	5.77	3.06	530.0	44	5.59	2.96	530.0	45	5.44	2.89	530.0
	46	5.33	2.83	530.0	47	5.25	2.78	530.0	48	5.21	2.76	530.0
65	1	1.92	0.96	500.0	2	2.14	1.07	500.0	3	2.40	1.20	500.0
	4	2.71	1.35	500.0	5	3.04	1.52	500.0	6	3.39	1.70	500.0
	7	1.74	0.87	500.0	8	1.97	0.99	500.0	9	2.26	1.13	500.0
	10	2.58	1.29	500.0	11	2.93	1.46	500.0	12	3.29	1.65	500.0
	13	1.62	0.81	500.0	14	1.87	0.93	500.0	15	2.17	1.08	500.0
	16	2.50	1.25	500.0	17	2.86	1.43	500.0	18	3.23	1.62	500.0
	31	3.89	2.06	530.0	32	4.30	2.28	530.0	33	4.80	2.55	530.0
	34	5.38	2.85	530.0	35	6.00	3.18	530.0	36	6.65	3.53	530.0
	37	3.56	1.89	530.0	38	4.00	2.12	530.0	39	4.54	2.41	530.0
	40	5.15	2.73	530.0	41	5.80	3.07	530.0	42	6.47	3.43	530.0
	43	3.34	1.77	530.0	44	3.81	2.02	530.0	45	4.37	2.32	530.0
	46	5.00	2.65	530.0	47	5.67	3.00	530.0	48	6.36	3.37	530.0
66	1	1.86	0.93	500.0	2	2.02	1.01	500.0	3	2.23	1.11	500.0
	4	2.47	1.23	500.0	5	2.73	1.37	500.0	6	3.01	1.51	500.0
	7	1.95	0.98	500.0	8	2.10	1.05	500.0	9	2.30	1.15	500.0
	10	2.54	1.27	500.0	11	2.80	1.40	500.0	12	3.07	1.53	500.0
	13	2.09	1.04	500.0	14	2.23	1.11	500.0	15	2.42	1.21	500.0
	16	2.64	1.32	500.0	17	2.89	1.45	500.0	18	3.16	1.58	500.0
	31	3.78	2.01	530.0	32	4.08	2.16	530.0	33	4.48	2.37	530.0
	34	4.93	2.61	530.0	35	5.43	2.88	530.0	36	5.95	3.15	530.0
	37	3.96	2.10	530.0	38	4.25	2.25	530.0	39	4.63	2.45	530.0
	40	5.07	2.69	530.0	41	5.55	2.94	530.0	42	6.06	3.21	530.0
	43	4.20	2.23	530.0	44	4.48	2.37	530.0	45	4.84	2.56	530.0
	46	5.26	2.79	530.0	47	5.72	3.03	530.0	48	6.22	3.29	530.0
67	1	1.87	0.93	500.0	2	2.02	1.01	500.0	3	2.23	1.11	500.0
	4	2.47	1.23	500.0	5	2.73	1.37	500.0	6	3.01	1.50	500.0
	7	1.96	0.98	500.0	8	2.11	1.05	500.0	9	2.30	1.15	500.0
	10	2.54	1.27	500.0	11	2.80	1.40	500.0	12	3.07	1.53	500.0
	13	2.10	1.05	500.0	14	2.23	1.12	500.0	15	2.42	1.21	500.0
	16	2.64	1.32	500.0	17	2.89	1.45	500.0	18	3.15	1.58	500.0
	31	3.78	2.00	530.0	32	4.08	2.16	530.0	33	4.48	2.37	530.0
	34	4.94	2.62	530.0	35	5.43	2.88	530.0	36	5.95	3.16	530.0
	37	3.95	2.10	530.0	38	4.24	2.25	530.0	39	4.63	2.45	530.0
	40	5.07	2.69	530.0	41	5.55	2.94	530.0	42	6.06	3.21	530.0
	43	4.20	2.22	530.0	44	4.47	2.37	530.0	45	4.84	2.56	530.0
	46	5.26	2.79	530.0	47	5.73	3.04	530.0	48	6.22	3.30	530.0

Cmb	Pilas.	1000 etaT/h	etaT	inter. h	Pilas.	1000 etaT/h	etaT	inter. h	Pilas.	1000 etaT/h	etaT	inter. h
			cm	cm			cm	cm			cm	cm
68	1	1.93	0.97	500.0	2	2.14	1.07	500.0	3	2.40	1.20	500.0
	4	2.71	1.35	500.0	5	3.04	1.52	500.0	6	3.39	1.69	500.0
	7	1.75	0.87	500.0	8	1.97	0.99	500.0	9	2.26	1.13	500.0
	10	2.58	1.29	500.0	11	2.93	1.46	500.0	12	3.29	1.65	500.0
	13	1.63	0.81	500.0	14	1.87	0.93	500.0	15	2.17	1.08	500.0
	16	2.50	1.25	500.0	17	2.86	1.43	500.0	18	3.23	1.62	500.0
	31	3.88	2.06	530.0	32	4.30	2.28	530.0	33	4.80	2.55	530.0
	34	5.38	2.85	530.0	35	6.00	3.18	530.0	36	6.66	3.53	530.0
	37	3.56	1.89	530.0	38	4.00	2.12	530.0	39	4.54	2.41	530.0
	40	5.15	2.73	530.0	41	5.80	3.07	530.0	42	6.48	3.43	530.0
	43	3.34	1.77	530.0	44	3.81	2.02	530.0	45	4.37	2.32	530.0
	46	5.00	2.65	530.0	47	5.67	3.00	530.0	48	6.36	3.37	530.0
69	1	2.09	1.04	500.0	2	2.23	1.11	500.0	3	2.42	1.21	500.0
	4	2.64	1.32	500.0	5	2.89	1.45	500.0	6	3.16	1.58	500.0
	7	1.95	0.98	500.0	8	2.10	1.05	500.0	9	2.30	1.15	500.0
	10	2.54	1.27	500.0	11	2.80	1.40	500.0	12	3.07	1.53	500.0
	13	1.86	0.93	500.0	14	2.02	1.01	500.0	15	2.23	1.11	500.0
	16	2.47	1.23	500.0	17	2.73	1.37	500.0	18	3.01	1.51	500.0
	31	4.20	2.23	530.0	32	4.48	2.37	530.0	33	4.84	2.56	530.0
	34	5.26	2.79	530.0	35	5.72	3.03	530.0	36	6.22	3.29	530.0
	37	3.96	2.10	530.0	38	4.25	2.25	530.0	39	4.63	2.45	530.0
	40	5.07	2.69	530.0	41	5.55	2.94	530.0	42	6.06	3.21	530.0
	43	3.78	2.01	530.0	44	4.08	2.16	530.0	45	4.48	2.37	530.0
	46	4.93	2.61	530.0	47	5.43	2.88	530.0	48	5.95	3.15	530.0
70	1	1.62	0.81	500.0	2	1.87	0.93	500.0	3	2.17	1.08	500.0
	4	2.50	1.25	500.0	5	2.86	1.43	500.0	6	3.23	1.62	500.0
	7	1.74	0.87	500.0	8	1.97	0.99	500.0	9	2.26	1.13	500.0
	10	2.58	1.29	500.0	11	2.93	1.46	500.0	12	3.29	1.65	500.0
	13	1.92	0.96	500.0	14	2.14	1.07	500.0	15	2.40	1.20	500.0
	16	2.71	1.35	500.0	17	3.04	1.52	500.0	18	3.39	1.70	500.0
	31	3.34	1.77	530.0	32	3.81	2.02	530.0	33	4.37	2.32	530.0
	34	5.00	2.65	530.0	35	5.67	3.00	530.0	36	6.36	3.37	530.0
	37	3.56	1.89	530.0	38	4.00	2.12	530.0	39	4.54	2.41	530.0
	40	5.15	2.73	530.0	41	5.80	3.07	530.0	42	6.47	3.43	530.0
	43	3.89	2.06	530.0	44	4.30	2.28	530.0	45	4.80	2.55	530.0
	46	5.38	2.85	530.0	47	6.00	3.18	530.0	48	6.65	3.53	530.0
71	1	1.63	0.81	500.0	2	1.87	0.93	500.0	3	2.17	1.08	500.0
	4	2.50	1.25	500.0	5	2.86	1.43	500.0	6	3.23	1.62	500.0
	7	1.75	0.87	500.0	8	1.97	0.99	500.0	9	2.26	1.13	500.0
	10	2.58	1.29	500.0	11	2.93	1.46	500.0	12	3.29	1.65	500.0
	13	1.93	0.97	500.0	14	2.14	1.07	500.0	15	2.40	1.20	500.0
	16	2.71	1.35	500.0	17	3.04	1.52	500.0	18	3.39	1.69	500.0
	31	3.34	1.77	530.0	32	3.81	2.02	530.0	33	4.37	2.32	530.0
	34	5.00	2.65	530.0	35	5.67	3.00	530.0	36	6.36	3.37	530.0
	37	3.56	1.89	530.0	38	4.00	2.12	530.0	39	4.54	2.41	530.0
	40	5.15	2.73	530.0	41	5.80	3.07	530.0	42	6.48	3.43	530.0
	43	3.88	2.06	530.0	44	4.30	2.28	530.0	45	4.80	2.55	530.0
	46	5.38	2.85	530.0	47	6.00	3.18	530.0	48	6.66	3.53	530.0
72	1	2.10	1.05	500.0	2	2.23	1.12	500.0	3	2.42	1.21	500.0
	4	2.64	1.32	500.0	5	2.89	1.45	500.0	6	3.15	1.58	500.0
	7	1.96	0.98	500.0	8	2.11	1.05	500.0	9	2.30	1.15	500.0
	10	2.54	1.27	500.0	11	2.80	1.40	500.0	12	3.07	1.53	500.0
	13	1.87	0.93	500.0	14	2.02	1.01	500.0	15	2.23	1.11	500.0
	16	2.47	1.23	500.0	17	2.73	1.37	500.0	18	3.01	1.50	500.0
	31	4.20	2.22	530.0	32	4.47	2.37	530.0	33	4.84	2.56	530.0
	34	5.26	2.79	530.0	35	5.73	3.04	530.0	36	6.22	3.30	530.0
	37	3.95	2.10	530.0	38	4.24	2.25	530.0	39	4.63	2.45	530.0
	40	5.07	2.69	530.0	41	5.55	2.94	530.0	42	6.06	3.21	530.0
	43	3.78	2.00	530.0	44	4.08	2.16	530.0	45	4.48	2.37	530.0
	46	4.94	2.62	530.0	47	5.43	2.88	530.0	48	5.95	3.16	530.0
73	1	2.98	1.49	500.0	2	2.72	1.36	500.0	3	2.47	1.24	500.0
	4	2.24	1.12	500.0	5	2.05	1.02	500.0	6	1.90	0.95	500.0
	7	3.04	1.52	500.0	8	2.78	1.39	500.0	9	2.54	1.27	500.0
	10	2.32	1.16	500.0	11	2.13	1.07	500.0	12	1.99	0.99	500.0
	13	3.12	1.56	500.0	14	2.87	1.44	500.0	15	2.64	1.32	500.0
	16	2.43	1.21	500.0	17	2.25	1.13	500.0	18	2.12	1.06	500.0
	31	5.91	3.13	530.0	32	5.42	2.87	530.0	33	4.95	2.62	530.0
	34	4.51	2.39	530.0	35	4.14	2.19	530.0	36	3.84	2.04	530.0
	37	6.02	3.19	530.0	38	5.53	2.93	530.0	39	5.07	2.69	530.0
	40	4.65	2.47	530.0	41	4.29	2.27	530.0	42	4.01	2.12	530.0
	43	6.17	3.27	530.0	44	5.70	3.02	530.0	45	5.26	2.79	530.0
	46	4.85	2.57	530.0	47	4.50	2.39	530.0	48	4.24	2.24	530.0

Cmb	Pilas.	1000 etaT/h	etaT cm	inter. h cm	Pilas.	1000 etaT/h	etaT cm	inter. h cm	Pilas.	1000 etaT/h	etaT cm	inter. h cm
74	1	3.36	1.68	500.0	2	3.03	1.51	500.0	3	2.71	1.35	500.0
	4	2.41	1.21	500.0	5	2.16	1.08	500.0	6	1.95	0.98	500.0
	7	3.27	1.63	500.0	8	2.92	1.46	500.0	9	2.59	1.29	500.0
	10	2.28	1.14	500.0	11	2.00	1.00	500.0	12	1.77	0.89	500.0
	13	3.21	1.60	500.0	14	2.85	1.43	500.0	15	2.51	1.26	500.0
	16	2.19	1.09	500.0	17	1.90	0.95	500.0	18	1.66	0.83	500.0
	31	6.61	3.50	530.0	32	5.98	3.17	530.0	33	5.38	2.85	530.0
	34	4.82	2.56	530.0	35	4.33	2.29	530.0	36	3.92	2.08	530.0
	37	6.43	3.41	530.0	38	5.78	3.07	530.0	39	5.16	2.73	530.0
	40	4.57	2.42	530.0	41	4.05	2.15	530.0	42	3.61	1.92	530.0
	43	6.32	3.35	530.0	44	5.66	3.00	530.0	45	5.01	2.66	530.0
	46	4.41	2.34	530.0	47	3.86	2.05	530.0	48	3.41	1.81	530.0
75	1	3.37	1.68	500.0	2	3.03	1.51	500.0	3	2.71	1.35	500.0
	4	2.41	1.21	500.0	5	2.16	1.08	500.0	6	1.94	0.97	500.0
	7	3.27	1.63	500.0	8	2.92	1.46	500.0	9	2.59	1.29	500.0
	10	2.28	1.14	500.0	11	2.00	1.00	500.0	12	1.77	0.89	500.0
	13	3.21	1.60	500.0	14	2.85	1.43	500.0	15	2.51	1.26	500.0
	16	2.19	1.10	500.0	17	1.90	0.95	500.0	18	1.66	0.83	500.0
	31	6.61	3.50	530.0	32	5.98	3.17	530.0	33	5.38	2.85	530.0
	34	4.83	2.56	530.0	35	4.33	2.30	530.0	36	3.93	2.08	530.0
	37	6.43	3.41	530.0	38	5.78	3.07	530.0	39	5.16	2.73	530.0
	40	4.58	2.42	530.0	41	4.05	2.15	530.0	42	3.62	1.92	530.0
	43	6.32	3.35	530.0	44	5.66	3.00	530.0	45	5.01	2.66	530.0
	46	4.41	2.34	530.0	47	3.87	2.05	530.0	48	3.41	1.81	530.0
76	1	2.99	1.49	500.0	2	2.72	1.36	500.0	3	2.47	1.24	500.0
	4	2.24	1.12	500.0	5	2.05	1.02	500.0	6	1.90	0.95	500.0
	7	3.04	1.52	500.0	8	2.78	1.39	500.0	9	2.54	1.27	500.0
	10	2.32	1.16	500.0	11	2.13	1.06	500.0	12	1.98	0.99	500.0
	13	3.13	1.56	500.0	14	2.88	1.44	500.0	15	2.64	1.32	500.0
	16	2.43	1.21	500.0	17	2.25	1.12	500.0	18	2.11	1.06	500.0
	31	5.91	3.13	530.0	32	5.42	2.87	530.0	33	4.94	2.62	530.0
	34	4.51	2.39	530.0	35	4.14	2.19	530.0	36	3.85	2.04	530.0
	37	6.01	3.19	530.0	38	5.53	2.93	530.0	39	5.07	2.69	530.0
	40	4.65	2.47	530.0	41	4.29	2.27	530.0	42	4.01	2.13	530.0
	43	6.17	3.27	530.0	44	5.70	3.02	530.0	45	5.26	2.79	530.0
	46	4.86	2.57	530.0	47	4.51	2.39	530.0	48	4.24	2.25	530.0
77	1	3.21	1.60	500.0	2	2.85	1.43	500.0	3	2.51	1.26	500.0
	4	2.19	1.09	500.0	5	1.90	0.95	500.0	6	1.66	0.83	500.0
	7	3.27	1.63	500.0	8	2.92	1.46	500.0	9	2.59	1.29	500.0
	10	2.28	1.14	500.0	11	2.00	1.00	500.0	12	1.77	0.89	500.0
	13	3.36	1.68	500.0	14	3.03	1.51	500.0	15	2.71	1.35	500.0
	16	2.41	1.21	500.0	17	2.16	1.08	500.0	18	1.95	0.98	500.0
	31	6.32	3.35	530.0	32	5.66	3.00	530.0	33	5.01	2.66	530.0
	34	4.41	2.34	530.0	35	3.86	2.05	530.0	36	3.41	1.81	530.0
	37	6.43	3.41	530.0	38	5.78	3.07	530.0	39	5.16	2.73	530.0
	40	4.57	2.42	530.0	41	4.05	2.15	530.0	42	3.61	1.92	530.0
	43	6.61	3.50	530.0	44	5.98	3.17	530.0	45	5.38	2.85	530.0
	46	4.82	2.56	530.0	47	4.33	2.29	530.0	48	3.92	2.08	530.0
78	1	3.12	1.56	500.0	2	2.87	1.44	500.0	3	2.64	1.32	500.0
	4	2.43	1.21	500.0	5	2.25	1.13	500.0	6	2.12	1.06	500.0
	7	3.04	1.52	500.0	8	2.78	1.39	500.0	9	2.54	1.27	500.0
	10	2.32	1.16	500.0	11	2.13	1.07	500.0	12	1.99	0.99	500.0
	13	2.98	1.49	500.0	14	2.72	1.36	500.0	15	2.47	1.24	500.0
	16	2.24	1.12	500.0	17	2.05	1.02	500.0	18	1.90	0.95	500.0
	31	6.17	3.27	530.0	32	5.70	3.02	530.0	33	5.26	2.79	530.0
	34	4.85	2.57	530.0	35	4.50	2.39	530.0	36	4.24	2.24	530.0
	37	6.02	3.19	530.0	38	5.53	2.93	530.0	39	5.07	2.69	530.0
	40	4.65	2.47	530.0	41	4.29	2.27	530.0	42	4.01	2.12	530.0
	43	5.91	3.13	530.0	44	5.42	2.87	530.0	45	4.95	2.62	530.0
	46	4.51	2.39	530.0	47	4.14	2.19	530.0	48	3.84	2.04	530.0
79	1	3.13	1.56	500.0	2	2.88	1.44	500.0	3	2.64	1.32	500.0
	4	2.43	1.21	500.0	5	2.25	1.12	500.0	6	2.11	1.06	500.0
	7	3.04	1.52	500.0	8	2.78	1.39	500.0	9	2.54	1.27	500.0
	10	2.32	1.16	500.0	11	2.13	1.06	500.0	12	1.98	0.99	500.0
	13	2.99	1.49	500.0	14	2.72	1.36	500.0	15	2.47	1.24	500.0
	16	2.24	1.12	500.0	17	2.05	1.02	500.0	18	1.90	0.95	500.0
	31	6.17	3.27	530.0	32	5.70	3.02	530.0	33	5.26	2.79	530.0
	34	4.86	2.57	530.0	35	4.51	2.39	530.0	36	4.24	2.25	530.0
	37	6.01	3.19	530.0	38	5.53	2.93	530.0	39	5.07	2.69	530.0
	40	4.65	2.47	530.0	41	4.29	2.27	530.0	42	4.01	2.13	530.0
	43	5.91	3.13	530.0	44	5.42	2.87	530.0	45	4.94	2.62	530.0
	46	4.51	2.39	530.0	47	4.14	2.19	530.0	48	3.85	2.04	530.0

CmbPilas.1000	etaT/h	etaT	inter. h		Pilas.1000	etaT/h	etaT	inter. h		Pilas.1000	etaT/h	etaT	inter. h	
			cm	cm				cm	cm				cm	cm
80	1	3.21	1.60	500.0	2	2.85	1.43	500.0	3	2.51	1.26	500.0		
	4	2.19	1.10	500.0	5	1.90	0.95	500.0	6	1.66	0.83	500.0		
	7	3.27	1.63	500.0	8	2.92	1.46	500.0	9	2.59	1.29	500.0		
	10	2.28	1.14	500.0	11	2.00	1.00	500.0	12	1.77	0.89	500.0		
	13	3.37	1.68	500.0	14	3.03	1.51	500.0	15	2.71	1.35	500.0		
	16	2.41	1.21	500.0	17	2.16	1.08	500.0	18	1.94	0.97	500.0		
	31	6.32	3.35	530.0	32	5.66	3.00	530.0	33	5.01	2.66	530.0		
	34	4.41	2.34	530.0	35	3.87	2.05	530.0	36	3.41	1.81	530.0		
	37	6.43	3.41	530.0	38	5.78	3.07	530.0	39	5.16	2.73	530.0		
	40	4.58	2.42	530.0	41	4.05	2.15	530.0	42	3.62	1.92	530.0		
	43	6.61	3.50	530.0	44	5.98	3.17	530.0	45	5.38	2.85	530.0		
	46	4.83	2.56	530.0	47	4.33	2.30	530.0	48	3.93	2.08	530.0		

	1000 etaT/h
Max	6.66

2.10 FONDAZIONE

La platea di fondazione ha spessore 70 cm, con dei ringrossi in corrispondenza dei bicchieri per le colonne prefabbricate, ed è collocata a livello del pavimento piano terreno (estradosso +3,50 m).

2.10.1 MODELLAZIONE STRUTTURA: NODI

LEGENDA TABELLA DATI NODI

Il programma utilizza per la modellazione nodi strutturali.
Ogni nodo è individuato dalle coordinate cartesiane nel sistema di riferimento globale (X Y Z).
Ad ogni nodo è eventualmente associato un codice di vincolamento rigido, un codice di fondazione speciale, ed un set di sei molle (tre per le traslazioni, tre per le rotazioni). Le tabelle sotto riportate riflettono le succitate possibilità. In particolare per ogni nodo viene indicato in tabella:

Nodo	numero del nodo.
X	valore della coordinata X
Y	valore della coordinata Y
Z	valore della coordinata Z

Per i nodi ai quali sia associato un codice di vincolamento rigido, un codice di fondazione speciale o un set di molle viene indicato in tabella:

Nodo	numero del nodo.
X	valore della coordinata X
Y	valore della coordinata Y
Z	valore della coordinata Z
Note	eventuale codice di vincolo (es. v=110010 sei valori relativi ai sei gradi di libertà previsti per il nodo TxTyTzRxRyRz, il valore 1 indica che lo spostamento o rotazione relativo è impedito, il valore 0 indica che lo spostamento o rotazione relativo è libero).
Note	(FS = 1, 2,…) eventuale codice del tipo di fondazione speciale (1, 2,… fanno riferimento alle tipologie: plinto, palo, plinto su pali,…) che è collegato al nodo. (ISO = "id SIGLA") indice e sigla identificativa dell' eventuale isolatore sismico assegnato al nodo
Rig. TX	valore della rigidezza dei vincoli elastici eventualmente applicati al nodo, nello specifico TX (idem per TY, TZ, RX, RY, RZ).

TABELLA DATI NODI

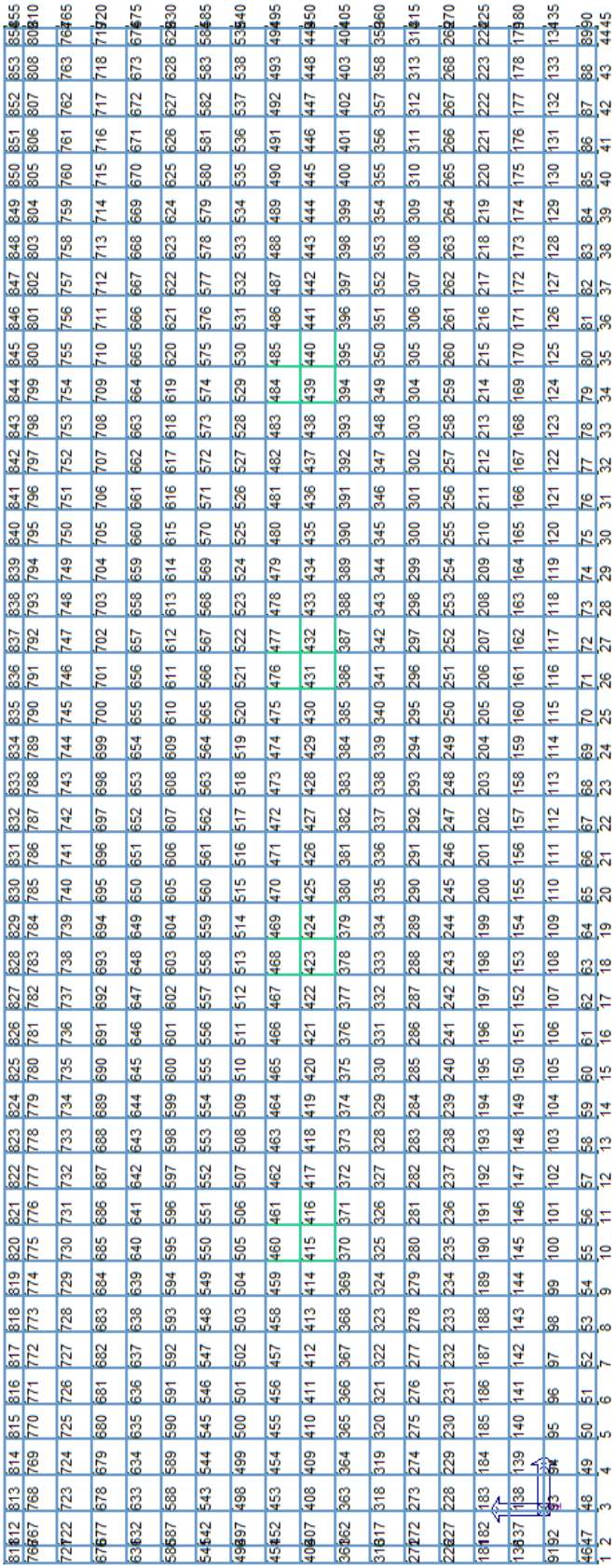
Nodo	X	Y	Z	Nodo	X	Y	Z	Nodo	X	Y	Z
	cm	cm	cm		cm	cm	cm		cm	cm	cm
1	-150.0	-150.0	0.0	2	-101.6	-150.0	0.0	3	0.0	-150.0	0.0
4	101.6	-150.0	0.0	5	203.3	-150.0	0.0	6	304.9	-150.0	0.0
7	406.5	-150.0	0.0	8	508.1	-150.0	0.0	9	609.8	-150.0	0.0
10	711.4	-150.0	0.0	11	813.0	-150.0	0.0	12	914.6	-150.0	0.0
13	1016.3	-150.0	0.0	14	1117.9	-150.0	0.0	15	1219.5	-150.0	0.0
16	1321.1	-150.0	0.0	17	1422.8	-150.0	0.0	18	1524.4	-150.0	0.0
19	1626.0	-150.0	0.0	20	1727.6	-150.0	0.0	21	1829.3	-150.0	0.0
22	1930.9	-150.0	0.0	23	2032.5	-150.0	0.0	24	2134.1	-150.0	0.0
25	2235.8	-150.0	0.0	26	2337.4	-150.0	0.0	27	2439.0	-150.0	0.0
28	2540.6	-150.0	0.0	29	2642.3	-150.0	0.0	30	2743.9	-150.0	0.0
31	2845.5	-150.0	0.0	32	2947.1	-150.0	0.0	33	3048.8	-150.0	0.0
34	3150.4	-150.0	0.0	35	3252.0	-150.0	0.0	36	3353.6	-150.0	0.0
37	3455.3	-150.0	0.0	38	3556.9	-150.0	0.0	39	3658.5	-150.0	0.0
40	3760.1	-150.0	0.0	41	3861.8	-150.0	0.0	42	3963.4	-150.0	0.0
43	4065.0	-150.0	0.0	44	4166.6	-150.0	0.0	45	4215.0	-150.0	0.0
46	-150.0	-98.6	0.0	47	-101.6	-98.6	0.0	48	0.0	-98.6	0.0
49	101.6	-98.6	0.0	50	203.3	-98.6	0.0	51	304.9	-98.6	0.0
52	406.5	-98.6	0.0	53	508.1	-98.6	0.0	54	609.8	-98.6	0.0
55	711.4	-98.6	0.0	56	813.0	-98.6	0.0	57	914.6	-98.6	0.0
58	1016.3	-98.6	0.0	59	1117.9	-98.6	0.0	60	1219.5	-98.6	0.0
61	1321.1	-98.6	0.0	62	1422.8	-98.6	0.0	63	1524.4	-98.6	0.0
64	1626.0	-98.6	0.0	65	1727.6	-98.6	0.0	66	1829.3	-98.6	0.0
67	1930.9	-98.6	0.0	68	2032.5	-98.6	0.0	69	2134.1	-98.6	0.0
70	2235.8	-98.6	0.0	71	2337.4	-98.6	0.0	72	2439.0	-98.6	0.0
73	2540.6	-98.6	0.0	74	2642.3	-98.6	0.0	75	2743.9	-98.6	0.0
76	2845.5	-98.6	0.0	77	2947.1	-98.6	0.0	78	3048.8	-98.6	0.0
79	3150.4	-98.6	0.0	80	3252.0	-98.6	0.0	81	3353.6	-98.6	0.0
82	3455.3	-98.6	0.0	83	3556.9	-98.6	0.0	84	3658.5	-98.6	0.0
85	3760.1	-98.6	0.0	86	3861.8	-98.6	0.0	87	3963.4	-98.6	0.0
88	4065.0	-98.6	0.0	89	4166.6	-98.6	0.0	90	4215.0	-98.6	0.0
91	-150.0	0.0	0.0	92	-101.6	0.0	0.0	93	0.0	0.0	0.0
94	101.6	0.0	0.0	95	203.3	0.0	0.0	96	304.9	0.0	0.0
97	406.5	0.0	0.0	98	508.1	0.0	0.0	99	609.8	0.0	0.0
100	711.4	0.0	0.0	101	813.0	0.0	0.0	102	914.6	0.0	0.0
103	1016.3	0.0	0.0	104	1117.9	0.0	0.0	105	1219.5	0.0	0.0
106	1321.1	0.0	0.0	107	1422.8	0.0	0.0	108	1524.4	0.0	0.0
109	1626.0	0.0	0.0	110	1727.6	0.0	0.0	111	1829.3	0.0	0.0
112	1930.9	0.0	0.0	113	2032.5	0.0	0.0	114	2134.1	0.0	0.0
115	2235.8	0.0	0.0	116	2337.4	0.0	0.0	117	2439.0	0.0	0.0
118	2540.6	0.0	0.0	119	2642.3	0.0	0.0	120	2743.9	0.0	0.0
121	2845.5	0.0	0.0	122	2947.1	0.0	0.0	123	3048.8	0.0	0.0
124	3150.4	0.0	0.0	125	3252.0	0.0	0.0	126	3353.6	0.0	0.0
127	3455.3	0.0	0.0	128	3556.9	0.0	0.0	129	3658.5	0.0	0.0
130	3760.1	0.0	0.0	131	3861.8	0.0	0.0	132	3963.4	0.0	0.0
133	4065.0	0.0	0.0	134	4166.6	0.0	0.0	135	4215.0	0.0	0.0
136	-150.0	98.6	0.0	137	-101.6	98.6	0.0	138	0.0	98.6	0.0
139	101.6	98.6	0.0	140	203.3	98.6	0.0	141	304.9	98.6	0.0
142	406.5	98.6	0.0	143	508.1	98.6	0.0	144	609.8	98.6	0.0
145	711.4	98.6	0.0	146	813.0	98.6	0.0	147	914.6	98.6	0.0
148	1016.3	98.6	0.0	149	1117.9	98.6	0.0	150	1219.5	98.6	0.0
151	1321.1	98.6	0.0	152	1422.8	98.6	0.0	153	1524.4	98.6	0.0
154	1626.0	98.6	0.0	155	1727.6	98.6	0.0	156	1829.3	98.6	0.0
157	1930.9	98.6	0.0	158	2032.5	98.6	0.0	159	2134.1	98.6	0.0
160	2235.8	98.6	0.0	161	2337.4	98.6	0.0	162	2439.0	98.6	0.0
163	2540.6	98.6	0.0	164	2642.3	98.6	0.0	165	2743.9	98.6	0.0
166	2845.5	98.6	0.0	167	2947.1	98.6	0.0	168	3048.8	98.6	0.0
169	3150.4	98.6	0.0	170	3252.0	98.6	0.0	171	3353.6	98.6	0.0
172	3455.3	98.6	0.0	173	3556.9	98.6	0.0	174	3658.5	98.6	0.0
175	3760.1	98.6	0.0	176	3861.8	98.6	0.0	177	3963.4	98.6	0.0
178	4065.0	98.6	0.0	179	4166.6	98.6	0.0	180	4215.0	98.6	0.0
181	-150.0	197.1	0.0	182	-101.6	197.1	0.0	183	0.0	197.1	0.0
184	101.6	197.1	0.0	185	203.3	197.1	0.0	186	304.9	197.1	0.0
187	406.5	197.1	0.0	188	508.1	197.1	0.0	189	609.8	197.1	0.0
190	711.4	197.1	0.0	191	813.0	197.1	0.0	192	914.6	197.1	0.0
193	1016.3	197.1	0.0	194	1117.9	197.1	0.0	195	1219.5	197.1	0.0
196	1321.1	197.1	0.0	197	1422.8	197.1	0.0	198	1524.4	197.1	0.0
199	1626.0	197.1	0.0	200	1727.6	197.1	0.0	201	1829.3	197.1	0.0
202	1930.9	197.1	0.0	203	2032.5	197.1	0.0	204	2134.1	197.1	0.0
205	2235.8	197.1	0.0	206	2337.4	197.1	0.0	207	2439.0	197.1	0.0
208	2540.6	197.1	0.0	209	2642.3	197.1	0.0	210	2743.9	197.1	0.0
211	2845.5	197.1	0.0	212	2947.1	197.1	0.0	213	3048.8	197.1	0.0

Nodo	X	Y	Z	Nodo	X	Y	Z	Nodo	X	Y	Z
	cm	cm	cm		cm	cm	cm		cm	cm	cm
214	3150.4	197.1	0.0	215	3252.0	197.1	0.0	216	3353.6	197.1	0.0
217	3455.3	197.1	0.0	218	3556.9	197.1	0.0	219	3658.5	197.1	0.0
220	3760.1	197.1	0.0	221	3861.8	197.1	0.0	222	3963.4	197.1	0.0
223	4065.0	197.1	0.0	224	4166.6	197.1	0.0	225	4215.0	197.1	0.0
226	-150.0	295.7	0.0	227	-101.6	295.7	0.0	228	0.0	295.7	0.0
229	101.6	295.7	0.0	230	203.3	295.7	0.0	231	304.9	295.7	0.0
232	406.5	295.7	0.0	233	508.1	295.7	0.0	234	609.8	295.7	0.0
235	711.4	295.7	0.0	236	813.0	295.7	0.0	237	914.6	295.7	0.0
238	1016.3	295.7	0.0	239	1117.9	295.7	0.0	240	1219.5	295.7	0.0
241	1321.1	295.7	0.0	242	1422.8	295.7	0.0	243	1524.4	295.7	0.0
244	1626.0	295.7	0.0	245	1727.6	295.7	0.0	246	1829.3	295.7	0.0
247	1930.9	295.7	0.0	248	2032.5	295.7	0.0	249	2134.1	295.7	0.0
250	2235.8	295.7	0.0	251	2337.4	295.7	0.0	252	2439.0	295.7	0.0
253	2540.6	295.7	0.0	254	2642.3	295.7	0.0	255	2743.9	295.7	0.0
256	2845.5	295.7	0.0	257	2947.1	295.7	0.0	258	3048.8	295.7	0.0
259	3150.4	295.7	0.0	260	3252.0	295.7	0.0	261	3353.6	295.7	0.0
262	3455.3	295.7	0.0	263	3556.9	295.7	0.0	264	3658.5	295.7	0.0
265	3760.1	295.7	0.0	266	3861.8	295.7	0.0	267	3963.4	295.7	0.0
268	4065.0	295.7	0.0	269	4166.6	295.7	0.0	270	4215.0	295.7	0.0
271	-150.0	394.3	0.0	272	-101.6	394.3	0.0	273	0.0	394.3	0.0
274	101.6	394.3	0.0	275	203.3	394.3	0.0	276	304.9	394.3	0.0
277	406.5	394.3	0.0	278	508.1	394.3	0.0	279	609.8	394.3	0.0
280	711.4	394.3	0.0	281	813.0	394.3	0.0	282	914.6	394.3	0.0
283	1016.3	394.3	0.0	284	1117.9	394.3	0.0	285	1219.5	394.3	0.0
286	1321.1	394.3	0.0	287	1422.8	394.3	0.0	288	1524.4	394.3	0.0
289	1626.0	394.3	0.0	290	1727.6	394.3	0.0	291	1829.3	394.3	0.0
292	1930.9	394.3	0.0	293	2032.5	394.3	0.0	294	2134.1	394.3	0.0
295	2235.8	394.3	0.0	296	2337.4	394.3	0.0	297	2439.0	394.3	0.0
298	2540.6	394.3	0.0	299	2642.3	394.3	0.0	300	2743.9	394.3	0.0
301	2845.5	394.3	0.0	302	2947.1	394.3	0.0	303	3048.8	394.3	0.0
304	3150.4	394.3	0.0	305	3252.0	394.3	0.0	306	3353.6	394.3	0.0
307	3455.3	394.3	0.0	308	3556.9	394.3	0.0	309	3658.5	394.3	0.0
310	3760.1	394.3	0.0	311	3861.8	394.3	0.0	312	3963.4	394.3	0.0
313	4065.0	394.3	0.0	314	4166.6	394.3	0.0	315	4215.0	394.3	0.0
316	-150.0	492.9	0.0	317	-101.6	492.9	0.0	318	0.0	492.9	0.0
319	101.6	492.9	0.0	320	203.3	492.9	0.0	321	304.9	492.9	0.0
322	406.5	492.9	0.0	323	508.1	492.9	0.0	324	609.8	492.9	0.0
325	711.4	492.9	0.0	326	813.0	492.9	0.0	327	914.6	492.9	0.0
328	1016.3	492.9	0.0	329	1117.9	492.9	0.0	330	1219.5	492.9	0.0
331	1321.1	492.9	0.0	332	1422.8	492.9	0.0	333	1524.4	492.9	0.0
334	1626.0	492.9	0.0	335	1727.6	492.9	0.0	336	1829.3	492.9	0.0
337	1930.9	492.9	0.0	338	2032.5	492.9	0.0	339	2134.1	492.9	0.0
340	2235.8	492.9	0.0	341	2337.4	492.9	0.0	342	2439.0	492.9	0.0
343	2540.6	492.9	0.0	344	2642.3	492.9	0.0	345	2743.9	492.9	0.0
346	2845.5	492.9	0.0	347	2947.1	492.9	0.0	348	3048.8	492.9	0.0
349	3150.4	492.9	0.0	350	3252.0	492.9	0.0	351	3353.6	492.9	0.0
352	3455.3	492.9	0.0	353	3556.9	492.9	0.0	354	3658.5	492.9	0.0
355	3760.1	492.9	0.0	356	3861.8	492.9	0.0	357	3963.4	492.9	0.0
358	4065.0	492.9	0.0	359	4166.6	492.9	0.0	360	4215.0	492.9	0.0
361	-150.0	591.4	0.0	362	-101.6	591.4	0.0	363	0.0	591.4	0.0
364	101.6	591.4	0.0	365	203.3	591.4	0.0	366	304.9	591.4	0.0
367	406.5	591.4	0.0	368	508.1	591.4	0.0	369	609.8	591.4	0.0
370	711.4	591.4	0.0	371	813.0	591.4	0.0	372	914.6	591.4	0.0
373	1016.3	591.4	0.0	374	1117.9	591.4	0.0	375	1219.5	591.4	0.0
376	1321.1	591.4	0.0	377	1422.8	591.4	0.0	378	1524.4	591.4	0.0
379	1626.0	591.4	0.0	380	1727.6	591.4	0.0	381	1829.3	591.4	0.0
382	1930.9	591.4	0.0	383	2032.5	591.4	0.0	384	2134.1	591.4	0.0
385	2235.8	591.4	0.0	386	2337.4	591.4	0.0	387	2439.0	591.4	0.0
388	2540.6	591.4	0.0	389	2642.3	591.4	0.0	390	2743.9	591.4	0.0
391	2845.5	591.4	0.0	392	2947.1	591.4	0.0	393	3048.8	591.4	0.0
394	3150.4	591.4	0.0	395	3252.0	591.4	0.0	396	3353.6	591.4	0.0
397	3455.3	591.4	0.0	398	3556.9	591.4	0.0	399	3658.5	591.4	0.0
400	3760.1	591.4	0.0	401	3861.8	591.4	0.0	402	3963.4	591.4	0.0
403	4065.0	591.4	0.0	404	4166.6	591.4	0.0	405	4215.0	591.4	0.0
406	-150.0	690.0	0.0	407	-101.6	690.0	0.0	408	0.0	690.0	0.0
409	101.6	690.0	0.0	410	203.3	690.0	0.0	411	304.9	690.0	0.0
412	406.5	690.0	0.0	413	508.1	690.0	0.0	414	609.8	690.0	0.0
415	711.4	690.0	0.0	416	813.0	690.0	0.0	417	914.6	690.0	0.0
418	1016.3	690.0	0.0	419	1117.9	690.0	0.0	420	1219.5	690.0	0.0
421	1321.1	690.0	0.0	422	1422.8	690.0	0.0	423	1524.4	690.0	0.0
424	1626.0	690.0	0.0	425	1727.6	690.0	0.0	426	1829.3	690.0	0.0
427	1930.9	690.0	0.0	428	2032.5	690.0	0.0	429	2134.1	690.0	0.0
430	2235.8	690.0	0.0	431	2337.4	690.0	0.0	432	2439.0	690.0	0.0
433	2540.6	690.0	0.0	434	2642.3	690.0	0.0	435	2743.9	690.0	0.0

Nodo	X	Y	Z	Nodo	X	Y	Z	Nodo	X	Y	Z
	cm	cm	cm		cm	cm	cm		cm	cm	cm
436	2845.5	690.0	0.0	437	2947.1	690.0	0.0	438	3048.8	690.0	0.0
439	3150.4	690.0	0.0	440	3252.0	690.0	0.0	441	3353.6	690.0	0.0
442	3455.3	690.0	0.0	443	3556.9	690.0	0.0	444	3658.5	690.0	0.0
445	3760.1	690.0	0.0	446	3861.8	690.0	0.0	447	3963.4	690.0	0.0
448	4065.0	690.0	0.0	449	4166.6	690.0	0.0	450	4215.0	690.0	0.0
451	-150.0	788.6	0.0	452	-101.6	788.6	0.0	453	0.0	788.6	0.0
454	101.6	788.6	0.0	455	203.3	788.6	0.0	456	304.9	788.6	0.0
457	406.5	788.6	0.0	458	508.1	788.6	0.0	459	609.8	788.6	0.0
460	711.4	788.6	0.0	461	813.0	788.6	0.0	462	914.6	788.6	0.0
463	1016.3	788.6	0.0	464	1117.9	788.6	0.0	465	1219.5	788.6	0.0
466	1321.1	788.6	0.0	467	1422.8	788.6	0.0	468	1524.4	788.6	0.0
469	1626.0	788.6	0.0	470	1727.6	788.6	0.0	471	1829.3	788.6	0.0
472	1930.9	788.6	0.0	473	2032.5	788.6	0.0	474	2134.1	788.6	0.0
475	2235.8	788.6	0.0	476	2337.4	788.6	0.0	477	2439.0	788.6	0.0
478	2540.6	788.6	0.0	479	2642.3	788.6	0.0	480	2743.9	788.6	0.0
481	2845.5	788.6	0.0	482	2947.1	788.6	0.0	483	3048.8	788.6	0.0
484	3150.4	788.6	0.0	485	3252.0	788.6	0.0	486	3353.6	788.6	0.0
487	3455.3	788.6	0.0	488	3556.9	788.6	0.0	489	3658.5	788.6	0.0
490	3760.1	788.6	0.0	491	3861.8	788.6	0.0	492	3963.4	788.6	0.0
493	4065.0	788.6	0.0	494	4166.6	788.6	0.0	495	4215.0	788.6	0.0
496	-150.0	887.1	0.0	497	-101.6	887.1	0.0	498	0.0	887.1	0.0
499	101.6	887.1	0.0	500	203.3	887.1	0.0	501	304.9	887.1	0.0
502	406.5	887.1	0.0	503	508.1	887.1	0.0	504	609.8	887.1	0.0
505	711.4	887.1	0.0	506	813.0	887.1	0.0	507	914.6	887.1	0.0
508	1016.3	887.1	0.0	509	1117.9	887.1	0.0	510	1219.5	887.1	0.0
511	1321.1	887.1	0.0	512	1422.8	887.1	0.0	513	1524.4	887.1	0.0
514	1626.0	887.1	0.0	515	1727.6	887.1	0.0	516	1829.3	887.1	0.0
517	1930.9	887.1	0.0	518	2032.5	887.1	0.0	519	2134.1	887.1	0.0
520	2235.8	887.1	0.0	521	2337.4	887.1	0.0	522	2439.0	887.1	0.0
523	2540.6	887.1	0.0	524	2642.3	887.1	0.0	525	2743.9	887.1	0.0
526	2845.5	887.1	0.0	527	2947.1	887.1	0.0	528	3048.8	887.1	0.0
529	3150.4	887.1	0.0	530	3252.0	887.1	0.0	531	3353.6	887.1	0.0
532	3455.3	887.1	0.0	533	3556.9	887.1	0.0	534	3658.5	887.1	0.0
535	3760.1	887.1	0.0	536	3861.8	887.1	0.0	537	3963.4	887.1	0.0
538	4065.0	887.1	0.0	539	4166.6	887.1	0.0	540	4215.0	887.1	0.0
541	-150.0	985.7	0.0	542	-101.6	985.7	0.0	543	0.0	985.7	0.0
544	101.6	985.7	0.0	545	203.3	985.7	0.0	546	304.9	985.7	0.0
547	406.5	985.7	0.0	548	508.1	985.7	0.0	549	609.8	985.7	0.0
550	711.4	985.7	0.0	551	813.0	985.7	0.0	552	914.6	985.7	0.0
553	1016.3	985.7	0.0	554	1117.9	985.7	0.0	555	1219.5	985.7	0.0
556	1321.1	985.7	0.0	557	1422.8	985.7	0.0	558	1524.4	985.7	0.0
559	1626.0	985.7	0.0	560	1727.6	985.7	0.0	561	1829.3	985.7	0.0
562	1930.9	985.7	0.0	563	2032.5	985.7	0.0	564	2134.1	985.7	0.0
565	2235.8	985.7	0.0	566	2337.4	985.7	0.0	567	2439.0	985.7	0.0
568	2540.6	985.7	0.0	569	2642.3	985.7	0.0	570	2743.9	985.7	0.0
571	2845.5	985.7	0.0	572	2947.1	985.7	0.0	573	3048.8	985.7	0.0
574	3150.4	985.7	0.0	575	3252.0	985.7	0.0	576	3353.6	985.7	0.0
577	3455.3	985.7	0.0	578	3556.9	985.7	0.0	579	3658.5	985.7	0.0
580	3760.1	985.7	0.0	581	3861.8	985.7	0.0	582	3963.4	985.7	0.0
583	4065.0	985.7	0.0	584	4166.6	985.7	0.0	585	4215.0	985.7	0.0
586	-150.0	1084.3	0.0	587	-101.6	1084.3	0.0	588	0.0	1084.3	0.0
589	101.6	1084.3	0.0	590	203.3	1084.3	0.0	591	304.9	1084.3	0.0
592	406.5	1084.3	0.0	593	508.1	1084.3	0.0	594	609.8	1084.3	0.0
595	711.4	1084.3	0.0	596	813.0	1084.3	0.0	597	914.6	1084.3	0.0
598	1016.3	1084.3	0.0	599	1117.9	1084.3	0.0	600	1219.5	1084.3	0.0
601	1321.1	1084.3	0.0	602	1422.8	1084.3	0.0	603	1524.4	1084.3	0.0
604	1626.0	1084.3	0.0	605	1727.6	1084.3	0.0	606	1829.3	1084.3	0.0
607	1930.9	1084.3	0.0	608	2032.5	1084.3	0.0	609	2134.1	1084.3	0.0
610	2235.8	1084.3	0.0	611	2337.4	1084.3	0.0	612	2439.0	1084.3	0.0
613	2540.6	1084.3	0.0	614	2642.3	1084.3	0.0	615	2743.9	1084.3	0.0
616	2845.5	1084.3	0.0	617	2947.1	1084.3	0.0	618	3048.8	1084.3	0.0
619	3150.4	1084.3	0.0	620	3252.0	1084.3	0.0	621	3353.6	1084.3	0.0
622	3455.3	1084.3	0.0	623	3556.9	1084.3	0.0	624	3658.5	1084.3	0.0
625	3760.1	1084.3	0.0	626	3861.8	1084.3	0.0	627	3963.4	1084.3	0.0
628	4065.0	1084.3	0.0	629	4166.6	1084.3	0.0	630	4215.0	1084.3	0.0
631	-150.0	1182.9	0.0	632	-101.6	1182.9	0.0	633	0.0	1182.9	0.0
634	101.6	1182.9	0.0	635	203.3	1182.9	0.0	636	304.9	1182.9	0.0
637	406.5	1182.9	0.0	638	508.1	1182.9	0.0	639	609.8	1182.9	0.0
640	711.4	1182.9	0.0	641	813.0	1182.9	0.0	642	914.6	1182.9	0.0
643	1016.3	1182.9	0.0	644	1117.9	1182.9	0.0	645	1219.5	1182.9	0.0
646	1321.1	1182.9	0.0	647	1422.8	1182.9	0.0	648	1524.4	1182.9	0.0
649	1626.0	1182.9	0.0	650	1727.6	1182.9	0.0	651	1829.3	1182.9	0.0
652	1930.9	1182.9	0.0	653	2032.5	1182.9	0.0	654	2134.1	1182.9	0.0
655	2235.8	1182.9	0.0	656	2337.4	1182.9	0.0	657	2439.0	1182.9	0.0

Nodo	X	Y	Z	Nodo	X	Y	Z	Nodo	X	Y	Z
	cm	cm	cm		cm	cm	cm		cm	cm	cm
658	2540.6	1182.9	0.0	659	2642.3	1182.9	0.0	660	2743.9	1182.9	0.0
661	2845.5	1182.9	0.0	662	2947.1	1182.9	0.0	663	3048.8	1182.9	0.0
664	3150.4	1182.9	0.0	665	3252.0	1182.9	0.0	666	3353.6	1182.9	0.0
667	3455.3	1182.9	0.0	668	3556.9	1182.9	0.0	669	3658.5	1182.9	0.0
670	3760.1	1182.9	0.0	671	3861.8	1182.9	0.0	672	3963.4	1182.9	0.0
673	4065.0	1182.9	0.0	674	4166.6	1182.9	0.0	675	4215.0	1182.9	0.0
676	-150.0	1281.4	0.0	677	-101.6	1281.4	0.0	678	0.0	1281.4	0.0
679	101.6	1281.4	0.0	680	203.3	1281.4	0.0	681	304.9	1281.4	0.0
682	406.5	1281.4	0.0	683	508.1	1281.4	0.0	684	609.8	1281.4	0.0
685	711.4	1281.4	0.0	686	813.0	1281.4	0.0	687	914.6	1281.4	0.0
688	1016.3	1281.4	0.0	689	1117.9	1281.4	0.0	690	1219.5	1281.4	0.0
691	1321.1	1281.4	0.0	692	1422.8	1281.4	0.0	693	1524.4	1281.4	0.0
694	1626.0	1281.4	0.0	695	1727.6	1281.4	0.0	696	1829.3	1281.4	0.0
697	1930.9	1281.4	0.0	698	2032.5	1281.4	0.0	699	2134.1	1281.4	0.0
700	2235.8	1281.4	0.0	701	2337.4	1281.4	0.0	702	2439.0	1281.4	0.0
703	2540.6	1281.4	0.0	704	2642.3	1281.4	0.0	705	2743.9	1281.4	0.0
706	2845.5	1281.4	0.0	707	2947.1	1281.4	0.0	708	3048.8	1281.4	0.0
709	3150.4	1281.4	0.0	710	3252.0	1281.4	0.0	711	3353.6	1281.4	0.0
712	3455.3	1281.4	0.0	713	3556.9	1281.4	0.0	714	3658.5	1281.4	0.0
715	3760.1	1281.4	0.0	716	3861.8	1281.4	0.0	717	3963.4	1281.4	0.0
718	4065.0	1281.4	0.0	719	4166.6	1281.4	0.0	720	4215.0	1281.4	0.0
721	-150.0	1380.0	0.0	722	-101.6	1380.0	0.0	723	0.0	1380.0	0.0
724	101.6	1380.0	0.0	725	203.3	1380.0	0.0	726	304.9	1380.0	0.0
727	406.5	1380.0	0.0	728	508.1	1380.0	0.0	729	609.8	1380.0	0.0
730	711.4	1380.0	0.0	731	813.0	1380.0	0.0	732	914.6	1380.0	0.0
733	1016.3	1380.0	0.0	734	1117.9	1380.0	0.0	735	1219.5	1380.0	0.0
736	1321.1	1380.0	0.0	737	1422.8	1380.0	0.0	738	1524.4	1380.0	0.0
739	1626.0	1380.0	0.0	740	1727.6	1380.0	0.0	741	1829.3	1380.0	0.0
742	1930.9	1380.0	0.0	743	2032.5	1380.0	0.0	744	2134.1	1380.0	0.0
745	2235.8	1380.0	0.0	746	2337.4	1380.0	0.0	747	2439.0	1380.0	0.0
748	2540.6	1380.0	0.0	749	2642.3	1380.0	0.0	750	2743.9	1380.0	0.0
751	2845.5	1380.0	0.0	752	2947.1	1380.0	0.0	753	3048.8	1380.0	0.0
754	3150.4	1380.0	0.0	755	3252.0	1380.0	0.0	756	3353.6	1380.0	0.0
757	3455.3	1380.0	0.0	758	3556.9	1380.0	0.0	759	3658.5	1380.0	0.0
760	3760.1	1380.0	0.0	761	3861.8	1380.0	0.0	762	3963.4	1380.0	0.0
763	4065.0	1380.0	0.0	764	4166.6	1380.0	0.0	765	4215.0	1380.0	0.0
766	-150.0	1478.6	0.0	767	-101.6	1478.6	0.0	768	0.0	1478.6	0.0
769	101.6	1478.6	0.0	770	203.3	1478.6	0.0	771	304.9	1478.6	0.0
772	406.5	1478.6	0.0	773	508.1	1478.6	0.0	774	609.8	1478.6	0.0
775	711.4	1478.6	0.0	776	813.0	1478.6	0.0	777	914.6	1478.6	0.0
778	1016.3	1478.6	0.0	779	1117.9	1478.6	0.0	780	1219.5	1478.6	0.0
781	1321.1	1478.6	0.0	782	1422.8	1478.6	0.0	783	1524.4	1478.6	0.0
784	1626.0	1478.6	0.0	785	1727.6	1478.6	0.0	786	1829.3	1478.6	0.0
787	1930.9	1478.6	0.0	788	2032.5	1478.6	0.0	789	2134.1	1478.6	0.0
790	2235.8	1478.6	0.0	791	2337.4	1478.6	0.0	792	2439.0	1478.6	0.0
793	2540.6	1478.6	0.0	794	2642.3	1478.6	0.0	795	2743.9	1478.6	0.0
796	2845.5	1478.6	0.0	797	2947.1	1478.6	0.0	798	3048.8	1478.6	0.0
799	3150.4	1478.6	0.0	800	3252.0	1478.6	0.0	801	3353.6	1478.6	0.0
802	3455.3	1478.6	0.0	803	3556.9	1478.6	0.0	804	3658.5	1478.6	0.0
805	3760.1	1478.6	0.0	806	3861.8	1478.6	0.0	807	3963.4	1478.6	0.0
808	4065.0	1478.6	0.0	809	4166.6	1478.6	0.0	810	4215.0	1478.6	0.0
811	-150.0	1530.0	0.0	812	-101.6	1530.0	0.0	813	0.0	1530.0	0.0
814	101.6	1530.0	0.0	815	203.3	1530.0	0.0	816	304.9	1530.0	0.0
817	406.5	1530.0	0.0	818	508.1	1530.0	0.0	819	609.8	1530.0	0.0
820	711.4	1530.0	0.0	821	813.0	1530.0	0.0	822	914.6	1530.0	0.0
823	1016.3	1530.0	0.0	824	1117.9	1530.0	0.0	825	1219.5	1530.0	0.0
826	1321.1	1530.0	0.0	827	1422.8	1530.0	0.0	828	1524.4	1530.0	0.0
829	1626.0	1530.0	0.0	830	1727.6	1530.0	0.0	831	1829.3	1530.0	0.0
832	1930.9	1530.0	0.0	833	2032.5	1530.0	0.0	834	2134.1	1530.0	0.0
835	2235.8	1530.0	0.0	836	2337.4	1530.0	0.0	837	2439.0	1530.0	0.0
838	2540.6	1530.0	0.0	839	2642.3	1530.0	0.0	840	2743.9	1530.0	0.0
841	2845.5	1530.0	0.0	842	2947.1	1530.0	0.0	843	3048.8	1530.0	0.0
844	3150.4	1530.0	0.0	845	3252.0	1530.0	0.0	846	3353.6	1530.0	0.0
847	3455.3	1530.0	0.0	848	3556.9	1530.0	0.0	849	3658.5	1530.0	0.0
850	3760.1	1530.0	0.0	851	3861.8	1530.0	0.0	852	3963.4	1530.0	0.0
853	4065.0	1530.0	0.0	854	4166.6	1530.0	0.0	855	4215.0	1530.0	0.0

Numerazione nodi



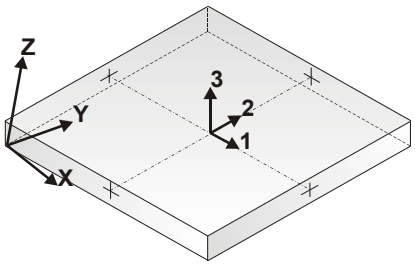
2.10.2 MODELLAZIONE STRUTTURA: ELEMENTI SHELL

LEGENDA TABELLA DATI SHELL

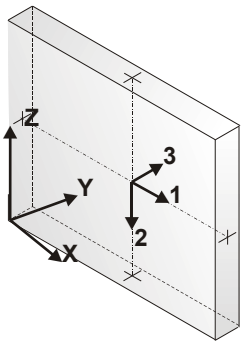
Il programma utilizza per la modellazione elementi a tre o quattro nodi denominati in generale shell.

Ogni elemento shell è individuato dai nodi I, J, K, L (L=I per gli elementi a tre nodi).

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



orientamento elementi 3D non verticali



orientamento elementi 3D verticali

In particolare per ogni elemento viene indicato in tabella:

Elem.	numero dell'elemento
Note	codice di comportamento: *Guscio* (elemento guscio in elevazione non verticale) *Guscio fond.* (elemento guscio su suolo elastico) *Setto* (elemento guscio in elevazione verticale) *Membrana* (elemento guscio con comportamento membranale)
Nodo I (J, K, L)	numero del nodo I (J, K, L)
Mat.	codice del materiale assegnato all'elemento
Spessore	spessore dell'elemento (costante)
Wink V	costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico verticale
Wink O	costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico orizzontale

TABELLA DATI SHELL

Elem.	Note	Nodo I	Nodo J	Nodo K	Nodo L	Mat.	Spessore	Wink V	Wink O
							cm	daN/cm3	daN/cm3
1	Guscio fond.	1	2	47	46	4	70.0	1.00	1.00
2	Guscio fond.	2	3	48	47	4	70.0	1.00	1.00
3	Guscio fond.	3	4	49	48	4	70.0	1.00	1.00
4	Guscio fond.	4	5	50	49	4	70.0	1.00	1.00
5	Guscio fond.	5	6	51	50	4	70.0	1.00	1.00
6	Guscio fond.	6	7	52	51	4	70.0	1.00	1.00
7	Guscio fond.	7	8	53	52	4	70.0	1.00	1.00
8	Guscio fond.	8	9	54	53	4	70.0	1.00	1.00
9	Guscio fond.	9	10	55	54	4	70.0	1.00	1.00
10	Guscio fond.	10	11	56	55	4	70.0	1.00	1.00
11	Guscio fond.	11	12	57	56	4	70.0	1.00	1.00
12	Guscio fond.	12	13	58	57	4	70.0	1.00	1.00
13	Guscio fond.	13	14	59	58	4	70.0	1.00	1.00
14	Guscio fond.	14	15	60	59	4	70.0	1.00	1.00
15	Guscio fond.	15	16	61	60	4	70.0	1.00	1.00
16	Guscio fond.	16	17	62	61	4	70.0	1.00	1.00
17	Guscio fond.	17	18	63	62	4	70.0	1.00	1.00
18	Guscio fond.	18	19	64	63	4	70.0	1.00	1.00
19	Guscio fond.	19	20	65	64	4	70.0	1.00	1.00
20	Guscio fond.	20	21	66	65	4	70.0	1.00	1.00
21	Guscio fond.	21	22	67	66	4	70.0	1.00	1.00
22	Guscio fond.	22	23	68	67	4	70.0	1.00	1.00
23	Guscio fond.	23	24	69	68	4	70.0	1.00	1.00
24	Guscio fond.	24	25	70	69	4	70.0	1.00	1.00
25	Guscio fond.	25	26	71	70	4	70.0	1.00	1.00
26	Guscio fond.	26	27	72	71	4	70.0	1.00	1.00
27	Guscio fond.	27	28	73	72	4	70.0	1.00	1.00
28	Guscio fond.	28	29	74	73	4	70.0	1.00	1.00
29	Guscio fond.	29	30	75	74	4	70.0	1.00	1.00
30	Guscio fond.	30	31	76	75	4	70.0	1.00	1.00
31	Guscio fond.	31	32	77	76	4	70.0	1.00	1.00
32	Guscio fond.	32	33	78	77	4	70.0	1.00	1.00
33	Guscio fond.	33	34	79	78	4	70.0	1.00	1.00
34	Guscio fond.	34	35	80	79	4	70.0	1.00	1.00
35	Guscio fond.	35	36	81	80	4	70.0	1.00	1.00
36	Guscio fond.	36	37	82	81	4	70.0	1.00	1.00
37	Guscio fond.	37	38	83	82	4	70.0	1.00	1.00
38	Guscio fond.	38	39	84	83	4	70.0	1.00	1.00
39	Guscio fond.	39	40	85	84	4	70.0	1.00	1.00
40	Guscio fond.	40	41	86	85	4	70.0	1.00	1.00
41	Guscio fond.	41	42	87	86	4	70.0	1.00	1.00
42	Guscio fond.	42	43	88	87	4	70.0	1.00	1.00
43	Guscio fond.	43	44	89	88	4	70.0	1.00	1.00
44	Guscio fond.	44	45	90	89	4	70.0	1.00	1.00
45	Guscio fond.	46	47	92	91	4	70.0	1.00	1.00
46	Guscio fond.	47	48	93	92	4	70.0	1.00	1.00
47	Guscio fond.	48	49	94	93	4	70.0	1.00	1.00
48	Guscio fond.	49	50	95	94	4	70.0	1.00	1.00
49	Guscio fond.	50	51	96	95	4	70.0	1.00	1.00
50	Guscio fond.	51	52	97	96	4	70.0	1.00	1.00
51	Guscio fond.	52	53	98	97	4	70.0	1.00	1.00
52	Guscio fond.	53	54	99	98	4	70.0	1.00	1.00
53	Guscio fond.	54	55	100	99	4	70.0	1.00	1.00
54	Guscio fond.	55	56	101	100	4	70.0	1.00	1.00
55	Guscio fond.	56	57	102	101	4	70.0	1.00	1.00
56	Guscio fond.	57	58	103	102	4	70.0	1.00	1.00
57	Guscio fond.	58	59	104	103	4	70.0	1.00	1.00
58	Guscio fond.	59	60	105	104	4	70.0	1.00	1.00
59	Guscio fond.	60	61	106	105	4	70.0	1.00	1.00
60	Guscio fond.	61	62	107	106	4	70.0	1.00	1.00
61	Guscio fond.	62	63	108	107	4	70.0	1.00	1.00
62	Guscio fond.	63	64	109	108	4	70.0	1.00	1.00
63	Guscio fond.	64	65	110	109	4	70.0	1.00	1.00
64	Guscio fond.	65	66	111	110	4	70.0	1.00	1.00
65	Guscio fond.	66	67	112	111	4	70.0	1.00	1.00
66	Guscio fond.	67	68	113	112	4	70.0	1.00	1.00
67	Guscio fond.	68	69	114	113	4	70.0	1.00	1.00
68	Guscio fond.	69	70	115	114	4	70.0	1.00	1.00
69	Guscio fond.	70	71	116	115	4	70.0	1.00	1.00
70	Guscio fond.	71	72	117	116	4	70.0	1.00	1.00
71	Guscio fond.	72	73	118	117	4	70.0	1.00	1.00

Elem.	Note	Nodo I	Nodo J	Nodo K	Nodo L	Mat.	Spessore	Wink V	Wink O
							cm	daN/cm3	daN/cm3
72	Guscio fond.	73	74	119	118	4	70.0	1.00	1.00
73	Guscio fond.	74	75	120	119	4	70.0	1.00	1.00
74	Guscio fond.	75	76	121	120	4	70.0	1.00	1.00
75	Guscio fond.	76	77	122	121	4	70.0	1.00	1.00
76	Guscio fond.	77	78	123	122	4	70.0	1.00	1.00
77	Guscio fond.	78	79	124	123	4	70.0	1.00	1.00
78	Guscio fond.	79	80	125	124	4	70.0	1.00	1.00
79	Guscio fond.	80	81	126	125	4	70.0	1.00	1.00
80	Guscio fond.	81	82	127	126	4	70.0	1.00	1.00
81	Guscio fond.	82	83	128	127	4	70.0	1.00	1.00
82	Guscio fond.	83	84	129	128	4	70.0	1.00	1.00
83	Guscio fond.	84	85	130	129	4	70.0	1.00	1.00
84	Guscio fond.	85	86	131	130	4	70.0	1.00	1.00
85	Guscio fond.	86	87	132	131	4	70.0	1.00	1.00
86	Guscio fond.	87	88	133	132	4	70.0	1.00	1.00
87	Guscio fond.	88	89	134	133	4	70.0	1.00	1.00
88	Guscio fond.	89	90	135	134	4	70.0	1.00	1.00
89	Guscio fond.	91	92	137	136	4	70.0	1.00	1.00
90	Guscio fond.	92	93	138	137	4	70.0	1.00	1.00
91	Guscio fond.	93	94	139	138	4	70.0	1.00	1.00
92	Guscio fond.	94	95	140	139	4	70.0	1.00	1.00
93	Guscio fond.	95	96	141	140	4	70.0	1.00	1.00
94	Guscio fond.	96	97	142	141	4	70.0	1.00	1.00
95	Guscio fond.	97	98	143	142	4	70.0	1.00	1.00
96	Guscio fond.	98	99	144	143	4	70.0	1.00	1.00
97	Guscio fond.	99	100	145	144	4	70.0	1.00	1.00
98	Guscio fond.	100	101	146	145	4	70.0	1.00	1.00
99	Guscio fond.	101	102	147	146	4	70.0	1.00	1.00
100	Guscio fond.	102	103	148	147	4	70.0	1.00	1.00
101	Guscio fond.	103	104	149	148	4	70.0	1.00	1.00
102	Guscio fond.	104	105	150	149	4	70.0	1.00	1.00
103	Guscio fond.	105	106	151	150	4	70.0	1.00	1.00
104	Guscio fond.	106	107	152	151	4	70.0	1.00	1.00
105	Guscio fond.	107	108	153	152	4	70.0	1.00	1.00
106	Guscio fond.	108	109	154	153	4	70.0	1.00	1.00
107	Guscio fond.	109	110	155	154	4	70.0	1.00	1.00
108	Guscio fond.	110	111	156	155	4	70.0	1.00	1.00
109	Guscio fond.	111	112	157	156	4	70.0	1.00	1.00
110	Guscio fond.	112	113	158	157	4	70.0	1.00	1.00
111	Guscio fond.	113	114	159	158	4	70.0	1.00	1.00
112	Guscio fond.	114	115	160	159	4	70.0	1.00	1.00
113	Guscio fond.	115	116	161	160	4	70.0	1.00	1.00
114	Guscio fond.	116	117	162	161	4	70.0	1.00	1.00
115	Guscio fond.	117	118	163	162	4	70.0	1.00	1.00
116	Guscio fond.	118	119	164	163	4	70.0	1.00	1.00
117	Guscio fond.	119	120	165	164	4	70.0	1.00	1.00
118	Guscio fond.	120	121	166	165	4	70.0	1.00	1.00
119	Guscio fond.	121	122	167	166	4	70.0	1.00	1.00
120	Guscio fond.	122	123	168	167	4	70.0	1.00	1.00
121	Guscio fond.	123	124	169	168	4	70.0	1.00	1.00
122	Guscio fond.	124	125	170	169	4	70.0	1.00	1.00
123	Guscio fond.	125	126	171	170	4	70.0	1.00	1.00
124	Guscio fond.	126	127	172	171	4	70.0	1.00	1.00
125	Guscio fond.	127	128	173	172	4	70.0	1.00	1.00
126	Guscio fond.	128	129	174	173	4	70.0	1.00	1.00
127	Guscio fond.	129	130	175	174	4	70.0	1.00	1.00
128	Guscio fond.	130	131	176	175	4	70.0	1.00	1.00
129	Guscio fond.	131	132	177	176	4	70.0	1.00	1.00
130	Guscio fond.	132	133	178	177	4	70.0	1.00	1.00
131	Guscio fond.	133	134	179	178	4	70.0	1.00	1.00
132	Guscio fond.	134	135	180	179	4	70.0	1.00	1.00
133	Guscio fond.	136	137	182	181	4	70.0	1.00	1.00
134	Guscio fond.	137	138	183	182	4	70.0	1.00	1.00
135	Guscio fond.	138	139	184	183	4	70.0	1.00	1.00
136	Guscio fond.	139	140	185	184	4	70.0	1.00	1.00
137	Guscio fond.	140	141	186	185	4	70.0	1.00	1.00
138	Guscio fond.	141	142	187	186	4	70.0	1.00	1.00
139	Guscio fond.	142	143	188	187	4	70.0	1.00	1.00
140	Guscio fond.	143	144	189	188	4	70.0	1.00	1.00
141	Guscio fond.	144	145	190	189	4	70.0	1.00	1.00
142	Guscio fond.	145	146	191	190	4	70.0	1.00	1.00
143	Guscio fond.	146	147	192	191	4	70.0	1.00	1.00
144	Guscio fond.	147	148	193	192	4	70.0	1.00	1.00
145	Guscio fond.	148	149	194	193	4	70.0	1.00	1.00

Elem.	Note	Nodo I	Nodo J	Nodo K	Nodo L	Mat.	Spessore	Wink V	Wink O
							cm	daN/cm3	daN/cm3
146	Guscio fond.	149	150	195	194	4	70.0	1.00	1.00
147	Guscio fond.	150	151	196	195	4	70.0	1.00	1.00
148	Guscio fond.	151	152	197	196	4	70.0	1.00	1.00
149	Guscio fond.	152	153	198	197	4	70.0	1.00	1.00
150	Guscio fond.	153	154	199	198	4	70.0	1.00	1.00
151	Guscio fond.	154	155	200	199	4	70.0	1.00	1.00
152	Guscio fond.	155	156	201	200	4	70.0	1.00	1.00
153	Guscio fond.	156	157	202	201	4	70.0	1.00	1.00
154	Guscio fond.	157	158	203	202	4	70.0	1.00	1.00
155	Guscio fond.	158	159	204	203	4	70.0	1.00	1.00
156	Guscio fond.	159	160	205	204	4	70.0	1.00	1.00
157	Guscio fond.	160	161	206	205	4	70.0	1.00	1.00
158	Guscio fond.	161	162	207	206	4	70.0	1.00	1.00
159	Guscio fond.	162	163	208	207	4	70.0	1.00	1.00
160	Guscio fond.	163	164	209	208	4	70.0	1.00	1.00
161	Guscio fond.	164	165	210	209	4	70.0	1.00	1.00
162	Guscio fond.	165	166	211	210	4	70.0	1.00	1.00
163	Guscio fond.	166	167	212	211	4	70.0	1.00	1.00
164	Guscio fond.	167	168	213	212	4	70.0	1.00	1.00
165	Guscio fond.	168	169	214	213	4	70.0	1.00	1.00
166	Guscio fond.	169	170	215	214	4	70.0	1.00	1.00
167	Guscio fond.	170	171	216	215	4	70.0	1.00	1.00
168	Guscio fond.	171	172	217	216	4	70.0	1.00	1.00
169	Guscio fond.	172	173	218	217	4	70.0	1.00	1.00
170	Guscio fond.	173	174	219	218	4	70.0	1.00	1.00
171	Guscio fond.	174	175	220	219	4	70.0	1.00	1.00
172	Guscio fond.	175	176	221	220	4	70.0	1.00	1.00
173	Guscio fond.	176	177	222	221	4	70.0	1.00	1.00
174	Guscio fond.	177	178	223	222	4	70.0	1.00	1.00
175	Guscio fond.	178	179	224	223	4	70.0	1.00	1.00
176	Guscio fond.	179	180	225	224	4	70.0	1.00	1.00
177	Guscio fond.	181	182	227	226	4	70.0	1.00	1.00
178	Guscio fond.	182	183	228	227	4	70.0	1.00	1.00
179	Guscio fond.	183	184	229	228	4	70.0	1.00	1.00
180	Guscio fond.	184	185	230	229	4	70.0	1.00	1.00
181	Guscio fond.	185	186	231	230	4	70.0	1.00	1.00
182	Guscio fond.	186	187	232	231	4	70.0	1.00	1.00
183	Guscio fond.	187	188	233	232	4	70.0	1.00	1.00
184	Guscio fond.	188	189	234	233	4	70.0	1.00	1.00
185	Guscio fond.	189	190	235	234	4	70.0	1.00	1.00
186	Guscio fond.	190	191	236	235	4	70.0	1.00	1.00
187	Guscio fond.	191	192	237	236	4	70.0	1.00	1.00
188	Guscio fond.	192	193	238	237	4	70.0	1.00	1.00
189	Guscio fond.	193	194	239	238	4	70.0	1.00	1.00
190	Guscio fond.	194	195	240	239	4	70.0	1.00	1.00
191	Guscio fond.	195	196	241	240	4	70.0	1.00	1.00
192	Guscio fond.	196	197	242	241	4	70.0	1.00	1.00
193	Guscio fond.	197	198	243	242	4	70.0	1.00	1.00
194	Guscio fond.	198	199	244	243	4	70.0	1.00	1.00
195	Guscio fond.	199	200	245	244	4	70.0	1.00	1.00
196	Guscio fond.	200	201	246	245	4	70.0	1.00	1.00
197	Guscio fond.	201	202	247	246	4	70.0	1.00	1.00
198	Guscio fond.	202	203	248	247	4	70.0	1.00	1.00
199	Guscio fond.	203	204	249	248	4	70.0	1.00	1.00
200	Guscio fond.	204	205	250	249	4	70.0	1.00	1.00
201	Guscio fond.	205	206	251	250	4	70.0	1.00	1.00
202	Guscio fond.	206	207	252	251	4	70.0	1.00	1.00
203	Guscio fond.	207	208	253	252	4	70.0	1.00	1.00
204	Guscio fond.	208	209	254	253	4	70.0	1.00	1.00
205	Guscio fond.	209	210	255	254	4	70.0	1.00	1.00
206	Guscio fond.	210	211	256	255	4	70.0	1.00	1.00
207	Guscio fond.	211	212	257	256	4	70.0	1.00	1.00
208	Guscio fond.	212	213	258	257	4	70.0	1.00	1.00
209	Guscio fond.	213	214	259	258	4	70.0	1.00	1.00
210	Guscio fond.	214	215	260	259	4	70.0	1.00	1.00
211	Guscio fond.	215	216	261	260	4	70.0	1.00	1.00
212	Guscio fond.	216	217	262	261	4	70.0	1.00	1.00
213	Guscio fond.	217	218	263	262	4	70.0	1.00	1.00
214	Guscio fond.	218	219	264	263	4	70.0	1.00	1.00
215	Guscio fond.	219	220	265	264	4	70.0	1.00	1.00
216	Guscio fond.	220	221	266	265	4	70.0	1.00	1.00
217	Guscio fond.	221	222	267	266	4	70.0	1.00	1.00
218	Guscio fond.	222	223	268	267	4	70.0	1.00	1.00
219	Guscio fond.	223	224	269	268	4	70.0	1.00	1.00

Elem.	Note	Nodo I	Nodo J	Nodo K	Nodo L	Mat.	Spessore	Wink V	Wink O
							cm	daN/cm3	daN/cm3
220	Guscio fond.	224	225	270	269	4	70.0	1.00	1.00
221	Guscio fond.	226	227	272	271	4	70.0	1.00	1.00
222	Guscio fond.	227	228	273	272	4	70.0	1.00	1.00
223	Guscio fond.	228	229	274	273	4	70.0	1.00	1.00
224	Guscio fond.	229	230	275	274	4	70.0	1.00	1.00
225	Guscio fond.	230	231	276	275	4	70.0	1.00	1.00
226	Guscio fond.	231	232	277	276	4	70.0	1.00	1.00
227	Guscio fond.	232	233	278	277	4	70.0	1.00	1.00
228	Guscio fond.	233	234	279	278	4	70.0	1.00	1.00
229	Guscio fond.	234	235	280	279	4	70.0	1.00	1.00
230	Guscio fond.	235	236	281	280	4	70.0	1.00	1.00
231	Guscio fond.	236	237	282	281	4	70.0	1.00	1.00
232	Guscio fond.	237	238	283	282	4	70.0	1.00	1.00
233	Guscio fond.	238	239	284	283	4	70.0	1.00	1.00
234	Guscio fond.	239	240	285	284	4	70.0	1.00	1.00
235	Guscio fond.	240	241	286	285	4	70.0	1.00	1.00
236	Guscio fond.	241	242	287	286	4	70.0	1.00	1.00
237	Guscio fond.	242	243	288	287	4	70.0	1.00	1.00
238	Guscio fond.	243	244	289	288	4	70.0	1.00	1.00
239	Guscio fond.	244	245	290	289	4	70.0	1.00	1.00
240	Guscio fond.	245	246	291	290	4	70.0	1.00	1.00
241	Guscio fond.	246	247	292	291	4	70.0	1.00	1.00
242	Guscio fond.	247	248	293	292	4	70.0	1.00	1.00
243	Guscio fond.	248	249	294	293	4	70.0	1.00	1.00
244	Guscio fond.	249	250	295	294	4	70.0	1.00	1.00
245	Guscio fond.	250	251	296	295	4	70.0	1.00	1.00
246	Guscio fond.	251	252	297	296	4	70.0	1.00	1.00
247	Guscio fond.	252	253	298	297	4	70.0	1.00	1.00
248	Guscio fond.	253	254	299	298	4	70.0	1.00	1.00
249	Guscio fond.	254	255	300	299	4	70.0	1.00	1.00
250	Guscio fond.	255	256	301	300	4	70.0	1.00	1.00
251	Guscio fond.	256	257	302	301	4	70.0	1.00	1.00
252	Guscio fond.	257	258	303	302	4	70.0	1.00	1.00
253	Guscio fond.	258	259	304	303	4	70.0	1.00	1.00
254	Guscio fond.	259	260	305	304	4	70.0	1.00	1.00
255	Guscio fond.	260	261	306	305	4	70.0	1.00	1.00
256	Guscio fond.	261	262	307	306	4	70.0	1.00	1.00
257	Guscio fond.	262	263	308	307	4	70.0	1.00	1.00
258	Guscio fond.	263	264	309	308	4	70.0	1.00	1.00
259	Guscio fond.	264	265	310	309	4	70.0	1.00	1.00
260	Guscio fond.	265	266	311	310	4	70.0	1.00	1.00
261	Guscio fond.	266	267	312	311	4	70.0	1.00	1.00
262	Guscio fond.	267	268	313	312	4	70.0	1.00	1.00
263	Guscio fond.	268	269	314	313	4	70.0	1.00	1.00
264	Guscio fond.	269	270	315	314	4	70.0	1.00	1.00
265	Guscio fond.	271	272	317	316	4	70.0	1.00	1.00
266	Guscio fond.	272	273	318	317	4	70.0	1.00	1.00
267	Guscio fond.	273	274	319	318	4	70.0	1.00	1.00
268	Guscio fond.	274	275	320	319	4	70.0	1.00	1.00
269	Guscio fond.	275	276	321	320	4	70.0	1.00	1.00
270	Guscio fond.	276	277	322	321	4	70.0	1.00	1.00
271	Guscio fond.	277	278	323	322	4	70.0	1.00	1.00
272	Guscio fond.	278	279	324	323	4	70.0	1.00	1.00
273	Guscio fond.	279	280	325	324	4	70.0	1.00	1.00
274	Guscio fond.	280	281	326	325	4	70.0	1.00	1.00
275	Guscio fond.	281	282	327	326	4	70.0	1.00	1.00
276	Guscio fond.	282	283	328	327	4	70.0	1.00	1.00
277	Guscio fond.	283	284	329	328	4	70.0	1.00	1.00
278	Guscio fond.	284	285	330	329	4	70.0	1.00	1.00
279	Guscio fond.	285	286	331	330	4	70.0	1.00	1.00
280	Guscio fond.	286	287	332	331	4	70.0	1.00	1.00
281	Guscio fond.	287	288	333	332	4	70.0	1.00	1.00
282	Guscio fond.	288	289	334	333	4	70.0	1.00	1.00
283	Guscio fond.	289	290	335	334	4	70.0	1.00	1.00
284	Guscio fond.	290	291	336	335	4	70.0	1.00	1.00
285	Guscio fond.	291	292	337	336	4	70.0	1.00	1.00
286	Guscio fond.	292	293	338	337	4	70.0	1.00	1.00
287	Guscio fond.	293	294	339	338	4	70.0	1.00	1.00
288	Guscio fond.	294	295	340	339	4	70.0	1.00	1.00
289	Guscio fond.	295	296	341	340	4	70.0	1.00	1.00
290	Guscio fond.	296	297	342	341	4	70.0	1.00	1.00
291	Guscio fond.	297	298	343	342	4	70.0	1.00	1.00
292	Guscio fond.	298	299	344	343	4	70.0	1.00	1.00
293	Guscio fond.	299	300	345	344	4	70.0	1.00	1.00

Elem.	Note	Nodo I	Nodo J	Nodo K	Nodo L	Mat.	Spessore	Wink V	Wink O
							cm	daN/cm3	daN/cm3
294	Guscio fond.	300	301	346	345	4	70.0	1.00	1.00
295	Guscio fond.	301	302	347	346	4	70.0	1.00	1.00
296	Guscio fond.	302	303	348	347	4	70.0	1.00	1.00
297	Guscio fond.	303	304	349	348	4	70.0	1.00	1.00
298	Guscio fond.	304	305	350	349	4	70.0	1.00	1.00
299	Guscio fond.	305	306	351	350	4	70.0	1.00	1.00
300	Guscio fond.	306	307	352	351	4	70.0	1.00	1.00
301	Guscio fond.	307	308	353	352	4	70.0	1.00	1.00
302	Guscio fond.	308	309	354	353	4	70.0	1.00	1.00
303	Guscio fond.	309	310	355	354	4	70.0	1.00	1.00
304	Guscio fond.	310	311	356	355	4	70.0	1.00	1.00
305	Guscio fond.	311	312	357	356	4	70.0	1.00	1.00
306	Guscio fond.	312	313	358	357	4	70.0	1.00	1.00
307	Guscio fond.	313	314	359	358	4	70.0	1.00	1.00
308	Guscio fond.	314	315	360	359	4	70.0	1.00	1.00
309	Guscio fond.	316	317	362	361	4	70.0	1.00	1.00
310	Guscio fond.	317	318	363	362	4	70.0	1.00	1.00
311	Guscio fond.	318	319	364	363	4	70.0	1.00	1.00
312	Guscio fond.	319	320	365	364	4	70.0	1.00	1.00
313	Guscio fond.	320	321	366	365	4	70.0	1.00	1.00
314	Guscio fond.	321	322	367	366	4	70.0	1.00	1.00
315	Guscio fond.	322	323	368	367	4	70.0	1.00	1.00
316	Guscio fond.	323	324	369	368	4	70.0	1.00	1.00
317	Guscio fond.	324	325	370	369	4	70.0	1.00	1.00
318	Guscio fond.	325	326	371	370	4	70.0	1.00	1.00
319	Guscio fond.	326	327	372	371	4	70.0	1.00	1.00
320	Guscio fond.	327	328	373	372	4	70.0	1.00	1.00
321	Guscio fond.	328	329	374	373	4	70.0	1.00	1.00
322	Guscio fond.	329	330	375	374	4	70.0	1.00	1.00
323	Guscio fond.	330	331	376	375	4	70.0	1.00	1.00
324	Guscio fond.	331	332	377	376	4	70.0	1.00	1.00
325	Guscio fond.	332	333	378	377	4	70.0	1.00	1.00
326	Guscio fond.	333	334	379	378	4	70.0	1.00	1.00
327	Guscio fond.	334	335	380	379	4	70.0	1.00	1.00
328	Guscio fond.	335	336	381	380	4	70.0	1.00	1.00
329	Guscio fond.	336	337	382	381	4	70.0	1.00	1.00
330	Guscio fond.	337	338	383	382	4	70.0	1.00	1.00
331	Guscio fond.	338	339	384	383	4	70.0	1.00	1.00
332	Guscio fond.	339	340	385	384	4	70.0	1.00	1.00
333	Guscio fond.	340	341	386	385	4	70.0	1.00	1.00
334	Guscio fond.	341	342	387	386	4	70.0	1.00	1.00
335	Guscio fond.	342	343	388	387	4	70.0	1.00	1.00
336	Guscio fond.	343	344	389	388	4	70.0	1.00	1.00
337	Guscio fond.	344	345	390	389	4	70.0	1.00	1.00
338	Guscio fond.	345	346	391	390	4	70.0	1.00	1.00
339	Guscio fond.	346	347	392	391	4	70.0	1.00	1.00
340	Guscio fond.	347	348	393	392	4	70.0	1.00	1.00
341	Guscio fond.	348	349	394	393	4	70.0	1.00	1.00
342	Guscio fond.	349	350	395	394	4	70.0	1.00	1.00
343	Guscio fond.	350	351	396	395	4	70.0	1.00	1.00
344	Guscio fond.	351	352	397	396	4	70.0	1.00	1.00
345	Guscio fond.	352	353	398	397	4	70.0	1.00	1.00
346	Guscio fond.	353	354	399	398	4	70.0	1.00	1.00
347	Guscio fond.	354	355	400	399	4	70.0	1.00	1.00
348	Guscio fond.	355	356	401	400	4	70.0	1.00	1.00
349	Guscio fond.	356	357	402	401	4	70.0	1.00	1.00
350	Guscio fond.	357	358	403	402	4	70.0	1.00	1.00
351	Guscio fond.	358	359	404	403	4	70.0	1.00	1.00
352	Guscio fond.	359	360	405	404	4	70.0	1.00	1.00
353	Guscio fond.	361	362	407	406	4	70.0	1.00	1.00
354	Guscio fond.	362	363	408	407	4	70.0	1.00	1.00
355	Guscio fond.	363	364	409	408	4	70.0	1.00	1.00
356	Guscio fond.	364	365	410	409	4	70.0	1.00	1.00
357	Guscio fond.	365	366	411	410	4	70.0	1.00	1.00
358	Guscio fond.	366	367	412	411	4	70.0	1.00	1.00
359	Guscio fond.	367	368	413	412	4	70.0	1.00	1.00
360	Guscio fond.	368	369	414	413	4	70.0	1.00	1.00
361	Guscio fond.	369	370	415	414	4	70.0	1.00	1.00
362	Guscio fond.	370	371	416	415	4	100.0	1.00	1.00
363	Guscio fond.	371	372	417	416	4	100.0	1.00	1.00
364	Guscio fond.	372	373	418	417	4	70.0	1.00	1.00
365	Guscio fond.	373	374	419	418	4	70.0	1.00	1.00
366	Guscio fond.	374	375	420	419	4	70.0	1.00	1.00
367	Guscio fond.	375	376	421	420	4	70.0	1.00	1.00

Elem.	Note	Nodo I	Nodo J	Nodo K	Nodo L	Mat.	Spessore	Wink V	Wink O
							cm	daN/cm3	daN/cm3
368	Guscio fond.	376	377	422	421	4	70.0	1.00	1.00
369	Guscio fond.	377	378	423	422	4	70.0	1.00	1.00
370	Guscio fond.	378	379	424	423	4	100.0	1.00	1.00
371	Guscio fond.	379	380	425	424	4	100.0	1.00	1.00
372	Guscio fond.	380	381	426	425	4	70.0	1.00	1.00
373	Guscio fond.	381	382	427	426	4	70.0	1.00	1.00
374	Guscio fond.	382	383	428	427	4	70.0	1.00	1.00
375	Guscio fond.	383	384	429	428	4	70.0	1.00	1.00
376	Guscio fond.	384	385	430	429	4	70.0	1.00	1.00
377	Guscio fond.	385	386	431	430	4	70.0	1.00	1.00
378	Guscio fond.	386	387	432	431	4	100.0	1.00	1.00
379	Guscio fond.	387	388	433	432	4	100.0	1.00	1.00
380	Guscio fond.	388	389	434	433	4	70.0	1.00	1.00
381	Guscio fond.	389	390	435	434	4	70.0	1.00	1.00
382	Guscio fond.	390	391	436	435	4	70.0	1.00	1.00
383	Guscio fond.	391	392	437	436	4	70.0	1.00	1.00
384	Guscio fond.	392	393	438	437	4	70.0	1.00	1.00
385	Guscio fond.	393	394	439	438	4	70.0	1.00	1.00
386	Guscio fond.	394	395	440	439	4	100.0	1.00	1.00
387	Guscio fond.	395	396	441	440	4	100.0	1.00	1.00
388	Guscio fond.	396	397	442	441	4	70.0	1.00	1.00
389	Guscio fond.	397	398	443	442	4	70.0	1.00	1.00
390	Guscio fond.	398	399	444	443	4	70.0	1.00	1.00
391	Guscio fond.	399	400	445	444	4	70.0	1.00	1.00
392	Guscio fond.	400	401	446	445	4	70.0	1.00	1.00
393	Guscio fond.	401	402	447	446	4	70.0	1.00	1.00
394	Guscio fond.	402	403	448	447	4	70.0	1.00	1.00
395	Guscio fond.	403	404	449	448	4	70.0	1.00	1.00
396	Guscio fond.	404	405	450	449	4	70.0	1.00	1.00
397	Guscio fond.	406	407	452	451	4	70.0	1.00	1.00
398	Guscio fond.	407	408	453	452	4	70.0	1.00	1.00
399	Guscio fond.	408	409	454	453	4	70.0	1.00	1.00
400	Guscio fond.	409	410	455	454	4	70.0	1.00	1.00
401	Guscio fond.	410	411	456	455	4	70.0	1.00	1.00
402	Guscio fond.	411	412	457	456	4	70.0	1.00	1.00
403	Guscio fond.	412	413	458	457	4	70.0	1.00	1.00
404	Guscio fond.	413	414	459	458	4	70.0	1.00	1.00
405	Guscio fond.	414	415	460	459	4	70.0	1.00	1.00
406	Guscio fond.	415	416	461	460	4	100.0	1.00	1.00
407	Guscio fond.	416	417	462	461	4	100.0	1.00	1.00
408	Guscio fond.	417	418	463	462	4	70.0	1.00	1.00
409	Guscio fond.	418	419	464	463	4	70.0	1.00	1.00
410	Guscio fond.	419	420	465	464	4	70.0	1.00	1.00
411	Guscio fond.	420	421	466	465	4	70.0	1.00	1.00
412	Guscio fond.	421	422	467	466	4	70.0	1.00	1.00
413	Guscio fond.	422	423	468	467	4	70.0	1.00	1.00
414	Guscio fond.	423	424	469	468	4	100.0	1.00	1.00
415	Guscio fond.	424	425	470	469	4	100.0	1.00	1.00
416	Guscio fond.	425	426	471	470	4	70.0	1.00	1.00
417	Guscio fond.	426	427	472	471	4	70.0	1.00	1.00
418	Guscio fond.	427	428	473	472	4	70.0	1.00	1.00
419	Guscio fond.	428	429	474	473	4	70.0	1.00	1.00
420	Guscio fond.	429	430	475	474	4	70.0	1.00	1.00
421	Guscio fond.	430	431	476	475	4	70.0	1.00	1.00
422	Guscio fond.	431	432	477	476	4	100.0	1.00	1.00
423	Guscio fond.	432	433	478	477	4	100.0	1.00	1.00
424	Guscio fond.	433	434	479	478	4	70.0	1.00	1.00
425	Guscio fond.	434	435	480	479	4	70.0	1.00	1.00
426	Guscio fond.	435	436	481	480	4	70.0	1.00	1.00
427	Guscio fond.	436	437	482	481	4	70.0	1.00	1.00
428	Guscio fond.	437	438	483	482	4	70.0	1.00	1.00
429	Guscio fond.	438	439	484	483	4	70.0	1.00	1.00
430	Guscio fond.	439	440	485	484	4	100.0	1.00	1.00
431	Guscio fond.	440	441	486	485	4	100.0	1.00	1.00
432	Guscio fond.	441	442	487	486	4	70.0	1.00	1.00
433	Guscio fond.	442	443	488	487	4	70.0	1.00	1.00
434	Guscio fond.	443	444	489	488	4	70.0	1.00	1.00
435	Guscio fond.	444	445	490	489	4	70.0	1.00	1.00
436	Guscio fond.	445	446	491	490	4	70.0	1.00	1.00
437	Guscio fond.	446	447	492	491	4	70.0	1.00	1.00
438	Guscio fond.	447	448	493	492	4	70.0	1.00	1.00
439	Guscio fond.	448	449	494	493	4	70.0	1.00	1.00
440	Guscio fond.	449	450	495	494	4	70.0	1.00	1.00
441	Guscio fond.	451	452	497	496	4	70.0	1.00	1.00

Elem.	Note	Nodo I	Nodo J	Nodo K	Nodo L	Mat.	Spessore	Wink V	Wink O
							cm	daN/cm3	daN/cm3
442	Guscio fond.	452	453	498	497	4	70.0	1.00	1.00
443	Guscio fond.	453	454	499	498	4	70.0	1.00	1.00
444	Guscio fond.	454	455	500	499	4	70.0	1.00	1.00
445	Guscio fond.	455	456	501	500	4	70.0	1.00	1.00
446	Guscio fond.	456	457	502	501	4	70.0	1.00	1.00
447	Guscio fond.	457	458	503	502	4	70.0	1.00	1.00
448	Guscio fond.	458	459	504	503	4	70.0	1.00	1.00
449	Guscio fond.	459	460	505	504	4	70.0	1.00	1.00
450	Guscio fond.	460	461	506	505	4	70.0	1.00	1.00
451	Guscio fond.	461	462	507	506	4	70.0	1.00	1.00
452	Guscio fond.	462	463	508	507	4	70.0	1.00	1.00
453	Guscio fond.	463	464	509	508	4	70.0	1.00	1.00
454	Guscio fond.	464	465	510	509	4	70.0	1.00	1.00
455	Guscio fond.	465	466	511	510	4	70.0	1.00	1.00
456	Guscio fond.	466	467	512	511	4	70.0	1.00	1.00
457	Guscio fond.	467	468	513	512	4	70.0	1.00	1.00
458	Guscio fond.	468	469	514	513	4	70.0	1.00	1.00
459	Guscio fond.	469	470	515	514	4	70.0	1.00	1.00
460	Guscio fond.	470	471	516	515	4	70.0	1.00	1.00
461	Guscio fond.	471	472	517	516	4	70.0	1.00	1.00
462	Guscio fond.	472	473	518	517	4	70.0	1.00	1.00
463	Guscio fond.	473	474	519	518	4	70.0	1.00	1.00
464	Guscio fond.	474	475	520	519	4	70.0	1.00	1.00
465	Guscio fond.	475	476	521	520	4	70.0	1.00	1.00
466	Guscio fond.	476	477	522	521	4	70.0	1.00	1.00
467	Guscio fond.	477	478	523	522	4	70.0	1.00	1.00
468	Guscio fond.	478	479	524	523	4	70.0	1.00	1.00
469	Guscio fond.	479	480	525	524	4	70.0	1.00	1.00
470	Guscio fond.	480	481	526	525	4	70.0	1.00	1.00
471	Guscio fond.	481	482	527	526	4	70.0	1.00	1.00
472	Guscio fond.	482	483	528	527	4	70.0	1.00	1.00
473	Guscio fond.	483	484	529	528	4	70.0	1.00	1.00
474	Guscio fond.	484	485	530	529	4	70.0	1.00	1.00
475	Guscio fond.	485	486	531	530	4	70.0	1.00	1.00
476	Guscio fond.	486	487	532	531	4	70.0	1.00	1.00
477	Guscio fond.	487	488	533	532	4	70.0	1.00	1.00
478	Guscio fond.	488	489	534	533	4	70.0	1.00	1.00
479	Guscio fond.	489	490	535	534	4	70.0	1.00	1.00
480	Guscio fond.	490	491	536	535	4	70.0	1.00	1.00
481	Guscio fond.	491	492	537	536	4	70.0	1.00	1.00
482	Guscio fond.	492	493	538	537	4	70.0	1.00	1.00
483	Guscio fond.	493	494	539	538	4	70.0	1.00	1.00
484	Guscio fond.	494	495	540	539	4	70.0	1.00	1.00
485	Guscio fond.	496	497	542	541	4	70.0	1.00	1.00
486	Guscio fond.	497	498	543	542	4	70.0	1.00	1.00
487	Guscio fond.	498	499	544	543	4	70.0	1.00	1.00
488	Guscio fond.	499	500	545	544	4	70.0	1.00	1.00
489	Guscio fond.	500	501	546	545	4	70.0	1.00	1.00
490	Guscio fond.	501	502	547	546	4	70.0	1.00	1.00
491	Guscio fond.	502	503	548	547	4	70.0	1.00	1.00
492	Guscio fond.	503	504	549	548	4	70.0	1.00	1.00
493	Guscio fond.	504	505	550	549	4	70.0	1.00	1.00
494	Guscio fond.	505	506	551	550	4	70.0	1.00	1.00
495	Guscio fond.	506	507	552	551	4	70.0	1.00	1.00
496	Guscio fond.	507	508	553	552	4	70.0	1.00	1.00
497	Guscio fond.	508	509	554	553	4	70.0	1.00	1.00
498	Guscio fond.	509	510	555	554	4	70.0	1.00	1.00
499	Guscio fond.	510	511	556	555	4	70.0	1.00	1.00
500	Guscio fond.	511	512	557	556	4	70.0	1.00	1.00
501	Guscio fond.	512	513	558	557	4	70.0	1.00	1.00
502	Guscio fond.	513	514	559	558	4	70.0	1.00	1.00
503	Guscio fond.	514	515	560	559	4	70.0	1.00	1.00
504	Guscio fond.	515	516	561	560	4	70.0	1.00	1.00
505	Guscio fond.	516	517	562	561	4	70.0	1.00	1.00
506	Guscio fond.	517	518	563	562	4	70.0	1.00	1.00
507	Guscio fond.	518	519	564	563	4	70.0	1.00	1.00
508	Guscio fond.	519	520	565	564	4	70.0	1.00	1.00
509	Guscio fond.	520	521	566	565	4	70.0	1.00	1.00
510	Guscio fond.	521	522	567	566	4	70.0	1.00	1.00
511	Guscio fond.	522	523	568	567	4	70.0	1.00	1.00
512	Guscio fond.	523	524	569	568	4	70.0	1.00	1.00
513	Guscio fond.	524	525	570	569	4	70.0	1.00	1.00
514	Guscio fond.	525	526	571	570	4	70.0	1.00	1.00
515	Guscio fond.	526	527	572	571	4	70.0	1.00	1.00

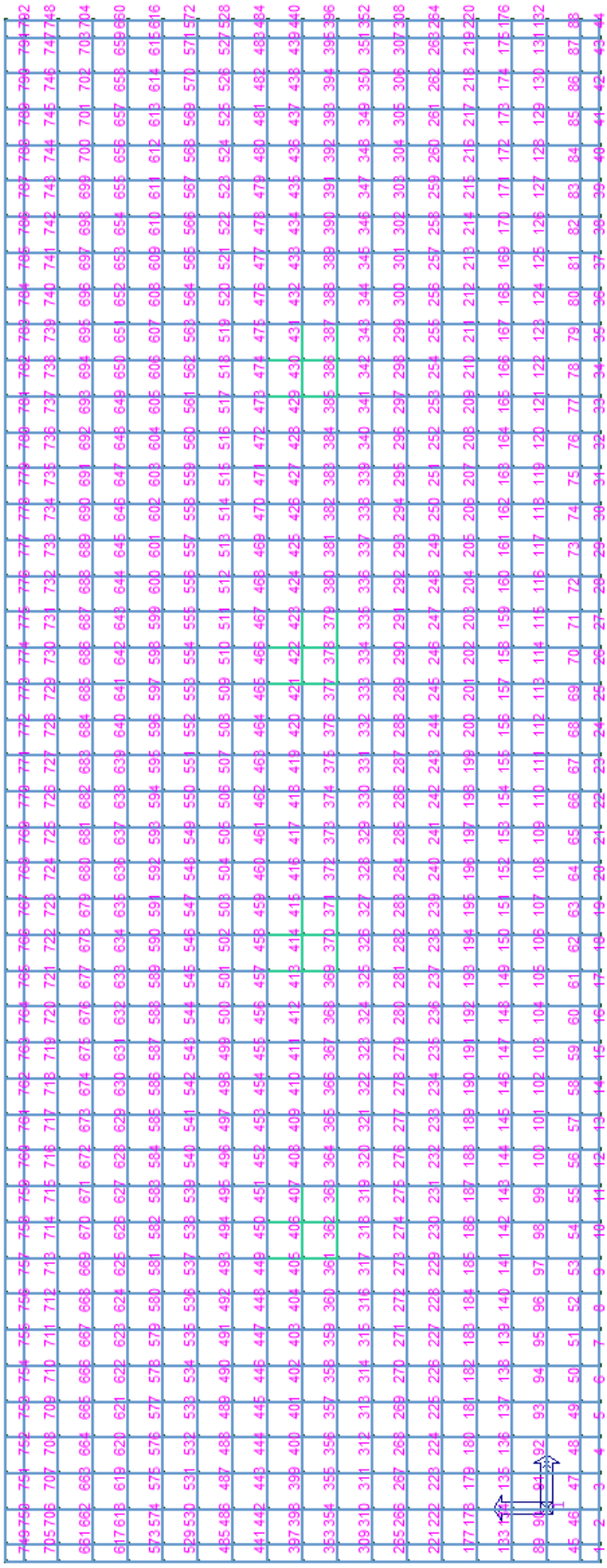
Elem.	Note	Nodo I	Nodo J	Nodo K	Nodo L	Mat.	Spessore	Wink V	Wink O
							cm	daN/cm3	daN/cm3
516	Guscio fond.	527	528	573	572	4	70.0	1.00	1.00
517	Guscio fond.	528	529	574	573	4	70.0	1.00	1.00
518	Guscio fond.	529	530	575	574	4	70.0	1.00	1.00
519	Guscio fond.	530	531	576	575	4	70.0	1.00	1.00
520	Guscio fond.	531	532	577	576	4	70.0	1.00	1.00
521	Guscio fond.	532	533	578	577	4	70.0	1.00	1.00
522	Guscio fond.	533	534	579	578	4	70.0	1.00	1.00
523	Guscio fond.	534	535	580	579	4	70.0	1.00	1.00
524	Guscio fond.	535	536	581	580	4	70.0	1.00	1.00
525	Guscio fond.	536	537	582	581	4	70.0	1.00	1.00
526	Guscio fond.	537	538	583	582	4	70.0	1.00	1.00
527	Guscio fond.	538	539	584	583	4	70.0	1.00	1.00
528	Guscio fond.	539	540	585	584	4	70.0	1.00	1.00
529	Guscio fond.	541	542	587	586	4	70.0	1.00	1.00
530	Guscio fond.	542	543	588	587	4	70.0	1.00	1.00
531	Guscio fond.	543	544	589	588	4	70.0	1.00	1.00
532	Guscio fond.	544	545	590	589	4	70.0	1.00	1.00
533	Guscio fond.	545	546	591	590	4	70.0	1.00	1.00
534	Guscio fond.	546	547	592	591	4	70.0	1.00	1.00
535	Guscio fond.	547	548	593	592	4	70.0	1.00	1.00
536	Guscio fond.	548	549	594	593	4	70.0	1.00	1.00
537	Guscio fond.	549	550	595	594	4	70.0	1.00	1.00
538	Guscio fond.	550	551	596	595	4	70.0	1.00	1.00
539	Guscio fond.	551	552	597	596	4	70.0	1.00	1.00
540	Guscio fond.	552	553	598	597	4	70.0	1.00	1.00
541	Guscio fond.	553	554	599	598	4	70.0	1.00	1.00
542	Guscio fond.	554	555	600	599	4	70.0	1.00	1.00
543	Guscio fond.	555	556	601	600	4	70.0	1.00	1.00
544	Guscio fond.	556	557	602	601	4	70.0	1.00	1.00
545	Guscio fond.	557	558	603	602	4	70.0	1.00	1.00
546	Guscio fond.	558	559	604	603	4	70.0	1.00	1.00
547	Guscio fond.	559	560	605	604	4	70.0	1.00	1.00
548	Guscio fond.	560	561	606	605	4	70.0	1.00	1.00
549	Guscio fond.	561	562	607	606	4	70.0	1.00	1.00
550	Guscio fond.	562	563	608	607	4	70.0	1.00	1.00
551	Guscio fond.	563	564	609	608	4	70.0	1.00	1.00
552	Guscio fond.	564	565	610	609	4	70.0	1.00	1.00
553	Guscio fond.	565	566	611	610	4	70.0	1.00	1.00
554	Guscio fond.	566	567	612	611	4	70.0	1.00	1.00
555	Guscio fond.	567	568	613	612	4	70.0	1.00	1.00
556	Guscio fond.	568	569	614	613	4	70.0	1.00	1.00
557	Guscio fond.	569	570	615	614	4	70.0	1.00	1.00
558	Guscio fond.	570	571	616	615	4	70.0	1.00	1.00
559	Guscio fond.	571	572	617	616	4	70.0	1.00	1.00
560	Guscio fond.	572	573	618	617	4	70.0	1.00	1.00
561	Guscio fond.	573	574	619	618	4	70.0	1.00	1.00
562	Guscio fond.	574	575	620	619	4	70.0	1.00	1.00
563	Guscio fond.	575	576	621	620	4	70.0	1.00	1.00
564	Guscio fond.	576	577	622	621	4	70.0	1.00	1.00
565	Guscio fond.	577	578	623	622	4	70.0	1.00	1.00
566	Guscio fond.	578	579	624	623	4	70.0	1.00	1.00
567	Guscio fond.	579	580	625	624	4	70.0	1.00	1.00
568	Guscio fond.	580	581	626	625	4	70.0	1.00	1.00
569	Guscio fond.	581	582	627	626	4	70.0	1.00	1.00
570	Guscio fond.	582	583	628	627	4	70.0	1.00	1.00
571	Guscio fond.	583	584	629	628	4	70.0	1.00	1.00
572	Guscio fond.	584	585	630	629	4	70.0	1.00	1.00
573	Guscio fond.	586	587	632	631	4	70.0	1.00	1.00
574	Guscio fond.	587	588	633	632	4	70.0	1.00	1.00
575	Guscio fond.	588	589	634	633	4	70.0	1.00	1.00
576	Guscio fond.	589	590	635	634	4	70.0	1.00	1.00
577	Guscio fond.	590	591	636	635	4	70.0	1.00	1.00
578	Guscio fond.	591	592	637	636	4	70.0	1.00	1.00
579	Guscio fond.	592	593	638	637	4	70.0	1.00	1.00
580	Guscio fond.	593	594	639	638	4	70.0	1.00	1.00
581	Guscio fond.	594	595	640	639	4	70.0	1.00	1.00
582	Guscio fond.	595	596	641	640	4	70.0	1.00	1.00
583	Guscio fond.	596	597	642	641	4	70.0	1.00	1.00
584	Guscio fond.	597	598	643	642	4	70.0	1.00	1.00
585	Guscio fond.	598	599	644	643	4	70.0	1.00	1.00
586	Guscio fond.	599	600	645	644	4	70.0	1.00	1.00
587	Guscio fond.	600	601	646	645	4	70.0	1.00	1.00
588	Guscio fond.	601	602	647	646	4	70.0	1.00	1.00
589	Guscio fond.	602	603	648	647	4	70.0	1.00	1.00

Elem.	Note	Nodo I	Nodo J	Nodo K	Nodo L	Mat.	Spessore	Wink V	Wink O
							cm	daN/cm3	daN/cm3
590	Guscio fond.	603	604	649	648	4	70.0	1.00	1.00
591	Guscio fond.	604	605	650	649	4	70.0	1.00	1.00
592	Guscio fond.	605	606	651	650	4	70.0	1.00	1.00
593	Guscio fond.	606	607	652	651	4	70.0	1.00	1.00
594	Guscio fond.	607	608	653	652	4	70.0	1.00	1.00
595	Guscio fond.	608	609	654	653	4	70.0	1.00	1.00
596	Guscio fond.	609	610	655	654	4	70.0	1.00	1.00
597	Guscio fond.	610	611	656	655	4	70.0	1.00	1.00
598	Guscio fond.	611	612	657	656	4	70.0	1.00	1.00
599	Guscio fond.	612	613	658	657	4	70.0	1.00	1.00
600	Guscio fond.	613	614	659	658	4	70.0	1.00	1.00
601	Guscio fond.	614	615	660	659	4	70.0	1.00	1.00
602	Guscio fond.	615	616	661	660	4	70.0	1.00	1.00
603	Guscio fond.	616	617	662	661	4	70.0	1.00	1.00
604	Guscio fond.	617	618	663	662	4	70.0	1.00	1.00
605	Guscio fond.	618	619	664	663	4	70.0	1.00	1.00
606	Guscio fond.	619	620	665	664	4	70.0	1.00	1.00
607	Guscio fond.	620	621	666	665	4	70.0	1.00	1.00
608	Guscio fond.	621	622	667	666	4	70.0	1.00	1.00
609	Guscio fond.	622	623	668	667	4	70.0	1.00	1.00
610	Guscio fond.	623	624	669	668	4	70.0	1.00	1.00
611	Guscio fond.	624	625	670	669	4	70.0	1.00	1.00
612	Guscio fond.	625	626	671	670	4	70.0	1.00	1.00
613	Guscio fond.	626	627	672	671	4	70.0	1.00	1.00
614	Guscio fond.	627	628	673	672	4	70.0	1.00	1.00
615	Guscio fond.	628	629	674	673	4	70.0	1.00	1.00
616	Guscio fond.	629	630	675	674	4	70.0	1.00	1.00
617	Guscio fond.	631	632	677	676	4	70.0	1.00	1.00
618	Guscio fond.	632	633	678	677	4	70.0	1.00	1.00
619	Guscio fond.	633	634	679	678	4	70.0	1.00	1.00
620	Guscio fond.	634	635	680	679	4	70.0	1.00	1.00
621	Guscio fond.	635	636	681	680	4	70.0	1.00	1.00
622	Guscio fond.	636	637	682	681	4	70.0	1.00	1.00
623	Guscio fond.	637	638	683	682	4	70.0	1.00	1.00
624	Guscio fond.	638	639	684	683	4	70.0	1.00	1.00
625	Guscio fond.	639	640	685	684	4	70.0	1.00	1.00
626	Guscio fond.	640	641	686	685	4	70.0	1.00	1.00
627	Guscio fond.	641	642	687	686	4	70.0	1.00	1.00
628	Guscio fond.	642	643	688	687	4	70.0	1.00	1.00
629	Guscio fond.	643	644	689	688	4	70.0	1.00	1.00
630	Guscio fond.	644	645	690	689	4	70.0	1.00	1.00
631	Guscio fond.	645	646	691	690	4	70.0	1.00	1.00
632	Guscio fond.	646	647	692	691	4	70.0	1.00	1.00
633	Guscio fond.	647	648	693	692	4	70.0	1.00	1.00
634	Guscio fond.	648	649	694	693	4	70.0	1.00	1.00
635	Guscio fond.	649	650	695	694	4	70.0	1.00	1.00
636	Guscio fond.	650	651	696	695	4	70.0	1.00	1.00
637	Guscio fond.	651	652	697	696	4	70.0	1.00	1.00
638	Guscio fond.	652	653	698	697	4	70.0	1.00	1.00
639	Guscio fond.	653	654	699	698	4	70.0	1.00	1.00
640	Guscio fond.	654	655	700	699	4	70.0	1.00	1.00
641	Guscio fond.	655	656	701	700	4	70.0	1.00	1.00
642	Guscio fond.	656	657	702	701	4	70.0	1.00	1.00
643	Guscio fond.	657	658	703	702	4	70.0	1.00	1.00
644	Guscio fond.	658	659	704	703	4	70.0	1.00	1.00
645	Guscio fond.	659	660	705	704	4	70.0	1.00	1.00
646	Guscio fond.	660	661	706	705	4	70.0	1.00	1.00
647	Guscio fond.	661	662	707	706	4	70.0	1.00	1.00
648	Guscio fond.	662	663	708	707	4	70.0	1.00	1.00
649	Guscio fond.	663	664	709	708	4	70.0	1.00	1.00
650	Guscio fond.	664	665	710	709	4	70.0	1.00	1.00
651	Guscio fond.	665	666	711	710	4	70.0	1.00	1.00
652	Guscio fond.	666	667	712	711	4	70.0	1.00	1.00
653	Guscio fond.	667	668	713	712	4	70.0	1.00	1.00
654	Guscio fond.	668	669	714	713	4	70.0	1.00	1.00
655	Guscio fond.	669	670	715	714	4	70.0	1.00	1.00
656	Guscio fond.	670	671	716	715	4	70.0	1.00	1.00
657	Guscio fond.	671	672	717	716	4	70.0	1.00	1.00
658	Guscio fond.	672	673	718	717	4	70.0	1.00	1.00
659	Guscio fond.	673	674	719	718	4	70.0	1.00	1.00
660	Guscio fond.	674	675	720	719	4	70.0	1.00	1.00
661	Guscio fond.	676	677	722	721	4	70.0	1.00	1.00
662	Guscio fond.	677	678	723	722	4	70.0	1.00	1.00
663	Guscio fond.	678	679	724	723	4	70.0	1.00	1.00

Elem.	Note	Nodo I	Nodo J	Nodo K	Nodo L	Mat.	Spessore	Wink V	Wink O
							cm	daN/cm3	daN/cm3
664	Guscio fond.	679	680	725	724	4	70.0	1.00	1.00
665	Guscio fond.	680	681	726	725	4	70.0	1.00	1.00
666	Guscio fond.	681	682	727	726	4	70.0	1.00	1.00
667	Guscio fond.	682	683	728	727	4	70.0	1.00	1.00
668	Guscio fond.	683	684	729	728	4	70.0	1.00	1.00
669	Guscio fond.	684	685	730	729	4	70.0	1.00	1.00
670	Guscio fond.	685	686	731	730	4	70.0	1.00	1.00
671	Guscio fond.	686	687	732	731	4	70.0	1.00	1.00
672	Guscio fond.	687	688	733	732	4	70.0	1.00	1.00
673	Guscio fond.	688	689	734	733	4	70.0	1.00	1.00
674	Guscio fond.	689	690	735	734	4	70.0	1.00	1.00
675	Guscio fond.	690	691	736	735	4	70.0	1.00	1.00
676	Guscio fond.	691	692	737	736	4	70.0	1.00	1.00
677	Guscio fond.	692	693	738	737	4	70.0	1.00	1.00
678	Guscio fond.	693	694	739	738	4	70.0	1.00	1.00
679	Guscio fond.	694	695	740	739	4	70.0	1.00	1.00
680	Guscio fond.	695	696	741	740	4	70.0	1.00	1.00
681	Guscio fond.	696	697	742	741	4	70.0	1.00	1.00
682	Guscio fond.	697	698	743	742	4	70.0	1.00	1.00
683	Guscio fond.	698	699	744	743	4	70.0	1.00	1.00
684	Guscio fond.	699	700	745	744	4	70.0	1.00	1.00
685	Guscio fond.	700	701	746	745	4	70.0	1.00	1.00
686	Guscio fond.	701	702	747	746	4	70.0	1.00	1.00
687	Guscio fond.	702	703	748	747	4	70.0	1.00	1.00
688	Guscio fond.	703	704	749	748	4	70.0	1.00	1.00
689	Guscio fond.	704	705	750	749	4	70.0	1.00	1.00
690	Guscio fond.	705	706	751	750	4	70.0	1.00	1.00
691	Guscio fond.	706	707	752	751	4	70.0	1.00	1.00
692	Guscio fond.	707	708	753	752	4	70.0	1.00	1.00
693	Guscio fond.	708	709	754	753	4	70.0	1.00	1.00
694	Guscio fond.	709	710	755	754	4	70.0	1.00	1.00
695	Guscio fond.	710	711	756	755	4	70.0	1.00	1.00
696	Guscio fond.	711	712	757	756	4	70.0	1.00	1.00
697	Guscio fond.	712	713	758	757	4	70.0	1.00	1.00
698	Guscio fond.	713	714	759	758	4	70.0	1.00	1.00
699	Guscio fond.	714	715	760	759	4	70.0	1.00	1.00
700	Guscio fond.	715	716	761	760	4	70.0	1.00	1.00
701	Guscio fond.	716	717	762	761	4	70.0	1.00	1.00
702	Guscio fond.	717	718	763	762	4	70.0	1.00	1.00
703	Guscio fond.	718	719	764	763	4	70.0	1.00	1.00
704	Guscio fond.	719	720	765	764	4	70.0	1.00	1.00
705	Guscio fond.	721	722	767	766	4	70.0	1.00	1.00
706	Guscio fond.	722	723	768	767	4	70.0	1.00	1.00
707	Guscio fond.	723	724	769	768	4	70.0	1.00	1.00
708	Guscio fond.	724	725	770	769	4	70.0	1.00	1.00
709	Guscio fond.	725	726	771	770	4	70.0	1.00	1.00
710	Guscio fond.	726	727	772	771	4	70.0	1.00	1.00
711	Guscio fond.	727	728	773	772	4	70.0	1.00	1.00
712	Guscio fond.	728	729	774	773	4	70.0	1.00	1.00
713	Guscio fond.	729	730	775	774	4	70.0	1.00	1.00
714	Guscio fond.	730	731	776	775	4	70.0	1.00	1.00
715	Guscio fond.	731	732	777	776	4	70.0	1.00	1.00
716	Guscio fond.	732	733	778	777	4	70.0	1.00	1.00
717	Guscio fond.	733	734	779	778	4	70.0	1.00	1.00
718	Guscio fond.	734	735	780	779	4	70.0	1.00	1.00
719	Guscio fond.	735	736	781	780	4	70.0	1.00	1.00
720	Guscio fond.	736	737	782	781	4	70.0	1.00	1.00
721	Guscio fond.	737	738	783	782	4	70.0	1.00	1.00
722	Guscio fond.	738	739	784	783	4	70.0	1.00	1.00
723	Guscio fond.	739	740	785	784	4	70.0	1.00	1.00
724	Guscio fond.	740	741	786	785	4	70.0	1.00	1.00
725	Guscio fond.	741	742	787	786	4	70.0	1.00	1.00
726	Guscio fond.	742	743	788	787	4	70.0	1.00	1.00
727	Guscio fond.	743	744	789	788	4	70.0	1.00	1.00
728	Guscio fond.	744	745	790	789	4	70.0	1.00	1.00
729	Guscio fond.	745	746	791	790	4	70.0	1.00	1.00
730	Guscio fond.	746	747	792	791	4	70.0	1.00	1.00
731	Guscio fond.	747	748	793	792	4	70.0	1.00	1.00
732	Guscio fond.	748	749	794	793	4	70.0	1.00	1.00
733	Guscio fond.	749	750	795	794	4	70.0	1.00	1.00
734	Guscio fond.	750	751	796	795	4	70.0	1.00	1.00
735	Guscio fond.	751	752	797	796	4	70.0	1.00	1.00
736	Guscio fond.	752	753	798	797	4	70.0	1.00	1.00
737	Guscio fond.	753	754	799	798	4	70.0	1.00	1.00

Elem.	Note	Nodo I	Nodo J	Nodo K	Nodo L	Mat.	Spessore	Wink V	Wink O
							cm	daN/cm3	daN/cm3
738	Guscio fond.	754	755	800	799	4	70.0	1.00	1.00
739	Guscio fond.	755	756	801	800	4	70.0	1.00	1.00
740	Guscio fond.	756	757	802	801	4	70.0	1.00	1.00
741	Guscio fond.	757	758	803	802	4	70.0	1.00	1.00
742	Guscio fond.	758	759	804	803	4	70.0	1.00	1.00
743	Guscio fond.	759	760	805	804	4	70.0	1.00	1.00
744	Guscio fond.	760	761	806	805	4	70.0	1.00	1.00
745	Guscio fond.	761	762	807	806	4	70.0	1.00	1.00
746	Guscio fond.	762	763	808	807	4	70.0	1.00	1.00
747	Guscio fond.	763	764	809	808	4	70.0	1.00	1.00
748	Guscio fond.	764	765	810	809	4	70.0	1.00	1.00
749	Guscio fond.	766	767	812	811	4	70.0	1.00	1.00
750	Guscio fond.	767	768	813	812	4	70.0	1.00	1.00
751	Guscio fond.	768	769	814	813	4	70.0	1.00	1.00
752	Guscio fond.	769	770	815	814	4	70.0	1.00	1.00
753	Guscio fond.	770	771	816	815	4	70.0	1.00	1.00
754	Guscio fond.	771	772	817	816	4	70.0	1.00	1.00
755	Guscio fond.	772	773	818	817	4	70.0	1.00	1.00
756	Guscio fond.	773	774	819	818	4	70.0	1.00	1.00
757	Guscio fond.	774	775	820	819	4	70.0	1.00	1.00
758	Guscio fond.	775	776	821	820	4	70.0	1.00	1.00
759	Guscio fond.	776	777	822	821	4	70.0	1.00	1.00
760	Guscio fond.	777	778	823	822	4	70.0	1.00	1.00
761	Guscio fond.	778	779	824	823	4	70.0	1.00	1.00
762	Guscio fond.	779	780	825	824	4	70.0	1.00	1.00
763	Guscio fond.	780	781	826	825	4	70.0	1.00	1.00
764	Guscio fond.	781	782	827	826	4	70.0	1.00	1.00
765	Guscio fond.	782	783	828	827	4	70.0	1.00	1.00
766	Guscio fond.	783	784	829	828	4	70.0	1.00	1.00
767	Guscio fond.	784	785	830	829	4	70.0	1.00	1.00
768	Guscio fond.	785	786	831	830	4	70.0	1.00	1.00
769	Guscio fond.	786	787	832	831	4	70.0	1.00	1.00
770	Guscio fond.	787	788	833	832	4	70.0	1.00	1.00
771	Guscio fond.	788	789	834	833	4	70.0	1.00	1.00
772	Guscio fond.	789	790	835	834	4	70.0	1.00	1.00
773	Guscio fond.	790	791	836	835	4	70.0	1.00	1.00
774	Guscio fond.	791	792	837	836	4	70.0	1.00	1.00
775	Guscio fond.	792	793	838	837	4	70.0	1.00	1.00
776	Guscio fond.	793	794	839	838	4	70.0	1.00	1.00
777	Guscio fond.	794	795	840	839	4	70.0	1.00	1.00
778	Guscio fond.	795	796	841	840	4	70.0	1.00	1.00
779	Guscio fond.	796	797	842	841	4	70.0	1.00	1.00
780	Guscio fond.	797	798	843	842	4	70.0	1.00	1.00
781	Guscio fond.	798	799	844	843	4	70.0	1.00	1.00
782	Guscio fond.	799	800	845	844	4	70.0	1.00	1.00
783	Guscio fond.	800	801	846	845	4	70.0	1.00	1.00
784	Guscio fond.	801	802	847	846	4	70.0	1.00	1.00
785	Guscio fond.	802	803	848	847	4	70.0	1.00	1.00
786	Guscio fond.	803	804	849	848	4	70.0	1.00	1.00
787	Guscio fond.	804	805	850	849	4	70.0	1.00	1.00
788	Guscio fond.	805	806	851	850	4	70.0	1.00	1.00
789	Guscio fond.	806	807	852	851	4	70.0	1.00	1.00
790	Guscio fond.	807	808	853	852	4	70.0	1.00	1.00
791	Guscio fond.	808	809	854	853	4	70.0	1.00	1.00
792	Guscio fond.	809	810	855	854	4	70.0	1.00	1.00

Numerazione elementi fondazione



2.10.3 RISULTATI OPERE DI FONDAZIONE

LEGENDA RISULTATI OPERE DI FONDAZIONE

Il controllo dei risultati delle analisi condotte, per quanto concerne le opere di fondazione, è possibile in relazione alle tabelle sotto riportate.

La tabella seguente è riferita alle fondazioni tipo platea su suolo elastico.

Per questo tipo di fondazione vengono riportate le pressioni in ogni vertice (nodo) degli elementi costituenti la platea per ogni combinazione.

RISULTATI OPERE DI FONDAZIONE

Nodo (G)	Pt 1/12	Pt 2/13	Pt 3...	Pt 4...							
	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2
1	-0.71	-0.74	-0.76	-0.79	-0.82	-0.85	-0.88	-0.91	-0.36	-0.39	-0.42
	-0.45	-0.48	-0.51	-0.54	-0.56	-0.49	-0.54	-0.71	-0.77	-0.47	-0.56
	-0.70	-0.78	-0.47	-0.52	-0.73	-0.79	-0.45	-0.54	-0.72	-0.81	-0.50
	-0.69	-0.56	-0.76	-0.49	-0.69	-0.57	-0.77	-0.44	-0.74	-0.51	-0.81
	-0.44	-0.74	-0.52	-0.82	-0.54	-0.57	-0.68	-0.72	-0.53	-0.58	-0.67
	-0.73	-0.52	-0.56	-0.69	-0.73	-0.51	-0.57	-0.68	-0.74	-0.54	-0.67
	-0.59	-0.71	-0.54	-0.66	-0.59	-0.72	-0.51	-0.70	-0.55	-0.75	-0.51
	-0.70	-0.56	-0.75	-0.52	-0.54	-0.56	-0.58	-0.60	-0.62	-0.64	-0.65
	-0.52	-0.54	-0.55	-0.57	-0.59	-0.60	-0.62	-0.64	-0.55	-0.57	-0.58
	-0.60	-0.62	-0.63	-0.54	-0.57	-0.60	-0.61	-0.63	-0.52	-0.54	-0.55
	-0.57	-0.58	-0.60	-0.61	-0.63						
2	-0.69	-0.73	-0.75	-0.78	-0.81	-0.84	-0.86	-0.90	-0.36	-0.39	-0.41
	-0.45	-0.47	-0.50	-0.53	-0.56	-0.50	-0.55	-0.68	-0.74	-0.48	-0.57
	-0.67	-0.76	-0.47	-0.53	-0.70	-0.76	-0.46	-0.55	-0.69	-0.78	-0.49
	-0.69	-0.55	-0.74	-0.49	-0.68	-0.56	-0.75	-0.44	-0.74	-0.50	-0.80
	-0.43	-0.73	-0.50	-0.80	-0.54	-0.58	-0.66	-0.70	-0.53	-0.59	-0.65
	-0.71	-0.52	-0.56	-0.67	-0.71	-0.51	-0.57	-0.66	-0.72	-0.54	-0.66
	-0.57	-0.70	-0.53	-0.66	-0.58	-0.70	-0.50	-0.70	-0.54	-0.73	-0.50
	-0.69	-0.54	-0.74	-0.51	-0.53	-0.55	-0.57	-0.58	-0.61	-0.62	-0.64
	-0.51	-0.53	-0.54	-0.56	-0.58	-0.59	-0.61	-0.62	-0.54	-0.56	-0.57
	-0.59	-0.60	-0.62	-0.53	-0.56	-0.59	-0.60	-0.62	-0.51	-0.53	-0.54
	-0.56	-0.57	-0.59	-0.60	-0.62						
3	-0.66	-0.70	-0.71	-0.75	-0.77	-0.81	-0.82	-0.86	-0.34	-0.39	-0.40
	-0.44	-0.45	-0.49	-0.50	-0.55	-0.51	-0.56	-0.62	-0.68	-0.49	-0.58
	-0.60	-0.69	-0.49	-0.54	-0.64	-0.70	-0.47	-0.56	-0.63	-0.72	-0.49
	-0.67	-0.52	-0.70	-0.48	-0.66	-0.53	-0.71	-0.43	-0.72	-0.46	-0.76
	-0.42	-0.72	-0.47	-0.76	-0.54	-0.57	-0.61	-0.65	-0.53	-0.59	-0.60
	-0.66	-0.53	-0.56	-0.63	-0.66	-0.51	-0.57	-0.62	-0.67	-0.52	-0.64
	-0.55	-0.66	-0.52	-0.64	-0.55	-0.67	-0.49	-0.68	-0.51	-0.70	-0.48
	-0.67	-0.51	-0.70	-0.48	-0.51	-0.52	-0.55	-0.56	-0.58	-0.59	-0.62
	-0.48	-0.51	-0.51	-0.54	-0.55	-0.57	-0.58	-0.60	-0.52	-0.54	-0.54
	-0.56	-0.57	-0.60	-0.51	-0.54	-0.57	-0.57	-0.60	-0.48	-0.51	-0.51
	-0.54	-0.54	-0.56	-0.57	-0.59						
4	-0.62	-0.67	-0.67	-0.72	-0.72	-0.77	-0.77	-0.82	-0.33	-0.38	-0.38
	-0.43	-0.43	-0.48	-0.48	-0.53	-0.51	-0.56	-0.57	-0.61	-0.50	-0.58
	-0.55	-0.63	-0.49	-0.54	-0.59	-0.64	-0.48	-0.56	-0.57	-0.65	-0.48
	-0.64	-0.49	-0.65	-0.47	-0.63	-0.50	-0.66	-0.42	-0.69	-0.44	-0.71
	-0.41	-0.69	-0.44	-0.72	-0.53	-0.56	-0.57	-0.60	-0.52	-0.57	-0.55
	-0.61	-0.52	-0.55	-0.58	-0.61	-0.51	-0.56	-0.57	-0.62	-0.51	-0.61
	-0.52	-0.62	-0.50	-0.61	-0.52	-0.63	-0.47	-0.65	-0.48	-0.66	-0.47
	-0.64	-0.49	-0.66	-0.46	-0.49	-0.49	-0.52	-0.52	-0.56	-0.56	-0.59
	-0.46	-0.48	-0.48	-0.51	-0.52	-0.54	-0.54	-0.57	-0.49	-0.51	-0.51
	-0.54	-0.54	-0.57	-0.49	-0.51	-0.54	-0.54	-0.57	-0.46	-0.48	-0.48
	-0.51	-0.51	-0.54	-0.54	-0.56						
5	-0.58	-0.64	-0.63	-0.69	-0.68	-0.74	-0.73	-0.78	-0.31	-0.37	-0.36
	-0.42	-0.41	-0.47	-0.46	-0.51	-0.51	-0.55	-0.53	-0.57	-0.49	-0.56
	-0.51	-0.59	-0.49	-0.53	-0.54	-0.59	-0.47	-0.55	-0.53	-0.60	-0.46
	-0.61	-0.47	-0.61	-0.46	-0.60	-0.47	-0.62	-0.41	-0.66	-0.42	-0.66
	-0.41	-0.65	-0.42	-0.67	-0.52	-0.54	-0.53	-0.56	-0.51	-0.55	-0.52
	-0.57	-0.51	-0.53	-0.54	-0.57	-0.50	-0.54	-0.53	-0.58	-0.49	-0.58

Nodo (G)	Pt 1/12	Pt 2/13	Pt 3...	Pt 4...							
	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2
	-0.49	-0.59	-0.49	-0.58	-0.50	-0.59	-0.46	-0.61	-0.46	-0.62	-0.45
	-0.61	-0.46	-0.62	-0.43	-0.47	-0.46	-0.50	-0.49	-0.53	-0.53	-0.56
	-0.43	-0.46	-0.46	-0.49	-0.49	-0.52	-0.51	-0.54	-0.46	-0.49	-0.48
	-0.51	-0.51	-0.54	-0.47	-0.49	-0.52	-0.51	-0.54	-0.43	-0.46	-0.46
	-0.49	-0.48	-0.51	-0.51	-0.54						
6	-0.56	-0.62	-0.60	-0.67	-0.65	-0.71	-0.70	-0.76	-0.31	-0.37	-0.35
	-0.42	-0.40	-0.46	-0.44	-0.51	-0.51	-0.55	-0.49	-0.53	-0.50	-0.56
	-0.48	-0.54	-0.48	-0.52	-0.52	-0.56	-0.47	-0.54	-0.50	-0.57	-0.46
	-0.59	-0.45	-0.58	-0.45	-0.58	-0.46	-0.59	-0.41	-0.63	-0.41	-0.63
	-0.41	-0.63	-0.42	-0.64	-0.52	-0.54	-0.50	-0.53	-0.51	-0.55	-0.49
	-0.54	-0.50	-0.52	-0.52	-0.54	-0.49	-0.53	-0.51	-0.55	-0.48	-0.57
	-0.48	-0.56	-0.48	-0.56	-0.48	-0.57	-0.45	-0.59	-0.45	-0.59	-0.45
	-0.59	-0.45	-0.59	-0.41	-0.46	-0.44	-0.49	-0.47	-0.52	-0.51	-0.55
	-0.41	-0.45	-0.44	-0.47	-0.47	-0.50	-0.49	-0.53	-0.44	-0.47	-0.46
	-0.50	-0.49	-0.52	-0.45	-0.48	-0.50	-0.49	-0.53	-0.41	-0.45	-0.44
	-0.47	-0.46	-0.50	-0.49	-0.52						
7	-0.55	-0.62	-0.59	-0.66	-0.64	-0.71	-0.69	-0.76	-0.30	-0.37	-0.35
	-0.42	-0.40	-0.47	-0.44	-0.51	-0.51	-0.55	-0.49	-0.53	-0.50	-0.56
	-0.48	-0.54	-0.49	-0.52	-0.51	-0.55	-0.48	-0.54	-0.50	-0.56	-0.46
	-0.58	-0.45	-0.58	-0.45	-0.58	-0.46	-0.58	-0.42	-0.62	-0.41	-0.62
	-0.41	-0.62	-0.42	-0.62	-0.51	-0.54	-0.50	-0.52	-0.51	-0.54	-0.49
	-0.53	-0.50	-0.52	-0.51	-0.54	-0.49	-0.53	-0.51	-0.55	-0.48	-0.56
	-0.48	-0.56	-0.48	-0.56	-0.48	-0.56	-0.45	-0.59	-0.45	-0.58	-0.45
	-0.58	-0.46	-0.59	-0.41	-0.45	-0.44	-0.48	-0.47	-0.51	-0.50	-0.55
	-0.41	-0.44	-0.43	-0.47	-0.46	-0.50	-0.49	-0.52	-0.43	-0.47	-0.46
	-0.49	-0.48	-0.52	-0.45	-0.47	-0.50	-0.48	-0.52	-0.41	-0.44	-0.43
	-0.47	-0.46	-0.49	-0.48	-0.52						
8	-0.55	-0.63	-0.60	-0.68	-0.65	-0.73	-0.71	-0.78	-0.31	-0.38	-0.36
	-0.43	-0.41	-0.48	-0.46	-0.53	-0.52	-0.56	-0.50	-0.54	-0.51	-0.57
	-0.49	-0.55	-0.50	-0.54	-0.52	-0.56	-0.49	-0.55	-0.51	-0.57	-0.47
	-0.59	-0.46	-0.59	-0.46	-0.59	-0.47	-0.60	-0.43	-0.63	-0.43	-0.62
	-0.43	-0.62	-0.43	-0.63	-0.52	-0.55	-0.51	-0.54	-0.52	-0.55	-0.50
	-0.54	-0.51	-0.53	-0.52	-0.55	-0.50	-0.54	-0.52	-0.56	-0.49	-0.57
	-0.49	-0.57	-0.49	-0.57	-0.49	-0.57	-0.47	-0.59	-0.46	-0.59	-0.46
	-0.59	-0.47	-0.59	-0.41	-0.46	-0.44	-0.49	-0.48	-0.53	-0.51	-0.56
	-0.41	-0.45	-0.44	-0.47	-0.47	-0.51	-0.50	-0.54	-0.44	-0.48	-0.46
	-0.50	-0.49	-0.53	-0.45	-0.48	-0.51	-0.49	-0.53	-0.41	-0.45	-0.44
	-0.47	-0.46	-0.50	-0.49	-0.53						
9	-0.57	-0.64	-0.63	-0.70	-0.68	-0.76	-0.74	-0.81	-0.31	-0.39	-0.37
	-0.45	-0.43	-0.50	-0.48	-0.56	-0.54	-0.58	-0.52	-0.56	-0.53	-0.59
	-0.51	-0.57	-0.52	-0.56	-0.54	-0.58	-0.51	-0.57	-0.53	-0.59	-0.49
	-0.62	-0.48	-0.61	-0.48	-0.61	-0.49	-0.62	-0.45	-0.65	-0.45	-0.65
	-0.45	-0.65	-0.46	-0.65	-0.54	-0.57	-0.53	-0.56	-0.54	-0.58	-0.53
	-0.56	-0.53	-0.56	-0.55	-0.57	-0.52	-0.56	-0.54	-0.58	-0.51	-0.60
	-0.51	-0.59	-0.51	-0.59	-0.51	-0.60	-0.49	-0.62	-0.49	-0.61	-0.49
	-0.61	-0.49	-0.62	-0.42	-0.47	-0.46	-0.51	-0.50	-0.55	-0.53	-0.58
	-0.42	-0.46	-0.45	-0.49	-0.49	-0.53	-0.52	-0.56	-0.45	-0.50	-0.48
	-0.52	-0.51	-0.56	-0.47	-0.50	-0.53	-0.51	-0.56	-0.42	-0.46	-0.45
	-0.49	-0.48	-0.52	-0.51	-0.55						
10	-0.59	-0.67	-0.65	-0.73	-0.71	-0.79	-0.77	-0.85	-0.32	-0.40	-0.38
	-0.46	-0.45	-0.52	-0.51	-0.59	-0.57	-0.61	-0.54	-0.59	-0.56	-0.62
	-0.53	-0.60	-0.55	-0.59	-0.56	-0.61	-0.54	-0.60	-0.55	-0.62	-0.51
	-0.65	-0.50	-0.64	-0.50	-0.64	-0.51	-0.65	-0.48	-0.68	-0.47	-0.68
	-0.47	-0.68	-0.47	-0.68	-0.57	-0.60	-0.55	-0.58	-0.56	-0.60	-0.55
	-0.59	-0.56	-0.58	-0.57	-0.59	-0.55	-0.59	-0.56	-0.60	-0.53	-0.62
	-0.53	-0.62	-0.53	-0.62	-0.53	-0.62	-0.51	-0.64	-0.51	-0.64	-0.51
	-0.64	-0.51	-0.64	-0.44	-0.49	-0.48	-0.53	-0.52	-0.57	-0.56	-0.61
	-0.44	-0.48	-0.47	-0.51	-0.51	-0.55	-0.54	-0.58	-0.47	-0.51	-0.50
	-0.54	-0.54	-0.58	-0.48	-0.52	-0.55	-0.53	-0.58	-0.44	-0.48	-0.47
	-0.51	-0.50	-0.54	-0.53	-0.58						
11	-0.60	-0.68	-0.67	-0.74	-0.73	-0.81	-0.80	-0.87	-0.33	-0.41	-0.39
	-0.47	-0.46	-0.54	-0.52	-0.60	-0.59	-0.63	-0.55	-0.59	-0.58	-0.64
	-0.54	-0.60	-0.58	-0.62	-0.56	-0.60	-0.57	-0.63	-0.55	-0.61	-0.53
	-0.67	-0.51	-0.66	-0.52	-0.66	-0.52	-0.66	-0.49	-0.70	-0.48	-0.69
	-0.49	-0.70	-0.48	-0.69	-0.59	-0.62	-0.56	-0.59	-0.58	-0.62	-0.56
	-0.60	-0.58	-0.61	-0.57	-0.60	-0.57	-0.62	-0.56	-0.61	-0.55	-0.64
	-0.54	-0.63	-0.55	-0.64	-0.54	-0.63	-0.53	-0.66	-0.52	-0.65	-0.52
	-0.66	-0.52	-0.66	-0.44	-0.50	-0.49	-0.54	-0.53	-0.58	-0.57	-0.63
	-0.44	-0.49	-0.48	-0.52	-0.52	-0.56	-0.56	-0.60	-0.48	-0.53	-0.51
	-0.56	-0.55	-0.59	-0.49	-0.53	-0.56	-0.55	-0.60	-0.44	-0.49	-0.48
	-0.52	-0.51	-0.56	-0.55	-0.59						
12	-0.60	-0.68	-0.66	-0.74	-0.73	-0.80	-0.79	-0.87	-0.33	-0.41	-0.39
	-0.47	-0.46	-0.54	-0.52	-0.60	-0.59	-0.63	-0.54	-0.58	-0.58	-0.64
	-0.53	-0.59	-0.58	-0.62	-0.55	-0.59	-0.57	-0.63	-0.54	-0.60	-0.53

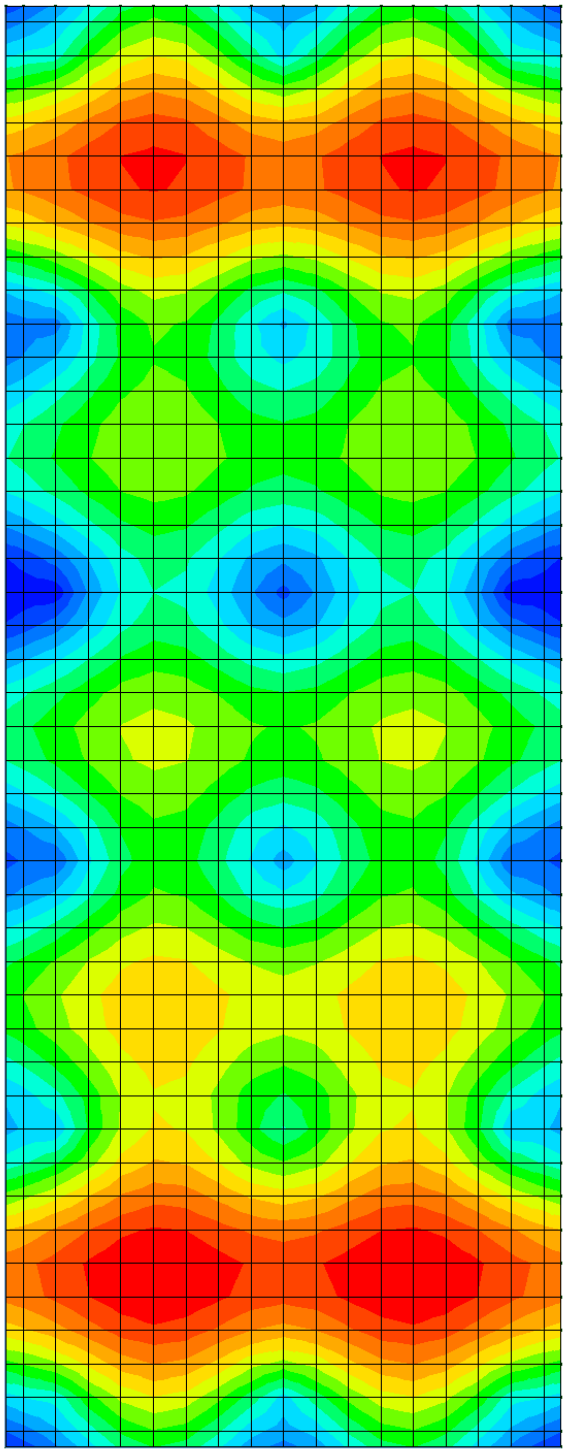
Nodo (G)	Pt 1/12	Pt 2/13	Pt 3...	Pt 4...							
	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2
	-0.66	-0.51	-0.65	-0.52	-0.66	-0.51	-0.65	-0.49	-0.69	-0.48	-0.68
	-0.49	-0.69	-0.48	-0.68	-0.59	-0.62	-0.56	-0.58	-0.58	-0.62	-0.55
	-0.59	-0.58	-0.61	-0.57	-0.59	-0.57	-0.61	-0.56	-0.60	-0.55	-0.63
	-0.54	-0.63	-0.55	-0.63	-0.54	-0.63	-0.53	-0.66	-0.52	-0.65	-0.52
	-0.65	-0.52	-0.65	-0.44	-0.49	-0.48	-0.54	-0.53	-0.58	-0.57	-0.62
	-0.44	-0.48	-0.48	-0.52	-0.52	-0.56	-0.55	-0.59	-0.48	-0.52	-0.51
	-0.55	-0.55	-0.59	-0.49	-0.52	-0.56	-0.54	-0.59	-0.44	-0.48	-0.48
	-0.52	-0.51	-0.55	-0.54	-0.59						
13	-0.58	-0.66	-0.64	-0.72	-0.71	-0.78	-0.77	-0.85	-0.32	-0.40	-0.38
	-0.46	-0.45	-0.53	-0.51	-0.59	-0.58	-0.62	-0.53	-0.57	-0.57	-0.63
	-0.52	-0.57	-0.57	-0.61	-0.54	-0.58	-0.56	-0.61	-0.53	-0.59	-0.52
	-0.64	-0.50	-0.63	-0.51	-0.64	-0.51	-0.63	-0.49	-0.67	-0.47	-0.66
	-0.48	-0.67	-0.48	-0.66	-0.58	-0.60	-0.54	-0.57	-0.57	-0.61	-0.54
	-0.57	-0.57	-0.59	-0.55	-0.58	-0.56	-0.60	-0.55	-0.58	-0.54	-0.62
	-0.53	-0.61	-0.53	-0.62	-0.53	-0.61	-0.52	-0.64	-0.51	-0.63	-0.52
	-0.63	-0.51	-0.63	-0.43	-0.48	-0.47	-0.52	-0.51	-0.57	-0.56	-0.61
	-0.43	-0.47	-0.46	-0.51	-0.51	-0.55	-0.54	-0.58	-0.47	-0.51	-0.50
	-0.54	-0.53	-0.58	-0.48	-0.51	-0.54	-0.53	-0.58	-0.43	-0.47	-0.46
	-0.51	-0.50	-0.54	-0.53	-0.57						
14	-0.57	-0.65	-0.63	-0.71	-0.69	-0.77	-0.75	-0.83	-0.32	-0.39	-0.38
	-0.46	-0.44	-0.52	-0.50	-0.58	-0.56	-0.60	-0.52	-0.56	-0.55	-0.60
	-0.52	-0.57	-0.55	-0.59	-0.53	-0.57	-0.54	-0.59	-0.52	-0.58	-0.51
	-0.63	-0.49	-0.61	-0.50	-0.62	-0.50	-0.62	-0.48	-0.65	-0.47	-0.64
	-0.48	-0.65	-0.47	-0.64	-0.56	-0.58	-0.54	-0.56	-0.56	-0.59	-0.53
	-0.56	-0.55	-0.58	-0.54	-0.57	-0.55	-0.58	-0.54	-0.57	-0.52	-0.60
	-0.52	-0.60	-0.52	-0.60	-0.52	-0.60	-0.51	-0.62	-0.50	-0.61	-0.51
	-0.62	-0.50	-0.61	-0.42	-0.47	-0.46	-0.51	-0.50	-0.55	-0.54	-0.59
	-0.42	-0.46	-0.45	-0.50	-0.49	-0.54	-0.53	-0.57	-0.46	-0.50	-0.49
	-0.53	-0.52	-0.56	-0.47	-0.50	-0.53	-0.52	-0.57	-0.42	-0.46	-0.45
	-0.50	-0.49	-0.53	-0.52	-0.56						
15	-0.57	-0.64	-0.63	-0.70	-0.69	-0.76	-0.75	-0.82	-0.32	-0.39	-0.38
	-0.45	-0.44	-0.51	-0.50	-0.57	-0.55	-0.58	-0.53	-0.56	-0.54	-0.59
	-0.52	-0.57	-0.54	-0.58	-0.53	-0.57	-0.54	-0.58	-0.53	-0.58	-0.50
	-0.62	-0.49	-0.61	-0.50	-0.62	-0.49	-0.62	-0.48	-0.64	-0.47	-0.63
	-0.48	-0.64	-0.48	-0.63	-0.55	-0.57	-0.54	-0.56	-0.55	-0.58	-0.53
	-0.57	-0.55	-0.57	-0.54	-0.57	-0.54	-0.57	-0.54	-0.57	-0.52	-0.60
	-0.51	-0.59	-0.52	-0.60	-0.52	-0.59	-0.51	-0.61	-0.50	-0.61	-0.51
	-0.61	-0.50	-0.61	-0.42	-0.47	-0.46	-0.51	-0.50	-0.55	-0.54	-0.59
	-0.42	-0.46	-0.45	-0.49	-0.49	-0.53	-0.52	-0.56	-0.46	-0.50	-0.48
	-0.52	-0.52	-0.56	-0.47	-0.50	-0.53	-0.52	-0.56	-0.42	-0.46	-0.45
	-0.49	-0.48	-0.52	-0.52	-0.56						
16	-0.57	-0.65	-0.63	-0.71	-0.70	-0.77	-0.76	-0.83	-0.32	-0.40	-0.38
	-0.46	-0.44	-0.52	-0.50	-0.58	-0.54	-0.58	-0.55	-0.59	-0.54	-0.58
	-0.54	-0.59	-0.54	-0.58	-0.55	-0.59	-0.53	-0.58	-0.55	-0.59	-0.50
	-0.63	-0.50	-0.63	-0.50	-0.63	-0.50	-0.63	-0.48	-0.64	-0.49	-0.64
	-0.48	-0.64	-0.49	-0.64	-0.55	-0.57	-0.55	-0.58	-0.55	-0.58	-0.55
	-0.58	-0.55	-0.57	-0.56	-0.58	-0.54	-0.57	-0.55	-0.58	-0.52	-0.60
	-0.52	-0.61	-0.52	-0.60	-0.52	-0.61	-0.51	-0.61	-0.51	-0.61	-0.51
	-0.61	-0.51	-0.62	-0.42	-0.48	-0.47	-0.52	-0.51	-0.56	-0.55	-0.60
	-0.42	-0.47	-0.46	-0.50	-0.50	-0.54	-0.53	-0.57	-0.46	-0.50	-0.49
	-0.53	-0.53	-0.57	-0.47	-0.50	-0.54	-0.52	-0.57	-0.42	-0.47	-0.46
	-0.50	-0.49	-0.53	-0.52	-0.56						
17	-0.59	-0.66	-0.65	-0.73	-0.72	-0.79	-0.78	-0.86	-0.33	-0.40	-0.39
	-0.47	-0.46	-0.53	-0.52	-0.60	-0.55	-0.59	-0.56	-0.61	-0.55	-0.60
	-0.56	-0.61	-0.55	-0.59	-0.57	-0.61	-0.54	-0.59	-0.57	-0.61	-0.51
	-0.65	-0.51	-0.65	-0.51	-0.65	-0.51	-0.65	-0.50	-0.66	-0.50	-0.66
	-0.49	-0.66	-0.50	-0.66	-0.56	-0.59	-0.57	-0.60	-0.56	-0.59	-0.57
	-0.60	-0.56	-0.59	-0.57	-0.60	-0.56	-0.59	-0.57	-0.60	-0.53	-0.62
	-0.54	-0.63	-0.53	-0.62	-0.54	-0.63	-0.53	-0.63	-0.53	-0.63	-0.52
	-0.63	-0.53	-0.63	-0.44	-0.49	-0.48	-0.53	-0.52	-0.57	-0.56	-0.62
	-0.44	-0.48	-0.47	-0.51	-0.51	-0.55	-0.55	-0.59	-0.47	-0.52	-0.50
	-0.55	-0.54	-0.58	-0.48	-0.52	-0.55	-0.54	-0.58	-0.44	-0.48	-0.47
	-0.51	-0.50	-0.55	-0.54	-0.58						
18	-0.61	-0.68	-0.68	-0.75	-0.74	-0.82	-0.81	-0.89	-0.33	-0.41	-0.40
	-0.48	-0.47	-0.55	-0.54	-0.61	-0.57	-0.62	-0.58	-0.63	-0.57	-0.62
	-0.58	-0.63	-0.57	-0.61	-0.58	-0.63	-0.56	-0.62	-0.58	-0.63	-0.52
	-0.67	-0.52	-0.68	-0.52	-0.67	-0.52	-0.68	-0.51	-0.68	-0.51	-0.69
	-0.51	-0.68	-0.51	-0.69	-0.58	-0.61	-0.59	-0.62	-0.58	-0.61	-0.58
	-0.62	-0.58	-0.61	-0.59	-0.62	-0.58	-0.61	-0.59	-0.62	-0.55	-0.65
	-0.55	-0.65	-0.55	-0.65	-0.55	-0.65	-0.54	-0.65	-0.54	-0.66	-0.54
	-0.65	-0.54	-0.66	-0.45	-0.50	-0.49	-0.55	-0.54	-0.59	-0.58	-0.64
	-0.45	-0.49	-0.49	-0.53	-0.53	-0.57	-0.57	-0.61	-0.49	-0.53	-0.52
	-0.56	-0.56	-0.60	-0.50	-0.53	-0.57	-0.56	-0.60	-0.45	-0.49	-0.49
	-0.53	-0.52	-0.56	-0.56	-0.60						

Nodo (G)	Pt 1/12	Pt 2/13	Pt 3...	Pt 4...							
	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2
19	-0.62	-0.69	-0.69	-0.76	-0.76	-0.83	-0.82	-0.90	-0.34	-0.41	-0.41
	-0.48	-0.48	-0.55	-0.55	-0.62	-0.59	-0.64	-0.58	-0.63	-0.58	-0.64
	-0.58	-0.63	-0.59	-0.63	-0.58	-0.63	-0.58	-0.64	-0.58	-0.63	-0.53
	-0.69	-0.53	-0.68	-0.53	-0.69	-0.53	-0.69	-0.52	-0.70	-0.52	-0.70
	-0.52	-0.70	-0.52	-0.70	-0.60	-0.63	-0.59	-0.62	-0.59	-0.63	-0.59
	-0.62	-0.59	-0.62	-0.59	-0.62	-0.59	-0.63	-0.59	-0.62	-0.56	-0.66
	-0.56	-0.66	-0.56	-0.66	-0.56	-0.66	-0.55	-0.67	-0.55	-0.66	-0.55
	-0.67	-0.55	-0.66	-0.46	-0.51	-0.50	-0.55	-0.55	-0.60	-0.59	-0.64
	-0.46	-0.50	-0.49	-0.53	-0.54	-0.58	-0.58	-0.62	-0.50	-0.54	-0.53
	-0.57	-0.57	-0.61	-0.50	-0.54	-0.58	-0.57	-0.61	-0.46	-0.50	-0.49
	-0.53	-0.53	-0.57	-0.57	-0.61						
20	-0.61	-0.69	-0.68	-0.75	-0.75	-0.82	-0.81	-0.89	-0.34	-0.41	-0.40
	-0.48	-0.47	-0.54	-0.54	-0.61	-0.59	-0.63	-0.57	-0.61	-0.58	-0.64
	-0.56	-0.61	-0.58	-0.63	-0.57	-0.62	-0.58	-0.63	-0.57	-0.62	-0.53
	-0.68	-0.52	-0.67	-0.53	-0.68	-0.52	-0.67	-0.52	-0.69	-0.51	-0.68
	-0.51	-0.69	-0.51	-0.69	-0.59	-0.62	-0.58	-0.61	-0.59	-0.62	-0.58
	-0.61	-0.59	-0.62	-0.58	-0.61	-0.59	-0.62	-0.58	-0.61	-0.55	-0.65
	-0.55	-0.65	-0.55	-0.65	-0.55	-0.65	-0.55	-0.66	-0.54	-0.65	-0.54
	-0.66	-0.54	-0.66	-0.45	-0.50	-0.50	-0.55	-0.54	-0.59	-0.59	-0.64
	-0.45	-0.49	-0.49	-0.53	-0.53	-0.57	-0.57	-0.61	-0.49	-0.53	-0.52
	-0.56	-0.56	-0.60	-0.50	-0.53	-0.57	-0.56	-0.60	-0.45	-0.49	-0.49
	-0.53	-0.52	-0.56	-0.56	-0.60						
21	-0.60	-0.67	-0.66	-0.74	-0.73	-0.80	-0.79	-0.86	-0.33	-0.40	-0.39
	-0.47	-0.46	-0.53	-0.52	-0.59	-0.58	-0.62	-0.55	-0.59	-0.57	-0.62
	-0.55	-0.60	-0.57	-0.61	-0.55	-0.60	-0.57	-0.62	-0.55	-0.60	-0.52
	-0.66	-0.51	-0.65	-0.52	-0.66	-0.51	-0.65	-0.51	-0.67	-0.50	-0.66
	-0.51	-0.67	-0.50	-0.66	-0.58	-0.61	-0.56	-0.59	-0.58	-0.61	-0.56
	-0.59	-0.58	-0.60	-0.56	-0.59	-0.57	-0.61	-0.56	-0.59	-0.54	-0.63
	-0.54	-0.63	-0.54	-0.63	-0.54	-0.63	-0.53	-0.64	-0.53	-0.63	-0.53
	-0.64	-0.53	-0.63	-0.44	-0.49	-0.48	-0.53	-0.53	-0.58	-0.57	-0.62
	-0.44	-0.48	-0.48	-0.52	-0.52	-0.56	-0.55	-0.59	-0.48	-0.52	-0.51
	-0.55	-0.55	-0.59	-0.49	-0.52	-0.55	-0.54	-0.59	-0.44	-0.48	-0.48
	-0.52	-0.51	-0.55	-0.54	-0.58						
22	-0.59	-0.66	-0.65	-0.72	-0.71	-0.78	-0.77	-0.84	-0.32	-0.40	-0.38
	-0.46	-0.44	-0.52	-0.51	-0.58	-0.56	-0.60	-0.54	-0.58	-0.56	-0.60
	-0.54	-0.58	-0.56	-0.60	-0.54	-0.59	-0.55	-0.60	-0.54	-0.59	-0.50
	-0.64	-0.50	-0.64	-0.50	-0.64	-0.50	-0.64	-0.50	-0.65	-0.49	-0.64
	-0.50	-0.65	-0.50	-0.64	-0.56	-0.59	-0.55	-0.58	-0.56	-0.59	-0.55
	-0.58	-0.56	-0.59	-0.55	-0.58	-0.56	-0.59	-0.55	-0.58	-0.53	-0.62
	-0.52	-0.61	-0.53	-0.62	-0.53	-0.61	-0.52	-0.62	-0.52	-0.62	-0.52
	-0.62	-0.52	-0.62	-0.43	-0.48	-0.47	-0.52	-0.51	-0.56	-0.56	-0.60
	-0.43	-0.47	-0.47	-0.50	-0.51	-0.55	-0.54	-0.58	-0.47	-0.51	-0.50
	-0.54	-0.54	-0.57	-0.48	-0.51	-0.54	-0.53	-0.58	-0.43	-0.47	-0.47
	-0.50	-0.50	-0.54	-0.53	-0.57						
....											
855	-0.70	-0.73	-0.76	-0.79	-0.82	-0.85	-0.87	-0.90	-0.36	-0.39	-0.42
	-0.45	-0.48	-0.51	-0.54	-0.56	-0.80	-0.71	-0.54	-0.45	-0.79	-0.73
	-0.52	-0.46	-0.78	-0.69	-0.56	-0.47	-0.77	-0.71	-0.54	-0.48	-0.81
	-0.51	-0.73	-0.43	-0.81	-0.51	-0.74	-0.44	-0.76	-0.56	-0.68	-0.48
	-0.76	-0.56	-0.69	-0.49	-0.74	-0.68	-0.57	-0.51	-0.73	-0.69	-0.56
	-0.52	-0.72	-0.67	-0.58	-0.52	-0.71	-0.68	-0.57	-0.53	-0.75	-0.55
	-0.69	-0.50	-0.74	-0.55	-0.70	-0.50	-0.71	-0.58	-0.66	-0.53	-0.71
	-0.58	-0.67	-0.54	-0.52	-0.53	-0.55	-0.57	-0.59	-0.61	-0.63	-0.65
	-0.52	-0.53	-0.55	-0.56	-0.58	-0.60	-0.62	-0.63	-0.55	-0.57	-0.58
	-0.59	-0.61	-0.63	-0.53	-0.56	-0.59	-0.61	-0.63	-0.52	-0.53	-0.55
	-0.56	-0.58	-0.59	-0.61	-0.62						

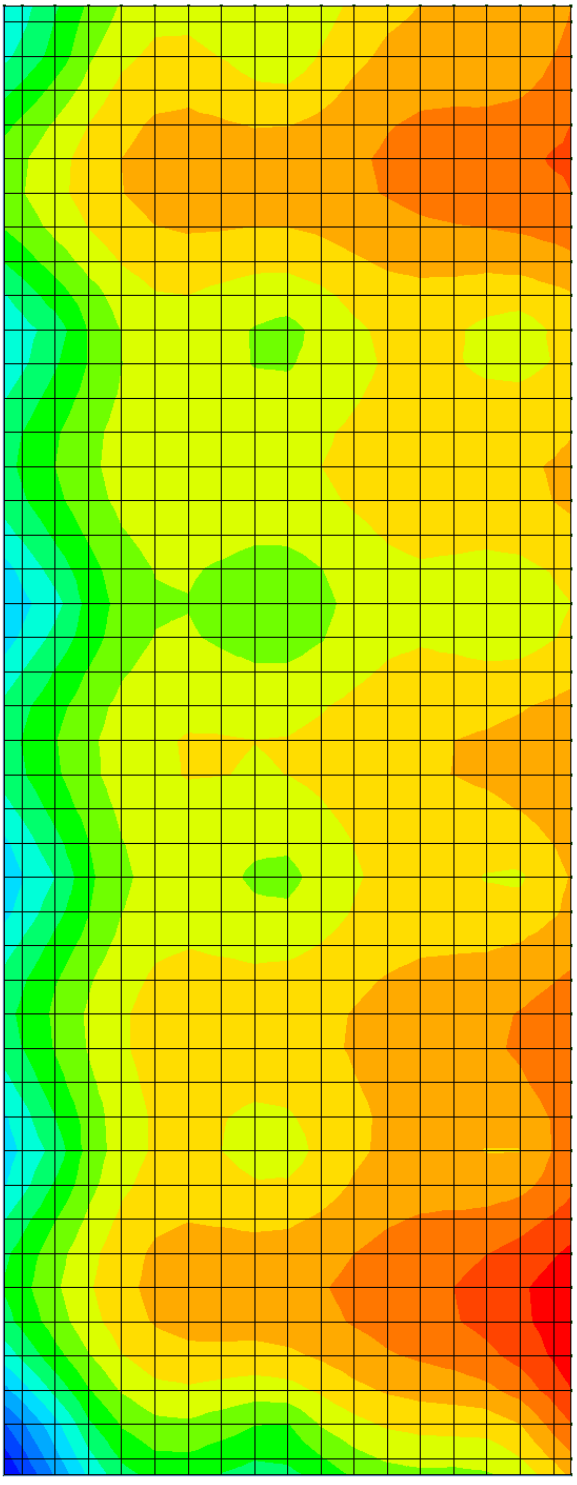
Min/Max
-0.92
-0.29

PRESSIONE PLATEA

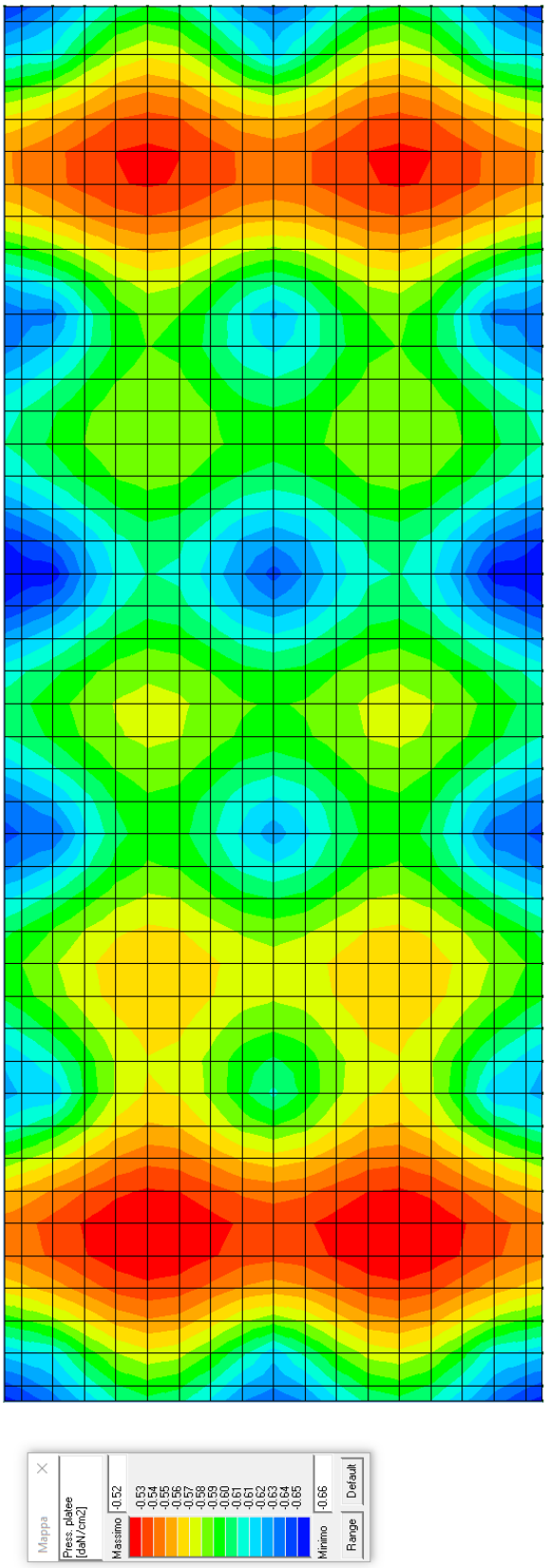
Pressione massima combinazioni SLU STR A1 (CMB 8)



Pressione massima combinazioni SLV sismiche (CMB 43)



Pressione massima combinazioni SLE (rara) (CMB 88)



2.10.4 VERIFICHE ELEMENTI PARETE E GUSCIO IN C.A.

LEGENDA TABELLA VERIFICHE ELEMENTI PARETE E GUSCIO IN C.A.

Nel caso dei gusci e nel caso in cui la progettazione della parete sia integrata o effettuata del tutto con progettazione locale si produce una tabella nella quale vengono riportati per ogni macroelemento il numero dello stesso ed il codice di verifica.

Per la progettazione con il metodo degli stati limite vengono riportati il rapporto x/d, la verifica per sollecitazioni ultime e la verifica per compressione media con l'indicazione delle due combinazioni in cui si sono attinti i rispettivi valori.

Per ogni elemento viene riportata inoltre la maglia di armatura necessaria in relazione alle risultanze della progettazione dei nodi dell'elemento stesso (diametri in mm, passi in cm). Le quantità di armature necessarie sono armature (disposte rispettivamente in direzione principale e secondaria, inferiore e superiore) distribuite nell'elemento ed espresse in centimetri quadri per sviluppo lineare pari ad un metro.

La progettazione degli elementi strutturali con proprietà fondazione è effettuata (per travi e platee) incrementando le sollecitazioni delle combinazioni con sisma del fattore: $\gamma rd = 1.1$ in CDB e $\gamma rd = 1.3$ in CDA per pali, plinti, travi e platee.

In particolare i simboli utilizzati assumono il seguente significato:

M_S		macroelemento di tipo setto (elementi verticali contigui ed analoghi per proprietà)
M_G		macroelemento di tipo guscio (elementi non verticali contigui ed analoghi per proprietà)
Stato		codice di verifica dell'elemento
Nodo		numero del nodo
x/d		rapporto tra posizione dell'asse neutro e altezza utile alla rottura della sezione (per sola flessione)
verif.		rapporto Sd/Su con sollecitazioni ultime ~~proporzionali~~: valore minore o uguale a 1 per verifica positiva
Ver.rd		rapporto Nd/Nu (Nu ottenuto con riduzione del 25% di fcd): valore minore o uguale a 1 per verifica positiva
Rete pr		maglia di armatura (diametro/passo) in direzione principale inferiore e superiore
Rete sec		maglia di armatura (diametro/passo) in direzione secondaria inferiore e superiore
Aggiuntivi		relativa armatura aggiuntiva (diametro/passo) inferiore (i) e superiore (s) eventualmente differenziate
sc max		massima tensione di compressione del calcestruzzo
sc med		massima tensione media di compressione del calcestruzzo
sf max		massima tensione dell'acciaio
Rif. cmb		combinazioni di carico in cui si verificano i valori riportati
Af pr-		quantità di armatura richiesta in direzione principale relativa alla faccia negativa (intradosso piastre) (valore derivante da calcolo o minimo normativo)
Af pr+		quantità di armatura richiesta in direzione principale relativa alla faccia positiva (estradosso piastre) (valore derivante da calcolo o minimo normativo)
Af sec-	**Af sec+**	valori analoghi a quelli sopraripportati ma relativi alla armatura secondaria

N	**M**	azioni membranali e flessionali (in direzione dell'armatura principale e secondaria) estratte, poiché rappresentative, tra quelle utilizzate per il progetto e la verifica

TABELLA VERIFICHE ELEMENTI GUSCIO IN C.A.

M_G	Nodo	x/d	verif.	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
									daN/cm	daN/cm	daN/cm	daN	daN	daN
1	ok 1	0.07	8.30e-02	4.09e-04	15.7	15.7	15.7	15.7	3.1	2.4	-1.9	1185.5	2044.0	1510.2
1	ok 2	0.07	0.3	8.46e-04	15.7	15.7	15.7	15.7	4.9	-1.3	0.6	-1.038e+04	-2461.5	2852.1
1	ok 3	0.07	0.5	1.66e-03	15.7	15.7	15.7	15.7	-15.4	-2.5	4.7	-1.834e+04	-371.9	-2436.0
1	ok 4	0.07	0.4	2.80e-03	15.7	15.7	15.7	15.7	23.5	0.2	-3.1	1.447e+04	2019.5	-1724.5
1	ok 5	0.07	0.6	3.52e-03	15.7	15.7	15.7	15.7	14.9	0.1	1.0	2.287e+04	416.1	2201.2
1	ok 6	0.07	0.6	3.58e-03	15.7	15.7	15.7	15.7	1.2	0.1	1.5	2.377e+04	680.3	750.9
1	ok 7	0.07	0.5	3.56e-03	15.7	15.7	15.7	15.7	-32.6	-1.7	0.4	1.981e+04	640.9	1160.0
1	ok 8	0.07	0.4	3.29e-03	15.7	15.7	15.7	15.7	-27.4	-0.8	-1.9	1.530e+04	509.8	-1580.4
1	ok 9	0.07	0.3	2.78e-03	15.7	15.7	15.7	15.7	-3.4	0.1	-1.3	9508.8	491.4	-2041.0
1	ok 10	0.07	0.4	1.84e-03	15.7	15.7	15.7	15.7	0.4	0.2	-2.9	-1.741e+04	-2958.4	21.1
1	ok 11	0.07	0.7	1.31e-03	15.7	15.7	15.7	15.7	-10.2	-1.9	4.3	-2.722e+04	-327.9	-3099.2
1	ok 12	0.07	0.5	2.21e-03	15.7	15.7	15.7	15.7	-8.8	2.3	3.9	-1.858e+04	-1950.5	1294.1
1	ok 13	0.07	0.3	2.98e-03	15.7	15.7	15.7	15.7	-27.4	-1.1	1.7	5748.5	1110.3	1924.9
1	ok 14	0.07	0.4	3.02e-03	15.7	15.7	15.7	15.7	-2.5	0.1	0.9	1.389e+04	581.6	777.9
1	ok 15	0.07	0.4	3.02e-03	15.7	15.7	15.7	15.7	-30.2	-1.4	0.3	1.451e+04	473.3	803.1
1	ok 16	0.07	0.4	2.81e-03	15.7	15.7	15.7	15.7	-3.6	0.2	-1.0	1.504e+04	687.0	-419.9
1	ok 17	0.07	0.3	2.53e-03	15.7	15.7	15.7	15.7	1.7	0.1	-0.7	1.089e+04	360.8	-1904.1
1	ok 18	0.07	0.4	1.73e-03	15.7	15.7	15.7	15.7	2.9	1.1	-2.9	-1.692e+04	-2515.9	-704.9
1	ok 19	0.07	0.7	1.11e-03	15.7	15.7	15.7	15.7	-9.9	-1.5	3.9	-2.447e+04	-438.5	-3083.6
1	ok 20	0.07	0.4	1.83e-03	15.7	15.7	15.7	15.7	-9.3	2.2	3.7	-1.589e+04	-1702.7	1213.6
1	ok 21	0.07	0.3	2.40e-03	15.7	15.7	15.7	15.7	-17.5	-1.3	1.6	7535.0	775.4	1234.8
1	ok 22	0.07	0.4	2.36e-03	15.7	15.7	15.7	15.7	1.9	0.4	0.8	1.526e+04	647.6	350.9
1	ok 23	0.07	0.4	2.37e-03	15.7	15.7	15.7	15.7	-0.5	7.86e-03	9.43e-03	1.646e+04	-212.4	-243.4
1	ok 24	0.07	0.4	2.38e-03	15.7	15.7	15.7	15.7	2.0	0.4	-0.8	1.496e+04	648.1	-399.5
1	ok 25	0.07	0.3	2.41e-03	15.7	15.7	15.7	15.7	6.4	3.93e-02	-0.3	1.036e+04	285.7	-1875.8
1	ok 26	0.07	0.5	1.86e-03	15.7	15.7	15.7	15.7	-11.3	1.2	-3.3	-1.862e+04	-2861.5	-742.7
1	ok 27	0.07	0.7	1.12e-03	15.7	15.7	15.7	15.7	-10.0	-1.5	-3.9	-2.607e+04	-423.1	3108.4
1	ok 28	0.07	0.5	1.72e-03	15.7	15.7	15.7	15.7	-2.8	2.1	3.4	-1.719e+04	-1499.1	1209.3
1	ok 29	0.07	0.3	2.51e-03	15.7	15.7	15.7	15.7	-24.5	-1.5	1.8	7091.5	928.5	1373.2
1	ok 30	0.07	0.4	2.80e-03	15.7	15.7	15.7	15.7	-3.5	0.3	1.0	1.500e+04	684.6	466.0
1	ok 31	0.07	0.4	3.03e-03	15.7	15.7	15.7	15.7	-30.3	-1.4	-0.3	1.462e+04	467.4	-785.6
1	ok 32	0.07	0.4	3.03e-03	15.7	15.7	15.7	15.7	-2.3	0.1	-0.9	1.396e+04	574.9	-755.5
1	ok 33	0.07	0.3	2.99e-03	15.7	15.7	15.7	15.7	11.4	-7.18e-03	0.1	1.022e+04	272.9	-1662.1
1	ok 34	0.07	0.5	2.21e-03	15.7	15.7	15.7	15.7	1.3	1.3	-3.7	-1.992e+04	-3214.9	-808.6
1	ok 35	0.07	0.7	1.31e-03	15.7	15.7	15.7	15.7	-10.1	-2.0	-4.4	-2.782e+04	-328.6	3107.1
1	ok 36	0.07	0.5	1.84e-03	15.7	15.7	15.7	15.7	-1.4	2.3	-1.4	-1.605e+04	-600.1	-712.2
1	ok 37	0.07	0.2	2.80e-03	15.7	15.7	15.7	15.7	-28.1	-1.7	1.9	7669.8	1104.7	1371.8
1	ok 38	0.07	0.4	3.32e-03	15.7	15.7	15.7	15.7	-27.6	-0.8	1.9	1.530e+04	515.7	1564.8
1	ok 39	0.07	0.5	3.61e-03	15.7	15.7	15.7	15.7	-33.1	-1.7	-0.4	1.990e+04	642.3	-1199.7
1	ok 40	0.07	0.6	3.62e-03	15.7	15.7	15.7	15.7	1.3	0.1	-1.5	2.389e+04	678.2	-783.0
1	ok 41	0.07	0.6	3.57e-03	15.7	15.7	15.7	15.7	15.0	0.2	-1.0	2.302e+04	419.6	-2227.6
1	ok 42	0.07	0.4	2.80e-03	15.7	15.7	15.7	15.7	9.1	-2.4	4.5	1.452e+04	1916.1	1000.9
1	ok 43	0.07	0.5	1.67e-03	15.7	15.7	15.7	15.7	-15.5	-2.6	-4.7	-1.834e+04	-368.5	2425.7
1	ok 44	0.07	0.3	8.46e-04	15.7	15.7	15.7	15.7	4.9	-1.3	-0.6	-1.049e+04	-2476.1	-2881.4
1	ok 45	0.07	8.34e-02	4.13e-04	15.7	15.7	15.7	15.7	-2.2	-2.3	-2.0	-1493.7	-1183.1	1761.0
1	ok 46	0.07	0.3	9.95e-04	15.7	15.7	15.7	15.7	-1.2	2.6	1.0	-1884.4	-9458.8	2395.0
1	ok 47	0.07	0.4	1.14e-03	15.7	15.7	15.7	15.7	1.9	4.3	-0.9	-8969.2	6887.2	6327.6
1	ok 48	0.07	0.9	2.81e-03	15.7	15.7	15.7	15.7	-5.6	-17.9	-6.7	-2.169e+04	-2.802e+04	1.030e+04
1	ok 49	0.07	0.5	2.99e-03	15.7	15.7	15.7	15.7	8.6	-2.9	6.1	1.640e+04	4735.6	4502.4
1	ok 50	0.07	0.7	2.87e-03	15.7	15.7	15.7	15.7	19.2	1.4	3.2	2.516e+04	2392.9	2352.0
1	ok 51	0.07	0.6	2.77e-03	15.7	15.7	15.7	15.7	-20.9	-2.4	5.8	2.013e+04	3737.4	4016.0
1	ok 52	0.07	0.5	2.77e-03	15.7	15.7	15.7	15.7	-24.6	-3.5	2.2	1.965e+04	3234.9	1077.4
1	ok 53	0.07	0.4	2.56e-03	15.7	15.7	15.7	15.7	-21.4	-2.5	-5.3	1.570e+04	3285.4	-2395.1
1	ok 54	0.07	0.3	2.17e-03	15.7	15.7	15.7	15.7	0.1	0.8	-5.7	1.118e+04	2093.8	-2751.1
1	ok 55	0.07	0.5	2.07e-03	15.7	15.7	15.7	15.7	-5.7	1.5	7.1	-1.669e+04	-8763.9	5526.4
1	ok 56	0.07	0.9	2.82e-03	15.7	15.7	15.7	15.7	-11.7	-17.4	-7.0	-2.965e+04	-2.424e+04	7938.4
1	ok 57	0.07	0.5	2.52e-03	15.7	15.7	15.7	15.7	-14.6	0.2	-5.1	-1.845e+04	-7654.1	-5463.5
1	ok 58	0.07	0.3	2.42e-03	15.7	15.7	15.7	15.7	-21.0	0.4	4.4	6302.2	1432.7	3759.5
1	ok 59	0.07	0.4	2.46e-03	15.7	15.7	15.7	15.7	-21.2	-1.7	4.6	1.274e+04	2699.8	3144.0
1	ok 60	0.07	0.4	2.43e-03	15.7	15.7	15.7	15.7	-23.9	-2.7	1.3	1.438e+04	2515.2	1017.7
1	ok 61	0.07	0.4	2.23e-03	15.7	15.7	15.7	15.7	-18.7	-1.6	-5.1	1.391e+04	2773.1	-1917.1
1	ok 62	0.07	0.3	2.04e-03	15.7	15.7	15.7	15.7	5.7	0.8	-4.6	1.266e+04	2053.4	-1997.4
1	ok 63	0.07	0.5	1.98e-03	15.7	15.7	15.7	15.7	-8.9	1.1	5.9	-1.769e+04	-8141.3	5811.0
1	ok 64	0.07	0.8	2.35e-03	15.7	15.7	15.7	15.7	-9.7	-15.0	-6.6	-2.726e+04	-2.083e+04	7542.0

M_G	Nodo	x/d	verif.	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
									daN/cm	daN/cm	daN/cm	daN	daN	daN
1	ok 65	0.07	0.5	2.11e-03	15.7	15.7	15.7	15.7	-13.0	0.7	-4.8	-1.696e+04	-7584.3	-5406.3
1	ok 66	0.07	0.3	1.96e-03	15.7	15.7	15.7	15.7	-13.0	-0.1	4.6	7854.4	1485.0	2458.8
1	ok 67	0.07	0.4	1.98e-03	15.7	15.7	15.7	15.7	-12.9	-1.1	4.8	1.408e+04	2430.5	1869.5
1	ok 68	0.07	0.4	1.90e-03	15.7	15.7	15.7	15.7	-19.5	-2.2	-0.6	1.464e+04	2213.7	-865.5
1	ok 69	0.07	0.4	2.00e-03	15.7	15.7	15.7	15.7	-13.0	-1.1	-4.8	1.378e+04	2416.6	-2033.0
1	ok 70	0.07	0.3	1.98e-03	15.7	15.7	15.7	15.7	10.3	0.8	-3.8	1.223e+04	1831.2	-2023.6
1	ok 71	0.07	0.5	2.14e-03	15.7	15.7	15.7	15.7	-13.3	0.6	5.0	-1.813e+04	-7745.6	5528.9
1	ok 72	0.07	0.9	2.34e-03	15.7	15.7	15.7	15.7	-9.8	-14.9	6.8	-2.903e+04	-2.059e+04	-7560.3
1	ok 73	0.07	0.5	1.97e-03	15.7	15.7	15.7	15.7	-8.5	1.2	-5.8	-1.868e+04	-8276.1	-5786.3
1	ok 74	0.07	0.3	2.03e-03	15.7	15.7	15.7	15.7	-7.7	0.3	-5.7	-7279.7	-4297.1	-656.2
1	ok 75	0.07	0.4	2.22e-03	15.7	15.7	15.7	15.7	-18.6	-1.6	5.2	1.390e+04	2765.9	2099.8
1	ok 76	0.07	0.4	2.43e-03	15.7	15.7	15.7	15.7	-23.9	-2.7	-1.3	1.448e+04	2519.5	-860.7
1	ok 77	0.07	0.4	2.47e-03	15.7	15.7	15.7	15.7	-21.3	-1.7	-4.6	1.280e+04	2707.6	-3007.9
1	ok 78	0.07	0.3	2.43e-03	15.7	15.7	15.7	15.7	14.9	0.7	-3.2	1.214e+04	1762.9	-1719.0
1	ok 79	0.07	0.5	2.53e-03	15.7	15.7	15.7	15.7	-14.2	0.3	5.0	-1.883e+04	-7657.0	5589.4
1	ok 80	0.07	0.9	2.84e-03	15.7	15.7	15.7	15.7	-11.6	-17.6	6.9	-3.021e+04	-2.426e+04	-8098.8
1	ok 81	0.07	0.5	2.07e-03	15.7	15.7	15.7	15.7	-5.3	1.6	-7.0	-1.717e+04	-8762.4	-5611.2
1	ok 82	0.07	0.3	2.18e-03	15.7	15.7	15.7	15.7	-21.4	-0.2	5.1	8127.3	2097.4	3027.8
1	ok 83	0.07	0.4	2.59e-03	15.7	15.7	15.7	15.7	-21.6	-2.5	5.4	1.571e+04	3300.7	2306.9
1	ok 84	0.07	0.5	2.80e-03	15.7	15.7	15.7	15.7	-24.9	-3.6	-2.2	1.974e+04	3247.1	-1188.0
1	ok 85	0.07	0.6	2.80e-03	15.7	15.7	15.7	15.7	-21.2	-2.4	-5.9	2.025e+04	3754.6	-4131.0
1	ok 86	0.07	0.7	2.87e-03	15.7	15.7	15.7	15.7	19.6	1.4	-3.3	2.529e+04	2404.1	-2437.4
1	ok 87	0.07	0.5	2.99e-03	15.7	15.7	15.7	15.7	17.7	-2.3	-2.4	1.797e+04	2623.1	-3153.3
1	ok 88	0.07	0.9	2.87e-03	15.7	15.7	15.7	15.7	-5.5	-18.2	6.6	-2.168e+04	-2.830e+04	-1.052e+04
1	ok 89	0.07	0.4	1.14e-03	15.7	15.7	15.7	15.7	1.9	4.3	1.1	-9111.7	6942.1	-6330.2
1	ok 90	0.07	0.3	1.00e-03	15.7	15.7	15.7	15.7	-2.2	-5.7	-4.1	1132.2	-8886.2	-1869.8
1	ok 91	0.07	0.5	2.07e-03	15.7	15.7	15.7	15.7	-2.7	-19.7	5.3	-404.9	-1.984e+04	-3732.7
1	ok 92	0.07	0.8	2.63e-03	15.7	15.7	15.7	15.7	-16.5	-15.4	10.2	-2.134e+04	-1.454e+04	5725.1
1	ok 93	0.11	1.0	5.08e-03	35.2	15.7	30.3	15.7	-8.3	-51.5	-20.2	-3.690e+04	-6.762e+04	-1.701e+04
1	ok 94	0.08	1.0	4.18e-03	15.7	19.2	15.7	16.0	23.6	0.9	-0.6	4.138e+04	4619.9	7961.6
1	ok 95	0.07	0.5	2.53e-03	15.7	15.7	15.7	15.7	-11.6	0.8	7.9	1.446e+04	8692.4	5709.7
1	ok 96	0.07	0.6	2.03e-03	15.7	15.7	15.7	15.7	-12.0	-2.4	8.4	1.701e+04	7443.8	3764.0
1	ok 97	0.07	0.5	1.69e-03	15.7	15.7	15.7	15.7	-13.9	-3.8	4.1	1.711e+04	7124.9	793.7
1	ok 98	0.07	0.4	1.56e-03	15.7	15.7	15.7	15.7	-13.9	-2.4	-7.2	1.287e+04	6356.5	-2549.7
1	ok 99	0.07	0.3	1.85e-03	15.7	15.7	15.7	15.7	-13.3	0.2	-6.7	7023.6	5979.5	-3835.5
1	ok 100	0.07	0.9	3.00e-03	15.7	15.7	15.7	15.7	-31.2	-3.6	7.8	-3.232e+04	-1.246e+04	-7274.8
1	ok 101	0.12	1.0	4.46e-03	41.0	15.7	33.2	15.7	-9.2	-46.4	16.7	-6.102e+04	-7.400e+04	1.485e+04
1	ok 102	0.07	1.0	4.00e-03	15.7	15.7	15.7	15.7	-18.7	-7.1	-9.3	-1.178e+04	-1.154e+04	3013.7
1	ok 103	0.07	0.3	2.35e-03	15.7	15.7	15.7	15.7	-14.4	1.3	5.7	5440.7	5166.2	4531.9
1	ok 104	0.07	0.3	1.94e-03	15.7	15.7	15.7	15.7	-15.0	-1.5	6.1	1.037e+04	5457.6	3351.1
1	ok 105	0.07	0.4	1.67e-03	15.7	15.7	15.7	15.7	-15.8	-2.8	2.8	1.229e+04	5780.8	790.1
1	ok 106	0.07	0.3	1.60e-03	15.7	15.7	15.7	15.7	-12.4	-1.4	-7.6	1.137e+04	5509.2	-2061.2
1	ok 107	0.07	0.2	1.81e-03	15.7	15.7	15.7	15.7	-12.1	0.6	-7.2	6680.7	5183.4	-3279.9
1	ok 108	0.07	0.9	3.30e-03	15.7	15.7	15.7	15.7	-35.0	-2.8	7.3	-3.372e+04	-1.212e+04	-7133.1
1	ok 109	0.12	1.0	3.99e-03	38.9	15.7	29.9	15.7	-6.6	-40.8	15.4	-5.728e+04	-6.738e+04	1.341e+04
1	ok 110	0.07	0.9	3.63e-03	15.7	15.7	15.7	15.7	-30.9	-3.4	3.1	-3.316e+04	-1.699e+04	-5104.5
1	ok 111	0.07	0.2	2.02e-03	15.7	15.7	15.7	15.7	-12.2	1.5	4.2	6146.5	4515.7	3996.9
1	ok 112	0.07	0.3	1.59e-03	15.7	15.7	15.7	15.7	-12.7	-1.0	4.6	1.104e+04	4981.0	2846.9
1	ok 113	0.07	0.4	1.32e-03	15.7	15.7	15.7	15.7	-11.8	-1.9	-4.2	1.299e+04	5341.2	-303.6
1	ok 114	0.07	0.3	1.61e-03	15.7	15.7	15.7	15.7	-12.4	-1.0	-4.9	1.083e+04	4920.4	-2920.5
1	ok 115	0.07	0.2	2.04e-03	15.7	15.7	15.7	15.7	-11.9	1.4	-4.5	5596.8	4310.8	-4047.5
1	ok 116	0.07	0.9	3.66e-03	15.7	15.7	15.7	15.7	-39.2	-1.9	6.6	-3.391e+04	-1.217e+04	-8364.3
1	ok 117	0.12	1.0	3.97e-03	39.1	15.7	30.5	15.7	-6.0	-40.8	-15.2	-5.957e+04	-6.880e+04	-1.308e+04
1	ok 118	0.07	0.9	3.26e-03	15.7	15.7	15.7	15.7	-27.4	-3.0	2.3	-3.440e+04	-1.794e+04	-6130.4
1	ok 119	0.07	0.2	1.79e-03	15.7	15.7	15.7	15.7	-11.9	0.6	7.3	6365.5	5083.3	3469.2
1	ok 120	0.07	0.3	1.59e-03	15.7	15.7	15.7	15.7	-12.3	-1.4	7.7	1.136e+04	5523.9	2257.9
1	ok 121	0.07	0.4	1.67e-03	15.7	15.7	15.7	15.7	-15.1	-2.6	4.1	1.274e+04	5901.7	176.6
1	ok 122	0.07	0.3	1.94e-03	15.7	15.7	15.7	15.7	-15.1	-1.5	-6.1	1.042e+04	5487.6	-3193.2
1	ok 123	0.07	0.2	2.37e-03	15.7	15.7	15.7	15.7	-14.4	1.4	-5.7	5311.3	5176.3	-4388.6
1	ok 124	0.07	1.0	4.01e-03	15.7	15.7	15.7	15.7	-42.6	-1.5	6.3	-3.545e+04	-1.210e+04	-9168.3
1	ok 125	0.12	1.0	4.48e-03	40.8	15.7	33.4	15.7	-9.2	-46.5	-16.9	-6.224e+04	-7.410e+04	-1.492e+04
1	ok 126	0.07	0.9	2.99e-03	15.7	15.7	15.7	15.7	-3.9	-15.6	-11.7	-1.481e+04	-1.218e+04	-8129.5
1	ok 127	0.07	0.3	1.86e-03	15.7	15.7	15.7	15.7	-13.3	0.2	6.9	6819.5	5975.9	3720.0
1	ok 128	0.07	0.4	1.57e-03	15.7	15.7	15.7	15.7	-13.9	-2.5	7.3	1.286e+04	6361.4	2437.9
1	ok 129	0.07	0.5	1.70e-03	15.7	15.7	15.7	15.7	-14.0	-3.9	-4.1	1.719e+04	7141.1	-913.6
1	ok 130	0.07	0.6	2.03e-03	15.7	15.7	15.7	15.7	-12.1	-2.4	-8.5	1.713e+04	7469.1	-3886.3
1	ok 131	0.07	0.5	2.53e-03	15.7	15.7	15.7	15.7	-11.7	0.8	-8.0	1.459e+04	8748.6	-5823.4
1	ok 132	0.08	1.0	4.19e-03	15.7	19.3	15.7	15.9	24.8	7.5	-13.0	4.157e+04	6816.4	-8557.1
1	ok 133	0.11	1.0	5.10e-03	35.2	15.7	30.7	15.7	-7.5	-52.1	19.9	-3.650e+04	-6.791e+04	1.684e+04
1	ok 134	0.07	0.8	2.67e-03	15.7	15.7	15.7	15.7	-9.3	-26.1	-8.4	-7734.0	-1.436e+04	-1.248e+04
1	ok 135	0.07	0.5	2.10e-03	15.7	15.7	15.7	15.7	-2.7	-20.0	-5.4	-405.6	-2.005e+04	3752.8
1	ok 136	0.07	0.5	2.92e-03	15.7	15.7	15.7	15.7	-0.4	27.9	-2.5	2244.1	1.614e+04	-1415.0
1	ok 137	0.07	0.5	3.11e-03	15.7	15.7	15.7	15.7	6.47e-02	-29.4	-6.6	-6731.1	-1.601e+04	-5125.1
1	ok 138	0.08	1.0	4.73e-03	16.6	16.2	16.6	22.7	-3.9	-52.1	9.5	-1.254e+04	-3.911e+04	2109.8

M_G	Nodo	x/d	verif.	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
									daN/cm	daN/cm	daN/cm	daN	daN	daN
1	ok 139	0.07	0.5	2.73e-03	15.7	15.7	15.7	15.7	-5.1	16.1	12.8	7233.5	1.608e+04	6254.9
1	ok 140	0.07	0.6	2.07e-03	15.7	15.7	15.7	15.7	6.5	-1.1	9.5	2.058e+04	8147.1	4086.2
1	ok 141	0.07	0.5	1.50e-03	15.7	15.7	15.7	15.7	-6.2	-2.1	10.1	1.473e+04	1.049e+04	2550.5
1	ok 142	0.07	0.5	1.17e-03	15.7	15.7	15.7	15.7	-4.4	-1.0	-0.4	1.789e+04	6499.7	-977.0
1	ok 143	0.07	0.4	1.23e-03	15.7	15.7	15.7	15.7	-4.3	-1.1	0.3	1.388e+04	5742.1	-2954.7
1	ok 144	0.07	0.3	1.79e-03	15.7	15.7	15.7	15.7	-10.5	1.7	-10.7	7126.3	9228.4	-4122.7
1	ok 145	0.07	0.5	2.10e-03	15.7	15.7	15.7	15.7	9.1	-16.0	1.9	-1.152e+04	-1.032e+04	-8121.3
1	ok 146	0.08	1.0	4.03e-03	15.7	16.0	15.7	19.8	4.0	-41.8	-9.9	-2.496e+04	-3.133e+04	1649.5
1	ok 147	0.07	0.5	2.08e-03	15.7	15.7	15.7	15.7	14.6	-16.2	0.4	-1.135e+04	-1.022e+04	7685.5
1	ok 148	0.07	0.3	2.18e-03	15.7	15.7	15.7	15.7	-10.4	2.2	5.8	3593.7	8051.0	5057.6
1	ok 149	0.07	0.3	1.47e-03	15.7	15.7	15.7	15.7	-11.1	-1.2	2.8	8452.3	8409.9	2309.6
1	ok 150	0.07	0.3	1.21e-03	15.7	15.7	15.7	15.7	-3.2	-0.8	8.00e-02	1.266e+04	6199.9	153.8
1	ok 151	0.07	0.3	1.32e-03	15.7	15.7	15.7	15.7	-9.4	-1.0	-8.4	8962.8	8202.3	-1420.2
1	ok 152	0.07	0.3	1.79e-03	15.7	15.7	15.7	15.7	-9.3	2.6	-11.6	6760.5	8165.7	-3639.9
1	ok 153	0.07	0.5	2.03e-03	15.7	15.7	15.7	15.7	4.7	-13.9	14.1	-1.181e+04	-7956.6	-6403.9
1	ok 154	0.07	1.0	3.62e-03	15.7	15.9	15.7	17.4	1.7	-37.1	11.8	-2.207e+04	-2.684e+04	535.5
1	ok 155	0.07	0.5	1.92e-03	15.7	15.7	15.7	15.7	13.7	-14.6	0.2	-9976.8	-8741.5	7378.9
1	ok 156	0.07	0.3	1.86e-03	15.7	15.7	15.7	15.7	-9.2	2.8	4.4	4306.7	7546.3	3565.6
1	ok 157	0.07	0.3	1.22e-03	15.7	15.7	15.7	15.7	-2.8	-0.8	-0.4	1.165e+04	5803.7	1998.1
1	ok 158	0.07	0.4	1.06e-03	15.7	15.7	15.7	15.7	-2.9	-0.7	4.52e-02	1.365e+04	6339.6	-85.4
1	ok 159	0.07	0.3	1.24e-03	15.7	15.7	15.7	15.7	-2.8	-0.9	0.5	1.128e+04	5797.1	-2183.1
1	ok 160	0.07	0.3	1.87e-03	15.7	15.7	15.7	15.7	-11.7	2.4	-7.3	5817.3	7590.7	-4378.9
1	ok 161	0.07	0.5	1.94e-03	15.7	15.7	15.7	15.7	14.1	-14.5	-5.31e-03	-1.102e+04	-8760.5	-7612.1
1	ok 162	0.07	1.0	3.62e-03	15.7	16.0	15.7	17.4	1.8	-37.0	-12.1	-2.357e+04	-2.651e+04	-428.2
1	ok 163	0.07	0.5	2.03e-03	15.7	15.7	15.7	15.7	5.0	-13.8	-14.1	-1.272e+04	-8165.2	6822.3
1	ok 164	0.07	0.3	1.77e-03	15.7	15.7	15.7	15.7	-8.8	1.2	7.4	4336.4	7966.6	4037.7
1	ok 165	0.07	0.3	1.32e-03	15.7	15.7	15.7	15.7	-9.2	-1.0	8.6	8940.1	8271.3	1628.6
1	ok 166	0.07	0.3	1.21e-03	15.7	15.7	15.7	15.7	-10.8	-2.1	4.8	1.036e+04	8288.3	-635.8
1	ok 167	0.07	0.3	1.47e-03	15.7	15.7	15.7	15.7	-11.2	-1.1	-6.3	8390.1	8318.5	-2378.3
1	ok 168	0.07	0.3	2.20e-03	15.7	15.7	15.7	15.7	-13.8	2.4	-9.1	5054.9	8467.1	-4585.1
1	ok 169	0.07	0.5	2.08e-03	15.7	15.7	15.7	15.7	15.2	-16.2	-0.5	-1.188e+04	-1.046e+04	-7566.5
1	ok 170	0.08	1.0	4.06e-03	15.7	16.0	15.7	19.7	4.4	-41.9	10.1	-2.624e+04	-3.194e+04	-1621.8
1	ok 171	0.07	0.5	2.11e-03	15.7	15.7	15.7	15.7	9.4	-16.0	-2.1	-1.211e+04	-1.059e+04	8031.2
1	ok 172	0.07	0.3	1.80e-03	15.7	15.7	15.7	15.7	-9.9	1.6	3.0	4128.4	8885.7	3912.9
1	ok 173	0.07	0.4	1.24e-03	15.7	15.7	15.7	15.7	-8.8	-2.5	-1.3	1.137e+04	9333.7	1655.0
1	ok 174	0.07	0.5	1.16e-03	15.7	15.7	15.7	15.7	-4.2	-0.9	0.4	1.803e+04	6447.9	848.2
1	ok 175	0.07	0.5	1.49e-03	15.7	15.7	15.7	15.7	-6.3	-2.1	-10.2	1.490e+04	1.051e+04	-2654.2
1	ok 176	0.07	0.6	2.06e-03	15.7	15.7	15.7	15.7	6.6	-1.1	-9.6	2.075e+04	8142.3	-4158.9
1	ok 177	0.07	0.5	2.73e-03	15.7	15.7	15.7	15.7	7.8	6.4	-10.5	1.418e+04	8921.5	-6021.5
1	ok 178	0.08	1.0	4.80e-03	16.9	16.7	16.9	22.8	-3.8	-52.8	-9.5	-1.240e+04	-3.956e+04	-2173.6
1	ok 179	0.07	0.6	3.15e-03	15.7	15.7	15.7	15.7	0.2	-29.8	6.5	-6724.6	-1.621e+04	5087.0
1	ok 180	0.07	0.5	2.96e-03	15.7	15.7	15.7	15.7	-0.4	28.4	2.5	2268.9	1.626e+04	1427.7
1	ok 181	0.07	0.6	2.76e-03	15.7	15.7	15.7	15.7	0.6	24.4	0.3	423.4	2.426e+04	2089.0
1	ok 182	0.07	0.7	2.99e-03	15.7	15.7	15.7	15.7	0.9	26.0	4.6	3442.8	2.655e+04	2189.4
1	ok 183	0.07	0.5	2.69e-03	15.7	15.7	15.7	15.7	0.3	22.0	10.6	5161.7	2.027e+04	2182.5
1	ok 184	0.07	0.6	2.59e-03	15.7	15.7	15.7	15.7	-4.4	14.5	9.4	8398.0	2.186e+04	3100.0
1	ok 185	0.07	0.4	1.66e-03	15.7	15.7	15.7	15.7	-3.1	2.2	9.7	1.108e+04	1.506e+04	2653.1
1	ok 186	0.07	0.5	1.23e-03	15.7	15.7	15.7	15.7	0.4	-1.2	8.7	1.772e+04	9406.0	709.7
1	ok 187	0.07	0.4	9.42e-04	15.7	15.7	15.7	15.7	-4.1	-1.7	-0.4	1.640e+04	9453.8	-814.5
1	ok 188	0.07	0.4	1.17e-03	15.7	15.7	15.7	15.7	-4.1	-1.8	0.2	1.240e+04	9512.2	-2368.8
1	ok 189	0.07	0.4	1.54e-03	15.7	15.7	15.7	15.7	-3.8	-2.4	0.7	4928.6	9885.9	-3995.1
1	ok 190	0.07	0.5	2.03e-03	15.7	15.7	15.7	15.7	-3.3	-3.4	0.6	-5340.8	1.169e+04	-4014.1
1	ok 191	0.07	0.4	2.02e-03	15.7	15.7	15.7	15.7	-3.1	-3.7	0.2	-1.086e+04	1.268e+04	-327.6
1	ok 192	0.07	0.5	1.92e-03	15.7	15.7	15.7	15.7	-10.8	13.6	4.7	-4039.3	1.799e+04	2128.8
1	ok 193	0.07	0.3	1.40e-03	15.7	15.7	15.7	15.7	-3.2	-2.0	-0.6	2849.6	9839.7	3524.1
1	ok 194	0.07	0.3	1.16e-03	15.7	15.7	15.7	15.7	-3.3	-1.4	-0.3	8827.4	9421.4	1808.8
1	ok 195	0.07	0.3	1.06e-03	15.7	15.7	15.7	15.7	-3.3	-1.2	7.50e-02	1.101e+04	9244.7	110.1
1	ok 196	0.07	0.3	1.30e-03	15.7	15.7	15.7	15.7	-3.3	-1.4	0.5	9118.3	9324.9	-1581.0
1	ok 197	0.07	0.3	1.56e-03	15.7	15.7	15.7	15.7	-8.3	2.5	-8.3	3948.9	1.167e+04	-1736.0
1	ok 198	0.07	0.4	1.94e-03	15.7	15.7	15.7	15.7	-2.6	-3.1	0.7	-5825.9	1.121e+04	-3464.1
1	ok 199	0.07	0.4	1.90e-03	15.7	15.7	15.7	15.7	-2.3	-3.5	2.89e-02	-1.120e+04	1.196e+04	266.9
1	ok 200	0.07	0.4	1.78e-03	15.7	15.7	15.7	15.7	-9.4	12.6	2.7	-3410.9	1.623e+04	1964.9
1	ok 201	0.07	0.3	1.36e-03	15.7	15.7	15.7	15.7	-2.8	-1.9	-0.6	4031.1	9714.6	3371.9
1	ok 202	0.07	0.3	1.17e-03	15.7	15.7	15.7	15.7	-3.0	-1.4	-0.4	1.003e+04	9456.4	1663.3
1	ok 203	0.07	0.3	9.72e-04	15.7	15.7	15.7	15.7	-3.0	-1.2	3.59e-02	1.197e+04	9387.2	-38.5
1	ok 204	0.07	0.3	1.15e-03	15.7	15.7	15.7	15.7	-3.0	-1.4	0.5	9638.9	9537.3	-1755.5
1	ok 205	0.07	0.3	1.35e-03	15.7	15.7	15.7	15.7	-2.7	-2.0	0.7	3225.2	9879.1	-3507.1
1	ok 206	0.07	0.4	1.80e-03	15.7	15.7	15.7	15.7	-9.5	12.6	-2.6	-4320.7	1.642e+04	-2053.2
1	ok 207	0.07	0.4	1.90e-03	15.7	15.7	15.7	15.7	-2.2	-3.6	-7.62e-02	-1.257e+04	1.233e+04	234.7
1	ok 208	0.07	0.4	1.94e-03	15.7	15.7	15.7	15.7	-2.4	-3.1	-0.6	-6842.0	1.153e+04	3726.1
1	ok 209	0.07	0.3	1.57e-03	15.7	15.7	15.7	15.7	-2.7	-2.0	-0.7	2842.6	9850.3	3553.1
1	ok 210	0.07	0.3	1.30e-03	15.7	15.7	15.7	15.7	-3.0	-1.4	-0.5	9021.9	9497.9	1804.0
1	ok 211	0.07	0.3	1.06e-03	15.7	15.7	15.7	15.7	-3.0	-1.2	-9.44e-02	1.109e+04	9339.1	82.9
1	ok 212	0.07	0.3	1.15e-03	15.7	15.7	15.7	15.7	-3.0	-1.3	0.3	8869.2	9407.6	-1634.9

M_G	Nodo	x/d	verif.	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
									daN/cm	daN/cm	daN/cm	daN	daN	daN
1	ok 213	0.07	0.3	1.40e-03	15.7	15.7	15.7	15.7	-8.5	3.1	-6.2	2718.5	1.232e+04	-2746.1
1	ok 214	0.07	0.5	1.91e-03	15.7	15.7	15.7	15.7	-10.8	13.9	-4.7	-4652.8	1.775e+04	-2056.7
1	ok 215	0.07	0.4	2.03e-03	15.7	15.7	15.7	15.7	-2.9	-3.6	-0.2	-1.263e+04	1.206e+04	358.5
1	ok 216	0.07	0.5	2.04e-03	15.7	15.7	15.7	15.7	-3.1	-3.3	-0.6	-6236.4	1.127e+04	3938.2
1	ok 217	0.07	0.3	1.56e-03	15.7	15.7	15.7	15.7	-3.6	-2.3	-0.6	4564.4	9629.1	3873.8
1	ok 218	0.07	0.3	1.18e-03	15.7	15.7	15.7	15.7	-3.9	-1.8	-0.2	1.237e+04	9361.8	2241.5
1	ok 219	0.07	0.4	9.38e-04	15.7	15.7	15.7	15.7	-3.9	-1.6	0.3	1.655e+04	9366.0	697.1
1	ok 220	0.07	0.5	1.24e-03	15.7	15.7	15.7	15.7	-4.1	-2.2	-10.1	1.363e+04	1.254e+04	-1697.4
1	ok 221	0.07	0.4	1.66e-03	15.7	15.7	15.7	15.7	-3.0	2.3	-9.8	1.124e+04	1.510e+04	-2726.1
1	ok 222	0.07	0.6	2.61e-03	15.7	15.7	15.7	15.7	-4.3	14.9	-9.5	8535.7	2.195e+04	-3160.6
1	ok 223	0.07	0.5	2.72e-03	15.7	15.7	15.7	15.7	0.2	22.5	-10.7	5211.2	2.033e+04	-2226.9
1	ok 224	0.07	0.7	3.03e-03	15.7	15.7	15.7	15.7	0.8	26.5	-4.6	3472.0	2.668e+04	-2226.5
1	ok 225	0.07	0.6	2.81e-03	15.7	15.7	15.7	15.7	0.6	24.8	-0.2	421.8	2.436e+04	-2096.8
1	ok 226	0.07	0.6	2.60e-03	15.7	15.7	15.7	15.7	1.1	18.3	1.4	1049.9	2.280e+04	113.5
1	ok 227	0.07	0.6	2.28e-03	15.7	15.7	15.7	15.7	0.7	16.0	5.3	1942.3	2.213e+04	105.7
1	ok 228	0.07	0.5	2.05e-03	15.7	15.7	15.7	15.7	-0.6	-0.2	7.5	7312.5	1.575e+04	1666.4
1	ok 229	0.07	0.4	1.92e-03	15.7	15.7	15.7	15.7	-0.4	2.8	8.7	1.131e+04	1.288e+04	836.1
1	ok 230	0.07	0.4	1.52e-03	15.7	15.7	15.7	15.7	-1.3	0.4	8.7	1.468e+04	1.118e+04	478.1
1	ok 231	0.07	0.4	1.24e-03	15.7	15.7	15.7	15.7	-3.4	-2.4	-0.6	1.581e+04	1.109e+04	-141.5
1	ok 232	0.07	0.4	9.36e-04	15.7	15.7	15.7	15.7	-3.8	-2.2	-0.2	1.550e+04	1.065e+04	-493.5
1	ok 233	0.07	0.3	9.61e-04	15.7	15.7	15.7	15.7	-3.8	-2.3	0.1	1.153e+04	1.110e+04	-940.7
1	ok 234	0.07	0.4	1.10e-03	15.7	15.7	15.7	15.7	-3.6	-2.6	0.4	4593.7	1.254e+04	-1352.5
1	ok 235	0.07	0.4	1.16e-03	15.7	15.7	15.7	15.7	-3.3	-3.1	0.4	-3214.0	1.463e+04	-1154.0
1	ok 236	0.07	0.4	1.14e-03	15.7	15.7	15.7	15.7	-3.1	-3.2	-9.59e-03	-6666.0	1.550e+04	-151.7
1	ok 237	0.07	0.4	1.13e-03	15.7	15.7	15.7	15.7	-3.0	-2.8	-0.4	-4183.7	1.456e+04	929.7
1	ok 238	0.07	0.3	1.11e-03	15.7	15.7	15.7	15.7	-3.2	-2.2	-0.5	2414.9	1.242e+04	1078.5
1	ok 239	0.07	0.3	1.02e-03	15.7	15.7	15.7	15.7	-3.4	-1.7	-0.3	7824.0	1.094e+04	598.3
1	ok 240	0.07	0.3	9.86e-04	15.7	15.7	15.7	15.7	-3.3	-1.6	3.71e-02	9905.5	1.044e+04	39.2
1	ok 241	0.07	0.3	1.22e-03	15.7	15.7	15.7	15.7	-3.2	-1.7	0.3	8111.0	1.080e+04	-521.3
1	ok 242	0.07	0.3	1.26e-03	15.7	15.7	15.7	15.7	-3.0	-2.2	0.5	2852.1	1.209e+04	-1013.0
1	ok 243	0.07	0.4	1.24e-03	15.7	15.7	15.7	15.7	-2.6	-2.7	0.4	-3936.7	1.395e+04	-887.8
1	ok 244	0.07	0.4	1.13e-03	15.7	15.7	15.7	15.7	-2.5	-2.9	2.89e-02	-7346.6	1.463e+04	125.2
1	ok 245	0.07	0.4	1.21e-03	15.7	15.7	15.7	15.7	-2.5	-2.7	-0.4	-3551.4	1.400e+04	978.2
1	ok 246	0.07	0.3	1.12e-03	15.7	15.7	15.7	15.7	-2.8	-2.1	-0.4	3552.5	1.218e+04	1095.1
1	ok 247	0.07	0.3	1.11e-03	15.7	15.7	15.7	15.7	-3.0	-1.7	-0.3	9015.2	1.092e+04	600.4
1	ok 248	0.07	0.3	9.45e-04	15.7	15.7	15.7	15.7	-3.0	-1.6	1.84e-02	1.085e+04	1.057e+04	33.7
1	ok 249	0.07	0.3	1.10e-03	15.7	15.7	15.7	15.7	-2.9	-1.7	0.3	8601.9	1.104e+04	-544.7
1	ok 250	0.07	0.3	1.10e-03	15.7	15.7	15.7	15.7	-2.7	-2.2	0.5	2736.7	1.242e+04	-1061.1
1	ok 251	0.07	0.4	1.22e-03	15.7	15.7	15.7	15.7	-2.4	-2.7	0.4	-4691.0	1.437e+04	-941.9
1	ok 252	0.07	0.4	1.13e-03	15.7	15.7	15.7	15.7	-2.3	-3.0	-2.78e-02	-8533.4	1.507e+04	110.0
1	ok 253	0.07	0.4	1.24e-03	15.7	15.7	15.7	15.7	-2.4	-2.7	-0.4	-4869.1	1.435e+04	1003.6
1	ok 254	0.07	0.3	1.26e-03	15.7	15.7	15.7	15.7	-2.7	-2.1	-0.5	2357.2	1.237e+04	1130.5
1	ok 255	0.07	0.3	1.22e-03	15.7	15.7	15.7	15.7	-3.0	-1.7	-0.3	7987.2	1.097e+04	625.7
1	ok 256	0.07	0.3	9.85e-04	15.7	15.7	15.7	15.7	-3.1	-1.5	-5.51e-02	9967.1	1.050e+04	59.1
1	ok 257	0.07	0.3	1.01e-03	15.7	15.7	15.7	15.7	-3.1	-1.6	0.2	7839.7	1.088e+04	-508.1
1	ok 258	0.07	0.3	1.10e-03	15.7	15.7	15.7	15.7	-3.0	-2.0	0.4	2122.2	1.219e+04	-1009.4
1	ok 259	0.07	0.4	1.13e-03	15.7	15.7	15.7	15.7	-2.8	-2.6	0.3	-5036.9	1.408e+04	-949.8
1	ok 260	0.07	0.4	1.13e-03	15.7	15.7	15.7	15.7	-2.8	-3.0	-3.06e-03	-8538.7	1.481e+04	177.0
1	ok 261	0.07	0.4	1.16e-03	15.7	15.7	15.7	15.7	-3.1	-3.0	-0.3	-4181.5	1.414e+04	1099.5
1	ok 262	0.07	0.4	1.11e-03	15.7	15.7	15.7	15.7	-3.4	-2.5	-0.4	4193.3	1.223e+04	1276.6
1	ok 263	0.07	0.3	9.66e-04	15.7	15.7	15.7	15.7	-3.6	-2.2	-0.1	1.148e+04	1.091e+04	844.2
1	ok 264	0.07	0.4	9.36e-04	15.7	15.7	15.7	15.7	-3.6	-2.1	0.2	1.565e+04	1.053e+04	395.1
1	ok 265	0.07	0.4	1.24e-03	15.7	15.7	15.7	15.7	-3.2	-2.4	0.6	1.605e+04	1.101e+04	52.2
1	ok 266	0.07	0.4	1.52e-03	15.7	15.7	15.7	15.7	-1.2	0.4	-8.7	1.486e+04	1.114e+04	-530.0
1	ok 267	0.07	0.4	1.97e-03	15.7	15.7	15.7	15.7	5.36e-02	2.8	-8.8	1.144e+04	1.285e+04	-877.1
1	ok 268	0.07	0.5	2.07e-03	15.7	15.7	15.7	15.7	-0.6	-0.1	-7.5	7380.6	1.572e+04	-1699.8
1	ok 269	0.07	0.6	2.32e-03	15.7	15.7	15.7	15.7	0.7	16.3	-5.3	1954.2	2.218e+04	-118.8
1	ok 270	0.07	0.6	2.66e-03	15.7	15.7	15.7	15.7	1.1	18.6	-1.4	1058.3	2.286e+04	-99.9
1	ok 271	0.07	0.4	2.40e-03	15.7	15.7	15.7	15.7	1.0	7.8	1.6	224.3	1.540e+04	-743.8
1	ok 272	0.07	0.4	1.75e-03	15.7	15.7	15.7	15.7	-1.0	-9.5	2.2	2861.7	1.523e+04	-613.8
1	ok 273	0.07	0.4	1.48e-03	15.7	15.7	15.7	15.7	-0.6	-3.5	3.6	6383.3	1.318e+04	-981.0
1	ok 274	0.07	0.3	1.72e-03	15.7	15.7	15.7	15.7	-1.6	-3.2	-4.72e-02	6996.0	1.274e+04	-2158.5
1	ok 275	0.07	0.4	1.60e-03	15.7	15.7	15.7	15.7	-2.7	-3.0	-0.1	1.255e+04	1.090e+04	-1977.4
1	ok 276	0.07	0.4	1.38e-03	15.7	15.7	15.7	15.7	-3.3	-2.7	-0.1	1.589e+04	9741.1	-1094.1
1	ok 277	0.07	0.4	1.02e-03	15.7	15.7	15.7	15.7	-3.7	-2.5	-3.55e-02	1.557e+04	9310.6	-143.4
1	ok 278	0.07	0.3	7.13e-04	15.7	15.7	15.7	15.7	-3.7	-2.5	9.41e-02	1.143e+04	9645.5	737.5
1	ok 279	0.07	0.3	7.74e-04	15.7	15.7	15.7	15.7	-3.5	-2.7	0.2	4267.3	1.072e+04	1388.3
1	ok 280	0.07	0.3	9.34e-04	15.7	15.7	15.7	15.7	-3.3	-2.9	0.1	-3781.7	1.243e+04	1100.2
1	ok 281	0.07	0.3	1.12e-03	15.7	15.7	15.7	15.7	-3.2	-2.9	-7.98e-02	-7122.6	1.319e+04	-98.0
1	ok 282	0.07	0.3	1.30e-03	15.7	15.7	15.7	15.7	-3.1	-2.6	-0.3	-4779.5	1.231e+04	-1222.7
1	ok 283	0.07	0.3	1.11e-03	15.7	15.7	15.7	15.7	-3.2	-2.2	-0.3	2038.5	1.050e+04	-1489.2
1	ok 284	0.07	0.2	9.71e-04	15.7	15.7	15.7	15.7	-3.3	-1.9	-0.2	7624.2	9329.8	-856.0
1	ok 285	0.07	0.3	8.85e-04	15.7	15.7	15.7	15.7	-3.3	-1.8	-2.64e-02	9797.0	8891.7	-41.1
1	ok 286	0.07	0.2	1.03e-03	15.7	15.7	15.7	15.7	-3.2	-2.0	0.2	7900.8	9222.5	773.2

M_G	Nodo	x/d	verif.	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
									daN/cm	daN/cm	daN/cm	daN	daN	daN
1	ok 287	0.07	0.3	1.12e-03	15.7	15.7	15.7	15.7	-3.0	-2.2	0.3	2464.7	1.024e+04	1372.6
1	ok 288	0.07	0.3	1.28e-03	15.7	15.7	15.7	15.7	-2.7	-2.5	0.2	-4513.9	1.179e+04	1092.4
1	ok 289	0.07	0.3	1.10e-03	15.7	15.7	15.7	15.7	-2.6	-2.6	5.09e-03	-7796.6	1.238e+04	35.6
1	ok 290	0.07	0.3	1.25e-03	15.7	15.7	15.7	15.7	-2.6	-2.4	-0.2	-4128.8	1.183e+04	-1025.4
1	ok 291	0.07	0.3	1.11e-03	15.7	15.7	15.7	15.7	-2.8	-2.1	-0.3	3164.0	1.032e+04	-1301.6
1	ok 292	0.07	0.3	1.01e-03	15.7	15.7	15.7	15.7	-2.9	-1.9	-0.2	8801.0	9331.2	-699.4
1	ok 293	0.07	0.3	8.63e-04	15.7	15.7	15.7	15.7	-2.9	-1.8	1.01e-02	1.073e+04	8999.4	112.0
1	ok 294	0.07	0.3	1.00e-03	15.7	15.7	15.7	15.7	-2.9	-1.9	0.2	8363.3	9394.7	907.3
1	ok 295	0.07	0.3	1.10e-03	15.7	15.7	15.7	15.7	-2.7	-2.2	0.3	2299.8	1.046e+04	1499.3
1	ok 296	0.07	0.3	1.25e-03	15.7	15.7	15.7	15.7	-2.5	-2.5	0.2	-5336.3	1.206e+04	1167.6
1	ok 297	0.07	0.3	1.10e-03	15.7	15.7	15.7	15.7	-2.4	-2.6	-1.66e-02	-9030.1	1.265e+04	33.8
1	ok 298	0.07	0.3	1.28e-03	15.7	15.7	15.7	15.7	-2.5	-2.5	-0.2	-5508.3	1.202e+04	-1101.7
1	ok 299	0.07	0.3	1.12e-03	15.7	15.7	15.7	15.7	-2.7	-2.2	-0.3	1932.7	1.038e+04	-1416.2
1	ok 300	0.07	0.2	1.03e-03	15.7	15.7	15.7	15.7	-2.9	-1.9	-0.2	7761.9	9282.9	-800.4
1	ok 301	0.07	0.3	8.81e-04	15.7	15.7	15.7	15.7	-3.0	-1.8	-4.66e-03	9853.8	8864.9	40.2
1	ok 302	0.07	0.2	9.61e-04	15.7	15.7	15.7	15.7	-3.0	-1.8	0.2	7618.9	9196.2	866.2
1	ok 303	0.07	0.3	1.10e-03	15.7	15.7	15.7	15.7	-2.9	-2.1	0.3	1707.6	1.022e+04	1484.9
1	ok 304	0.07	0.3	1.30e-03	15.7	15.7	15.7	15.7	-2.8	-2.5	0.3	-5704.4	1.182e+04	1184.1
1	ok 305	0.07	0.3	1.12e-03	15.7	15.7	15.7	15.7	-2.8	-2.7	8.45e-02	-9014.7	1.245e+04	57.1
1	ok 306	0.07	0.3	9.36e-04	15.7	15.7	15.7	15.7	-3.1	-2.8	-8.73e-02	-4784.8	1.191e+04	-1088.1
1	ok 307	0.07	0.3	7.75e-04	15.7	15.7	15.7	15.7	-3.3	-2.6	-0.2	3825.2	1.039e+04	-1421.9
1	ok 308	0.07	0.3	7.13e-04	15.7	15.7	15.7	15.7	-3.5	-2.4	-7.86e-02	1.136e+04	9432.6	-802.8
1	ok 309	0.07	0.4	1.02e-03	15.7	15.7	15.7	15.7	-3.5	-2.4	4.66e-02	1.572e+04	9172.1	66.9
1	ok 310	0.07	0.4	1.38e-03	15.7	15.7	15.7	15.7	-3.1	-2.6	0.1	1.614e+04	9645.7	1021.3
1	ok 311	0.07	0.4	1.61e-03	15.7	15.7	15.7	15.7	-2.5	-2.9	0.1	1.280e+04	1.083e+04	1915.6
1	ok 312	0.07	0.3	1.73e-03	15.7	15.7	15.7	15.7	-1.5	-3.1	6.24e-02	7188.1	1.267e+04	2110.4
1	ok 313	0.07	0.4	1.50e-03	15.7	15.7	15.7	15.7	-0.5	-3.5	-3.6	6460.6	1.314e+04	961.5
1	ok 314	0.07	0.4	1.76e-03	15.7	15.7	15.7	15.7	-1.0	-9.5	-2.2	2874.8	1.520e+04	600.3
1	ok 315	0.07	0.4	2.42e-03	15.7	15.7	15.7	15.7	1.0	8.0	-1.6	223.4	1.539e+04	759.6
1	ok 316	0.07	0.3	1.82e-03	15.7	15.7	15.7	15.7	0.2	2.3	-1.1	483.6	1.092e+04	-1698.3
1	ok 317	0.07	0.3	1.38e-03	15.7	15.7	15.7	15.7	1.2	7.7	-7.1	2762.5	1.318e+04	-1615.7
1	ok 318	0.07	0.2	2.18e-03	15.7	15.7	15.7	15.7	3.0	-1.0	-13.5	6796.1	7732.8	-2088.3
1	ok 319	0.07	0.3	2.49e-03	15.7	15.7	15.7	15.7	2.9	-1.4	-11.7	1.048e+04	7847.7	-3641.7
1	ok 320	0.07	0.4	1.95e-03	15.7	15.7	15.7	15.7	-3.3	-2.8	0.6	1.295e+04	5909.4	-3821.0
1	ok 321	0.07	0.5	1.54e-03	15.7	15.7	15.7	15.7	-3.6	-2.6	0.3	1.686e+04	5979.1	-1772.8
1	ok 322	0.07	0.4	1.11e-03	15.7	15.7	15.7	15.7	-3.8	-2.5	0.1	1.656e+04	5811.2	107.8
1	ok 323	0.07	0.3	7.29e-04	15.7	15.7	15.7	15.7	-3.8	-2.5	5.15e-02	1.203e+04	5380.4	1959.3
1	ok 324	0.07	0.2	8.95e-04	15.7	15.7	15.7	15.7	-3.7	-2.6	-2.80e-02	3762.7	4650.5	3469.8
1	ok 325	0.07	0.3	1.50e-03	15.7	15.7	15.7	15.7	-3.8	-2.8	-0.1	-8007.8	4618.3	3520.7
1	ok 326	0.07	0.3	1.75e-03	15.7	15.7	15.7	15.7	-3.6	-2.7	-4.66e-02	-1.158e+04	5707.7	-103.2
1	ok 327	0.07	0.3	1.92e-03	15.7	15.7	15.7	15.7	-2.9	-2.4	-0.4	-8962.9	4423.5	-3601.8
1	ok 328	0.07	0.2	1.26e-03	15.7	15.7	15.7	15.7	-3.1	-2.3	-0.2	1530.9	4318.8	-3449.3
1	ok 329	0.07	0.2	9.73e-04	15.7	15.7	15.7	15.7	-3.2	-2.1	-0.2	8167.4	4841.0	-1927.0
1	ok 330	0.07	0.3	7.50e-04	15.7	15.7	15.7	15.7	-3.2	-2.0	-5.57e-02	1.065e+04	5007.6	-83.0
1	ok 331	0.07	0.2	1.00e-03	15.7	15.7	15.7	15.7	-3.2	-2.1	4.11e-02	8426.3	4852.8	1749.6
1	ok 332	0.07	0.2	1.26e-03	15.7	15.7	15.7	15.7	-3.0	-2.2	5.53e-02	1956.0	4317.7	3212.9
1	ok 333	0.07	0.3	1.78e-03	15.7	15.7	15.7	15.7	-3.0	-2.4	2.77e-02	-8481.8	4314.4	3298.0
1	ok 334	0.07	0.3	1.58e-03	15.7	15.7	15.7	15.7	-2.4	-2.4	-7.00e-02	-1.191e+04	5245.5	43.3
1	ok 335	0.07	0.2	1.69e-03	15.7	15.7	15.7	15.7	-2.6	-2.3	-0.2	-8048.7	4362.8	-3256.4
1	ok 336	0.07	0.2	1.24e-03	15.7	15.7	15.7	15.7	-2.8	-2.1	-0.1	2667.4	4393.9	-3157.9
1	ok 337	0.07	0.3	1.03e-03	15.7	15.7	15.7	15.7	-2.9	-2.0	-0.1	9328.2	4948.1	-1687.1
1	ok 338	0.07	0.3	8.13e-04	15.7	15.7	15.7	15.7	-2.9	-1.9	-4.52e-03	1.157e+04	5087.4	145.5
1	ok 339	0.07	0.2	1.03e-03	15.7	15.7	15.7	15.7	-2.8	-2.0	8.12e-02	8862.8	4865.6	1980.0
1	ok 340	0.07	0.2	1.24e-03	15.7	15.7	15.7	15.7	-2.7	-2.2	9.14e-02	1700.5	4240.0	3456.4
1	ok 341	0.07	0.3	1.70e-03	15.7	15.7	15.7	15.7	-2.7	-2.4	7.76e-02	-9601.3	4160.6	3504.6
1	ok 342	0.07	0.4	1.59e-03	15.7	15.7	15.7	15.7	-2.4	-2.5	-5.34e-02	-1.338e+04	5075.5	32.5
1	ok 343	0.07	0.3	1.78e-03	15.7	15.7	15.7	15.7	-2.6	-2.4	-0.1	-9761.9	4099.9	-3453.4
1	ok 344	0.07	0.2	1.25e-03	15.7	15.7	15.7	15.7	-2.7	-2.2	-0.1	1352.4	4123.9	-3378.1
1	ok 345	0.07	0.2	9.90e-04	15.7	15.7	15.7	15.7	-2.9	-2.0	-8.69e-02	8286.0	4685.2	-1873.0
1	ok 346	0.07	0.3	7.39e-04	15.7	15.7	15.7	15.7	-2.9	-1.9	2.57e-02	1.072e+04	4831.9	21.5
1	ok 347	0.07	0.2	9.61e-04	15.7	15.7	15.7	15.7	-2.9	-2.0	0.2	8147.5	4618.3	1896.8
1	ok 348	0.07	0.2	1.25e-03	15.7	15.7	15.7	15.7	-2.8	-2.2	0.2	1144.8	3998.6	3401.7
1	ok 349	0.07	0.3	1.92e-03	15.7	15.7	15.7	15.7	-2.5	-2.3	0.4	-9908.1	3929.4	3515.2
1	ok 350	0.07	0.4	1.75e-03	15.7	15.7	15.7	15.7	-3.4	-2.6	6.21e-02	-1.340e+04	4930.0	42.7
1	ok 351	0.07	0.3	1.51e-03	15.7	15.7	15.7	15.7	-3.7	-2.7	0.2	-9053.4	4113.8	-3462.3
1	ok 352	0.07	0.2	8.96e-04	15.7	15.7	15.7	15.7	-3.5	-2.5	5.07e-02	3249.0	4318.1	-3470.7
1	ok 353	0.07	0.3	7.23e-04	15.7	15.7	15.7	15.7	-3.6	-2.4	-3.13e-02	1.192e+04	5151.3	-2005.6
1	ok 354	0.07	0.4	1.11e-03	15.7	15.7	15.7	15.7	-3.6	-2.4	-8.65e-02	1.670e+04	5655.2	-162.7
1	ok 355	0.07	0.5	1.55e-03	15.7	15.7	15.7	15.7	-3.4	-2.5	-0.2	1.711e+04	5871.5	1719.3
1	ok 356	0.07	0.4	1.96e-03	15.7	15.7	15.7	15.7	-3.1	-2.7	-0.5	1.321e+04	5826.4	3774.7
1	ok 357	0.07	0.3	2.51e-03	15.7	15.7	15.7	15.7	-0.4	-2.1	13.0	1.008e+04	7677.1	4129.0
1	ok 358	0.07	0.2	2.21e-03	15.7	15.7	15.7	15.7	3.0	-1.0	13.6	6872.9	7690.8	2069.0
1	ok 359	0.07	0.3	1.39e-03	15.7	15.7	15.7	15.7	1.1	7.8	7.2	2802.3	1.323e+04	1605.9
1	ok 360	0.07	0.3	1.83e-03	15.7	15.7	15.7	15.7	0.2	2.3	1.1	485.4	1.094e+04	1700.2

M_G	Nodo	x/d	verif.	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
									daN/cm	daN/cm	daN/cm	daN	daN	daN
1	ok 361	0.07	0.4	1.14e-03	15.7	15.7	15.7	15.7	2.1	-4.3	-3.3	-1954.8	-1.438e+04	-1711.0
1	ok 362	0.07	0.5	1.37e-03	15.7	15.7	15.7	15.7	2.0	-9.8	8.9	-8440.4	-1.618e+04	5767.2
1	ok 363	0.07	1.0	4.05e-03	16.5	16.3	16.5	17.7	-3.9	-35.9	-2.2	-2.067e+04	-3.937e+04	5846.8
1	ok 364	0.07	0.4	2.77e-03	15.7	15.7	15.7	15.7	-14.5	7.3	-3.1	-8308.7	-9840.1	-7958.8
1	ok 365	0.07	0.5	2.18e-03	15.7	15.7	15.7	15.7	10.8	-1.2	-11.9	1.930e+04	635.6	-2545.1
1	ok 366	0.07	0.5	1.63e-03	15.7	15.7	15.7	15.7	-4.2	-2.3	0.3	1.837e+04	1491.3	-1512.0
1	ok 367	0.07	0.5	1.09e-03	15.7	15.7	15.7	15.7	-4.0	-2.3	0.1	1.790e+04	1927.0	133.7
1	ok 368	0.07	0.3	8.43e-04	15.7	15.7	15.7	15.7	-3.0	-1.5	-4.11e-02	1.133e+04	-2439.8	1685.6
1	ok 369	0.07	0.3	1.44e-03	15.7	15.7	15.7	15.7	-1.2	0.2	-0.3	-1052.0	-9402.4	2925.8
1	ok 370	0.07	0.4	1.60e-03	15.7	15.7	15.7	15.7	-1.5	0.2	-0.3	-1.414e+04	-1.487e+04	-486.5
1	ok 371	0.07	0.6	1.74e-03	15.7	15.7	15.7	15.7	-3.1	-2.1	-0.7	-2.205e+04	-2.079e+04	458.1
1	ok 372	0.07	0.5	1.94e-03	15.7	15.7	15.7	15.7	-14.9	-8.0	6.6	-1.781e+04	-1.284e+04	1364.0
1	ok 373	0.07	0.3	1.59e-03	15.7	15.7	15.7	15.7	-0.3	4.85e-02	-8.99e-02	-1342.0	-8528.3	-2024.2
1	ok 374	0.07	0.2	9.99e-04	15.7	15.7	15.7	15.7	-2.1	-1.3	-9.52e-02	8616.7	-3093.2	-1582.2
1	ok 375	0.07	0.3	6.85e-04	15.7	15.7	15.7	15.7	-2.2	-1.2	-4.69e-02	1.127e+04	-1785.8	-57.1
1	ok 376	0.07	0.3	9.93e-04	15.7	15.7	15.7	15.7	-2.2	-1.2	-3.16e-02	9054.0	-2904.6	1449.4
1	ok 377	0.07	0.3	1.61e-03	15.7	15.7	15.7	15.7	-12.9	-0.5	-6.1	-5389.4	-7590.6	1830.4
1	ok 378	0.07	0.4	1.85e-03	15.7	15.7	15.7	15.7	-13.9	-5.9	-8.3	-1.666e+04	-1.202e+04	-1248.5
1	ok 379	0.07	0.6	1.69e-03	15.7	15.7	15.7	15.7	-1.9	-1.6	-0.2	-2.094e+04	-1.988e+04	529.7
1	ok 380	0.07	0.4	1.77e-03	15.7	15.7	15.7	15.7	-13.7	-5.6	5.0	-1.601e+04	-1.190e+04	1217.8
1	ok 381	0.07	0.3	1.64e-03	15.7	15.7	15.7	15.7	-1.8	-1.2	-3.67e-02	1870.8	-7043.6	-3349.1
1	ok 382	0.07	0.3	1.04e-03	15.7	15.7	15.7	15.7	-1.9	-1.1	-2.73e-02	1.010e+04	-2799.2	-1407.2
1	ok 383	0.07	0.3	7.17e-04	15.7	15.7	15.7	15.7	-1.9	-1.1	-9.88e-03	1.242e+04	-1708.8	100.3
1	ok 384	0.07	0.3	1.05e-03	15.7	15.7	15.7	15.7	-1.9	-1.1	1.51e-03	9647.1	-3092.1	1625.9
1	ok 385	0.07	0.3	1.65e-03	15.7	15.7	15.7	15.7	-13.1	-1.0	-3.1	-5302.9	-7953.4	1976.1
1	ok 386	0.07	0.5	1.79e-03	15.7	15.7	15.7	15.7	-13.9	-5.5	-5.1	-1.752e+04	-1.271e+04	-1318.9
1	ok 387	0.07	0.6	1.68e-03	15.7	15.7	15.7	15.7	-1.6	-1.5	-4.60e-02	-2.278e+04	-2.134e+04	537.4
1	ok 388	0.07	0.5	1.83e-03	15.7	15.7	15.7	15.7	-13.5	-5.8	8.2	-1.795e+04	-1.283e+04	1363.4
1	ok 389	0.07	0.3	1.58e-03	15.7	15.7	15.7	15.7	-1.8	-1.2	-1.30e-02	382.6	-7883.4	-3582.9
1	ok 390	0.07	0.3	9.67e-04	15.7	15.7	15.7	15.7	-1.8	-1.2	-8.95e-03	8946.6	-3352.0	-1560.6
1	ok 391	0.07	0.3	6.67e-04	15.7	15.7	15.7	15.7	-1.8	-1.2	3.04e-02	1.136e+04	-2119.0	-3.7
1	ok 392	0.07	0.2	9.88e-04	15.7	15.7	15.7	15.7	-1.8	-1.2	9.10e-02	8594.6	-3416.5	1553.9
1	ok 393	0.07	0.3	1.58e-03	15.7	15.7	15.7	15.7	-13.8	-1.6	-4.9	-6609.3	-8353.6	1750.8
1	ok 394	0.07	0.5	1.93e-03	15.7	15.7	15.7	15.7	-14.8	-8.0	-6.5	-1.874e+04	-1.328e+04	-1618.0
1	ok 395	0.07	0.6	1.73e-03	15.7	15.7	15.7	15.7	-3.1	-2.0	0.8	-2.337e+04	-2.138e+04	-453.8
1	ok 396	0.07	0.5	1.59e-03	15.7	15.7	15.7	15.7	-3.2	-1.4	0.6	-1.683e+04	-1.407e+04	-34.3
1	ok 397	0.07	0.3	1.43e-03	15.7	15.7	15.7	15.7	-2.9	-1.3	0.3	980.6	-7690.1	-3690.3
1	ok 398	0.07	0.3	8.37e-04	15.7	15.7	15.7	15.7	-2.8	-1.4	5.66e-02	1.120e+04	-2699.3	-1712.4
1	ok 399	0.07	0.5	1.08e-03	15.7	15.7	15.7	15.7	-3.8	-2.3	-9.99e-02	1.804e+04	1755.2	-164.7
1	ok 400	0.07	0.5	1.64e-03	15.7	15.7	15.7	15.7	-4.0	-2.3	-0.3	1.862e+04	1376.8	1482.2
1	ok 401	0.07	0.5	2.19e-03	15.7	15.7	15.7	15.7	10.2	-4.1	10.0	1.968e+04	1757.2	2880.4
1	ok 402	0.07	0.4	2.78e-03	15.7	15.7	15.7	15.7	-14.3	7.4	3.2	-8146.0	-9900.3	7940.9
1	ok 403	0.07	1.0	4.12e-03	16.7	16.3	16.7	17.9	-3.8	-36.5	2.1	-2.052e+04	-3.979e+04	-5921.2
1	ok 404	0.07	0.5	1.37e-03	15.7	15.7	15.7	15.7	2.2	-9.8	-8.9	-8467.3	-1.634e+04	-5791.9
1	ok 405	0.07	0.4	1.13e-03	15.7	15.7	15.7	15.7	1.0	-8.8	1.0	-1728.9	-1.372e+04	872.1
1	ok 406	0.07	0.6	7.15e-04	15.7	15.7	15.7	15.7	-1.1	-4.7	3.5	-316.4	-2.226e+04	-3756.3
1	ok 407	0.07	0.8	1.95e-03	15.7	15.7	15.7	15.7	-13.9	-4.1	7.0	-1.879e+04	-2.421e+04	-7835.3
1	ok 408	0.12	1.0	4.74e-03	38.7	15.7	35.3	15.7	-23.4	-41.0	-22.5	-5.104e+04	-7.805e+04	-1.639e+04
1	ok 409	0.07	1.0	3.56e-03	15.7	17.8	15.7	16.1	3.8	-12.3	12.9	1.912e+04	-7050.9	1.344e+04
1	ok 410	0.07	0.4	2.15e-03	15.7	15.7	15.7	15.7	-3.7	-1.3	-6.83e-02	1.321e+04	-7699.8	147.6
1	ok 411	0.07	0.5	1.40e-03	15.7	15.7	15.7	15.7	-3.3	-1.4	-6.15e-03	1.698e+04	-3083.4	54.2
1	ok 412	0.07	0.5	9.44e-04	15.7	15.7	15.7	15.7	-4.2	-2.3	4.40e-03	1.858e+04	132.0	-3.7
1	ok 413	0.07	0.4	8.67e-04	15.7	15.7	15.7	15.7	-3.1	-1.5	-3.01e-03	1.193e+04	-4460.5	-60.1
1	ok 414	0.07	0.3	1.42e-03	15.7	15.7	15.7	15.7	-3.2	-1.6	-0.1	2641.2	-9998.2	-82.1
1	ok 415	0.07	0.6	1.53e-03	15.7	15.7	15.7	15.7	-3.2	-1.6	0.2	-2.377e+04	-2.004e+04	-462.4
1	ok 417	0.07	0.6	1.86e-03	15.7	15.7	15.7	15.7	-1.9	-1.4	-0.2	-2.398e+04	-2.000e+04	-504.2
1	ok 418	0.07	0.3	1.53e-03	15.7	15.7	15.7	15.7	-0.2	2.30e-02	1.37e-02	-1682.3	-1.152e+04	85.7
1	ok 419	0.07	0.3	9.97e-04	15.7	15.7	15.7	15.7	-2.1	-1.3	-2.17e-03	9213.6	-5186.2	58.7
1	ok 420	0.07	0.3	5.77e-04	15.7	15.7	15.7	15.7	-2.2	-1.2	4.20e-03	1.180e+04	-3511.6	3.6
1	ok 421	0.07	0.3	9.07e-04	15.7	15.7	15.7	15.7	-2.2	-1.2	4.79e-04	9634.0	-4928.9	-53.2
1	ok 422	0.07	0.3	1.46e-03	15.7	15.7	15.7	15.7	-13.9	-0.8	6.0	-3872.1	-9357.4	-116.1
1	ok 423	0.07	0.6	1.75e-03	15.7	15.7	15.7	15.7	-2.3	-1.2	5.76e-02	-2.229e+04	-1.895e+04	-441.5
1	ok 425	0.07	0.6	1.69e-03	15.7	15.7	15.7	15.7	-1.9	-1.2	-3.90e-02	-2.167e+04	-1.884e+04	-442.1
1	ok 426	0.07	0.3	1.49e-03	15.7	15.7	15.7	15.7	-1.9	-1.2	-1.47e-02	2883.9	-9632.3	74.6
1	ok 427	0.07	0.3	9.86e-04	15.7	15.7	15.7	15.7	-1.9	-1.2	-1.20e-03	1.069e+04	-4821.4	53.1
1	ok 428	0.07	0.3	5.54e-04	15.7	15.7	15.7	15.7	-1.9	-1.1	2.96e-04	1.295e+04	-3440.2	3.8
1	ok 429	0.07	0.3	9.96e-04	15.7	15.7	15.7	15.7	-1.9	-1.2	-8.96e-04	1.024e+04	-5196.3	-58.8
1	ok 430	0.07	0.3	1.50e-03	15.7	15.7	15.7	15.7	-14.7	-1.3	3.1	-3695.9	-9808.6	-71.7
1	ok 431	0.07	0.6	1.70e-03	15.7	15.7	15.7	15.7	-2.0	-1.2	-1.97e-02	-2.453e+04	-2.031e+04	483.0
1	ok 433	0.07	0.6	1.74e-03	15.7	15.7	15.7	15.7	-1.8	-1.2	1.39e-02	-2.467e+04	-2.034e+04	489.4
1	ok 434	0.07	0.3	1.43e-03	15.7	15.7	15.7	15.7	-8.0	0.3	-3.8	-2589.3	-9618.9	-115.6
1	ok 435	0.07	0.3	8.78e-04	15.7	15.7	15.7	15.7	-1.8	-1.2	-3.96e-03	9547.4	-5484.6	57.8
1	ok 436	0.07	0.3	5.63e-04	15.7	15.7	15.7	15.7	-1.8	-1.2	2.81e-03	1.191e+04	-3906.2	-1.2
1	ok 437	0.07	0.3	9.86e-04	15.7	15.7	15.7	15.7	-1.7	-1.2	3.42e-03	9192.7	-5551.6	-58.6

M_G	Nodo	x/d	verif.	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
									daN/cm	daN/cm	daN/cm	daN	daN	daN
1	ok 438	0.07	0.3	1.51e-03	15.7	15.7	15.7	15.7	-15.1	-1.8	5.1	-5050.5	-1.022e+04	-24.1
1	ok 439	0.07	0.7	1.85e-03	15.7	15.7	15.7	15.7	-1.6	-1.2	0.2	-2.555e+04	-2.041e+04	518.3
1	ok 441	0.07	0.7	1.52e-03	15.7	15.7	15.7	15.7	-3.1	-1.5	-0.2	-2.551e+04	-2.048e+04	474.7
1	ok 442	0.07	0.3	1.40e-03	15.7	15.7	15.7	15.7	-1.3	1.85e-02	-2.82e-02	-1603.1	-1.122e+04	90.7
1	ok 443	0.07	0.4	8.52e-04	15.7	15.7	15.7	15.7	-2.9	-1.4	3.63e-03	1.180e+04	-4735.3	61.0
1	ok 444	0.07	0.5	9.44e-04	15.7	15.7	15.7	15.7	-2.9	-1.4	-3.06e-03	1.659e+04	-2424.3	2.7
1	ok 445	0.07	0.5	1.40e-03	15.7	15.7	15.7	15.7	-3.1	-1.3	5.30e-03	1.724e+04	-3199.2	-54.1
1	ok 446	0.07	0.5	2.17e-03	15.7	15.7	15.7	15.7	-3.5	-1.4	-0.3	1.430e+04	-7039.0	-409.4
1	ok 447	0.07	1.0	3.55e-03	15.7	17.9	15.7	16.1	-33.4	4.8	-0.5	-2.357e+04	-2.050e+04	-1.002e+04
1	ok 448	0.12	1.0	4.76e-03	39.3	15.7	35.5	15.7	-23.1	-41.5	22.5	-5.070e+04	-7.842e+04	1.635e+04
1	ok 449	0.07	0.8	1.94e-03	15.7	15.7	15.7	15.7	2.8	-8.3	1.5	1.193e+04	-1.230e+04	1.407e+04
1	ok 450	0.07	0.6	7.10e-04	15.7	15.7	15.7	15.7	-1.1	-4.7	3.5	-324.6	-2.238e+04	-3774.9
1	ok 451	0.07	0.4	1.14e-03	15.7	15.7	15.7	15.7	0.9	-8.8	0.9	-1712.8	-1.359e+04	860.0
1	ok 452	0.07	0.5	1.37e-03	15.7	15.7	15.7	15.7	2.0	-9.8	-8.9	-8440.4	-1.618e+04	-5767.2
1	ok 453	0.07	1.0	4.05e-03	16.5	16.3	16.5	17.7	-4.6	-41.2	6.1	-1.724e+04	-3.907e+04	652.7
1	ok 454	0.07	0.4	2.77e-03	15.7	15.7	15.7	15.7	-14.5	7.3	3.1	-8308.7	-9840.0	7958.8
1	ok 455	0.07	0.5	2.18e-03	15.7	15.7	15.7	15.7	10.8	-1.2	11.9	1.930e+04	635.6	2545.1
1	ok 456	0.07	0.5	1.63e-03	15.7	15.7	15.7	15.7	-4.2	-2.3	-0.3	1.837e+04	1491.3	1512.0
1	ok 457	0.07	0.5	1.09e-03	15.7	15.7	15.7	15.7	-4.0	-2.3	-0.1	1.790e+04	1927.0	-133.7
1	ok 458	0.07	0.3	8.43e-04	15.7	15.7	15.7	15.7	-3.0	-1.5	4.11e-02	1.133e+04	-2439.8	-1685.6
1	ok 459	0.07	0.3	1.44e-03	15.7	15.7	15.7	15.7	-3.0	-1.4	0.3	1572.6	-7297.0	-3688.7
1	ok 460	0.07	0.4	1.60e-03	15.7	15.7	15.7	15.7	-1.5	0.2	0.3	-1.414e+04	-1.487e+04	486.5
1	ok 461	0.07	0.6	1.74e-03	15.7	15.7	15.7	15.7	-3.1	-2.1	0.7	-2.205e+04	-2.079e+04	-458.1
1	ok 462	0.07	0.5	1.94e-03	15.7	15.7	15.7	15.7	-14.9	-8.0	-6.6	-1.781e+04	-1.284e+04	-1364.0
1	ok 463	0.07	0.3	1.59e-03	15.7	15.7	15.7	15.7	-14.5	-4.3	-6.6	-5955.7	-4732.7	2382.1
1	ok 464	0.07	0.2	9.99e-04	15.7	15.7	15.7	15.7	-2.1	-1.3	9.52e-02	8616.7	-3093.2	1582.2
1	ok 465	0.07	0.3	6.85e-04	15.7	15.7	15.7	15.7	-2.2	-1.2	4.69e-02	1.127e+04	-1785.8	57.1
1	ok 466	0.07	0.3	9.93e-04	15.7	15.7	15.7	15.7	-2.2	-1.2	3.16e-02	9054.0	-2904.6	-1449.4
1	ok 467	0.07	0.3	1.61e-03	15.7	15.7	15.7	15.7	-13.4	-3.2	8.1	-5075.7	-4393.6	-2402.3
1	ok 468	0.07	0.4	1.85e-03	15.7	15.7	15.7	15.7	-13.9	-5.9	8.3	-1.666e+04	-1.202e+04	1248.5
1	ok 469	0.07	0.6	1.69e-03	15.7	15.7	15.7	15.7	-1.9	-1.6	0.2	-2.094e+04	-1.988e+04	-529.7
1	ok 470	0.07	0.4	1.77e-03	15.7	15.7	15.7	15.7	-13.7	-5.6	-5.0	-1.601e+04	-1.190e+04	-1217.8
1	ok 471	0.07	0.3	1.64e-03	15.7	15.7	15.7	15.7	-1.8	-1.2	3.67e-02	1870.8	-7043.6	3349.1
1	ok 472	0.07	0.3	1.04e-03	15.7	15.7	15.7	15.7	-1.9	-1.1	2.73e-02	1.010e+04	-2799.2	1407.2
1	ok 473	0.07	0.3	7.17e-04	15.7	15.7	15.7	15.7	-1.9	-1.1	9.88e-03	1.242e+04	-1708.8	-100.3
1	ok 474	0.07	0.3	1.05e-03	15.7	15.7	15.7	15.7	-1.9	-1.1	-1.51e-03	9647.1	-3092.1	-1625.9
1	ok 475	0.07	0.3	1.65e-03	15.7	15.7	15.7	15.7	-13.6	-3.5	4.9	-5003.0	-4637.4	-2614.5
1	ok 476	0.07	0.5	1.79e-03	15.7	15.7	15.7	15.7	-13.9	-5.5	5.1	-1.752e+04	-1.271e+04	1318.9
1	ok 477	0.07	0.6	1.68e-03	15.7	15.7	15.7	15.7	-1.6	-1.5	4.60e-02	-2.278e+04	-2.134e+04	-537.4
1	ok 478	0.07	0.5	1.83e-03	15.7	15.7	15.7	15.7	-13.5	-5.8	-8.2	-1.795e+04	-1.283e+04	-1363.4
1	ok 479	0.07	0.3	1.58e-03	15.7	15.7	15.7	15.7	-13.1	-3.1	-8.1	-5585.3	-4802.6	2570.5
1	ok 480	0.07	0.3	9.67e-04	15.7	15.7	15.7	15.7	-1.8	-1.2	8.95e-03	8946.6	-3352.0	1560.6
1	ok 481	0.07	0.3	6.67e-04	15.7	15.7	15.7	15.7	-1.8	-1.2	-3.04e-02	1.136e+04	-2119.0	3.7
1	ok 482	0.07	0.2	9.88e-04	15.7	15.7	15.7	15.7	-1.8	-1.2	-9.10e-02	8594.6	-3416.5	-1553.9
1	ok 483	0.07	0.3	1.58e-03	15.7	15.7	15.7	15.7	-14.4	-4.2	6.5	-6311.3	-4980.6	-2382.0
1	ok 484	0.07	0.5	1.93e-03	15.7	15.7	15.7	15.7	-14.8	-8.0	6.5	-1.874e+04	-1.328e+04	1618.0
1	ok 485	0.07	0.6	1.73e-03	15.7	15.7	15.7	15.7	-3.1	-2.0	-0.8	-2.337e+04	-2.138e+04	453.8
1	ok 486	0.07	0.5	1.59e-03	15.7	15.7	15.7	15.7	-3.2	-1.4	-0.6	-1.683e+04	-1.407e+04	34.3
1	ok 487	0.07	0.3	1.43e-03	15.7	15.7	15.7	15.7	-2.9	-1.3	-0.3	980.6	-7690.1	3690.3
1	ok 488	0.07	0.3	8.37e-04	15.7	15.7	15.7	15.7	-2.8	-1.4	-5.66e-02	1.120e+04	-2699.3	1712.4
1	ok 489	0.07	0.5	1.08e-03	15.7	15.7	15.7	15.7	-3.8	-2.3	9.99e-02	1.804e+04	1755.2	164.7
1	ok 490	0.07	0.5	1.64e-03	15.7	15.7	15.7	15.7	-4.0	-2.3	0.3	1.862e+04	1376.8	-1482.2
1	ok 491	0.07	0.5	2.19e-03	15.7	15.7	15.7	15.7	11.0	-1.1	-11.9	1.950e+04	579.0	-2522.6
1	ok 492	0.07	0.4	2.78e-03	15.7	15.7	15.7	15.7	-14.3	7.4	-3.2	-8146.0	-9900.3	-7940.9
1	ok 493	0.07	1.0	4.11e-03	16.7	16.8	16.7	17.9	-4.5	-41.8	-6.0	-1.710e+04	-3.948e+04	-581.5
1	ok 494	0.07	0.5	1.37e-03	15.7	15.7	15.7	15.7	2.2	-9.8	8.9	-8467.3	-1.634e+04	5791.9
1	ok 495	0.07	0.4	1.13e-03	15.7	15.7	15.7	15.7	2.4	-4.1	1.3	-994.4	-1.460e+04	267.2
1	ok 496	0.07	0.3	1.82e-03	15.7	15.7	15.7	15.7	-1.7	-20.0	1.9	815.4	7668.9	721.0
1	ok 497	0.07	0.3	1.38e-03	15.7	15.7	15.7	15.7	-0.6	-13.5	5.1	2204.1	8213.5	1793.4
1	ok 498	0.07	0.2	2.18e-03	15.7	15.7	15.7	15.7	5.36e-02	-4.8	7.5	5970.5	6756.4	2656.4
1	ok 499	0.07	0.3	2.49e-03	15.7	15.7	15.7	15.7	2.9	-1.4	11.7	1.048e+04	7847.7	3641.7
1	ok 500	0.07	0.4	1.95e-03	15.7	15.7	15.7	15.7	-3.3	-2.8	-0.6	1.295e+04	5909.4	3821.0
1	ok 501	0.07	0.5	1.54e-03	15.7	15.7	15.7	15.7	-3.6	-2.6	-0.3	1.686e+04	5979.0	1772.8
1	ok 502	0.07	0.4	1.11e-03	15.7	15.7	15.7	15.7	-3.8	-2.5	-0.1	1.656e+04	5811.2	-107.8
1	ok 503	0.07	0.3	7.29e-04	15.7	15.7	15.7	15.7	-3.8	-2.5	-5.15e-02	1.203e+04	5380.4	-1959.3
1	ok 504	0.07	0.2	8.95e-04	15.7	15.7	15.7	15.7	-3.7	-2.6	2.80e-02	3762.7	4650.5	-3469.8
1	ok 505	0.07	0.3	1.50e-03	15.7	15.7	15.7	15.7	-3.0	-1.9	0.2	-9535.0	1925.8	-3515.2
1	ok 506	0.07	0.3	1.75e-03	15.7	15.7	15.7	15.7	-3.0	-2.7	0.2	-1.187e+04	4271.6	195.7
1	ok 507	0.07	0.3	1.92e-03	15.7	15.7	15.7	15.7	-1.9	-1.4	0.4	-1.003e+04	1772.0	3520.9
1	ok 508	0.07	0.2	1.26e-03	15.7	15.7	15.7	15.7	-3.1	-2.3	0.2	1530.9	4318.8	3449.3
1	ok 509	0.07	0.2	9.73e-04	15.7	15.7	15.7	15.7	-3.2	-2.1	0.2	8167.4	4841.0	1927.0
1	ok 510	0.07	0.3	7.50e-04	15.7	15.7	15.7	15.7	-3.2	-2.0	5.57e-02	1.065e+04	5007.6	83.0
1	ok 511	0.07	0.2	1.00e-03	15.7	15.7	15.7	15.7	-3.2	-2.1	-4.11e-02	8426.3	4852.8	-1749.6
1	ok 512	0.07	0.2	1.26e-03	15.7	15.7	15.7	15.7	-3.0	-2.2	-6.56e-02	1635.3	4592.4	-3212.6

M_G	Nodo	x/d	verif.	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
									daN/cm	daN/cm	daN/cm	daN	daN	daN
1	ok 513	0.07	0.3	1.78e-03	15.7	15.7	15.7	15.7	-2.7	-2.4	8.54e-03	-7286.3	4237.0	-2631.7
1	ok 514	0.07	0.3	1.58e-03	15.7	15.7	15.7	15.7	-2.7	-2.5	5.65e-02	-1.220e+04	3916.4	-167.3
1	ok 515	0.07	0.2	1.69e-03	15.7	15.7	15.7	15.7	-2.6	-2.4	8.84e-02	-6914.8	4282.0	2593.2
1	ok 516	0.07	0.2	1.24e-03	15.7	15.7	15.7	15.7	-2.8	-2.1	0.1	2667.4	4393.9	3157.9
1	ok 517	0.07	0.3	1.03e-03	15.7	15.7	15.7	15.7	-2.9	-2.0	0.1	9328.2	4948.0	1687.1
1	ok 518	0.07	0.3	8.13e-04	15.7	15.7	15.7	15.7	-2.9	-1.9	4.52e-03	1.157e+04	5087.3	-145.5
1	ok 519	0.07	0.2	1.03e-03	15.7	15.7	15.7	15.7	-2.8	-2.0	-8.12e-02	8862.8	4865.6	-1980.0
1	ok 520	0.07	0.2	1.24e-03	15.7	15.7	15.7	15.7	-2.7	-2.2	-9.99e-02	1362.5	4527.3	-3454.9
1	ok 521	0.07	0.3	1.70e-03	15.7	15.7	15.7	15.7	-2.5	-2.4	-3.21e-02	-8294.2	4068.6	-2765.7
1	ok 522	0.07	0.4	1.59e-03	15.7	15.7	15.7	15.7	-2.5	-2.5	1.11e-02	-1.368e+04	3665.8	-172.9
1	ok 523	0.07	0.3	1.78e-03	15.7	15.7	15.7	15.7	-1.7	-1.3	0.1	-1.027e+04	1474.7	3440.7
1	ok 524	0.07	0.2	1.25e-03	15.7	15.7	15.7	15.7	-2.7	-2.2	0.1	1352.4	4123.9	3378.1
1	ok 525	0.07	0.2	9.90e-04	15.7	15.7	15.7	15.7	-2.9	-2.0	8.69e-02	8286.0	4685.2	1873.0
1	ok 526	0.07	0.3	7.39e-04	15.7	15.7	15.7	15.7	-2.9	-1.9	-2.57e-02	1.072e+04	4831.9	-21.5
1	ok 527	0.07	0.2	9.61e-04	15.7	15.7	15.7	15.7	-2.9	-2.0	-0.2	8147.5	4618.3	-1896.8
1	ok 528	0.07	0.2	1.25e-03	15.7	15.7	15.7	15.7	-2.9	-2.2	-0.2	809.4	4285.3	-3401.0
1	ok 529	0.07	0.3	1.92e-03	15.7	15.7	15.7	15.7	-1.6	-1.3	-0.4	-1.098e+04	1277.9	-3434.2
1	ok 530	0.07	0.4	1.75e-03	15.7	15.7	15.7	15.7	-2.8	-2.6	-0.3	-1.364e+04	3516.8	-205.2
1	ok 531	0.07	0.3	1.51e-03	15.7	15.7	15.7	15.7	-2.8	-1.8	-0.3	-1.058e+04	1421.3	3456.8
1	ok 532	0.07	0.2	8.96e-04	15.7	15.7	15.7	15.7	-3.5	-2.5	-5.07e-02	3249.0	4318.1	3470.7
1	ok 533	0.07	0.3	7.23e-04	15.7	15.7	15.7	15.7	-3.6	-2.4	3.13e-02	1.192e+04	5151.3	2005.6
1	ok 534	0.07	0.4	1.11e-03	15.7	15.7	15.7	15.7	-3.6	-2.4	8.65e-02	1.670e+04	5655.2	162.7
1	ok 535	0.07	0.5	1.55e-03	15.7	15.7	15.7	15.7	-3.4	-2.5	0.2	1.711e+04	5871.4	-1719.3
1	ok 536	0.07	0.4	1.96e-03	15.7	15.7	15.7	15.7	-3.1	-2.7	0.5	1.321e+04	5826.4	-3774.7
1	ok 537	0.07	0.3	2.51e-03	15.7	15.7	15.7	15.7	3.0	-1.3	-11.8	1.064e+04	7801.7	-3613.5
1	ok 538	0.07	0.2	2.21e-03	15.7	15.7	15.7	15.7	0.1	-4.8	-7.5	6064.5	6710.4	-2642.2
1	ok 539	0.07	0.3	1.39e-03	15.7	15.7	15.7	15.7	-0.6	-13.6	-5.1	2223.3	8178.1	-1784.1
1	ok 540	0.07	0.3	1.83e-03	15.7	15.7	15.7	15.7	-1.4	-19.7	-1.7	893.9	7377.4	-768.6
1	ok 541	0.07	0.4	2.40e-03	15.7	15.7	15.7	15.7	1.0	7.8	-1.6	224.3	1.540e+04	743.8
1	ok 542	0.07	0.4	1.75e-03	15.7	15.7	15.7	15.7	-1.0	-9.5	-2.2	2861.7	1.523e+04	613.8
1	ok 543	0.07	0.4	1.48e-03	15.7	15.7	15.7	15.7	-0.6	-3.5	-3.6	6383.3	1.318e+04	981.0
1	ok 544	0.07	0.3	1.72e-03	15.7	15.7	15.7	15.7	-0.5	-1.3	-6.3	1.068e+04	1.079e+04	1562.6
1	ok 545	0.07	0.4	1.60e-03	15.7	15.7	15.7	15.7	-2.7	-3.0	0.1	1.255e+04	1.090e+04	1977.4
1	ok 546	0.07	0.4	1.38e-03	15.7	15.7	15.7	15.7	-3.3	-2.7	0.1	1.589e+04	9741.1	1094.1
1	ok 547	0.07	0.4	1.02e-03	15.7	15.7	15.7	15.7	-3.7	-2.5	3.55e-02	1.557e+04	9310.6	143.4
1	ok 548	0.07	0.3	7.13e-04	15.7	15.7	15.7	15.7	-3.7	-2.5	-9.41e-02	1.143e+04	9645.5	-737.5
1	ok 549	0.07	0.3	7.74e-04	15.7	15.7	15.7	15.7	-3.5	-2.7	-0.2	4267.3	1.072e+04	-1388.3
1	ok 550	0.07	0.3	9.34e-04	15.7	15.7	15.7	15.7	-3.3	-2.9	-0.1	-3781.7	1.243e+04	-1100.2
1	ok 551	0.07	0.3	1.12e-03	15.7	15.7	15.7	15.7	-3.2	-2.9	7.98e-02	-7122.6	1.319e+04	98.0
1	ok 552	0.07	0.3	1.30e-03	15.7	15.7	15.7	15.7	-3.1	-2.6	0.3	-4779.5	1.231e+04	1222.7
1	ok 553	0.07	0.3	1.11e-03	15.7	15.7	15.7	15.7	-3.2	-2.2	0.3	2038.5	1.050e+04	1489.2
1	ok 554	0.07	0.2	9.71e-04	15.7	15.7	15.7	15.7	-3.3	-1.9	0.2	7624.2	9329.8	856.0
1	ok 555	0.07	0.3	8.85e-04	15.7	15.7	15.7	15.7	-3.3	-1.8	2.64e-02	9797.0	8891.7	41.1
1	ok 556	0.07	0.2	1.03e-03	15.7	15.7	15.7	15.7	-3.2	-2.0	-0.2	7900.8	9222.5	-773.2
1	ok 557	0.07	0.3	1.12e-03	15.7	15.7	15.7	15.7	-3.0	-2.2	-0.3	2464.7	1.024e+04	-1372.6
1	ok 558	0.07	0.3	1.28e-03	15.7	15.7	15.7	15.7	-2.7	-2.5	-0.2	-4513.9	1.179e+04	-1092.4
1	ok 559	0.07	0.3	1.10e-03	15.7	15.7	15.7	15.7	-2.6	-2.6	-5.09e-03	-7796.6	1.238e+04	-35.6
1	ok 560	0.07	0.3	1.25e-03	15.7	15.7	15.7	15.7	-2.6	-2.4	0.2	-4128.8	1.183e+04	1025.4
1	ok 561	0.07	0.3	1.11e-03	15.7	15.7	15.7	15.7	-2.8	-2.1	0.3	3164.0	1.032e+04	1301.6
1	ok 562	0.07	0.3	1.01e-03	15.7	15.7	15.7	15.7	-2.9	-1.9	0.2	8801.0	9331.2	699.4
1	ok 563	0.07	0.3	8.63e-04	15.7	15.7	15.7	15.7	-2.9	-1.8	-1.01e-02	1.073e+04	8999.4	-112.0
1	ok 564	0.07	0.3	1.00e-03	15.7	15.7	15.7	15.7	-2.9	-1.9	-0.2	8363.3	9394.7	-907.3
1	ok 565	0.07	0.3	1.10e-03	15.7	15.7	15.7	15.7	-2.7	-2.2	-0.3	2299.8	1.046e+04	-1499.3
1	ok 566	0.07	0.3	1.25e-03	15.7	15.7	15.7	15.7	-2.5	-2.5	-0.2	-5336.3	1.206e+04	-1167.6
1	ok 567	0.07	0.3	1.10e-03	15.7	15.7	15.7	15.7	-2.4	-2.6	1.66e-02	-9030.1	1.265e+04	-33.8
1	ok 568	0.07	0.3	1.28e-03	15.7	15.7	15.7	15.7	-2.5	-2.5	0.2	-5508.3	1.202e+04	1101.7
1	ok 569	0.07	0.3	1.12e-03	15.7	15.7	15.7	15.7	-2.7	-2.2	0.3	1932.7	1.038e+04	1416.2
1	ok 570	0.07	0.2	1.03e-03	15.7	15.7	15.7	15.7	-2.9	-1.9	0.2	7761.9	9282.9	800.4
1	ok 571	0.07	0.3	8.81e-04	15.7	15.7	15.7	15.7	-3.0	-1.8	4.66e-03	9853.7	8864.9	-40.2
1	ok 572	0.07	0.2	9.61e-04	15.7	15.7	15.7	15.7	-3.0	-1.8	-0.2	7618.9	9196.1	-866.2
1	ok 573	0.07	0.3	1.10e-03	15.7	15.7	15.7	15.7	-2.9	-2.1	-0.3	1707.6	1.022e+04	-1484.9
1	ok 574	0.07	0.3	1.30e-03	15.7	15.7	15.7	15.7	-2.8	-2.5	-0.3	-5704.4	1.182e+04	-1184.1
1	ok 575	0.07	0.3	1.12e-03	15.7	15.7	15.7	15.7	-2.8	-2.7	-8.45e-02	-9014.7	1.245e+04	-57.1
1	ok 576	0.07	0.3	9.36e-04	15.7	15.7	15.7	15.7	-3.1	-2.8	8.73e-02	-4784.8	1.191e+04	1088.1
1	ok 577	0.07	0.3	7.75e-04	15.7	15.7	15.7	15.7	-3.3	-2.6	0.2	3825.2	1.039e+04	1421.9
1	ok 578	0.07	0.3	7.13e-04	15.7	15.7	15.7	15.7	-3.5	-2.4	7.86e-02	1.136e+04	9432.6	802.8
1	ok 579	0.07	0.4	1.02e-03	15.7	15.7	15.7	15.7	-3.5	-2.4	-4.66e-02	1.572e+04	9172.1	-66.9
1	ok 580	0.07	0.4	1.38e-03	15.7	15.7	15.7	15.7	-3.1	-2.6	-0.1	1.614e+04	9645.7	-1021.3
1	ok 581	0.07	0.4	1.61e-03	15.7	15.7	15.7	15.7	-2.5	-2.9	-0.1	1.280e+04	1.083e+04	-1915.6
1	ok 582	0.07	0.3	1.73e-03	15.7	15.7	15.7	15.7	-1.5	-3.1	-6.24e-02	7188.1	1.267e+04	-2110.4
1	ok 583	0.07	0.4	1.50e-03	15.7	15.7	15.7	15.7	-1.1	-7.7	-0.9	6307.5	1.146e+04	-1962.2
1	ok 584	0.07	0.4	1.76e-03	15.7	15.7	15.7	15.7	-1.0	-9.5	2.2	2874.8	1.520e+04	-600.3
1	ok 585	0.07	0.4	2.42e-03	15.7	15.7	15.7	15.7	1.0	8.0	1.6	223.4	1.539e+04	-759.6
1	ok 586	0.07	0.6	2.60e-03	15.7	15.7	15.7	15.7	1.1	18.3	-1.4	1049.9	2.280e+04	-113.5

M_G	Nodo	x/d	verif.	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
									daN/cm	daN/cm	daN/cm	daN	daN	daN
1	ok 587	0.07	0.6	2.28e-03	15.7	15.7	15.7	15.7	0.7	16.0	-5.3	1942.3	2.213e+04	-105.7
1	ok 588	0.07	0.5	2.05e-03	15.7	15.7	15.7	15.7	-0.6	-0.2	-7.5	7312.5	1.575e+04	-1666.4
1	ok 589	0.07	0.4	1.92e-03	15.7	15.7	15.7	15.7	-1.4	8.4	-12.9	7653.0	1.733e+04	390.2
1	ok 590	0.07	0.4	1.52e-03	15.7	15.7	15.7	15.7	-2.9	1.5	-12.8	1.097e+04	1.534e+04	199.5
1	ok 591	0.07	0.4	1.24e-03	15.7	15.7	15.7	15.7	-3.4	-2.4	0.6	1.581e+04	1.109e+04	141.5
1	ok 592	0.07	0.4	9.36e-04	15.7	15.7	15.7	15.7	-3.8	-2.2	0.2	1.550e+04	1.065e+04	493.5
1	ok 593	0.07	0.3	9.61e-04	15.7	15.7	15.7	15.7	-3.8	-2.3	-0.1	1.153e+04	1.110e+04	940.7
1	ok 594	0.07	0.4	1.10e-03	15.7	15.7	15.7	15.7	-3.6	-2.6	-0.4	4593.7	1.254e+04	1352.5
1	ok 595	0.07	0.4	1.16e-03	15.7	15.7	15.7	15.7	-3.3	-3.1	-0.4	-3214.0	1.463e+04	1154.0
1	ok 596	0.07	0.4	1.14e-03	15.7	15.7	15.7	15.7	-3.1	-3.2	9.59e-03	-6666.1	1.550e+04	151.7
1	ok 597	0.07	0.4	1.13e-03	15.7	15.7	15.7	15.7	-3.0	-2.8	0.4	-4183.7	1.456e+04	-929.7
1	ok 598	0.07	0.3	1.11e-03	15.7	15.7	15.7	15.7	-3.2	-2.2	0.5	2414.9	1.242e+04	-1078.5
1	ok 599	0.07	0.3	1.02e-03	15.7	15.7	15.7	15.7	-3.4	-1.7	0.3	7824.0	1.094e+04	-598.3
1	ok 600	0.07	0.3	9.86e-04	15.7	15.7	15.7	15.7	-3.3	-1.6	-3.71e-02	9905.5	1.044e+04	-39.2
1	ok 601	0.07	0.3	1.22e-03	15.7	15.7	15.7	15.7	-3.2	-1.7	-0.3	8111.0	1.080e+04	521.3
1	ok 602	0.07	0.3	1.26e-03	15.7	15.7	15.7	15.7	-3.0	-2.2	-0.5	2852.1	1.209e+04	1013.0
1	ok 603	0.07	0.4	1.24e-03	15.7	15.7	15.7	15.7	-2.6	-2.7	-0.4	-3936.7	1.395e+04	887.8
1	ok 604	0.07	0.4	1.13e-03	15.7	15.7	15.7	15.7	-2.5	-2.9	-2.89e-02	-7346.6	1.463e+04	-125.2
1	ok 605	0.07	0.4	1.21e-03	15.7	15.7	15.7	15.7	-2.5	-2.7	0.4	-3551.4	1.400e+04	-978.2
1	ok 606	0.07	0.3	1.12e-03	15.7	15.7	15.7	15.7	-2.8	-2.1	0.4	3552.5	1.218e+04	-1095.2
1	ok 607	0.07	0.3	1.11e-03	15.7	15.7	15.7	15.7	-3.0	-1.7	0.3	9015.2	1.092e+04	-600.4
1	ok 608	0.07	0.3	9.45e-04	15.7	15.7	15.7	15.7	-3.0	-1.6	-1.84e-02	1.085e+04	1.057e+04	-33.7
1	ok 609	0.07	0.3	1.10e-03	15.7	15.7	15.7	15.7	-2.9	-1.7	-0.3	8601.9	1.104e+04	544.7
1	ok 610	0.07	0.3	1.10e-03	15.7	15.7	15.7	15.7	-2.7	-2.2	-0.5	2736.7	1.242e+04	1061.1
1	ok 611	0.07	0.4	1.22e-03	15.7	15.7	15.7	15.7	-2.4	-2.7	-0.4	-4691.0	1.437e+04	941.9
1	ok 612	0.07	0.4	1.13e-03	15.7	15.7	15.7	15.7	-2.3	-3.0	2.78e-02	-8533.4	1.507e+04	-110.0
1	ok 613	0.07	0.4	1.24e-03	15.7	15.7	15.7	15.7	-2.4	-2.7	0.4	-4869.1	1.435e+04	-1003.6
1	ok 614	0.07	0.3	1.26e-03	15.7	15.7	15.7	15.7	-2.7	-2.1	0.5	2357.2	1.237e+04	-1130.5
1	ok 615	0.07	0.3	1.22e-03	15.7	15.7	15.7	15.7	-3.0	-1.7	0.3	7987.2	1.097e+04	-625.7
1	ok 616	0.07	0.3	9.85e-04	15.7	15.7	15.7	15.7	-3.1	-1.5	5.51e-02	9967.1	1.050e+04	-59.1
1	ok 617	0.07	0.3	1.01e-03	15.7	15.7	15.7	15.7	-3.1	-1.6	-0.2	7839.7	1.088e+04	508.1
1	ok 618	0.07	0.3	1.10e-03	15.7	15.7	15.7	15.7	-8.6	2.2	6.7	2775.4	1.295e+04	187.3
1	ok 619	0.07	0.4	1.13e-03	15.7	15.7	15.7	15.7	-2.8	-2.6	-0.3	-5036.9	1.408e+04	949.8
1	ok 620	0.07	0.4	1.13e-03	15.7	15.7	15.7	15.7	-2.8	-3.0	3.06e-03	-8538.7	1.481e+04	-177.0
1	ok 621	0.07	0.4	1.16e-03	15.7	15.7	15.7	15.7	-3.1	-3.0	0.3	-4181.6	1.414e+04	-1099.5
1	ok 622	0.07	0.4	1.11e-03	15.7	15.7	15.7	15.7	-3.4	-2.5	0.4	4193.3	1.223e+04	-1276.6
1	ok 623	0.07	0.3	9.66e-04	15.7	15.7	15.7	15.7	-3.6	-2.2	0.1	1.148e+04	1.091e+04	-844.2
1	ok 624	0.07	0.4	9.36e-04	15.7	15.7	15.7	15.7	-3.6	-2.1	-0.2	1.565e+04	1.053e+04	-395.1
1	ok 625	0.07	0.4	1.24e-03	15.7	15.7	15.7	15.7	-3.2	-2.4	-0.6	1.605e+04	1.101e+04	-52.2
1	ok 626	0.07	0.4	1.52e-03	15.7	15.7	15.7	15.7	-2.8	1.6	13.0	1.113e+04	1.536e+04	-156.9
1	ok 627	0.07	0.4	1.97e-03	15.7	15.7	15.7	15.7	3.89e-02	8.6	13.0	7778.2	1.736e+04	-364.8
1	ok 628	0.07	0.5	2.07e-03	15.7	15.7	15.7	15.7	-0.6	-0.1	7.5	7380.6	1.572e+04	1699.8
1	ok 629	0.07	0.6	2.32e-03	15.7	15.7	15.7	15.7	0.7	16.3	5.3	1954.2	2.218e+04	118.8
1	ok 630	0.07	0.6	2.66e-03	15.7	15.7	15.7	15.7	1.1	18.6	1.4	1058.3	2.286e+04	99.9
1	ok 631	0.07	0.6	2.76e-03	15.7	15.7	15.7	15.7	0.6	24.4	-0.3	423.4	2.426e+04	-2089.0
1	ok 632	0.07	0.7	2.99e-03	15.7	15.7	15.7	15.7	0.9	26.0	-4.6	3442.8	2.655e+04	-2189.4
1	ok 633	0.07	0.5	2.69e-03	15.7	15.7	15.7	15.7	0.3	22.0	-10.6	5161.7	2.027e+04	-2182.5
1	ok 634	0.07	0.6	2.59e-03	15.7	15.7	15.7	15.7	-4.4	14.5	-9.4	8398.0	2.186e+04	-3100.0
1	ok 635	0.07	0.4	1.66e-03	15.7	15.7	15.7	15.7	-3.1	2.2	-9.7	1.108e+04	1.506e+04	-2653.1
1	ok 636	0.07	0.5	1.23e-03	15.7	15.7	15.7	15.7	-4.2	-2.2	-10.0	1.345e+04	1.253e+04	-1609.4
1	ok 637	0.07	0.4	9.42e-04	15.7	15.7	15.7	15.7	-4.1	-1.7	0.4	1.640e+04	9453.8	814.5
1	ok 638	0.07	0.4	1.17e-03	15.7	15.7	15.7	15.7	-4.1	-1.8	-0.2	1.240e+04	9512.1	2368.8
1	ok 639	0.07	0.4	1.54e-03	15.7	15.7	15.7	15.7	-10.9	1.2	10.7	4713.7	1.296e+04	1866.0
1	ok 640	0.07	0.5	2.03e-03	15.7	15.7	15.7	15.7	-7.8	14.2	6.0	-2097.1	1.833e+04	1865.0
1	ok 641	0.07	0.4	2.02e-03	15.7	15.7	15.7	15.7	-2.5	-3.7	0.3	-1.006e+04	1.348e+04	587.4
1	ok 642	0.07	0.5	1.92e-03	15.7	15.7	15.7	15.7	-10.8	13.6	-4.7	-4039.3	1.799e+04	-2128.8
1	ok 643	0.07	0.3	1.40e-03	15.7	15.7	15.7	15.7	-8.6	3.0	-6.2	2906.9	1.242e+04	-2840.4
1	ok 644	0.07	0.3	1.16e-03	15.7	15.7	15.7	15.7	-3.3	-1.4	0.3	8827.4	9421.4	-1808.8
1	ok 645	0.07	0.3	1.06e-03	15.7	15.7	15.7	15.7	-3.3	-1.2	-7.50e-02	1.101e+04	9244.6	-110.1
1	ok 646	0.07	0.3	1.30e-03	15.7	15.7	15.7	15.7	-3.3	-1.4	-0.5	9118.3	9324.8	1581.0
1	ok 647	0.07	0.3	1.56e-03	15.7	15.7	15.7	15.7	-10.4	1.9	11.6	4281.9	1.166e+04	1689.7
1	ok 648	0.07	0.4	1.94e-03	15.7	15.7	15.7	15.7	-8.8	12.5	7.4	-2993.2	1.634e+04	1821.6
1	ok 649	0.07	0.4	1.90e-03	15.7	15.7	15.7	15.7	-2.7	-3.5	-0.3	-1.055e+04	1.272e+04	-418.5
1	ok 650	0.07	0.4	1.78e-03	15.7	15.7	15.7	15.7	-9.4	12.6	-2.7	-3410.9	1.623e+04	-1964.9
1	ok 651	0.07	0.3	1.36e-03	15.7	15.7	15.7	15.7	-7.8	2.9	-4.6	3775.5	1.141e+04	-2606.7
1	ok 652	0.07	0.3	1.17e-03	15.7	15.7	15.7	15.7	-3.0	-1.4	0.4	1.003e+04	9456.4	-1663.3
1	ok 653	0.07	0.3	9.72e-04	15.7	15.7	15.7	15.7	-3.0	-1.2	-3.59e-02	1.197e+04	9387.2	38.5
1	ok 654	0.07	0.3	1.15e-03	15.7	15.7	15.7	15.7	-3.0	-1.4	-0.5	9638.9	9537.3	1755.5
1	ok 655	0.07	0.3	1.35e-03	15.7	15.7	15.7	15.7	-10.2	2.3	6.8	3307.0	1.147e+04	2278.8
1	ok 656	0.07	0.4	1.80e-03	15.7	15.7	15.7	15.7	-9.5	12.6	2.6	-4320.7	1.642e+04	2053.2
1	ok 657	0.07	0.4	1.90e-03	15.7	15.7	15.7	15.7	-2.4	-3.6	-0.3	-1.187e+04	1.312e+04	-402.7
1	ok 658	0.07	0.4	1.94e-03	15.7	15.7	15.7	15.7	-8.7	12.5	-7.5	-3707.9	1.655e+04	-2015.1
1	ok 659	0.07	0.3	1.57e-03	15.7	15.7	15.7	15.7	-8.1	2.5	-8.5	3616.7	1.183e+04	-1916.8
1	ok 660	0.07	0.3	1.30e-03	15.7	15.7	15.7	15.7	-3.0	-1.4	0.5	9021.9	9497.9	-1804.0

M_G	Nodo	x/d	verif.	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
									daN/cm	daN/cm	daN/cm	daN	daN	daN
1	ok 661	0.07	0.3	1.06e-03	15.7	15.7	15.7	15.7	-3.0	-1.2	9.44e-02	1.109e+04	9339.1	-82.9
1	ok 662	0.07	0.3	1.15e-03	15.7	15.7	15.7	15.7	-3.0	-1.3	-0.3	8869.2	9407.6	1634.9
1	ok 663	0.07	0.3	1.40e-03	15.7	15.7	15.7	15.7	-10.9	2.5	9.2	3031.3	1.232e+04	2259.0
1	ok 664	0.07	0.5	1.91e-03	15.7	15.7	15.7	15.7	-10.8	13.9	4.7	-4652.8	1.775e+04	2056.7
1	ok 665	0.07	0.4	2.03e-03	15.7	15.7	15.7	15.7	-2.1	-3.5	-0.3	-1.183e+04	1.284e+04	-558.4
1	ok 666	0.07	0.5	2.04e-03	15.7	15.7	15.7	15.7	-7.7	14.4	-6.2	-2734.1	1.807e+04	-1804.7
1	ok 667	0.07	0.3	1.56e-03	15.7	15.7	15.7	15.7	-7.1	1.9	-3.2	3614.8	1.288e+04	-2373.1
1	ok 668	0.07	0.3	1.18e-03	15.7	15.7	15.7	15.7	-3.9	-1.8	0.2	1.237e+04	9361.8	-2241.5
1	ok 669	0.07	0.4	9.38e-04	15.7	15.7	15.7	15.7	-3.9	-1.6	-0.3	1.655e+04	9366.0	-697.1
1	ok 670	0.07	0.5	1.24e-03	15.7	15.7	15.7	15.7	0.5	-1.2	8.8	1.789e+04	9368.6	787.5
1	ok 671	0.07	0.4	1.66e-03	15.7	15.7	15.7	15.7	-3.0	2.3	9.8	1.124e+04	1.510e+04	2726.1
1	ok 672	0.07	0.6	2.61e-03	15.7	15.7	15.7	15.7	-4.3	14.9	9.5	8535.7	2.195e+04	3160.6
1	ok 673	0.07	0.5	2.72e-03	15.7	15.7	15.7	15.7	0.2	22.5	10.7	5211.2	2.033e+04	2226.9
1	ok 674	0.07	0.7	3.03e-03	15.7	15.7	15.7	15.7	0.8	26.5	4.6	3472.0	2.668e+04	2226.5
1	ok 675	0.07	0.6	2.81e-03	15.7	15.7	15.7	15.7	0.6	24.8	0.2	421.8	2.436e+04	2096.8
1	ok 676	0.07	0.5	2.92e-03	15.7	15.7	15.7	15.7	-1.9	22.1	0.3	1578.7	1.746e+04	-323.7
1	ok 677	0.07	0.5	3.11e-03	15.7	15.7	15.7	15.7	-3.6	23.5	-4.2	3915.9	2.024e+04	-3616.0
1	ok 678	0.08	1.0	4.73e-03	16.6	16.3	16.6	22.6	5.7	42.0	-15.8	1.002e+04	5.237e+04	-5196.1
1	ok 679	0.07	0.5	2.73e-03	15.7	15.7	15.7	15.7	-5.1	16.1	-12.8	7233.5	1.608e+04	-6254.9
1	ok 680	0.07	0.6	2.07e-03	15.7	15.7	15.7	15.7	6.5	-1.1	-9.5	2.058e+04	8147.1	-4086.2
1	ok 681	0.07	0.5	1.50e-03	15.7	15.7	15.7	15.7	-6.2	-2.1	-10.1	1.473e+04	1.049e+04	-2550.5
1	ok 682	0.07	0.5	1.17e-03	15.7	15.7	15.7	15.7	-4.4	-1.0	0.4	1.789e+04	6499.7	977.0
1	ok 683	0.07	0.4	1.23e-03	15.7	15.7	15.7	15.7	-4.3	-1.1	-0.3	1.388e+04	5742.1	2954.7
1	ok 684	0.07	0.3	1.79e-03	15.7	15.7	15.7	15.7	-11.1	-0.2	13.2	6975.1	8925.0	4875.7
1	ok 685	0.07	0.5	2.10e-03	15.7	15.7	15.7	15.7	9.1	-16.0	-1.9	-1.152e+04	-1.032e+04	8121.2
1	ok 686	0.08	1.0	4.03e-03	15.7	16.2	15.7	19.8	10.6	-38.9	4.5	-2.442e+04	-3.134e+04	-8707.7
1	ok 687	0.07	0.5	2.08e-03	15.7	15.7	15.7	15.7	14.6	-16.2	-0.4	-1.135e+04	-1.022e+04	-7685.5
1	ok 688	0.07	0.3	2.18e-03	15.7	15.7	15.7	15.7	-10.4	2.2	-5.8	3593.7	8050.9	-5057.6
1	ok 689	0.07	0.3	1.47e-03	15.7	15.7	15.7	15.7	-3.1	-0.9	0.4	1.043e+04	5672.6	-2227.2
1	ok 690	0.07	0.3	1.21e-03	15.7	15.7	15.7	15.7	-3.2	-0.8	-8.00e-02	1.266e+04	6199.8	-153.8
1	ok 691	0.07	0.3	1.32e-03	15.7	15.7	15.7	15.7	-3.1	-0.9	-0.5	1.072e+04	5675.5	1914.0
1	ok 692	0.07	0.3	1.79e-03	15.7	15.7	15.7	15.7	3.7	-1.3	9.1	1.068e+04	5847.7	2905.5
1	ok 693	0.07	0.5	2.03e-03	15.7	15.7	15.7	15.7	-2.4	-2.1	-1.7	-1.339e+04	-5435.6	7676.0
1	ok 694	0.07	1.0	3.62e-03	15.7	16.1	15.7	17.4	10.7	-35.0	2.6	-2.271e+04	-2.690e+04	-8765.2
1	ok 695	0.07	0.5	1.92e-03	15.7	15.7	15.7	15.7	13.7	-14.6	-0.2	-9976.8	-8741.6	-7378.9
1	ok 696	0.07	0.3	1.86e-03	15.7	15.7	15.7	15.7	-9.2	2.2	-4.3	4613.4	7330.4	-4551.3
1	ok 697	0.07	0.3	1.22e-03	15.7	15.7	15.7	15.7	-2.8	-0.8	0.4	1.165e+04	5803.7	-1998.1
1	ok 698	0.07	0.4	1.06e-03	15.7	15.7	15.7	15.7	-2.9	-0.7	-4.52e-02	1.365e+04	6339.6	85.4
1	ok 699	0.07	0.3	1.24e-03	15.7	15.7	15.7	15.7	-2.8	-0.9	-0.5	1.128e+04	5797.1	2183.1
1	ok 700	0.07	0.3	1.87e-03	15.7	15.7	15.7	15.7	7.6	-1.3	8.1	1.026e+04	5307.8	3020.1
1	ok 701	0.07	0.5	1.94e-03	15.7	15.7	15.7	15.7	-2.2	-2.1	-1.6	-1.452e+04	-5743.8	8205.6
1	ok 702	0.07	1.0	3.62e-03	15.7	15.9	15.7	17.4	11.2	-35.0	-2.3	-2.381e+04	-2.655e+04	8938.2
1	ok 703	0.07	0.5	2.03e-03	15.7	15.7	15.7	15.7	9.4	-15.1	3.9	-1.095e+04	-8695.8	-7389.9
1	ok 704	0.07	0.3	1.77e-03	15.7	15.7	15.7	15.7	-8.8	1.2	-7.4	4336.4	7966.6	-4037.7
1	ok 705	0.07	0.3	1.32e-03	15.7	15.7	15.7	15.7	-2.8	-0.8	0.5	1.066e+04	5764.2	-2204.0
1	ok 706	0.07	0.3	1.21e-03	15.7	15.7	15.7	15.7	-2.8	-0.7	0.1	1.278e+04	6280.2	-102.8
1	ok 707	0.07	0.3	1.47e-03	15.7	15.7	15.7	15.7	-2.8	-0.8	-0.3	1.050e+04	5693.7	1991.6
1	ok 708	0.07	0.3	2.20e-03	15.7	15.7	15.7	15.7	3.7	-0.9	8.3	9247.7	5685.4	3401.3
1	ok 709	0.07	0.5	2.08e-03	15.7	15.7	15.7	15.7	15.2	-16.2	0.5	-1.188e+04	-1.046e+04	7566.5
1	ok 710	0.08	1.0	4.06e-03	15.7	16.0	15.7	19.7	11.1	-39.1	-4.6	-2.572e+04	-3.195e+04	8683.5
1	ok 711	0.07	0.5	2.11e-03	15.7	15.7	15.7	15.7	9.4	-16.0	2.1	-1.211e+04	-1.059e+04	-8031.2
1	ok 712	0.07	0.3	1.80e-03	15.7	15.7	15.7	15.7	-8.5	1.1	-7.0	4529.7	8789.9	-4137.0
1	ok 713	0.07	0.4	1.24e-03	15.7	15.7	15.7	15.7	-4.1	-1.0	0.3	1.384e+04	5647.8	-2808.6
1	ok 714	0.07	0.5	1.16e-03	15.7	15.7	15.7	15.7	-4.2	-0.9	-0.4	1.803e+04	6447.8	-848.2
1	ok 715	0.07	0.5	1.49e-03	15.7	15.7	15.7	15.7	-6.3	-2.1	10.2	1.490e+04	1.051e+04	2654.2
1	ok 716	0.07	0.6	2.06e-03	15.7	15.7	15.7	15.7	6.6	-1.1	9.6	2.075e+04	8142.3	4158.9
1	ok 717	0.07	0.5	2.73e-03	15.7	15.7	15.7	15.7	-5.1	16.4	13.0	7357.7	1.618e+04	6325.9
1	ok 718	0.08	1.0	4.80e-03	16.9	16.3	16.9	22.8	5.8	42.9	15.8	1.002e+04	5.275e+04	5104.1
1	ok 719	0.07	0.6	3.15e-03	15.7	15.7	15.7	15.7	-3.6	24.1	4.3	3929.2	2.036e+04	3663.3
1	ok 720	0.07	0.5	2.96e-03	15.7	15.7	15.7	15.7	-1.9	22.6	-0.3	1603.5	1.756e+04	311.9
1	ok 721	0.07	0.5	2.07e-03	15.7	15.7	15.7	15.7	-2.7	-19.7	-5.3	-404.9	-1.984e+04	3732.7
1	ok 722	0.07	0.8	2.63e-03	15.7	15.7	15.7	15.7	-13.3	-4.6	5.0	-2.178e+04	-1.893e+04	-9522.5
1	ok 723	0.10	1.0	5.08e-03	33.4	15.7	30.5	15.7	-8.3	-51.5	20.2	-3.690e+04	-6.762e+04	1.701e+04
1	ok 724	0.08	1.0	4.18e-03	15.7	19.2	15.7	17.0	-7.0	16.3	-15.6	1.154e+04	4701.2	-2.053e+04
1	ok 725	0.07	0.5	2.53e-03	15.7	15.7	15.7	15.7	-11.6	0.8	-7.9	1.446e+04	8692.4	-5709.7
1	ok 726	0.07	0.6	2.03e-03	15.7	15.7	15.7	15.7	-12.0	-2.4	-8.4	1.701e+04	7443.8	-3764.0
1	ok 727	0.07	0.5	1.69e-03	15.7	15.7	15.7	15.7	-13.9	-3.8	-4.1	1.711e+04	7124.9	-793.8
1	ok 728	0.07	0.4	1.56e-03	15.7	15.7	15.7	15.7	-4.2	-0.3	-0.2	1.511e+04	2208.8	2481.3
1	ok 729	0.07	0.3	1.85e-03	15.7	15.7	15.7	15.7	-4.4	-1.6	-1.1	6245.2	-1768.9	3141.3
1	ok 730	0.07	0.9	3.00e-03	15.7	15.7	15.7	15.7	-25.1	-2.6	1.1	-3.256e+04	-1.867e+04	-6901.0
1	ok 731	0.12	1.0	4.46e-03	40.4	15.7	33.3	15.7	-9.2	-46.4	-16.7	-6.102e+04	-7.400e+04	-1.485e+04
1	ok 732	0.07	1.0	4.00e-03	15.7	15.7	15.7	15.7	-32.8	-4.2	-11.6	-1.572e+04	-4676.2	-1.281e+04
1	ok 733	0.07	0.3	2.35e-03	15.7	15.7	15.7	15.7	-14.4	1.3	-5.7	5440.7	5166.2	-4531.9
1	ok 734	0.07	0.3	1.94e-03	15.7	15.7	15.7	15.7	-15.0	-1.5	-6.1	1.037e+04	5457.5	-3351.1

M_G	Nodo	x/d	verif.	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
									daN/cm	daN/cm	daN/cm	daN	daN	daN
1	ok 735	0.07	0.4	1.67e-03	15.7	15.7	15.7	15.7	-2.6	-0.3	-7.51e-02	1.414e+04	2984.3	-190.6
1	ok 736	0.07	0.3	1.60e-03	15.7	15.7	15.7	15.7	-12.4	-1.4	7.6	1.137e+04	5509.1	2061.2
1	ok 737	0.07	0.2	1.81e-03	15.7	15.7	15.7	15.7	7.6	-0.9	4.8	7757.2	888.1	1728.7
1	ok 738	0.07	0.9	3.30e-03	15.7	15.7	15.7	15.7	-27.7	-2.9	2.1	-3.367e+04	-1.757e+04	-6345.2
1	ok 739	0.11	1.0	3.99e-03	37.7	15.7	30.1	15.7	-6.6	-40.8	-15.4	-5.728e+04	-6.738e+04	-1.341e+04
1	ok 740	0.07	0.9	3.63e-03	15.7	15.7	15.7	15.7	-38.9	-4.1	-7.1	-3.312e+04	-1.376e+04	-1276.9
1	ok 741	0.07	0.2	2.02e-03	15.7	15.7	15.7	15.7	-8.0	0.8	-4.4	6086.2	632.9	-3473.9
1	ok 742	0.07	0.3	1.59e-03	15.7	15.7	15.7	15.7	-12.6	-0.6	-3.5	1.071e+04	3156.2	-2955.8
1	ok 743	0.07	0.4	1.32e-03	15.7	15.7	15.7	15.7	-2.3	-0.3	-1.86e-02	1.515e+04	3091.6	127.2
1	ok 744	0.07	0.3	1.61e-03	15.7	15.7	15.7	15.7	-12.8	-0.6	3.4	1.042e+04	3099.1	3114.4
1	ok 745	0.07	0.2	2.04e-03	15.7	15.7	15.7	15.7	11.5	-1.1	3.9	7383.7	634.4	1943.1
1	ok 746	0.07	0.9	3.66e-03	15.7	15.7	15.7	15.7	-31.2	-3.3	2.9	-3.384e+04	-1.741e+04	-5230.0
1	ok 747	0.12	1.0	3.97e-03	38.6	15.7	30.6	15.7	-6.0	-40.8	15.2	-5.957e+04	-6.880e+04	1.308e+04
1	ok 748	0.07	0.9	3.26e-03	15.7	15.7	15.7	15.7	-34.4	-3.6	-6.2	-3.439e+04	-1.465e+04	-272.3
1	ok 749	0.07	0.2	1.79e-03	15.7	15.7	15.7	15.7	-11.9	0.6	-7.3	6365.5	5083.3	-3469.2
1	ok 750	0.07	0.3	1.59e-03	15.7	15.7	15.7	15.7	-12.3	-1.4	-7.7	1.136e+04	5523.9	-2257.9
1	ok 751	0.07	0.4	1.67e-03	15.7	15.7	15.7	15.7	-2.3	-0.3	6.51e-02	1.427e+04	3031.5	-138.1
1	ok 752	0.07	0.3	1.94e-03	15.7	15.7	15.7	15.7	-15.1	-1.5	6.1	1.042e+04	5487.6	3193.2
1	ok 753	0.07	0.2	2.37e-03	15.7	15.7	15.7	15.7	12.3	-0.8	4.3	7176.1	532.7	2144.6
1	ok 754	0.07	1.0	4.01e-03	15.7	15.7	15.7	15.7	-34.0	-3.8	3.7	-3.542e+04	-1.701e+04	-4298.3
1	ok 755	0.12	1.0	4.48e-03	41.1	15.7	33.4	15.7	-9.2	-46.5	16.9	-6.224e+04	-7.410e+04	1.492e+04
1	ok 756	0.07	0.9	2.99e-03	15.7	15.7	15.7	15.7	-30.2	-3.3	-6.2	-2.698e+04	-1.246e+04	-2175.5
1	ok 757	0.07	0.3	1.86e-03	15.7	15.7	15.7	15.7	-13.2	1.1	-4.9	5761.8	890.7	-4128.3
1	ok 758	0.07	0.4	1.57e-03	15.7	15.7	15.7	15.7	-4.0	-0.2	0.2	1.507e+04	2169.1	-2338.5
1	ok 759	0.07	0.5	1.70e-03	15.7	15.7	15.7	15.7	-14.0	-3.9	4.1	1.719e+04	7141.0	913.6
1	ok 760	0.07	0.6	2.03e-03	15.7	15.7	15.7	15.7	-12.1	-2.4	8.5	1.713e+04	7469.1	3886.3
1	ok 761	0.07	0.5	2.53e-03	15.7	15.7	15.7	15.7	-11.7	0.8	8.0	1.459e+04	8748.6	5823.4
1	ok 762	0.08	1.0	4.19e-03	15.7	19.2	15.7	18.1	24.1	0.9	-0.5	4.140e+04	4659.3	8088.3
1	ok 763	0.10	1.0	5.10e-03	33.3	15.7	30.6	15.7	-7.5	-52.1	-19.9	-3.650e+04	-6.791e+04	-1.684e+04
1	ok 764	0.07	0.8	2.67e-03	15.7	15.7	15.7	15.7	2.0	-3.3	5.9	-1613.8	-1.556e+04	-2976.6
1	ok 765	0.07	0.5	2.10e-03	15.7	15.7	15.7	15.7	-2.7	-20.0	5.4	-405.6	-2.005e+04	-3752.8
1	ok 766	0.07	0.3	9.95e-04	15.7	15.7	15.7	15.7	-1.9	-8.8	-4.6	2642.8	-5756.5	-814.1
1	ok 767	0.07	0.4	1.14e-03	15.7	15.7	15.7	15.7	-0.8	-2.6	0.5	-1.120e+04	-3710.2	-5619.5
1	ok 768	0.07	0.9	2.81e-03	15.7	15.7	15.7	15.7	-4.0	-20.1	9.0	-1.730e+04	-2.800e+04	-5105.7
1	ok 769	0.07	0.5	2.99e-03	15.7	15.7	15.7	15.7	17.2	-2.4	-2.3	1.786e+04	2594.4	-3061.2
1	ok 770	0.07	0.7	2.87e-03	15.7	15.7	15.7	15.7	19.2	1.4	-3.2	2.516e+04	2392.9	-2352.0
1	ok 771	0.07	0.6	2.77e-03	15.7	15.7	15.7	15.7	-20.9	-2.4	-5.8	2.013e+04	3737.4	-4016.0
1	ok 772	0.07	0.5	2.77e-03	15.7	15.7	15.7	15.7	-24.6	-3.5	-2.2	1.965e+04	3234.9	-1077.4
1	ok 773	0.07	0.4	2.56e-03	15.7	15.7	15.7	15.7	-21.4	-2.5	5.3	1.570e+04	3285.3	2395.1
1	ok 774	0.07	0.3	2.17e-03	15.7	15.7	15.7	15.7	-7.56e-02	0.7	0.7	1.092e+04	330.4	2842.0
1	ok 775	0.07	0.5	2.07e-03	15.7	15.7	15.7	15.7	-5.7	1.5	-7.1	-1.669e+04	-8763.9	-5526.4
1	ok 776	0.07	0.9	2.82e-03	15.7	15.7	15.7	15.7	-20.2	-19.6	-11.4	-3.060e+04	-2.429e+04	-1160.9
1	ok 777	0.07	0.5	2.52e-03	15.7	15.7	15.7	15.7	-14.6	0.2	5.1	-1.845e+04	-7654.0	5463.5
1	ok 778	0.07	0.3	2.42e-03	15.7	15.7	15.7	15.7	-21.0	0.4	-4.4	6302.2	1432.7	-3759.5
1	ok 779	0.07	0.4	2.46e-03	15.7	15.7	15.7	15.7	-21.2	-1.7	-4.6	1.274e+04	2699.7	-3144.0
1	ok 780	0.07	0.4	2.43e-03	15.7	15.7	15.7	15.7	-23.9	-2.7	-1.3	1.438e+04	2515.2	-1017.7
1	ok 781	0.07	0.4	2.23e-03	15.7	15.7	15.7	15.7	-18.7	-1.6	5.1	1.391e+04	2773.1	1917.1
1	ok 782	0.07	0.3	2.04e-03	15.7	15.7	15.7	15.7	5.5	0.6	0.3	1.175e+04	301.3	2097.0
1	ok 783	0.07	0.5	1.98e-03	15.7	15.7	15.7	15.7	-8.9	1.1	-5.9	-1.769e+04	-8141.3	-5811.0
1	ok 784	0.07	0.8	2.35e-03	15.7	15.7	15.7	15.7	-15.5	-7.1	-6.8	-2.084e+04	-3973.4	-9575.4
1	ok 785	0.07	0.5	2.11e-03	15.7	15.7	15.7	15.7	-13.0	0.7	4.8	-1.696e+04	-7584.3	5406.3
1	ok 786	0.07	0.3	1.96e-03	15.7	15.7	15.7	15.7	-13.0	-0.1	-4.6	7854.4	1485.0	-2458.8
1	ok 787	0.07	0.4	1.98e-03	15.7	15.7	15.7	15.7	-12.9	-1.1	-4.8	1.408e+04	2430.5	-1869.5
1	ok 788	0.07	0.4	1.90e-03	15.7	15.7	15.7	15.7	-1.0	-3.00e-02	8.34e-03	1.648e+04	639.9	139.2
1	ok 789	0.07	0.4	2.00e-03	15.7	15.7	15.7	15.7	-13.0	-1.1	4.8	1.378e+04	2416.6	2032.9
1	ok 790	0.07	0.3	1.98e-03	15.7	15.7	15.7	15.7	10.0	0.5	-0.1	1.132e+04	211.5	2221.0
1	ok 791	0.07	0.5	2.14e-03	15.7	15.7	15.7	15.7	-13.3	0.6	-5.0	-1.813e+04	-7745.6	-5528.9
1	ok 792	0.07	0.9	2.34e-03	15.7	15.7	15.7	15.7	-15.7	-7.0	6.5	-2.227e+04	-3685.4	9392.5
1	ok 793	0.07	0.5	1.97e-03	15.7	15.7	15.7	15.7	-8.5	1.2	5.8	-1.868e+04	-8276.1	5786.3
1	ok 794	0.07	0.3	2.03e-03	15.7	15.7	15.7	15.7	-18.6	-8.54e-02	-5.0	7479.1	1725.5	-2716.3
1	ok 795	0.07	0.4	2.22e-03	15.7	15.7	15.7	15.7	-18.6	-1.6	-5.2	1.390e+04	2765.8	-2099.8
1	ok 796	0.07	0.4	2.43e-03	15.7	15.7	15.7	15.7	-23.9	-2.7	1.3	1.448e+04	2519.5	860.7
1	ok 797	0.07	0.4	2.47e-03	15.7	15.7	15.7	15.7	-21.3	-1.7	4.6	1.280e+04	2707.6	3007.9
1	ok 798	0.07	0.3	2.43e-03	15.7	15.7	15.7	15.7	14.7	0.4	-0.3	1.193e+04	184.9	1919.0
1	ok 799	0.07	0.5	2.53e-03	15.7	15.7	15.7	15.7	-14.2	0.3	-5.0	-1.883e+04	-7656.9	-5589.4
1	ok 800	0.07	0.9	2.84e-03	15.7	15.7	15.7	15.7	-20.3	-19.7	11.6	-3.130e+04	-2.432e+04	1080.5
1	ok 801	0.07	0.5	2.07e-03	15.7	15.7	15.7	15.7	-5.3	1.6	7.0	-1.717e+04	-8762.4	5611.2
1	ok 802	0.07	0.3	2.18e-03	15.7	15.7	15.7	15.7	-21.4	-0.2	-5.1	8127.3	2097.4	-3027.8
1	ok 803	0.07	0.4	2.59e-03	15.7	15.7	15.7	15.7	-21.6	-2.5	-5.4	1.571e+04	3300.7	-2306.9
1	ok 804	0.07	0.5	2.80e-03	15.7	15.7	15.7	15.7	-24.9	-3.6	2.2	1.974e+04	3247.1	1188.0
1	ok 805	0.07	0.6	2.80e-03	15.7	15.7	15.7	15.7	-21.2	-2.4	5.9	2.025e+04	3754.6	4131.0
1	ok 806	0.07	0.7	2.87e-03	15.7	15.7	15.7	15.7	19.6	1.4	3.3	2.529e+04	2404.1	2437.4
1	ok 807	0.07	0.5	2.99e-03	15.7	15.7	15.7	15.7	8.8	-2.8	6.2	1.652e+04	4734.3	4573.0
1	ok 808	0.07	0.9	2.87e-03	15.7	15.7	15.7	15.7	-4.0	-20.4	-8.9	-1.729e+04	-2.828e+04	5322.7

M_G	Nodo	x/d	verif.	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
									daN/cm	daN/cm	daN/cm	daN	daN	daN
1	ok 809	0.07	0.4	1.14e-03	15.7	15.7	15.7	15.7	-0.7	-2.6	-0.4	-1.130e+04	-3748.6	5691.8
1	ok 810	0.07	0.3	1.00e-03	15.7	15.7	15.7	15.7	-1.9	-8.8	4.6	2648.9	-5862.9	840.3
1	ok 811	0.07	8.30e-02	4.09e-04	15.7	15.7	15.7	15.7	3.1	2.4	1.9	1185.5	2044.0	-1510.2
1	ok 812	0.07	0.3	8.46e-04	15.7	15.7	15.7	15.7	4.9	-1.3	-0.6	-1.038e+04	-2461.5	-2852.1
1	ok 813	0.07	0.5	1.66e-03	15.7	15.7	15.7	15.7	-15.4	-2.5	-4.7	-1.834e+04	-371.8	2436.1
1	ok 814	0.07	0.4	2.80e-03	15.7	15.7	15.7	15.7	8.7	-2.4	4.4	1.437e+04	1909.8	1007.6
1	ok 815	0.07	0.6	3.52e-03	15.7	15.7	15.7	15.7	17.6	-0.1	-8.60e-02	2.332e+04	303.0	-1843.7
1	ok 816	0.07	0.6	3.58e-03	15.7	15.7	15.7	15.7	1.2	0.1	-1.5	2.377e+04	680.3	-750.9
1	ok 817	0.07	0.5	3.56e-03	15.7	15.7	15.7	15.7	-2.6	2.01e-02	-1.99e-02	2.043e+04	-193.8	447.2
1	ok 818	0.07	0.4	3.29e-03	15.7	15.7	15.7	15.7	-27.4	-0.8	1.9	1.530e+04	509.8	1580.4
1	ok 819	0.07	0.3	2.78e-03	15.7	15.7	15.7	15.7	-27.8	-1.7	1.9	7846.9	1101.2	1389.3
1	ok 820	0.07	0.4	1.84e-03	15.7	15.7	15.7	15.7	-7.8	0.9	0.8	-1.474e+04	-1276.4	477.0
1	ok 821	0.07	0.7	1.31e-03	15.7	15.7	15.7	15.7	-4.2	-2.47e-02	-0.3	-2.786e+04	547.6	273.2
1	ok 822	0.07	0.5	2.21e-03	15.7	15.7	15.7	15.7	-21.2	6.87e-03	-2.4	-1.700e+04	-1667.8	-1022.5
1	ok 823	0.07	0.3	2.98e-03	15.7	15.7	15.7	15.7	-27.4	-1.1	-1.7	5748.5	1110.3	-1924.9
1	ok 824	0.07	0.4	3.02e-03	15.7	15.7	15.7	15.7	-26.8	-0.8	-1.7	1.218e+04	240.1	-2278.6
1	ok 825	0.07	0.4	3.02e-03	15.7	15.7	15.7	15.7	-0.6	1.38e-02	8.55e-03	1.525e+04	-207.7	-269.4
1	ok 826	0.07	0.4	2.81e-03	15.7	15.7	15.7	15.7	-3.6	0.2	1.0	1.504e+04	687.0	419.9
1	ok 827	0.07	0.3	2.53e-03	15.7	15.7	15.7	15.7	-4.4	-1.3	1.0	8639.6	23.9	736.9
1	ok 828	0.07	0.4	1.73e-03	15.7	15.7	15.7	15.7	-11.6	0.6	1.4	-1.650e+04	-1498.4	436.8
1	ok 829	0.07	0.7	1.11e-03	15.7	15.7	15.7	15.7	-2.6	-1.63e-02	9.50e-02	-2.543e+04	492.1	-269.9
1	ok 830	0.07	0.4	1.83e-03	15.7	15.7	15.7	15.7	-16.0	0.3	-2.0	-1.578e+04	-1615.1	-703.4
1	ok 831	0.07	0.3	2.40e-03	15.7	15.7	15.7	15.7	1.1	-1.1	-0.8	8690.2	-73.7	-709.0
1	ok 832	0.07	0.4	2.36e-03	15.7	15.7	15.7	15.7	1.9	0.4	-0.8	1.526e+04	647.6	-350.9
1	ok 833	0.07	0.4	2.37e-03	15.7	15.7	15.7	15.7	-0.5	7.86e-03	-9.43e-03	1.646e+04	-212.4	243.4
1	ok 834	0.07	0.4	2.38e-03	15.7	15.7	15.7	15.7	2.0	0.4	0.8	1.496e+04	648.1	399.5
1	ok 835	0.07	0.3	2.41e-03	15.7	15.7	15.7	15.7	1.2	-1.1	0.8	8003.0	-64.6	734.8
1	ok 836	0.07	0.5	1.86e-03	15.7	15.7	15.7	15.7	-16.4	0.3	1.9	-1.704e+04	-1594.6	684.9
1	ok 837	0.07	0.7	1.12e-03	15.7	15.7	15.7	15.7	-2.7	-2.00e-02	-0.1	-2.765e+04	524.0	254.2
1	ok 838	0.07	0.5	1.72e-03	15.7	15.7	15.7	15.7	-11.2	0.5	-1.5	-1.750e+04	-1488.6	-462.7
1	ok 839	0.07	0.3	2.51e-03	15.7	15.7	15.7	15.7	-4.3	-1.3	-1.0	8248.2	20.9	-769.4
1	ok 840	0.07	0.4	2.80e-03	15.7	15.7	15.7	15.7	-3.5	0.3	-1.0	1.500e+04	684.6	-466.0
1	ok 841	0.07	0.4	3.03e-03	15.7	15.7	15.7	15.7	-0.3	1.49e-02	1.90e-02	1.533e+04	-205.9	-217.8
1	ok 842	0.07	0.4	3.03e-03	15.7	15.7	15.7	15.7	-26.9	-0.8	1.7	1.224e+04	231.5	2270.3
1	ok 843	0.07	0.3	2.99e-03	15.7	15.7	15.7	15.7	-27.4	-1.1	1.7	5643.1	1113.7	1907.6
1	ok 844	0.07	0.5	2.21e-03	15.7	15.7	15.7	15.7	-21.1	2.11e-02	2.4	-1.795e+04	-1672.7	1000.0
1	ok 845	0.07	0.7	1.31e-03	15.7	15.7	15.7	15.7	-3.8	-2.45e-02	0.3	-2.865e+04	549.6	-277.7
1	ok 846	0.07	0.5	1.84e-03	15.7	15.7	15.7	15.7	-1.4	2.3	1.4	-1.605e+04	-600.1	712.2
1	ok 847	0.07	0.2	2.80e-03	15.7	15.7	15.7	15.7	-28.1	-1.7	-1.9	7669.8	1104.7	-1371.8
1	ok 848	0.07	0.4	3.32e-03	15.7	15.7	15.7	15.7	-27.6	-0.8	-1.9	1.530e+04	515.7	-1564.8
1	ok 849	0.07	0.5	3.61e-03	15.7	15.7	15.7	15.7	-2.5	1.83e-02	1.93e-02	2.054e+04	-194.4	-428.3
1	ok 850	0.07	0.6	3.62e-03	15.7	15.7	15.7	15.7	1.3	0.1	1.5	2.389e+04	678.2	783.0
1	ok 851	0.07	0.6	3.57e-03	15.7	15.7	15.7	15.7	18.0	-0.1	9.18e-02	2.345e+04	307.6	1872.1
1	ok 852	0.07	0.4	2.80e-03	15.7	15.7	15.7	15.7	16.8	-1.4	-0.6	1.562e+04	1359.3	224.3
1	ok 853	0.07	0.5	1.67e-03	15.7	15.7	15.7	15.7	-15.5	-2.6	4.7	-1.834e+04	-368.5	-2425.8
1	ok 854	0.07	0.3	8.46e-04	15.7	15.7	15.7	15.7	4.9	-1.3	0.6	-1.049e+04	-2476.2	2881.5
1	ok 855	0.07	8.34e-02	4.13e-04	15.7	15.7	15.7	15.7	3.2	2.4	-1.9	1184.5	2058.6	1514.0

M_G		x/d	verif.	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
									-42.64	-52.84	-22.54	-6.224e+04	-7.842e+04	-2.053e+04
		0.12	0.98	5.10e-03	41.11	19.26	35.55	22.83	24.83	42.94	22.51	4.157e+04	5.275e+04	1.701e+04

L’armatura della platea è costituita da una maglia base di 1ϕ20/20/20 inf/sup a cui si aggiungono ferri alternati con sezione variabile.

2.10.5 STATI LIMITE D' ESERCIZIO

LEGENDA TABELLA STATI LIMITE D' ESERCIZIO

In tabella vengono riportati i valori di interesse per il controllo degli stati limite d'esercizio.

In particolare vengono riportati, in relazione al tipo di elemento strutturale, i risultati relativi alle tre categorie di combinazione considerate:

- Combinazioni rare
- Combinazioni frequenti
- Combinazioni quasi permanenti.

I valori di interesse sono i seguenti:

rRfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni rare	[*normalizzato a 1*]
rRfyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni rare	[*normalizzato a 1*]
rPfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni quasi permanenti	[*normalizzato a 1*]
wR	apertura caratteristica delle fessure in combinazioni rare	[*mm*]
wF	apertura caratteristica delle fessure in combinazioni frequenti	[*mm*]
wP	apertura caratteristica delle fessure in combinazioni quasi permanenti	[*mm*]
dR	massima deformazione in combinazioni rare	
dF	massima deformazione in combinazioni frequenti	
dP	massima deformazione in combinazioni quasi permanenti	

Per ognuno dei nove valori sopra riportati viene indicata (Rif.cmb) la combinazione in cui si è verificato.

In relazione al tipo di elemento strutturale i valori sono selezionati nel modo seguente:

pilastri	**rRfck**	**rRfyk**	**rPfck**	per sezioni significative
travi	**rRfck**	**rRfyk**	**rPfck**	per sezioni significative
	wR	**wF**	**wP**	per sezioni significative
	dR	**dF**	**dP**	massimi in campata
setti e gusci	**rRfck**	**rRfyk**	**rPfck**	massimi nei nodi dell'elemento
	wR	**wF**	**wP**	massimi nei nodi dell'elemento

Si precisa che i valori di massima deformazione per travi sono riferiti al piano verticale (piano locale 1-2 con momenti flettenti 3-3).

TABELLA STATI LIMITE D' ESERCIZIO

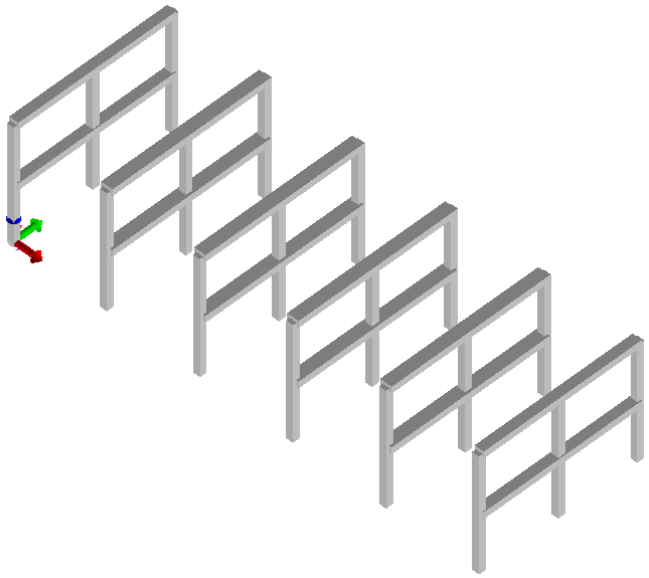
Guscio	rRfck	rRfyk	rPfck	Rif. cmb	wR	wF	wP	Rif. cmb
					mm	mm	mm	
1	0.04	0.10	0.04	88,88,115	0.0	0.0	0.0	0,0,0
2	0.06	0.19	0.08	88,88,115	0.0	0.0	0.0	0,0,0
3	0.07	0.21	0.09	88,88,115	0.0	0.0	0.0	0,0,0
4	0.10	0.31	0.13	87,87,114	0.0	0.0	0.0	0,0,0
5	0.14	0.42	0.18	87,87,114	0.0	0.0	0.0	0,0,0
6	0.14	0.42	0.18	87,87,114	0.0	0.0	0.0	0,0,0
7	0.14	0.42	0.18	87,87,114	0.0	0.0	0.0	0,0,0
8	0.11	0.33	0.14	87,87,114	0.0	0.0	0.0	0,0,0
9	0.09	0.27	0.11	88,88,115	0.0	0.0	0.0	0,0,0
10	0.21	0.63	0.26	88,88,115	0.0	0.0	0.0	0,0,0
11	0.21	0.62	0.26	88,88,115	0.0	0.0	0.0	0,0,0
12	0.09	0.28	0.11	88,88,115	0.0	0.0	0.0	0,0,0
13	0.09	0.26	0.11	87,88,114	0.0	0.0	0.0	0,0,0
14	0.10	0.31	0.13	88,88,115	0.0	0.0	0.0	0,0,0
15	0.10	0.31	0.13	88,88,115	0.0	0.0	0.0	0,0,0
16	0.09	0.27	0.11	88,88,115	0.0	0.0	0.0	0,0,0
17	0.08	0.25	0.10	87,88,114	0.0	0.0	0.0	0,0,0
18	0.19	0.58	0.24	88,88,115	0.0	0.0	0.0	0,0,0
19	0.19	0.58	0.24	88,88,115	0.0	0.0	0.0	0,0,0
20	0.08	0.23	0.10	87,88,114	0.0	0.0	0.0	0,0,0
21	0.10	0.29	0.12	88,88,115	0.0	0.0	0.0	0,0,0
22	0.11	0.34	0.14	88,88,115	0.0	0.0	0.0	0,0,0
23	0.11	0.34	0.14	88,88,115	0.0	0.0	0.0	0,0,0
24	0.09	0.28	0.12	88,88,115	0.0	0.0	0.0	0,0,0
25	0.09	0.27	0.11	87,88,114	0.0	0.0	0.0	0,0,0
26	0.21	0.62	0.26	88,88,115	0.0	0.0	0.0	0,0,0
27	0.21	0.62	0.26	88,88,115	0.0	0.0	0.0	0,0,0
28	0.09	0.27	0.11	88,88,115	0.0	0.0	0.0	0,0,0
29	0.09	0.27	0.11	88,88,115	0.0	0.0	0.0	0,0,0
30	0.11	0.32	0.13	88,88,115	0.0	0.0	0.0	0,0,0
31	0.11	0.32	0.13	88,88,115	0.0	0.0	0.0	0,0,0
32	0.09	0.26	0.11	87,87,114	0.0	0.0	0.0	0,0,0
33	0.10	0.29	0.12	88,88,115	0.0	0.0	0.0	0,0,0
34	0.21	0.64	0.26	88,88,115	0.0	0.0	0.0	0,0,0
35	0.22	0.65	0.27	88,88,115	0.0	0.0	0.0	0,0,0
36	0.09	0.28	0.12	88,88,115	0.0	0.0	0.0	0,0,0
37	0.11	0.33	0.14	87,87,114	0.0	0.0	0.0	0,0,0
38	0.14	0.42	0.18	87,87,114	0.0	0.0	0.0	0,0,0
39	0.14	0.42	0.18	87,87,114	0.0	0.0	0.0	0,0,0
40	0.14	0.42	0.18	87,87,114	0.0	0.0	0.0	0,0,0
41	0.11	0.31	0.13	87,87,114	0.0	0.0	0.0	0,0,0
42	0.07	0.21	0.09	88,88,115	0.0	0.0	0.0	0,0,0
43	0.06	0.19	0.08	88,88,115	0.0	0.0	0.0	0,0,0
44	0.04	0.11	0.04	88,88,115	0.0	0.0	0.0	0,0,0
45	0.06	0.18	0.07	88,88,115	0.0	0.0	0.0	0,0,0
46	0.19	0.53	0.24	88,88,115	0.0	0.0	0.0	0,0,0
47	0.17	0.32	0.21	87,87,114	0.0	0.0	0.0	0,0,0
48	0.11	0.32	0.14	87,87,114	0.0	0.0	0.0	0,0,0
49	0.14	0.42	0.18	87,87,114	0.0	0.0	0.0	0,0,0
50	0.14	0.42	0.18	87,87,114	0.0	0.0	0.0	0,0,0
51	0.14	0.42	0.18	87,87,114	0.0	0.0	0.0	0,0,0
52	0.11	0.33	0.14	87,87,114	0.0	0.0	0.0	0,0,0
53	0.09	0.27	0.11	88,88,115	0.0	0.0	0.0	0,0,0
54	0.30	0.60	0.37	88,88,115	0.20	0.22	0.21	88,96,115
55	0.29	0.58	0.36	88,88,115	0.19	0.21	0.20	88,96,115
56	0.09	0.26	0.11	88,88,115	0.0	0.0	0.0	0,0,0
57	0.09	0.25	0.11	87,87,114	0.0	0.0	0.0	0,0,0
58	0.10	0.31	0.13	88,88,115	0.0	0.0	0.0	0,0,0
59	0.10	0.31	0.13	88,88,115	0.0	0.0	0.0	0,0,0
60	0.09	0.26	0.11	88,88,115	0.0	0.0	0.0	0,0,0
61	0.08	0.24	0.10	88,88,115	0.0	0.0	0.0	0,0,0
62	0.29	0.61	0.36	88,88,115	0.21	0.23	0.23	88,96,115
63	0.28	0.59	0.35	88,88,115	0.19	0.22	0.21	88,96,115
64	0.08	0.24	0.10	88,88,115	0.0	0.0	0.0	0,0,0
65	0.09	0.29	0.12	88,88,115	0.0	0.0	0.0	0,0,0
66	0.11	0.34	0.14	88,88,115	0.0	0.0	0.0	0,0,0
67	0.11	0.34	0.14	88,88,115	0.0	0.0	0.0	0,0,0
68	0.09	0.28	0.11	88,88,115	0.0	0.0	0.0	0,0,0
69	0.09	0.26	0.11	88,88,114	0.0	0.0	0.0	0,0,0
70	0.30	0.60	0.37	88,88,115	0.20	0.22	0.21	88,96,115

Guscio	rRfck	rRfyk	rPfck	Rif. cmb	wR	wF	wP	Rif. cmb
					mm	mm	mm	
71	0.30	0.63	0.38	88,88,115	0.21	0.24	0.23	88,96,115
72	0.09	0.26	0.11	87,88,114	0.0	0.0	0.0	0,0,0
73	0.09	0.26	0.11	88,88,115	0.0	0.0	0.0	0,0,0
74	0.10	0.32	0.13	88,88,115	0.0	0.0	0.0	0,0,0
75	0.10	0.32	0.13	88,88,115	0.0	0.0	0.0	0,0,0
76	0.09	0.26	0.11	87,87,114	0.0	0.0	0.0	0,0,0
77	0.09	0.27	0.11	88,88,115	0.0	0.0	0.0	0,0,0
78	0.29	0.60	0.37	88,88,115	0.19	0.21	0.20	88,96,115
79	0.31	0.60	0.38	88,88,115	0.20	0.22	0.21	88,96,115
80	0.09	0.28	0.11	88,88,115	0.0	0.0	0.0	0,0,0
81	0.11	0.33	0.14	87,87,114	0.0	0.0	0.0	0,0,0
82	0.14	0.42	0.18	87,87,114	0.0	0.0	0.0	0,0,0
83	0.14	0.42	0.18	87,87,114	0.0	0.0	0.0	0,0,0
84	0.14	0.42	0.18	87,87,114	0.0	0.0	0.0	0,0,0
85	0.11	0.32	0.14	87,87,114	0.0	0.0	0.0	0,0,0
86	0.16	0.31	0.20	87,88,114	0.0	0.0	0.0	0,0,0
87	0.19	0.53	0.24	88,88,115	0.0	0.0	0.0	0,0,0
88	0.06	0.18	0.08	88,88,115	0.0	0.0	0.0	0,0,0
89	0.07	0.19	0.08	88,88,115	0.0	0.0	0.0	0,0,0
90	0.16	0.32	0.20	87,87,114	0.0	0.0	0.0	0,0,0
91	0.18	0.35	0.23	87,87,114	0.10	0.0	0.0	87,0,0
92	0.11	0.32	0.14	87,87,114	0.0	0.0	0.0	0,0,0
93	0.13	0.40	0.17	87,87,114	0.0	0.0	0.0	0,0,0
94	0.13	0.40	0.17	87,87,114	0.0	0.0	0.0	0,0,0
95	0.13	0.40	0.17	87,87,114	0.0	0.0	0.0	0,0,0
96	0.11	0.32	0.14	87,87,114	0.0	0.0	0.0	0,0,0
97	0.10	0.29	0.12	88,88,115	0.0	0.0	0.0	0,0,0
98	0.28	0.48	0.35	88,88,115	0.14	0.16	0.15	88,95,114
99	0.28	0.51	0.34	88,87,115	0.15	0.17	0.17	88,95,114
100	0.09	0.28	0.11	88,88,115	0.0	0.0	0.0	0,0,0
101	0.08	0.25	0.10	87,87,114	0.0	0.0	0.0	0,0,0
102	0.10	0.29	0.12	87,87,114	0.0	0.0	0.0	0,0,0
103	0.10	0.29	0.12	87,87,114	0.0	0.0	0.0	0,0,0
104	0.08	0.25	0.10	87,87,114	0.0	0.0	0.0	0,0,0
105	0.09	0.26	0.11	88,88,115	0.0	0.0	0.0	0,0,0
106	0.27	0.50	0.33	88,87,115	0.15	0.17	0.17	87,95,114
107	0.27	0.53	0.33	88,87,115	0.16	0.19	0.18	87,95,114
108	0.09	0.26	0.11	88,88,115	0.0	0.0	0.0	0,0,0
109	0.09	0.27	0.11	87,88,114	0.0	0.0	0.0	0,0,0
110	0.10	0.31	0.13	87,88,114	0.0	0.0	0.0	0,0,0
111	0.10	0.31	0.13	87,88,114	0.0	0.0	0.0	0,0,0
112	0.09	0.26	0.11	87,88,114	0.0	0.0	0.0	0,0,0
113	0.09	0.28	0.11	88,88,115	0.0	0.0	0.0	0,0,0
114	0.29	0.54	0.36	88,87,115	0.17	0.19	0.19	87,95,114
115	0.28	0.52	0.35	88,87,115	0.16	0.18	0.17	87,95,114
116	0.09	0.28	0.11	88,88,115	0.0	0.0	0.0	0,0,0
117	0.08	0.25	0.11	87,87,114	0.0	0.0	0.0	0,0,0
118	0.10	0.29	0.12	87,87,114	0.0	0.0	0.0	0,0,0
119	0.10	0.29	0.12	87,87,114	0.0	0.0	0.0	0,0,0
120	0.08	0.25	0.10	87,87,114	0.0	0.0	0.0	0,0,0
121	0.09	0.28	0.11	88,88,115	0.0	0.0	0.0	0,0,0
122	0.28	0.52	0.35	88,88,115	0.16	0.18	0.17	88,96,115
123	0.29	0.49	0.36	88,88,115	0.14	0.16	0.15	88,96,115
124	0.10	0.29	0.12	88,88,115	0.0	0.0	0.0	0,0,0
125	0.11	0.32	0.13	87,87,114	0.0	0.0	0.0	0,0,0
126	0.13	0.40	0.17	87,87,114	0.0	0.0	0.0	0,0,0
127	0.13	0.40	0.17	87,87,114	0.0	0.0	0.0	0,0,0
128	0.14	0.40	0.17	87,87,114	0.0	0.0	0.0	0,0,0
129	0.11	0.33	0.14	87,87,114	0.0	0.0	0.0	0,0,0
130	0.18	0.34	0.23	87,87,114	0.10	0.0	0.0	87,0,0
131	0.16	0.32	0.20	87,87,114	0.0	0.0	0.0	0,0,0
132	0.07	0.19	0.08	88,88,115	0.0	0.0	0.0	0,0,0
133	0.09	0.27	0.11	87,87,114	0.0	0.0	0.0	0,0,0
134	0.09	0.27	0.12	87,87,114	0.0	0.0	0.0	0,0,0
135	0.09	0.28	0.12	87,87,114	0.0	0.0	0.0	0,0,0
136	0.11	0.31	0.13	87,87,114	0.0	0.0	0.0	0,0,0
137	0.13	0.37	0.16	87,87,114	0.0	0.0	0.0	0,0,0
138	0.12	0.37	0.16	87,87,114	0.0	0.0	0.0	0,0,0
139	0.12	0.37	0.16	87,87,114	0.0	0.0	0.0	0,0,0
140	0.10	0.30	0.13	87,87,114	0.0	0.0	0.0	0,0,0
141	0.09	0.26	0.11	87,87,114	0.0	0.0	0.0	0,0,0
142	0.16	0.49	0.20	88,88,115	0.0	0.0	0.0	0,0,0
143	0.16	0.48	0.20	88,88,115	0.0	0.0	0.0	0,0,0
144	0.09	0.26	0.11	87,87,114	0.0	0.0	0.0	0,0,0

Guscio	rRfck	rRfyk	rPfck	Rif. cmb	wR	wF	wP	Rif. cmb
					mm	mm	mm	
145	0.08	0.23	0.10	87,87,114	0.0	0.0	0.0	0,0,0
146	0.09	0.26	0.11	87,87,114	0.0	0.0	0.0	0,0,0
147	0.09	0.26	0.11	87,87,114	0.0	0.0	0.0	0,0,0
148	0.08	0.23	0.10	87,87,114	0.0	0.0	0.0	0,0,0
149	0.08	0.25	0.10	87,87,114	0.0	0.0	0.0	0,0,0
150	0.15	0.46	0.19	88,88,115	0.0	0.0	0.0	0,0,0
151	0.15	0.46	0.19	88,88,115	0.0	0.0	0.0	0,0,0
152	0.08	0.25	0.10	87,87,114	0.0	0.0	0.0	0,0,0
153	0.08	0.25	0.10	87,87,114	0.0	0.0	0.0	0,0,0
154	0.09	0.28	0.12	87,87,114	0.0	0.0	0.0	0,0,0
155	0.09	0.28	0.12	87,87,114	0.0	0.0	0.0	0,0,0
156	0.08	0.25	0.10	87,87,114	0.0	0.0	0.0	0,0,0
157	0.09	0.25	0.11	87,87,114	0.0	0.0	0.0	0,0,0
158	0.17	0.50	0.21	88,88,115	0.0	0.0	0.0	0,0,0
159	0.17	0.50	0.21	88,88,115	0.0	0.0	0.0	0,0,0
160	0.09	0.26	0.11	87,88,115	0.0	0.0	0.0	0,0,0
161	0.08	0.24	0.10	87,87,114	0.0	0.0	0.0	0,0,0
162	0.09	0.26	0.11	87,87,114	0.0	0.0	0.0	0,0,0
163	0.09	0.26	0.11	87,87,114	0.0	0.0	0.0	0,0,0
164	0.08	0.23	0.10	87,87,114	0.0	0.0	0.0	0,0,0
165	0.09	0.27	0.11	88,88,115	0.0	0.0	0.0	0,0,0
166	0.17	0.51	0.21	88,88,115	0.0	0.0	0.0	0,0,0
167	0.17	0.52	0.21	88,88,115	0.0	0.0	0.0	0,0,0
168	0.09	0.27	0.11	88,88,115	0.0	0.0	0.0	0,0,0
169	0.10	0.30	0.13	87,87,114	0.0	0.0	0.0	0,0,0
170	0.12	0.37	0.16	87,87,114	0.0	0.0	0.0	0,0,0
171	0.13	0.38	0.16	87,87,114	0.0	0.0	0.0	0,0,0
172	0.13	0.38	0.16	87,87,114	0.0	0.0	0.0	0,0,0
173	0.11	0.32	0.13	87,87,114	0.0	0.0	0.0	0,0,0
174	0.09	0.28	0.12	87,87,114	0.0	0.0	0.0	0,0,0
175	0.09	0.27	0.12	87,87,114	0.0	0.0	0.0	0,0,0
176	0.09	0.26	0.11	87,87,114	0.0	0.0	0.0	0,0,0
177	0.11	0.34	0.14	87,87,114	0.0	0.0	0.0	0,0,0
178	0.11	0.34	0.14	87,87,114	0.0	0.0	0.0	0,0,0
179	0.11	0.33	0.14	87,87,114	0.0	0.0	0.0	0,0,0
180	0.10	0.29	0.12	87,87,114	0.0	0.0	0.0	0,0,0
181	0.11	0.34	0.14	87,87,114	0.0	0.0	0.0	0,0,0
182	0.12	0.34	0.14	87,87,114	0.0	0.0	0.0	0,0,0
183	0.11	0.34	0.14	87,87,114	0.0	0.0	0.0	0,0,0
184	0.09	0.28	0.12	87,87,114	0.0	0.0	0.0	0,0,0
185	0.10	0.30	0.13	87,87,114	0.0	0.0	0.0	0,0,0
186	0.11	0.32	0.13	87,87,114	0.0	0.0	0.0	0,0,0
187	0.11	0.32	0.13	87,87,114	0.0	0.0	0.0	0,0,0
188	0.10	0.30	0.12	87,87,114	0.0	0.0	0.0	0,0,0
189	0.09	0.26	0.11	87,87,114	0.0	0.0	0.0	0,0,0
190	0.08	0.23	0.09	87,87,114	0.0	0.0	0.0	0,0,0
191	0.08	0.23	0.09	87,87,114	0.0	0.0	0.0	0,0,0
192	0.08	0.25	0.10	87,87,114	0.0	0.0	0.0	0,0,0
193	0.10	0.29	0.12	87,87,114	0.0	0.0	0.0	0,0,0
194	0.10	0.30	0.13	87,87,114	0.0	0.0	0.0	0,0,0
195	0.10	0.30	0.13	87,87,114	0.0	0.0	0.0	0,0,0
196	0.10	0.29	0.12	87,87,114	0.0	0.0	0.0	0,0,0
197	0.08	0.25	0.11	87,87,114	0.0	0.0	0.0	0,0,0
198	0.08	0.25	0.10	87,87,114	0.0	0.0	0.0	0,0,0
199	0.08	0.25	0.10	87,87,114	0.0	0.0	0.0	0,0,0
200	0.09	0.26	0.11	87,87,114	0.0	0.0	0.0	0,0,0
201	0.10	0.29	0.12	87,87,114	0.0	0.0	0.0	0,0,0
202	0.10	0.31	0.13	87,87,114	0.0	0.0	0.0	0,0,0
203	0.10	0.31	0.13	87,87,114	0.0	0.0	0.0	0,0,0
204	0.10	0.29	0.12	87,87,114	0.0	0.0	0.0	0,0,0
205	0.09	0.26	0.11	87,87,114	0.0	0.0	0.0	0,0,0
206	0.08	0.23	0.10	87,87,114	0.0	0.0	0.0	0,0,0
207	0.08	0.23	0.10	87,87,114	0.0	0.0	0.0	0,0,0
208	0.08	0.25	0.11	87,87,114	0.0	0.0	0.0	0,0,0
209	0.10	0.29	0.12	87,87,114	0.0	0.0	0.0	0,0,0
210	0.10	0.31	0.13	87,87,114	0.0	0.0	0.0	0,0,0
211	0.10	0.31	0.13	87,87,114	0.0	0.0	0.0	0,0,0
…								
792	0.04	0.11	0.04	88,88,115	0.0	0.0	0.0	0,0,0
	rRfck	**rRfyk**	**rPfck**		**wR**	**wF**	**wP**	
Max	0.31	0.73	0.38		0.26	0.27	0.26	

2.11 STRUTTURA FABBRICATO

La struttura portante è prefabbricata in C.A.P.



2.11.1 MODELLAZIONE STRUTTURA: NODI

LEGENDA TABELLA DATI NODI

Il programma utilizza per la modellazione nodi strutturali.
Ogni nodo è individuato dalle coordinate cartesiane nel sistema di riferimento globale (X Y Z).
Ad ogni nodo è eventualmente associato un codice di vincolamento rigido, un codice di fondazione speciale, ed un set di sei molle (tre per le traslazioni, tre per le rotazioni). Le tabelle sotto riportate riflettono le succitate possibilità. In particolare per ogni nodo viene indicato in tabella:

Nodo	numero del nodo.
X	valore della coordinata X
Y	valore della coordinata Y
Z	valore della coordinata Z

Per i nodi ai quali sia associato un codice di vincolamento rigido, un codice di fondazione speciale o un set di molle viene indicato in tabella:

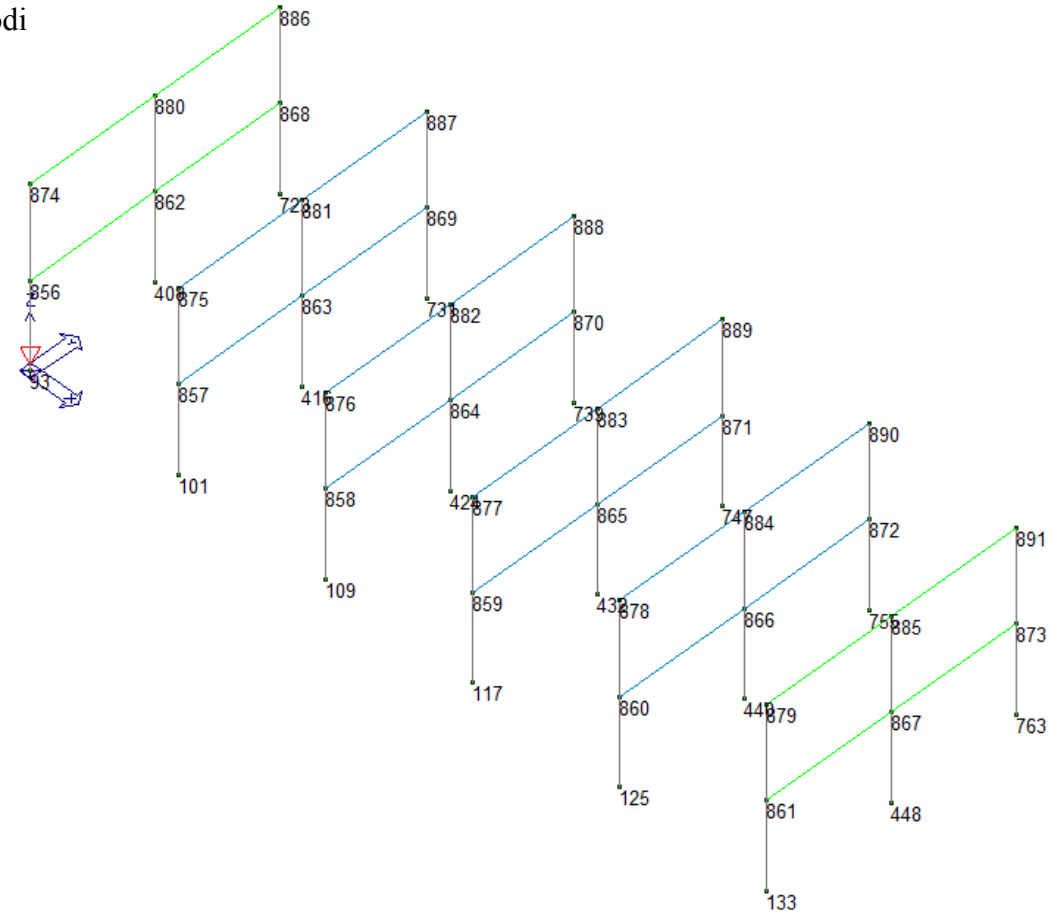
Nodo	numero del nodo.
X	valore della coordinata X
Y	valore della coordinata Y
Z	valore della coordinata Z
Note	eventuale codice di vincolo (es. v=110010 sei valori relativi ai sei gradi di libertà previsti per il nodo TxTyTzRxRyRz, il valore 1 indica che lo spostamento o rotazione relativo è impedito, il valore 0 indica che lo spostamento o rotazione relativo è libero).

Note	(FS = 1, 2,…) eventuale codice del tipo di fondazione speciale (1, 2,… fanno riferimento alle tipologie: plinto, palo, plinto su pali,…) che è collegato al nodo. (ISO = "id SIGLA") indice e sigla identificativa dell' eventuale isolatore sismico assegnato al nodo
Rig. TX	valore della rigidezza dei vincoli elastici eventualmente applicati al nodo, nello specifico TX (idem per TY, TZ, RX, RY, RZ).

TABELLA DATI NODI

Nodo	X	Y	Z	Nodo	X	Y	Z	Nodo	X	Y	Z
	cm	cm	cm		cm	cm	cm		cm	cm	cm
93	0.0	0.0	0.0	101	813.0	0.0	0.0	109	1626.0	0.0	0.0
117	2439.0	0.0	0.0	125	3252.0	0.0	0.0	133	4065.0	0.0	0.0
408	0.0	690.0	0.0	416	813.0	690.0	0.0	424	1626.0	690.0	0.0
432	2439.0	690.0	0.0	440	3252.0	690.0	0.0	448	4065.0	690.0	0.0
723	0.0	1380.0	0.0	731	813.0	1380.0	0.0	739	1626.0	1380.0	0.0
747	2439.0	1380.0	0.0	755	3252.0	1380.0	0.0	763	4065.0	1380.0	0.0
856	0.0	0.0	500.0	857	813.0	0.0	500.0	858	1626.0	0.0	500.0
859	2439.0	0.0	500.0	860	3252.0	0.0	500.0	861	4065.0	0.0	500.0
862	0.0	690.0	500.0	863	813.0	690.0	500.0	864	1626.0	690.0	500.0
865	2439.0	690.0	500.0	866	3252.0	690.0	500.0	867	4065.0	690.0	500.0
868	0.0	1380.0	500.0	869	813.0	1380.0	500.0	870	1626.0	1380.0	500.0
871	2439.0	1380.0	500.0	872	3252.0	1380.0	500.0	873	4065.0	1380.0	500.0
874	0.0	0.0	1030.0	875	813.0	0.0	1030.0	876	1626.0	0.0	1030.0
877	2439.0	0.0	1030.0	878	3252.0	0.0	1030.0	879	4065.0	0.0	1030.0
880	0.0	690.0	1030.0	881	813.0	690.0	1030.0	882	1626.0	690.0	1030.0
883	2439.0	690.0	1030.0	884	3252.0	690.0	1030.0	885	4065.0	690.0	1030.0
886	0.0	1380.0	1030.0	887	813.0	1380.0	1030.0	888	1626.0	1380.0	1030.0
889	2439.0	1380.0	1030.0	890	3252.0	1380.0	1030.0	891	4065.0	1380.0	1030.0

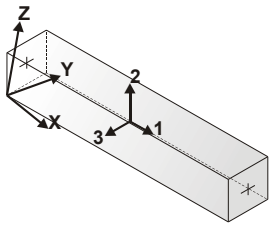
Numerazione nodi



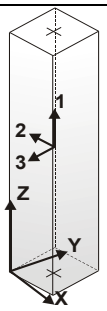
2.11.2 MODELLAZIONE STRUTTURA: ELEMENTI TRAVE

LEGENDA TABELLA DATI TRAVI

Il programma utilizza per la modellazione elementi a due nodi denominati in generale travi.
Ogni elemento trave è individuato dal nodo iniziale e dal nodo finale.
Ogni elemento è caratterizzato da un insieme di proprietà riportate in tabella che ne completano la modellazione.



orientamento elementi 2D non verticali



orientamento elementi 2D verticali

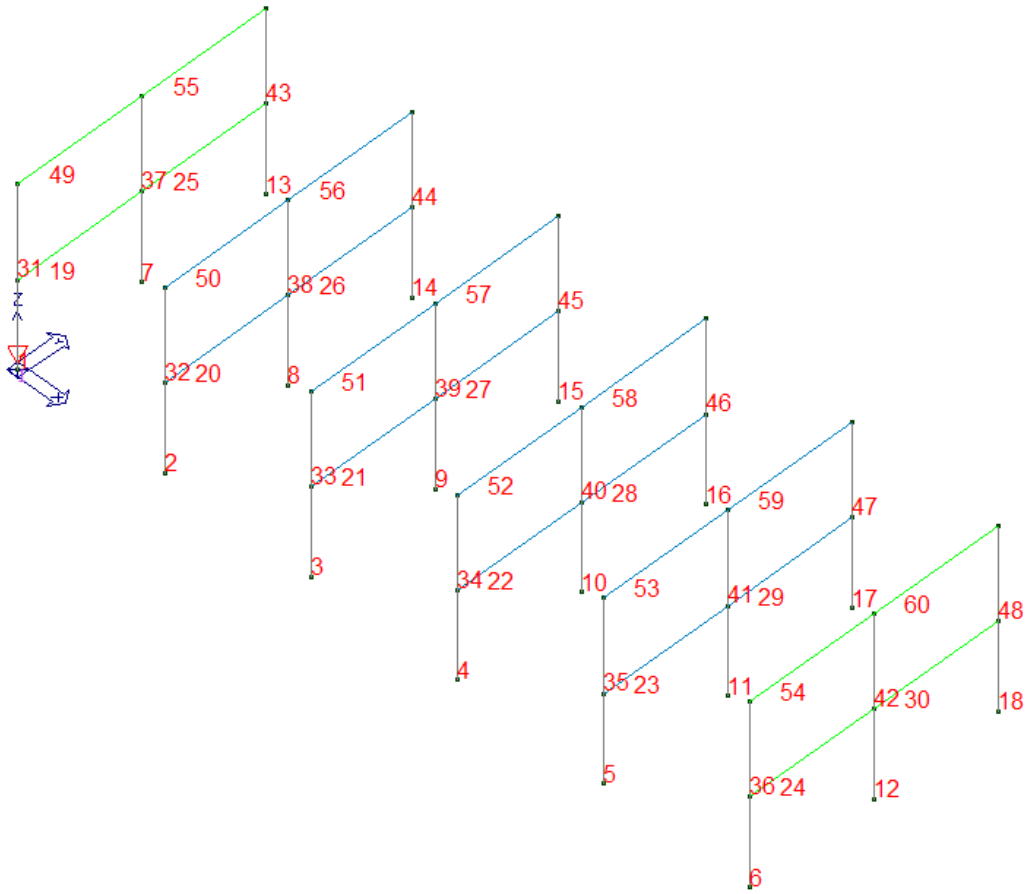
In particolare per ogni elemento viene indicato in tabella:

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

TABELLA DATI TRAVI

Elem.	Note	Nodo I	Nodo J	Mat.	Sez.	Rotaz. gradi	Svincolo I	Svincolo J	Wink V daN/cm3	Wink O daN/cm3
1	Pilas.	93	856	7	1					
2	Pilas.	101	857	7	1					
3	Pilas.	109	858	7	1					
4	Pilas.	117	859	7	1					
5	Pilas.	125	860	7	1					
6	Pilas.	133	861	7	1					
7	Pilas.	408	862	7	1					
8	Pilas.	416	863	7	1					
9	Pilas.	424	864	7	1					
10	Pilas.	432	865	7	1					
11	Pilas.	440	866	7	1					
12	Pilas.	448	867	7	1					
13	Pilas.	723	868	7	1					
14	Pilas.	731	869	7	1					
15	Pilas.	739	870	7	1					
16	Pilas.	747	871	7	1					
17	Pilas.	755	872	7	1					
18	Pilas.	763	873	7	1					
19	Trave	856	862	7	3		000011	000011		
20	Trave	857	863	7	2		000011	000011		
21	Trave	858	864	7	2		000011	000011		
22	Trave	859	865	7	2		000011	000011		
23	Trave	860	866	7	2		000011	000011		
24	Trave	861	867	7	3		000011	000011		
25	Trave	862	868	7	3		000011	000011		
26	Trave	863	869	7	2		000011	000011		
27	Trave	864	870	7	2		000011	000011		
28	Trave	865	871	7	2		000011	000011		
29	Trave	866	872	7	2		000011	000011		
30	Trave	867	873	7	3		000011	000011		
31	Pilas.	856	874	7	1					
32	Pilas.	857	875	7	1					
33	Pilas.	858	876	7	1					
34	Pilas.	859	877	7	1					
35	Pilas.	860	878	7	1					
36	Pilas.	861	879	7	1					
37	Pilas.	862	880	7	1					
38	Pilas.	863	881	7	1					
39	Pilas.	864	882	7	1					
40	Pilas.	865	883	7	1					
41	Pilas.	866	884	7	1					
42	Pilas.	867	885	7	1					
43	Pilas.	868	886	7	1					
44	Pilas.	869	887	7	1					
45	Pilas.	870	888	7	1					
46	Pilas.	871	889	7	1					
47	Pilas.	872	890	7	1					
48	Pilas.	873	891	7	1					
49	Trave	874	880	7	3		000011	000011		
50	Trave	875	881	7	2		000011	000011		
51	Trave	876	882	7	2		000011	000011		
52	Trave	877	883	7	2		000011	000011		
53	Trave	878	884	7	2		000011	000011		
54	Trave	879	885	7	3		000011	000011		
55	Trave	880	886	7	3		000011	000011		
56	Trave	881	887	7	2		000011	000011		
57	Trave	882	888	7	2		000011	000011		
58	Trave	883	889	7	2		000011	000011		
59	Trave	884	890	7	2		000011	000011		
60	Trave	885	891	7	3		000011	000011		

Numerazione elementi trave



2.11.3 VERIFICHE ELEMENTI TRAVE C.A.

LEGENDA TABELLA VERIFICHE ELEMENTI TRAVE C.A.

In tabella vengono riportati per ogni elemento il numero dello stesso ed il codice di verifica.

Nel caso in cui si sia proceduto alla progettazione con il metodo degli stati limite vengono riportati il rapporto x/d, le verifiche per sollecitazioni proporzionali e la verifica per compressione media con l'indicazione delle combinazioni in cui si sono attinti i rispettivi valori.

Per gli elementi tipo pilastro sono riportati numero e diametro dei ferri di vertice, numero e diametro di ferri disposti lungo i lati L1 (paralleli alla base della sezione) e lungo i lati L2 (paralleli all'altezza della sezione).

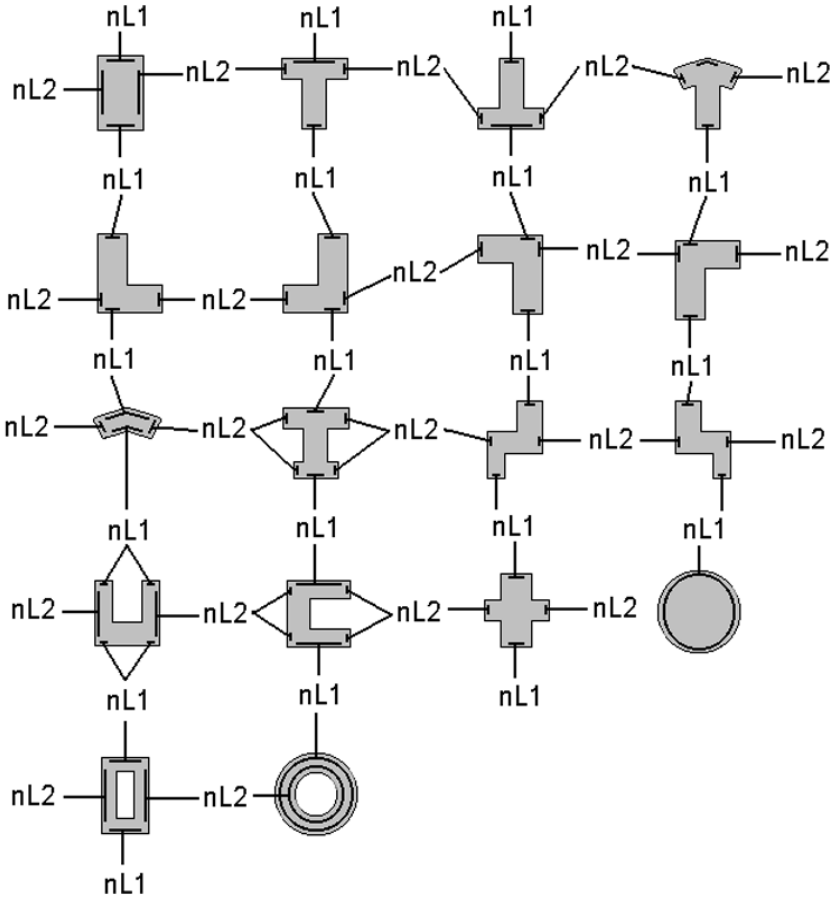
Per gli elementi tipo trave sono riportati infine le quantità di armatura inferiore e superiore.

I simboli utilizzati con il metodo degli stati limite assumono il seguente significato:

r. snell.	Rapporto λ su λ^*: valore superiore a 1 per elementi snelli, caso in cui viene effettuata la verifica con il metodo diretto dello stato di equilibrio
Verifica(verif.)	rapporto Sd/Su con sollecitazioni ultime proporzionali o a sforzo normale costante: valore minore o uguale a 1 per verifica positiva
ver.sis	rapporto Nd/Nu con Nu calcolato come al punto 7.4.4.2.2.1; valore minore o uguale a 1 per verifica positiva
ver.V/T	rapporto Sd/Su con sollecitazioni taglianti e torcenti proporzionali valore minore o uguale a 1 per verifica positiva
x/d	rapporto tra posizione dell'asse neutro e altezza utile alla rottura della sezione (per sola flessione)

Per gli elementi progettati secondo il criterio della gerarchia delle resistenze (pilastri e travi) si riporta una ulteriore tabella di seguito descritta:

M negativo i	Valore del momento resistente negativo (positivo) all' estremità iniziale i (finale f) della trave
V M-i M+f	Taglio generato dai momenti resistenti negativo i e positivo f (positivo i e negativo f)
V totale	Massimo valore assoluto ottenuto per combinazione del taglio isostatico e dei tagli concomitanti (p.to 7.4.4.1.1.)
Verif. V	Rapporto tra il taglio massimo e Vr1 (p.to 7.4.4.1.2.2);
Sovr. 2-2 i	Sovraresistenza del pilastro (come da formula 7.4.4). Rapporto tra i momenti resistenti delle travi e dei pilastri. Il valore del fattore rispettivamente per il momento 2-2 (3-3) alla base i ed alla sommità f del pilastro deve essere maggiore del gammaRd adottato
M 2-2 i	Valore del momento resistente rispettivamente per 2-2 (3-3) alla base i ed alla sommità f del pilastro (massimo momento in presenza dello sforzo normale di calcolo)
Luce per V	Luce di calcolo per la definizione del taglio (generato dai momenti resistenti)
V M2-2	Valore del taglio generato dai momenti resistenti 2-2 (3-3)



schema della distribuzione delle armature longitudinali

TABELLA VERIFICHE ELEMENTI TRAVE C.A.

					M_P= 1	**X=0.0**	**Y=0.0**					
Pilas.	Note	Stato	Quota cm	%Af	r. snell.	Armat. long.	verif.	ver.sis	Staffe L=cm	v V/T cls	v V/T acc	Rif. cmb
1	s=1,m=7	ok,ok	0.0	3.02	0.52	4d24 10+10 d24	0.92	0.13	3+3d10/8 L=88	0.46	0.41	43,45,23,17
			250.0	2.01	0.52	4d24 6+6 d24	0.92	0.113	+3d10/15 L=324	0.46	0.77	43,45,23,17
	[b=1.0;1.0]		500.0	2.01	0.52	4d24 6+6 d24	0.62	0.10	3+3d10/8 L=88	0.47	0.41	42,45,23,17
31	s=1,m=7	ok,ok	500.0	2.01	0.52	4d24 6+6 d24	0.70	0.06	3+3d10/8 L=96	0.31	0.26	42,45,36,17
			765.0	2.01	0.52	4d24 6+6 d24	0.34	0.053	+3d10/25 L=338	0.31	0.81	42,45,36,17
	[b=1.0;1.0]		1030.0	2.01	0.52	4d24 6+6 d24	0.10	0.03	3+3d10/8 L=96	0.31	0.26	39,45,36,17
					M_P= 2	**X=813.0**	**Y=0.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	verif.	ver.sis	Staffe	v V/T cls	v V/T acc	Rif. cmb
2	s=1,m=7	ok,ok	0.0	2.51	0.88	4d24 8+8 d24	0.96	0.20	3+3d10/8 L=88	0.41	0.38	43,42,36,17
			250.0	2.01	0.88	4d24 6+6 d24	0.81	0.193	+3d10/20 L=324	0.41	0.96	43,42,36,17
	[b=1.0;1.0]		500.0	2.01	0.88	4d24 6+6 d24	0.53	0.17	3+3d10/8 L=88	0.42	0.38	42,42,36,17
32	s=1,m=7	ok,ok	500.0	2.01	0.36	4d24 6+6 d24	0.64	0.09	3+3d10/8 L=96	0.32	0.27	42,41,33,17
			765.0	2.01	0.36	4d24 6+6 d24	0.30	0.083	+3d10/25 L=338	0.32	0.85	42,41,33,17
	[b=1.0;1.0]		1030.0	2.01	0.36	4d24 6+6 d24	0.13	0.06	3+3d10/8 L=96	0.32	0.27	36,41,33,17
					M_P= 3	**X=1626.0**	**Y=0.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	verif.	ver.sis	Staffe	v V/T cls	v V/T acc	Rif. cmb
3	s=1,m=7	ok,ok	0.0	2.01	0.66	4d24 6+6 d24	0.99	0.19	3+3d10/8 L=88	0.36	0.33	23,41,36,17
			250.0	2.01	0.66	4d24 6+6 d24	0.73	0.183	+3d10/20 L=324	0.36	0.83	23,41,36,17
	[b=1.0;1.0]		500.0	2.01	0.66	4d24 6+6 d24	0.49	0.16	3+3d10/8 L=88	0.37	0.33	42,41,36,17
33	s=1,m=7	ok,ok	500.0	2.01	0.35	4d24 6+6 d24	0.58	0.09	3+3d10/8 L=96	0.32	0.27	42,41,36,17
			765.0	2.01	0.35	4d24 6+6 d24	0.27	0.083	+3d10/25 L=338	0.32	0.85	42,41,36,17
	[b=1.0;1.0]		1030.0	2.01	0.35	4d24 6+6 d24	0.13	0.06	3+3d10/8 L=96	0.32	0.27	36,41,36,17

					M_P= 4	**X=2439.0**	**Y=0.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	verif.	ver.sis	Staffe	v V/T cls	v V/T acc	Rif. cmb
4	s=1,m=7	ok,ok	0.0	2.01	0.70	4d24 6+6 d24	0.98	0.20	3+3d10/8 L=88	0.36	0.33	17,35,36,17
			250.0	2.01	0.70	4d24 6+6 d24	0.71	0.193	+3d10/20 L=324	0.36	0.84	17,35,36,17
	[b=1.0;1.0]		500.0	2.01	0.70	4d24 6+6 d24	0.48	0.17	3+3d10/8 L=88	0.37	0.33	38,35,36,17
34	s=1,m=7	ok,ok	500.0	2.01	0.35	4d24 6+6 d24	0.58	0.09	3+3d10/8 L=96	0.32	0.27	36,34,33,17
			765.0	2.01	0.35	4d24 6+6 d24	0.27	0.083	+3d10/25 L=338	0.32	0.85	36,34,33,17
	[b=1.0;1.0]		1030.0	2.01	0.35	4d24 6+6 d24	0.13	0.06	3+3d10/8 L=96	0.32	0.27	33,34,33,17
					M_P= 5	**X=3252.0**	**Y=0.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	verif.	ver.sis	Staffe	v V/T cls	v V/T acc	Rif. cmb
5	s=1,m=7	ok,ok	0.0	2.51	0.89	4d24 8+8 d24	0.96	0.20	3+3d10/8 L=88	0.41	0.38	33,36,33,17
			250.0	2.01	0.89	4d24 6+6 d24	0.81	0.193	+3d10/20 L=324	0.41	0.96	33,36,33,17
	[b=1.0;1.0]		500.0	2.01	0.89	4d24 6+6 d24	0.53	0.17	3+3d10/8 L=88	0.42	0.38	36,36,33,17
35	s=1,m=7	ok,ok	500.0	2.01	0.35	4d24 6+6 d24	0.64	0.09	3+3d10/8 L=96	0.32	0.27	36,33,36,33
			765.0	2.01	0.35	4d24 6+6 d24	0.30	0.083	+3d10/25 L=338	0.32	0.85	36,33,36,33
	[b=1.0;1.0]		1030.0	2.01	0.35	4d24 6+6 d24	0.13	0.06	3+3d10/8 L=96	0.32	0.27	36,33,36,33
					M_P= 6	**X=4065.0**	**Y=0.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	verif.	ver.sis	Staffe	v V/T cls	v V/T acc	Rif. cmb
6	s=1,m=7	ok,ok	0.0	3.02	0.53	4d24 10+10 d24	0.93	0.13	3+3d10/8 L=88	0.46	0.41	33,37,17,17
			250.0	2.01	0.53	4d24 6+6 d24	0.93	0.113	+3d10/15 L=324	0.46	0.77	33,37,17,17
	[b=1.0;1.0]		500.0	2.01	0.53	4d24 6+6 d24	0.63	0.10	3+3d10/8 L=88	0.47	0.41	36,37,17,17
36	s=1,m=7	ok,ok	500.0	2.01	0.45	4d24 6+6 d24	0.71	0.06	3+3d10/8 L=96	0.31	0.26	36,37,42,17
			765.0	2.01	0.45	4d24 6+6 d24	0.34	0.053	+3d10/25 L=338	0.31	0.81	36,37,42,17
	[b=1.0;1.0]		1030.0	2.01	0.45	4d24 6+6 d24	0.10	0.03	3+3d10/8 L=96	0.31	0.26	38,37,42,17
					M_P= 7	**X=0.0**	**Y=690.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	verif.	ver.sis	Staffe	v V/T cls	v V/T acc	Rif. cmb
7	s=1,m=7	ok,ok	0.0	3.02	0.74	4d24 10+10 d24	0.91	0.19	3+3d10/8 L=88	0.46	0.43	45,31,22,17
			250.0	2.01	0.74	4d24 6+6 d24	0.86	0.183	+3d10/15 L=324	0.46	0.81	45,31,22,17
	[b=1.0;1.0]		500.0	2.01	0.74	4d24 6+6 d24	0.55	0.17	3+3d10/8 L=88	0.47	0.43	43,31,22,17
37	s=1,m=7	ok,ok	500.0	2.01	0.35	4d24 6+6 d24	0.62	0.09	3+3d10/8 L=96	0.30	0.27	43,29,32,17
			765.0	2.01	0.35	4d24 6+6 d24	0.32	0.083	+3d10/25 L=338	0.30	0.85	43,29,32,17
	[b=1.0;1.0]		1030.0	2.01	0.35	4d24 6+6 d24	0.03	0.07	3+3d10/8 L=96	0.31	0.27	3,29,32,17
					M_P= 8	**X=813.0**	**Y=690.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	verif.	ver.sis	Staffe	v V/T cls	v V/T acc	Rif. cmb
8	s=1,m=7	ok,ok	0.0	2.51	0.68	4d24 8+8 d24	0.89	0.30	3+3d10/8 L=88	0.42	0.43	43,22,23,17
			250.0	2.01	0.68	4d24 6+6 d24	0.72	0.293	+3d10/15 L=324	0.42	0.80	43,22,23,17
	[b=1.0;1.0]		500.0	2.01	0.68	4d24 6+6 d24	0.44	0.29	3+3d10/8 L=88	0.42	0.43	45,22,23,17
38	s=1,m=7	ok,ok	500.0	2.01	0.42	4d24 6+6 d24	0.53	0.13	3+3d10/8 L=96	0.30	0.29	45,22,23,33
			765.0	2.01	0.42	4d24 6+6 d24	0.27	0.133	+3d10/25 L=338	0.30	0.89	45,22,23,33
	[b=1.0;1.0]		1030.0	2.01	0.42	4d24 6+6 d24	0.06	0.12	3+3d10/8 L=96	0.31	0.29	8,22,23,33
					M_P= 9	**X=1626.0**	**Y=690.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	verif.	ver.sis	Staffe	v V/T cls	v V/T acc	Rif. cmb
9	s=1,m=7	ok,ok	0.0	2.01	0.64	4d24 6+6 d24	0.90	0.28	3+3d10/8 L=88	0.37	0.37	43,21,32,17
			250.0	2.01	0.64	4d24 6+6 d24	0.65	0.283	+3d10/20 L=324	0.37	0.93	43,21,32,17
	[b=1.0;1.0]		500.0	2.01	0.64	4d24 6+6 d24	0.40	0.27	3+3d10/8 L=88	0.37	0.37	45,21,32,17
39	s=1,m=7	ok,ok	500.0	2.01	0.42	4d24 6+6 d24	0.48	0.13	3+3d10/8 L=96	0.30	0.29	45,24,22,17
			765.0	2.01	0.42	4d24 6+6 d24	0.24	0.133	+3d10/25 L=338	0.30	0.89	45,24,22,17
	[b=1.0;1.0]		1030.0	2.01	0.42	4d24 6+6 d24	0.06	0.12	3+3d10/8 L=96	0.30	0.29	3,24,22,17
					M_P= 10	**X=2439.0**	**Y=690.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	verif.	ver.sis	Staffe	v V/T cls	v V/T acc	Rif. cmb
10	s=1,m=7	ok,ok	0.0	2.01	0.66	4d24 6+6 d24	0.89	0.30	3+3d10/8 L=88	0.37	0.38	39,23,17,17
			250.0	2.01	0.66	4d24 6+6 d24	0.64	0.293	+3d10/20 L=324	0.37	0.94	39,23,17,17
	[b=1.0;1.0]		500.0	2.01	0.66	4d24 6+6 d24	0.39	0.29	3+3d10/8 L=88	0.37	0.38	33,23,17,17
40	s=1,m=7	ok,ok	500.0	2.01	0.42	4d24 6+6 d24	0.47	0.13	3+3d10/8 L=96	0.30	0.29	33,24,17,17
			765.0	2.01	0.42	4d24 6+6 d24	0.24	0.133	+3d10/25 L=338	0.30	0.89	33,24,17,17
	[b=1.0;1.0]		1030.0	2.01	0.42	4d24 6+6 d24	0.06	0.12	3+3d10/8 L=96	0.30	0.29	3,24,17,17
					M_P= 11	**X=3252.0**	**Y=690.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	verif.	ver.sis	Staffe	v V/T cls	v V/T acc	Rif. cmb
11	s=1,m=7	ok,ok	0.0	2.51	0.68	4d24 8+8 d24	0.90	0.30	3+3d10/8 L=88	0.42	0.43	33,24,17,17
			250.0	2.01	0.68	4d24 6+6 d24	0.73	0.293	+3d10/15 L=324	0.42	0.80	33,24,17,17
	[b=1.0;1.0]		500.0	2.01	0.68	4d24 6+6 d24	0.44	0.29	3+3d10/8 L=88	0.42	0.43	39,24,17,17
41	s=1,m=7	ok,ok	500.0	2.01	0.42	4d24 6+6 d24	0.53	0.13	3+3d10/8 L=96	0.30	0.29	39,22,27,17
			765.0	2.01	0.42	4d24 6+6 d24	0.27	0.133	+3d10/25 L=338	0.30	0.89	39,22,27,17
	[b=1.0;1.0]		1030.0	2.01	0.42	4d24 6+6 d24	0.06	0.12	3+3d10/8 L=96	0.31	0.29	3,22,27,17
					M_P= 12	**X=4065.0**	**Y=690.0**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	verif.	ver.sis	Staffe	v V/T cls	v V/T acc	Rif. cmb
12	s=1,m=7	ok,ok	0.0	3.02	0.72	4d24 10+10 d24	0.92	0.19	3+3d10/8 L=88	0.46	0.43	39,21,20,17
			250.0	2.01	0.72	4d24 6+6 d24	0.87	0.183	+3d10/15 L=324	0.46	0.81	39,21,20,17
	[b=1.0;1.0]		500.0	2.01	0.72	4d24 6+6 d24	0.55	0.17	3+3d10/8 L=88	0.47	0.43	33,21,20,17
42	s=1,m=7	ok,ok	500.0	2.01	0.35	4d24 6+6 d24	0.63	0.09	3+3d10/8 L=96	0.30	0.27	33,23,26,17
			765.0	2.01	0.35	4d24 6+6 d24	0.32	0.083	+3d10/25 L=338	0.30	0.85	33,23,26,17
	[b=1.0;1.0]		1030.0	2.01	0.35	4d24 6+6 d24	0.03	0.07	3+3d10/8 L=96	0.31	0.27	3,23,26,17

				M_P= 13		**X=0.0 Y=1380.0**							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	verif.	ver.sis	Staffe	v V/T cls	v V/T acc	Rif. cmb	
13	s=1,m=7	ok,ok	0.0	3.02	0.53	4d24 10+10 d24	0.93	0.13	3+3d10/8 L=88	0.46	0.41	48,43,22,17	
			250.0	2.01	0.53	4d24 6+6 d24	0.93	0.113	+3d10/15 L=324	0.46	0.77	48,43,22,17	
	[b=1.0;1.0]		500.0	2.01	0.53	4d24 6+6 d24	0.62	0.10	3+3d10/8 L=88	0.47	0.41	45,43,22,17	
43	s=1,m=7	ok,ok	500.0	2.01	0.53	4d24 6+6 d24	0.70	0.06	3+3d10/8 L=96	0.31	0.26	45,41,39,17	
			765.0	2.01	0.53	4d24 6+6 d24	0.34	0.053	+3d10/25 L=338	0.31	0.81	45,41,39,17	
	[b=1.0;1.0]		1030.0	2.01	0.53	4d24 6+6 d24	0.10	0.03	3+3d10/8 L=96	0.31	0.26	36,41,39,17	
				M_P= 14		**X=813.0 Y=1380.0**							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	verif.	ver.sis	Staffe	v V/T cls	v V/T acc	Rif. cmb	
14	s=1,m=7	ok,ok	0.0	2.51	0.88	4d24 8+8 d24	0.96	0.20	3+3d10/8 L=88	0.41	0.38	48,45,39,17	
			250.0	2.01	0.88	4d24 6+6 d24	0.81	0.193	+3d10/20 L=324	0.41	0.96	48,45,39,17	
	[b=1.0;1.0]		500.0	2.01	0.88	4d24 6+6 d24	0.53	0.17	3+3d10/8 L=88	0.42	0.38	45,45,39,17	
44	s=1,m=7	ok,ok	500.0	2.01	0.36	4d24 6+6 d24	0.64	0.09	3+3d10/8 L=96	0.32	0.27	45,45,38,17	
			765.0	2.01	0.36	4d24 6+6 d24	0.30	0.083	+3d10/25 L=338	0.32	0.85	45,45,38,17	
	[b=1.0;1.0]		1030.0	2.01	0.36	4d24 6+6 d24	0.13	0.06	3+3d10/8 L=96	0.32	0.27	39,45,38,17	
				M_P= 15		**X=1626.0 Y=1380.0**							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	verif.	ver.sis	Staffe	v V/T cls	v V/T acc	Rif. cmb	
15	s=1,m=7	ok,ok	0.0	2.01	0.66	4d24 6+6 d24	0.99	0.19	3+3d10/8 L=88	0.36	0.33	32,47,39,17	
			250.0	2.01	0.66	4d24 6+6 d24	0.73	0.183	+3d10/20 L=324	0.36	0.83	32,47,39,17	
	[b=1.0;1.0]		500.0	2.01	0.66	4d24 6+6 d24	0.48	0.16	3+3d10/8 L=88	0.37	0.33	45,47,39,17	
45	s=1,m=7	ok,ok	500.0	2.01	0.35	4d24 6+6 d24	0.58	0.09	3+3d10/8 L=96	0.32	0.27	45,45,38,33	
			765.0	2.01	0.35	4d24 6+6 d24	0.27	0.083	+3d10/25 L=338	0.32	0.85	45,45,38,33	
	[b=1.0;1.0]		1030.0	2.01	0.35	4d24 6+6 d24	0.13	0.06	3+3d10/8 L=96	0.32	0.27	38,45,38,33	
				M_P= 16		**X=2439.0 Y=1380.0**							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	verif.	ver.sis	Staffe	v V/T cls	v V/T acc	Rif. cmb	
16	s=1,m=7	ok,ok	0.0	2.01	0.69	4d24 6+6 d24	0.98	0.20	3+3d10/8 L=88	0.36	0.33	26,40,39,17	
			250.0	2.01	0.69	4d24 6+6 d24	0.71	0.193	+3d10/20 L=324	0.36	0.84	26,40,39,17	
	[b=1.0;1.0]		500.0	2.01	0.69	4d24 6+6 d24	0.48	0.17	3+3d10/8 L=88	0.37	0.33	33,40,39,17	
46	s=1,m=7	ok,ok	500.0	2.01	0.35	4d24 6+6 d24	0.58	0.09	3+3d10/8 L=96	0.32	0.27	39,39,38,17	
			765.0	2.01	0.35	4d24 6+6 d24	0.27	0.083	+3d10/25 L=338	0.32	0.85	39,39,38,17	
	[b=1.0;1.0]		1030.0	2.01	0.35	4d24 6+6 d24	0.13	0.06	3+3d10/8 L=96	0.32	0.27	38,39,38,17	
				M_P= 17		**X=3252.0 Y=1380.0**							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	verif.	ver.sis	Staffe	v V/T cls	v V/T acc	Rif. cmb	
17	s=1,m=7	ok,ok	0.0	2.51	0.89	4d24 8+8 d24	0.96	0.20	3+3d10/8 L=88	0.41	0.38	38,39,38,17	
			250.0	2.01	0.89	4d24 6+6 d24	0.81	0.193	+3d10/20 L=324	0.41	0.96	38,39,38,17	
	[b=1.0;1.0]		500.0	2.01	0.89	4d24 6+6 d24	0.53	0.17	3+3d10/8 L=88	0.42	0.38	39,39,38,17	
47	s=1,m=7	ok,ok	500.0	2.01	0.35	4d24 6+6 d24	0.64	0.09	3+3d10/8 L=96	0.32	0.27	39,37,48,33	
			765.0	2.01	0.35	4d24 6+6 d24	0.30	0.083	+3d10/25 L=338	0.32	0.85	39,37,48,33	
	[b=1.0;1.0]		1030.0	2.01	0.35	4d24 6+6 d24	0.13	0.06	3+3d10/8 L=96	0.32	0.27	38,37,48,33	
				M_P= 18		**X=4065.0 Y=1380.0**							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	verif.	ver.sis	Staffe	v V/T cls	v V/T acc	Rif. cmb	
18	s=1,m=7	ok,ok	0.0	3.02	0.52	4d24 10+10 d24	0.93	0.13	3+3d10/8 L=88	0.46	0.41	38,34,26,33	
			250.0	2.01	0.52	4d24 6+6 d24	0.93	0.113	+3d10/15 L=324	0.46	0.77	38,34,26,33	
	[b=1.0;1.0]		500.0	2.01	0.52	4d24 6+6 d24	0.63	0.10	3+3d10/8 L=88	0.47	0.41	39,34,26,33	
48	s=1,m=7	ok,ok	500.0	2.01	0.45	4d24 6+6 d24	0.71	0.06	3+3d10/8 L=96	0.31	0.26	39,33,45,17	
			765.0	2.01	0.45	4d24 6+6 d24	0.34	0.053	+3d10/25 L=338	0.31	0.81	39,33,45,17	
	[b=1.0;1.0]		1030.0	2.01	0.45	4d24 6+6 d24	0.10	0.03	3+3d10/8 L=96	0.31	0.26	33,33,45,17	

Pilas.	**%Af**	**r. snell.**	**verif.**	**ver.sis**	**v V/T cls**	**v V/T acc**
	3.02	0.89	0.99	0.30	0.47	0.96

							M_T= 1	**Z=500.0**	**P=1**	**P=13**		
Trave	Note	Pos. cm	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe L=cm	Rif. cmb
19	ok,ok	0.0	0.31	15.1	15.1	0.0	0.09	0.02	0.28	0.49	3d10/15 L=54	43,38,8
	s=3,m=7	345.0	0.69	33.2	15.1	0.0	0.13	0.95	0.15	0.0	3d10/15 L=522	5,38,8
		690.0	0.31	15.1	15.1	0.0	0.09	0.02	0.28	0.49	3d10/15 L=54	43,38,8
25	ok,ok	0.0	0.31	15.1	15.1	0.0	0.09	0.02	0.28	0.49	3d10/15 L=54	48,33,8
	s=3,m=7	345.0	0.69	33.2	15.1	0.0	0.13	0.95	0.15	0.0	3d10/15 L=522	5,33,8
		690.0	0.31	15.1	15.1	0.0	0.09	0.02	0.28	0.49	3d10/15 L=54	48,33,8
							M_T= 2	**Z=500.0**	**P=2**	**P=14**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
20	ok,ok	0.0	0.40	24.1	19.6	0.0	0.10	0.01	0.38	0.86	3d10/12 L=54	41,39,8
	s=2,m=7	345.0	1.20	72.0	19.6	0.0	0.20	0.95	0.16	0.0	3d10/15 L=522	7,39,4
		690.0	0.40	24.1	19.6	0.0	0.09	0.01	0.38	0.86	3d10/12 L=54	41,39,8
26	ok,ok	0.0	0.40	24.1	19.6	0.0	0.10	0.01	0.38	0.86	3d10/12 L=54	46,36,8
	s=2,m=7	345.0	1.20	72.0	19.6	0.0	0.20	0.95	0.16	0.0	3d10/15 L=522	7,36,4
		690.0	0.40	24.1	19.6	0.0	0.10	0.01	0.38	0.86	3d10/12 L=54	42,36,8

							M_T= 3	Z=500.0	P=3	P=15		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
21	ok,ok	0.0	0.40	24.1	19.6	0.0	0.10	0.01	0.35	0.92	3d10/15 L=54	43,39,8
	s=2,m=7	345.0	1.04	62.6	19.6	0.0	0.17	0.97	0.16	0.0	3d10/15 L=522	7,39,8
		690.0	0.40	24.1	19.6	0.0	0.10	0.01	0.35	0.92	3d10/15 L=54	43,39,8
27	ok,ok	0.0	0.40	24.1	19.6	0.0	0.10	0.01	0.35	0.92	3d10/15 L=54	48,36,8
	s=2,m=7	345.0	1.04	62.6	19.6	0.0	0.17	0.97	0.16	0.0	3d10/15 L=522	7,36,8
		690.0	0.40	24.1	19.6	0.0	0.09	0.01	0.35	0.92	3d10/15 L=54	48,36,8
							M_T= 4	Z=500.0	P=4	P=16		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
22	ok,ok	0.0	0.41	24.9	19.6	0.0	0.10	0.02	0.38	0.86	3d10/12 L=54	35,39,8
	s=2,m=7	345.0	1.20	72.0	19.6	0.0	0.20	0.95	0.16	0.0	3d10/15 L=522	5,39,8
		690.0	0.41	24.9	19.6	0.0	0.10	0.01	0.38	0.86	3d10/12 L=54	35,39,8
28	ok,ok	0.0	0.41	24.9	19.6	0.0	0.09	0.02	0.38	0.86	3d10/12 L=54	40,36,8
	s=2,m=7	345.0	1.20	72.0	19.6	0.0	0.20	0.95	0.16	0.0	3d10/15 L=522	5,36,8
		690.0	0.41	24.9	19.6	0.0	0.10	0.01	0.38	0.86	3d10/12 L=54	40,36,8
							M_T= 5	Z=500.0	P=5	P=17		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
23	ok,ok	0.0	0.41	24.9	19.6	0.0	0.10	0.01	0.38	0.86	3d10/12 L=54	35,39,8
	s=2,m=7	345.0	1.20	72.0	19.6	0.0	0.20	0.95	0.15	0.0	3d10/15 L=522	7,38,8
		690.0	0.41	24.9	19.6	0.0	0.10	0.01	0.38	0.86	3d10/12 L=54	35,39,8
29	ok,ok	0.0	0.41	24.9	19.6	0.0	0.09	0.01	0.38	0.86	3d10/12 L=54	40,36,8
	s=2,m=7	345.0	1.20	72.0	19.6	0.0	0.20	0.95	0.15	0.0	3d10/15 L=522	7,33,8
		690.0	0.41	24.9	19.6	0.0	0.10	0.01	0.38	0.86	3d10/12 L=54	38,36,8
							M_T= 6	Z=500.0	P=6	P=18		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
24	ok,ok	0.0	0.31	15.1	15.1	0.0	0.09	0.02	0.28	0.49	3d10/15 L=54	33,39,8
	s=3,m=7	345.0	0.69	33.2	15.1	0.0	0.13	0.95	0.15	0.0	3d10/15 L=522	5,39,8
		690.0	0.31	15.1	15.1	0.0	0.09	0.02	0.28	0.49	3d10/15 L=54	33,39,8
30	ok,ok	0.0	0.31	15.1	15.1	0.0	0.09	0.02	0.28	0.49	3d10/15 L=54	38,36,8
	s=3,m=7	345.0	0.69	33.2	15.1	0.0	0.13	0.95	0.15	0.0	3d10/15 L=522	5,36,8
		690.0	0.31	15.1	15.1	0.0	0.09	0.02	0.28	0.49	3d10/15 L=54	38,36,8
							M_T= 7	Z=1030.0	P=1	P=13		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
49	ok,ok	0.0	0.31	15.1	15.1	0.0	0.09	0.01	0.28	0.40	3d10/15 L=54	43,39,8
	s=3,m=7	345.0	0.58	28.0	15.1	0.0	0.12	0.92	0.17	0.0	3d10/15 L=522	3,39,6
		690.0	0.31	15.1	15.1	0.0	0.09	0.01	0.28	0.40	3d10/15 L=54	43,39,8
55	ok,ok	0.0	0.31	15.1	15.1	0.0	0.09	0.01	0.28	0.40	3d10/15 L=54	48,36,8
	s=3,m=7	345.0	0.58	28.0	15.1	0.0	0.12	0.92	0.17	0.0	3d10/15 L=522	3,36,6
		690.0	0.31	15.1	15.1	0.0	0.09	0.01	0.28	0.40	3d10/15 L=54	48,36,8
							M_T= 8	Z=1030.0	P=2	P=14		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
50	ok,ok	0.0	0.33	19.6	19.6	0.0	0.09	9.34e-03	0.34	0.75	3d10/15 L=54	43,36,8
	s=2,m=7	345.0	0.83	50.0	19.6	0.0	0.14	0.98	0.16	0.0	3d10/15 L=522	3,36,6
		690.0	0.33	19.6	19.6	0.0	0.09	9.34e-03	0.34	0.75	3d10/15 L=54	43,36,8
56	ok,ok	0.0	0.33	19.6	19.6	0.0	0.09	9.34e-03	0.34	0.75	3d10/15 L=54	48,39,8
	s=2,m=7	345.0	0.83	50.0	19.6	0.0	0.14	0.98	0.16	0.0	3d10/15 L=522	3,39,6
		690.0	0.33	19.6	19.6	0.0	0.09	9.34e-03	0.34	0.75	3d10/15 L=54	48,39,8
							M_T= 9	Z=1030.0	P=3	P=15		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
51	ok,ok	0.0	0.33	19.6	19.6	0.0	0.09	0.01	0.34	0.75	3d10/15 L=54	43,33,8
	s=2,m=7	345.0	0.83	50.0	19.6	0.0	0.14	0.98	0.16	0.0	3d10/15 L=522	3,36,6
		690.0	0.33	19.6	19.6	0.0	0.09	0.01	0.34	0.75	3d10/15 L=54	43,33,8
57	ok,ok	0.0	0.33	19.6	19.6	0.0	0.09	0.01	0.34	0.75	3d10/15 L=54	48,38,8
	s=2,m=7	345.0	0.83	50.0	19.6	0.0	0.14	0.98	0.16	0.0	3d10/15 L=522	3,39,6
		690.0	0.33	19.6	19.6	0.0	0.09	0.01	0.34	0.75	3d10/15 L=54	48,38,8
							M_T= 10	Z=1030.0	P=4	P=16		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
52	ok,ok	0.0	0.33	19.6	19.6	0.0	0.09	0.01	0.33	0.75	3d10/15 L=54	33,33,8
	s=2,m=7	345.0	0.83	50.0	19.6	0.0	0.14	0.98	0.16	0.0	3d10/15 L=522	3,36,6
		690.0	0.33	19.6	19.6	0.0	0.09	0.01	0.33	0.75	3d10/15 L=54	33,33,8
58	ok,ok	0.0	0.33	19.6	19.6	0.0	0.09	0.01	0.33	0.75	3d10/15 L=54	38,38,8
	s=2,m=7	345.0	0.83	50.0	19.6	0.0	0.14	0.98	0.16	0.0	3d10/15 L=522	3,39,6
		690.0	0.33	19.6	19.6	0.0	0.09	0.01	0.33	0.75	3d10/15 L=54	38,38,8
							M_T= 11	Z=1030.0	P=5	P=17		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
53	ok,ok	0.0	0.33	19.6	19.6	0.0	0.09	9.61e-03	0.33	0.75	3d10/15 L=54	33,33,8
	s=2,m=7	345.0	0.83	50.0	19.6	0.0	0.14	0.98	0.16	0.0	3d10/15 L=522	3,33,6
		690.0	0.33	19.6	19.6	0.0	0.09	9.61e-03	0.33	0.75	3d10/15 L=54	33,33,8
59	ok,ok	0.0	0.33	19.6	19.6	0.0	0.09	9.61e-03	0.33	0.75	3d10/15 L=54	38,38,8
	s=2,m=7	345.0	0.83	50.0	19.6	0.0	0.14	0.98	0.16	0.0	3d10/15 L=522	3,38,6
		690.0	0.33	19.6	19.6	0.0	0.09	9.61e-03	0.33	0.75	3d10/15 L=54	38,38,8

							M_T= 12	Z=1030.0	P=6	P=18		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
54	ok,ok	0.0	0.31	15.1	15.1	0.0	0.09	0.01	0.28	0.40	3d10/15 L=54	33,38,8
	s=3,m=7	345.0	0.58	28.0	15.1	0.0	0.12	0.92	0.16	0.0	3d10/15 L=522	3,38,6
		690.0	0.31	15.1	15.1	0.0	0.09	0.01	0.28	0.40	3d10/15 L=54	33,38,8
60	ok,ok	0.0	0.31	15.1	15.1	0.0	0.09	0.01	0.28	0.40	3d10/15 L=54	38,33,8
	s=3,m=7	345.0	0.58	28.0	15.1	0.0	0.12	0.92	0.16	0.0	3d10/15 L=522	3,33,6
		690.0	0.31	15.1	15.1	0.0	0.09	0.01	0.28	0.40	3d10/15 L=54	38,33,8
			%Af	**Af inf.**	**Af. sup**	**Af long.**	**x/d**	**V N/M**	**V V/T cls**	**V V/T acc**		
Max			1.20	72.00	19.60	0.0	0.20	0.98	0.38	0.92		

2.11.4 STATI LIMITE D' ESERCIZIO

LEGENDA TABELLA STATI LIMITE D' ESERCIZIO

In tabella vengono riportati i valori di interesse per il controllo degli stati limite d'esercizio.

In particolare vengono riportati, in relazione al tipo di elemento strutturale, i risultati relativi alle tre categorie di combinazione considerate:

- Combinazioni rare
- Combinazioni frequenti
- Combinazioni quasi permanenti.

I valori di interesse sono i seguenti:

rRfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni rare [*normalizzato a 1*]	
rRfyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni rare [*normalizzato a 1*]	
rPfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni quasi permanenti [*normalizzato a 1*]	
wR	apertura caratteristica delle fessure in combinazioni rare	[*mm*]
wF	apertura caratteristica delle fessure in combinazioni frequenti	[*mm*]
wP	apertura caratteristica delle fessure in combinazioni quasi permanenti	[*mm*]
dR	massima deformazione in combinazioni rare	
dF	massima deformazione in combinazioni frequenti	
dP	massima deformazione in combinazioni quasi permanenti	

Per ognuno dei nove valori soprariportati viene indicata (Rif.cmb) la combinazione in cui si è verificato.

In relazione al tipo di elemento strutturale i valori sono selezionati nel modo seguente:

pilastri	**rRfck**	**rRfyk**	**rPfck**	per sezioni significative
travi	**rRfck**	**rRfyk**	**rPfck**	per sezioni significative
	wR	**wF**	**wP**	per sezioni significative
	dR	**dF**	**dP**	massimi in campata

setti e gusci	**rRfck**	**rRfyk**	**rPfck**	massimi nei nodi dell'elemento
	wR	**wF**	**wP**	massimi nei nodi dell'elemento

Si precisa che i valori di massima deformazione per travi sono riferiti al piano verticale (piano locale 1-2 con momenti flettenti 3-3).

TABELLA STATI LIMITE D' ESERCIZIO

Pilas.	Pos. cm	rRfck	rRfyk	rPfck	Rif. cmb	Pos. cm	rRfck	rRfyk	rPfck	Rif. cmb
1	0.0	0.13	0.13	0.16	87,87,114	250.0	0.09	0.09	0.11	87,87,114
	500.0	0.07	0.07	0.08	87,87,114					
2	0.0	0.14	0.15	0.17	87,87,114	250.0	0.11	0.12	0.14	87,87,114
	500.0	0.10	0.11	0.12	87,87,114					
3	0.0	0.14	0.15	0.17	87,87,114	250.0	0.10	0.12	0.13	87,87,114
	500.0	0.09	0.10	0.11	87,87,114					
4	0.0	0.14	0.15	0.17	87,87,114	250.0	0.11	0.12	0.13	87,87,114
	500.0	0.10	0.11	0.12	87,87,114					
5	0.0	0.14	0.15	0.17	87,87,114	250.0	0.11	0.12	0.14	87,87,114
	500.0	0.10	0.11	0.12	87,87,114					
6	0.0	0.12	0.12	0.16	87,87,114	250.0	0.09	0.09	0.11	87,87,114
	500.0	0.07	0.07	0.08	87,87,114					
7	0.0	0.13	0.14	0.17	87,87,114	250.0	0.11	0.12	0.14	87,87,114
	500.0	0.10	0.11	0.12	87,87,114					
8	0.0	0.16	0.17	0.19	88,88,115	250.0	0.16	0.18	0.19	88,88,115
	500.0	0.15	0.17	0.19	88,88,115					
9	0.0	0.15	0.17	0.18	87,87,114	250.0	0.14	0.16	0.17	87,87,114
	500.0	0.14	0.16	0.17	87,87,114					
10	0.0	0.15	0.18	0.19	88,88,115	250.0	0.15	0.17	0.18	88,88,115
	500.0	0.15	0.17	0.18	88,88,115					
11	0.0	0.16	0.18	0.19	88,88,115	250.0	0.16	0.18	0.19	88,88,115
	500.0	0.15	0.17	0.19	88,88,115					
12	0.0	0.13	0.14	0.16	87,87,114	250.0	0.11	0.12	0.14	87,87,114
	500.0	0.10	0.11	0.12	87,87,114					
13	0.0	0.13	0.13	0.16	87,87,114	250.0	0.09	0.09	0.11	87,87,114
	500.0	0.07	0.07	0.08	87,87,114					
14	0.0	0.14	0.15	0.17	87,87,114	250.0	0.11	0.12	0.14	87,87,114
	500.0	0.10	0.11	0.12	87,87,114					
15	0.0	0.14	0.15	0.17	87,87,114	250.0	0.10	0.12	0.13	87,87,114
	500.0	0.09	0.10	0.11	87,87,114					
16	0.0	0.14	0.15	0.17	87,87,114	250.0	0.11	0.12	0.13	87,87,114
	500.0	0.10	0.11	0.12	87,87,114					
17	0.0	0.14	0.15	0.17	87,87,114	250.0	0.11	0.12	0.14	87,87,114
	500.0	0.10	0.11	0.12	87,87,114					
18	0.0	0.12	0.12	0.16	87,87,114	250.0	0.09	0.09	0.11	87,87,114
	500.0	0.07	0.07	0.08	87,87,114					
31	0.0	0.05	0.05	0.06	87,87,114	265.0	0.03	0.03	0.04	87,87,114
	530.0	0.02	0.02	0.02	87,87,114					
32	0.0	0.06	0.06	0.07	87,87,114	265.0	0.04	0.05	0.06	87,87,114
	530.0	0.03	0.04	0.04	88,88,115					
33	0.0	0.05	0.06	0.07	87,87,114	265.0	0.04	0.05	0.05	87,87,114
	530.0	0.03	0.04	0.04	84,84,111					
34	0.0	0.05	0.06	0.07	87,87,114	265.0	0.04	0.05	0.05	87,87,114
	530.0	0.03	0.04	0.04	88,88,115					
35	0.0	0.06	0.06	0.07	87,87,114	265.0	0.04	0.05	0.06	87,87,114
	530.0	0.03	0.04	0.04	83,83,110					
36	0.0	0.05	0.05	0.06	87,87,114	265.0	0.03	0.03	0.04	87,87,114
	530.0	0.02	0.02	0.02	87,87,114					
37	0.0	0.06	0.06	0.07	87,87,114	265.0	0.04	0.05	0.06	87,87,114
	530.0	0.03	0.04	0.04	87,87,114					
38	0.0	0.07	0.08	0.09	88,88,115	265.0	0.07	0.07	0.08	88,88,115
	530.0	0.06	0.07	0.08	88,88,115					
39	0.0	0.07	0.08	0.08	87,87,114	265.0	0.06	0.07	0.08	87,87,114
	530.0	0.06	0.07	0.08	83,83,110					
40	0.0	0.07	0.08	0.08	87,87,114	265.0	0.06	0.07	0.08	87,87,114
	530.0	0.06	0.07	0.08	87,87,114					
41	0.0	0.07	0.08	0.09	88,88,115	265.0	0.07	0.07	0.08	88,88,115
	530.0	0.06	0.07	0.08	83,83,110					

Pilas.	Pos.	rRfck	rRfyk	rPfck	Rif. cmb	Pos.	rRfck	rRfyk	rPfck	Rif. cmb
	cm					cm				
42	0.0	0.06	0.06	0.07	87,87,114	265.0	0.04	0.05	0.06	87,87,114
	530.0	0.03	0.04	0.04	87,87,114					
43	0.0	0.05	0.05	0.06	87,87,114	265.0	0.03	0.03	0.04	87,87,114
	530.0	0.02	0.02	0.02	87,87,114					
44	0.0	0.06	0.06	0.07	87,87,114	265.0	0.04	0.05	0.06	87,87,114
	530.0	0.03	0.04	0.04	88,88,115					
45	0.0	0.05	0.06	0.07	87,87,114	265.0	0.04	0.05	0.05	87,87,114
	530.0	0.03	0.04	0.04	83,83,110					
46	0.0	0.05	0.06	0.07	87,87,114	265.0	0.04	0.05	0.05	87,87,114
	530.0	0.03	0.04	0.04	87,87,114					
47	0.0	0.06	0.06	0.07	87,87,114	265.0	0.04	0.05	0.06	87,87,114
	530.0	0.03	0.04	0.04	83,83,110					
48	0.0	0.05	0.05	0.06	87,87,114	265.0	0.03	0.03	0.04	87,87,114
	530.0	0.02	0.02	0.02	87,87,114					

Pilas.		rRfck	rRfyk	rPfck			rRfck	rRfyk	rPfck	
		0.16	0.18	0.19						

Trave	Pos.	rRfck	rRfyk	rPfck	Rif. cmb	wR	wF	wP	Rif. cmb	dR	dF	dP	Rif. cmb
	cm					mm	mm	mm		cm	cm	cm	
19	0.0	0.0	5.35e-03	0.0	0,87,0	0.0	0.0	0.0	0,0,0	-1.65	-1.68	-1.57	88,96,115
	345.0	0.37	0.78	0.44	86,87,113	0.30	0.31	0.29	87,95,114				
	690.0	0.0	5.35e-03	0.0	0,87,0	0.0	0.0	0.0	0,0,0				
20	0.0	0.0	5.03e-03	0.0	0,87,0	0.0	0.0	0.0	0,0,0	-2.12	-2.08	-1.95	88,96,115
	345.0	0.52	0.77	0.62	86,87,113	0.26	0.26	0.25	87,95,114				
	690.0	0.0	5.03e-03	0.0	0,87,0	0.0	0.0	0.0	0,0,0				
21	0.0	0.0	4.31e-03	0.0	0,87,0	0.0	0.0	0.0	0,0,0	-2.03	-1.99	-1.86	88,96,115
	345.0	0.49	0.79	0.57	86,87,113	0.28	0.28	0.26	87,95,114				
	690.0	0.0	4.31e-03	0.0	0,87,0	0.0	0.0	0.0	0,0,0				
22	0.0	0.0	4.53e-03	0.0	0,87,0	0.0	0.0	0.0	0,0,0	-2.11	-2.07	-1.95	88,96,115
	345.0	0.52	0.77	0.62	86,87,113	0.26	0.26	0.25	87,95,114				
	690.0	0.0	4.53e-03	0.0	0,87,0	0.0	0.0	0.0	0,0,0				
23	0.0	0.0	4.81e-03	0.0	0,87,0	0.0	0.0	0.0	0,0,0	-2.11	-2.07	-1.95	88,96,115
	345.0	0.52	0.77	0.62	86,87,113	0.26	0.26	0.25	87,95,114				
	690.0	0.0	4.81e-03	0.0	0,87,0	0.0	0.0	0.0	0,0,0				
24	0.0	0.0	5.37e-03	0.0	0,87,0	0.0	0.0	0.0	0,0,0	-1.65	-1.68	-1.57	88,96,115
	345.0	0.37	0.78	0.44	86,87,113	0.30	0.31	0.29	87,95,114				
	690.0	0.0	5.37e-03	0.0	0,87,0	0.0	0.0	0.0	0,0,0				
25	0.0	0.0	5.35e-03	0.0	0,87,0	0.0	0.0	0.0	0,0,0	-1.65	-1.68	-1.57	85,93,112
	345.0	0.37	0.78	0.44	86,87,113	0.30	0.31	0.29	87,95,114				
	690.0	0.0	5.35e-03	0.0	0,87,0	0.0	0.0	0.0	0,0,0				
26	0.0	0.0	5.03e-03	0.0	0,87,0	0.0	0.0	0.0	0,0,0	-2.12	-2.08	-1.95	85,93,112
	345.0	0.52	0.77	0.62	86,87,113	0.26	0.26	0.25	87,95,114				
	690.0	0.0	5.03e-03	0.0	0,87,0	0.0	0.0	0.0	0,0,0				
27	0.0	0.0	4.31e-03	0.0	0,87,0	0.0	0.0	0.0	0,0,0	-2.03	-1.99	-1.86	85,93,112
	345.0	0.49	0.79	0.57	86,87,113	0.28	0.28	0.26	87,95,114				
	690.0	0.0	4.31e-03	0.0	0,87,0	0.0	0.0	0.0	0,0,0				
28	0.0	0.0	4.53e-03	0.0	0,87,0	0.0	0.0	0.0	0,0,0	-2.11	-2.07	-1.95	85,93,112
	345.0	0.52	0.77	0.62	86,87,113	0.26	0.26	0.25	87,95,114				
	690.0	0.0	4.53e-03	0.0	0,87,0	0.0	0.0	0.0	0,0,0				
29	0.0	0.0	4.81e-03	0.0	0,87,0	0.0	0.0	0.0	0,0,0	-2.11	-2.07	-1.95	85,93,112
	345.0	0.52	0.77	0.62	86,87,113	0.26	0.26	0.25	87,95,114				
	690.0	0.0	4.81e-03	0.0	0,87,0	0.0	0.0	0.0	0,0,0				
30	0.0	0.0	5.37e-03	0.0	0,87,0	0.0	0.0	0.0	0,0,0	-1.65	-1.68	-1.57	85,93,112
	345.0	0.37	0.78	0.44	86,87,113	0.30	0.31	0.29	87,95,114				
	690.0	0.0	5.37e-03	0.0	0,87,0	0.0	0.0	0.0	0,0,0				
49	0.0	6.58e-05	7.50e-05	8.67e-05	87,87,114	0.0	0.0	0.0	0,0,0	-1.46	-1.56	-1.49	88,102,115
	345.0	0.33	0.76	0.41	87,84,114	0.28	0.31	0.30	84,98,111				
	690.0	6.58e-05	7.50e-05	8.67e-05	87,87,114	0.0	0.0	0.0	0,0,0				
50	0.0	6.18e-05	7.05e-05	7.96e-05	87,87,114	0.0	0.0	0.0	0,0,0	-1.87	-1.91	-1.83	88,102,115
	345.0	0.43	0.81	0.53	87,84,114	0.29	0.31	0.29	84,98,111				
	690.0	6.18e-05	7.05e-05	7.96e-05	87,87,114	0.0	0.0	0.0	0,0,0				
51	0.0	5.58e-05	6.37e-05	7.14e-05	87,87,114	0.0	0.0	0.0	0,0,0	-1.87	-1.91	-1.83	88,102,115
	345.0	0.43	0.81	0.53	87,84,114	0.29	0.31	0.29	84,98,111				
	690.0	5.58e-05	6.37e-05	7.14e-05	87,87,114	0.0	0.0	0.0	0,0,0				
52	0.0	5.84e-05	6.66e-05	7.49e-05	87,87,114	0.0	0.0	0.0	0,0,0	-1.87	-1.91	-1.83	88,102,115
	345.0	0.43	0.81	0.53	87,84,114	0.29	0.31	0.29	84,98,111				
	690.0	5.84e-05	6.66e-05	7.49e-05	87,87,114	0.0	0.0	0.0	0,0,0				
53	0.0	5.91e-05	6.75e-05	7.61e-05	87,87,114	0.0	0.0	0.0	0,0,0	-1.87	-1.91	-1.83	88,102,115
	345.0	0.43	0.81	0.53	87,84,114	0.29	0.31	0.29	84,98,111				
	690.0	5.91e-05	6.75e-05	7.61e-05	87,87,114	0.0	0.0	0.0	0,0,0				

Pilas.	Pos. cm	rRfck	rRfyk	rPfck	Rif. cmb		Pos. cm	rRfck	rRfyk	rPfck	Rif. cmb
54	0.0	6.58e-05	7.51e-05	8.68e-05	87,87,114	0.0	0.0	0.0	0,0,0	-1.46	-1.56	-1.49	88,102,115
	345.0	0.33	0.76	0.41	87,84,114	0.28	0.31	0.30	84,98,111				
	690.0	6.58e-05	7.51e-05	8.68e-05	87,87,114	0.0	0.0	0.0	0,0,0				
55	0.0	6.58e-05	7.50e-05	8.67e-05	87,87,114	0.0	0.0	0.0	0,0,0	-1.46	-1.56	-1.49	83,97,110
	345.0	0.33	0.76	0.41	87,84,114	0.28	0.31	0.30	84,98,111				
	690.0	6.58e-05	7.50e-05	8.67e-05	87,87,114	0.0	0.0	0.0	0,0,0				
56	0.0	6.18e-05	7.05e-05	7.96e-05	87,87,114	0.0	0.0	0.0	0,0,0	-1.87	-1.91	-1.83	83,97,110
	345.0	0.43	0.81	0.53	87,84,114	0.29	0.31	0.29	84,98,111				
	690.0	6.18e-05	7.05e-05	7.96e-05	87,87,114	0.0	0.0	0.0	0,0,0				
57	0.0	5.58e-05	6.37e-05	7.14e-05	87,87,114	0.0	0.0	0.0	0,0,0	-1.87	-1.91	-1.83	83,97,110
	345.0	0.43	0.81	0.53	87,84,114	0.29	0.31	0.29	84,98,111				
	690.0	5.58e-05	6.37e-05	7.14e-05	87,87,114	0.0	0.0	0.0	0,0,0				
58	0.0	5.84e-05	6.66e-05	7.49e-05	87,87,114	0.0	0.0	0.0	0,0,0	-1.87	-1.91	-1.83	83,97,110
	345.0	0.43	0.81	0.53	87,84,114	0.29	0.31	0.29	84,98,111				
	690.0	5.84e-05	6.66e-05	7.49e-05	87,87,114	0.0	0.0	0.0	0,0,0				
59	0.0	5.91e-05	6.75e-05	7.61e-05	87,87,114	0.0	0.0	0.0	0,0,0	-1.87	-1.91	-1.83	83,97,110
	345.0	0.43	0.81	0.53	87,84,114	0.29	0.31	0.29	84,98,111				
	690.0	5.91e-05	6.75e-05	7.61e-05	87,87,114	0.0	0.0	0.0	0,0,0				
60	0.0	6.58e-05	7.51e-05	8.68e-05	87,87,114	0.0	0.0	0.0	0,0,0	-1.46	-1.56	-1.49	83,97,110
	345.0	0.33	0.76	0.41	87,84,114	0.28	0.31	0.30	84,98,111				
	690.0	6.58e-05	7.51e-05	8.68e-05	87,87,114	0.0	0.0	0.0	0,0,0				

Trave	rRfck	rRfyk	rPfck	wR	wF	wP	dR	dF	dP
	0.52	0.81	0.62	0.30	0.31	0.30	-1.46	-1.56	-1.49