

Città di Cuneo

Settore Lavori Pubblici



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RELAZIONE DI CALCOLO DELLE STRUTTURE PORTANTI

1.	DESCRIZIONE GENERALE DELLE OPERE	2
2.	RIFERIMENTI NORMATIVI	2
3.	PRINCIPI DI MODELLAZIONE STRUTTURALE	2
4.	MATERIALI UTILIZZATI	3
5.	IMMAGINE MODELLO 3D	4
6.	CODICE DI CALCOLO	4
7.	PARAMETRI DI PROGETTO	5
8.	DATI STRUTTURA	7
9.	DATI ANALISI SISMICA	39
10.	DESCRIZIONE CASI DI CARICO	40
11.	SPOSTAMENTI NODALI	42
12.	VERIFICA GUSCI IN C.A.	43
13.	VERIFICA TRAVI CONTINUE - FONDAZIONE	91
14.	VERIFICA TRAVI CONTINUE - COPERTURA	104
15.	VERIFICA PILASTRI	116
16.	TRAVETTI SOLAIO	137

1. DESCRIZIONE GENERALE DELLE OPERE

La presente relazione ha per oggetto le strutture di un nuovo spogliatoio ad un piano fuori terra delle dimensioni in pianta, al filo esterno dei pilastri, di 16,99 m x 8,54 m, altezza netta minima di 2,7 m, con copertura pedonabile a doppia falda, nella Città di Cuneo nel quartiere "Cerialdo".

La fondazione è a platea, dello spessore di 15 cm su magrone di 10 cm, posta a circa -90 cm dal piano medio campagna. La platea è nervata con un cordolo rialzato ove è realizzato lo spiccato dei pilastri e della muratura.

La copertura è realizzata in lastre predalles con sbalzi in soletta piena.

2. RIFERIMENTI NORMATIVI

I principali riferimenti normativi di progetto sono:

- Legge 05/11/1976 n°1086 – Norme per la disciplina delle opere di conglomerato cementizio armato, normale e precompresso ed a struttura metallica;
- D.P.R. 06/06/2001 N° 380 - Testo unico delle disposizioni legislative e regolamentari in materia edilizia;
- D.M. 17/01/2018 – Aggiornamento delle "Norme Tecniche per le Costruzioni";
- C.S.LL.PP. - Circolare 21/01/2019 n° 7 – Istruzioni per l'applicazione dell'Aggiornamento delle "Norme Tecniche per le Costruzioni" di cui al D.M. 17/01/2018.

3. PRINCIPI DI MODELLAZIONE STRUTTURALE

La struttura è stata modellata con il metodo degli elementi finiti, applicato a sistemi tridimensionali. Gli elementi utilizzati sono sia monodirezionali (travi con eventuali sconnessioni interne), che bidimensionali (piastre e membrane triangolari e quadrangolari).

I vincoli sono considerati puntuali ed inseriti tramite le sei costanti di rigidità elastica, oppure come elementi asta appoggianti su suolo elastico.

Le travi e le platee di fondazione sono schematizzate come poggianti su vincoli elastici distribuiti (adottato coeff. Winkler 3 daN/cm³). Le verifiche del piano di fondazione sono state effettuate applicando, a favore di

sicurezza, un angolo di attrito di 30° (40° da relazione geologico – tecnica, datata 21/07/2010 a firma Dott. Geol. BALSAMO Denis).

Lo zero sismico è stato posto a livello della platea. Sono stati quindi definiti i piani rigidi, rispettivamente per:

- fondazione (platea);
- copertura.

I pesi propri ed i carichi di piano, relativi alla quota della zero sismico, sono stati associati alla condizione di carico con tipologia "Peso di fondazione".

4. MATERIALI UTILIZZATI

Calcestruzzo → C25/30

$$R_{ck} = 300 \text{ daN/cm}^2$$

$$f_{ck} = 249 \text{ daN/cm}^2$$

$$f_{cd} = 141.1 \text{ daN/cm}^2$$

$$g_c = 1.5$$

$$E_{cm} = 314472 \text{ daN/cm}^2$$

Acciaio per calcestruzzo → B450C

$$f_{yk} = 4500 \text{ daN/cm}^2$$

$$f_{yd} = 3913 \text{ daN/cm}^2$$

$$f_{tk} = 5175 \text{ daN/cm}^2$$

$$g_c = 1.15$$

$$E_s = 2100000 \text{ daN/cm}^2$$

5. IMMAGINE MODELLO 3D

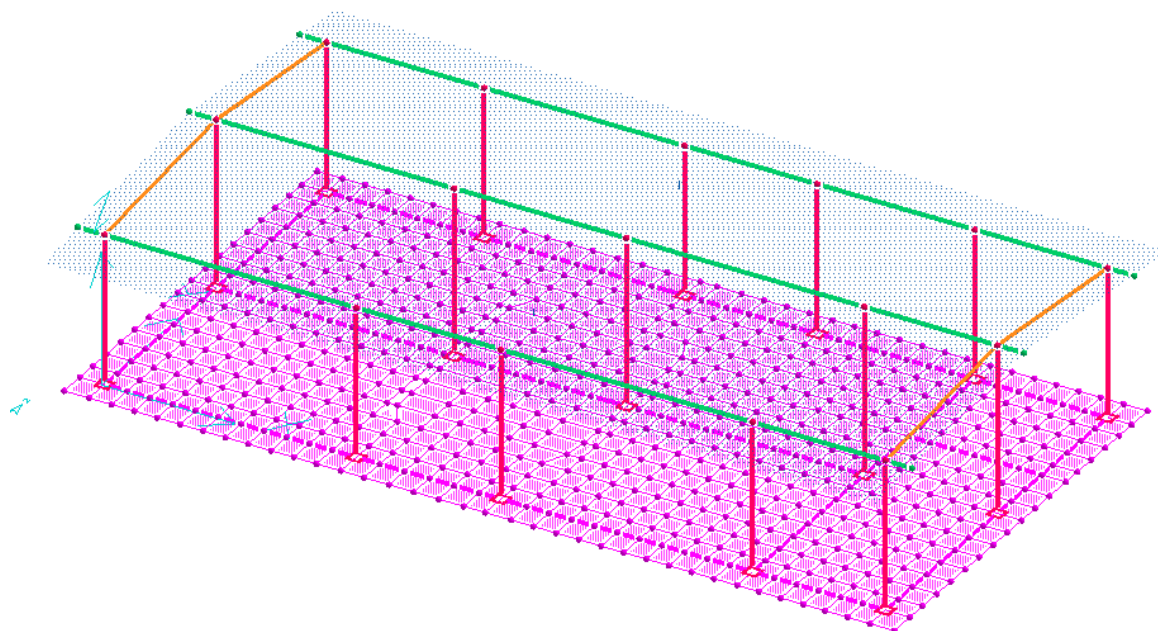


Immagine del modello FEM

6. CODICE DI CALCOLO

Per il calcolo delle sollecitazioni e per la verifica di travi e pilastri in cemento armato si è fatto ricorso all'elaboratore elettronico utilizzando in programma di calcolo DOLMEN WIN (R), versione 19.0 del 2019 prodotto, distribuito ed assistito dalla CDM DOLMEN srl.

Questa procedura è sviluppata in ambiente Windows, ed è stata scritta utilizzando i linguaggi Fortran e C. DOLMEN WIN permette l'analisi elastica lineare di strutture tridimensionali con nodi a sei gradi di libertà utilizzando un solutore ad elementi finiti.

Gli elementi considerati sono la trave, con eventuali svincoli interni o rotazione attorno al proprio asse, ed il guscio, sia rettangolare che triangolare, avente comportamento di membrana e piastra.

I carichi possono essere applicati sia ai nodi, come forze o coppie concentrate, sia sulle travi, come forze distribuite, trapezie, concentrate, come coppie e come distorsioni termiche.

I vincoli sono forniti tramite le sei costanti di rigidezza elastica. È possibile ottenere rappresentazioni grafiche di deformate e sollecitazioni della struttura. Al termine dell'elaborazione viene inoltre valutata la qualità della soluzione, in base all'uguaglianza del lavoro esterno e dell'energia di deformazione.

DOLMEN WIN permette in campo elastico lineare un'analisi dettagliata del comportamento dell'intera struttura, tenendo conto del comportamento irrigidente di setti anche complessi e solai considerati con la loro effettiva rigidezza.

Il modello di calcolo adottato è da ritenersi appropriato in quanto non sono state riscontrate labilità, le reazioni vincolari equilibrano i carichi applicati, la simmetria di carichi e struttura dà origine a sollecitazioni simmetriche.

7. PARAMETRI DI PROGETTO

CARICHI APPLICATI

- Peso proprio elementi strutturali (platea, pilastri e travi) $25,0 \text{ kN/m}^3$
- Peso proprio solaio copertura (esclusa l'incidenza travi applicata nel modello tenuto conto delle dimensioni effettiva degli elementi strutturali), compreso incidenza rompitratta, ribassamenti e cordoli) $4,5 \text{ kN/m}^2$
- Permanente (intonaco, pacchetto copertura e incidenza impianti) $1,0 \text{ kN/m}^2$
- Variabile neve $1,8 \text{ kN/m}^2$
- Vento (pressione + depressione) $0,9 \text{ kN/m}^2$ (valore cautelativo, tenuto conto che l'azione dimensionante, per le azioni orizzontali, è quella sismica).
- Tamponamento $12,0 \text{ kN/m}$
- Carichi permanenti su piano terra (escluso peso proprio platea applicato nel modello tenuto conto delle dimensioni effettive)
- Carico vespaio e getto di completamento su piano terra $3,0 \text{ kN/m}^2$
- Massetti e incidenza tramezzi su piano terra $5,0 \text{ kN/m}^2$
- Carichi accidentali su piano terra $2,0 \text{ kN/m}^2$

- Oltre a quanto sopra, sulla platea, nell'area locale impianti e portico, si è applicato ulteriore carico $8,0 \text{ kN/m}^2$ per tener conto del riempimento con materiale scavo e finitura con pavimentazioni in cls.

Il carico trasmesso dalle pareti di tamponamento, gravanti direttamente in fondazione, è stato schematizzato come carico distribuito sulle travi di fondazione.

Per quanto riguarda la partecipazione, dal punto di vista sismico, della massa spingente delle pareti, si è valutato il peso complessivo del tamponamento e lo si è ripartito come carico lineare su pilastri ed inserito tra le masse sismiche partecipanti.

8. DATI STRUTTURA

*** DATI STRUTTURA

Uni ta` di mi sura :
 LUNGHEZZE : cm
 SUPERFICI : cm2
 DATI SEZIONALI : cm
 ANGOLI : gradi
 FORZE : daN
 MOMENTI : daNcm
 CARI CHI LI NEARI : daN/cm
 CARI CHI SUPERFIC. : daN/cm2
 TENSIONI : daN/cm2
 PESI DI VOLUME : daN/cm3
 COEFF. DI WINKLER: daN/cm3
 RIGIDENZE VINCOL. : daN/cm - daNcm/rad

NODI --	-----	-----	-----	-----	num. =
Nome	Coord. X	Coord. Y	Coord. Z		
1	3.000	420.000	0.000		
2	3.000	420.000	360.000		
3	341.000	830.000	0.000		
4	341.000	830.000	320.500		
5	1393.000	420.000	0.000		
6	1393.000	420.000	360.000		
7	1678.000	420.000	0.000		
8	1678.000	420.000	360.000		
9	1393.000	5.000	0.000		
10	1393.000	5.000	320.500		
11	1678.000	5.000	0.000		
12	1678.000	5.000	320.500		
13	1678.000	830.000	0.000		
14	1678.000	830.000	320.500		
15	3.000	5.000	0.000		
16	3.000	5.000	320.500		
17	3.000	830.000	0.000		
18	3.000	830.000	320.500		
19	543.000	5.000	0.000		
20	543.000	5.000	320.500		
21	853.000	5.000	0.000		
22	853.000	5.000	320.500		
23	513.000	420.000	0.000		
24	513.000	420.000	360.000		
25	883.000	420.000	0.000		
26	883.000	420.000	360.000		
27	1055.000	830.000	0.000		
28	1055.000	830.000	320.500		
29	1393.000	830.000	0.000		
30	1393.000	830.000	320.500		
31	-55.000	420.000	360.000		
32	1735.000	420.000	360.000		
33	-55.000	830.000	320.500		
34	1735.000	830.000	320.500		
35	-55.000	5.000	320.500		
36	1735.000	5.000	320.500		
41	771.000	830.000	0.000		
42	771.000	830.000	320.500		
43	-50.000	5.000	0.000		
44	-50.000	-53.000	0.000		
45	3.000	-53.000	0.000		
46	51.800	-53.000	0.000		
47	51.800	5.000	0.000		
48	-50.000	52.500	0.000		
49	3.000	52.500	0.000		
50	1678.000	-53.000	0.000		
51	1730.000	-53.000	0.000		
52	1730.000	5.000	0.000		
53	1629.500	-53.000	0.000		
54	1629.500	5.000	0.000		
55	1678.000	52.500	0.000		
56	1730.000	52.500	0.000		
57	1678.000	888.000	0.000		
58	1730.000	830.000	0.000		
59	1730.000	888.000	0.000		
60	1629.500	830.000	0.000		
61	1629.500	888.000	0.000		

62	1678.000	783.100	0.000
63	1730.000	783.100	0.000
64	-50.000	888.000	0.000
65	-50.000	830.000	0.000
66	3.000	888.000	0.000
67	51.800	830.000	0.000
68	51.800	888.000	0.000
69	-50.000	783.100	0.000
70	3.000	783.100	0.000
71	-50.000	105.000	0.000
72	3.000	105.000	0.000
73	-50.000	157.500	0.000
74	3.000	157.500	0.000
75	-50.000	210.000	0.000
76	3.000	210.000	0.000
77	-50.000	262.500	0.000
78	3.000	262.500	0.000
79	-50.000	315.000	0.000
80	3.000	315.000	0.000
81	-50.000	367.500	0.000
82	3.000	367.500	0.000
83	-50.000	420.000	0.000
84	51.800	52.500	0.000
85	51.800	105.000	0.000
86	51.800	157.500	0.000
87	51.800	210.000	0.000
88	51.800	262.500	0.000
89	51.800	315.000	0.000
90	51.800	367.500	0.000
91	51.800	420.000	0.000
92	-50.000	471.900	0.000
93	3.000	471.900	0.000
94	-50.000	523.800	0.000
95	3.000	523.800	0.000
96	-50.000	575.600	0.000
97	3.000	575.600	0.000
98	-50.000	627.500	0.000
99	3.000	627.500	0.000
100	-50.000	679.400	0.000
101	3.000	679.400	0.000
102	-50.000	731.300	0.000
103	3.000	731.300	0.000
104	51.800	471.900	0.000
105	51.800	523.800	0.000
106	51.800	575.600	0.000
107	51.800	627.500	0.000
108	51.800	679.400	0.000
109	51.800	731.300	0.000
110	51.800	783.100	0.000
111	1629.500	52.500	0.000
112	1678.000	105.000	0.000
113	1730.000	105.000	0.000
114	1629.500	105.000	0.000
115	1678.000	157.500	0.000
116	1730.000	157.500	0.000
117	1629.500	157.500	0.000
118	1678.000	210.000	0.000
119	1730.000	210.000	0.000
120	1629.500	210.000	0.000
121	1678.000	262.500	0.000
122	1730.000	262.500	0.000
123	1629.500	262.500	0.000
124	1678.000	315.000	0.000
125	1730.000	315.000	0.000
126	1629.500	315.000	0.000
127	1678.000	367.500	0.000
128	1730.000	367.500	0.000
129	1629.500	367.500	0.000
130	1730.000	420.000	0.000
131	1629.500	420.000	0.000
132	1678.000	471.900	0.000
133	1730.000	471.900	0.000
134	1629.500	471.900	0.000
135	1678.000	523.800	0.000
136	1730.000	523.800	0.000
137	1629.500	523.800	0.000
138	1678.000	585.000	0.000
139	1730.000	585.000	0.000
140	1629.500	585.000	0.000
141	1678.000	627.500	0.000
142	1730.000	627.500	0.000
143	1629.500	627.500	0.000
144	1678.000	679.400	0.000
145	1730.000	679.400	0.000
146	1629.500	679.400	0.000

147	1678.000	731.300	0.000
148	1730.000	731.300	0.000
149	1629.500	731.300	0.000
150	1629.500	783.100	0.000
151	100.600	-53.000	0.000
152	100.600	5.000	0.000
153	149.500	-53.000	0.000
154	149.500	5.000	0.000
155	198.300	-53.000	0.000
156	198.300	5.000	0.000
157	247.100	-53.000	0.000
158	247.100	5.000	0.000
159	295.900	-53.000	0.000
160	295.900	5.000	0.000
161	344.700	-53.000	0.000
162	344.700	5.000	0.000
163	393.500	-53.000	0.000
164	393.500	5.000	0.000
165	442.400	-53.000	0.000
166	442.400	5.000	0.000
167	491.200	-53.000	0.000
168	491.200	5.000	0.000
169	543.000	-53.000	0.000
170	593.300	-53.000	0.000
171	593.300	5.000	0.000
172	491.200	52.500	0.000
173	543.000	52.500	0.000
174	442.400	52.500	0.000
175	393.500	52.500	0.000
176	344.700	52.500	0.000
177	295.900	52.500	0.000
178	247.100	52.500	0.000
179	198.300	52.500	0.000
180	149.500	52.500	0.000
181	100.600	52.500	0.000
182	100.600	830.000	0.000
183	100.600	888.000	0.000
184	149.500	830.000	0.000
185	149.500	888.000	0.000
186	198.300	830.000	0.000
187	198.300	888.000	0.000
188	247.100	830.000	0.000
189	247.100	888.000	0.000
190	295.900	830.000	0.000
191	295.900	888.000	0.000
192	341.000	888.000	0.000
193	393.500	888.000	0.000
194	393.500	830.000	0.000
195	442.400	830.000	0.000
196	442.400	888.000	0.000
197	491.200	830.000	0.000
198	491.200	888.000	0.000
199	540.000	830.000	0.000
200	540.000	888.000	0.000
201	593.300	830.000	0.000
202	593.300	888.000	0.000
203	491.200	783.100	0.000
204	540.000	783.100	0.000
205	442.400	783.100	0.000
206	393.500	783.100	0.000
207	247.100	783.100	0.000
208	295.900	783.100	0.000
209	198.300	783.100	0.000
210	149.500	783.100	0.000
211	100.600	783.100	0.000
212	100.600	105.000	0.000
213	100.600	157.500	0.000
214	100.600	210.000	0.000
215	100.600	262.500	0.000
216	100.600	315.000	0.000
217	100.600	367.500	0.000
218	100.600	420.000	0.000
219	149.500	105.000	0.000
220	149.500	157.500	0.000
221	149.500	210.000	0.000
222	149.500	262.500	0.000
223	149.500	315.000	0.000
224	149.500	367.500	0.000
225	149.500	420.000	0.000
226	198.300	105.000	0.000
227	198.300	157.500	0.000
228	198.300	210.000	0.000
229	198.300	262.500	0.000
230	198.300	315.000	0.000
231	198.300	367.500	0.000

232	198.300	420.000	0.000
233	247.100	105.000	0.000
234	247.100	157.500	0.000
235	247.100	210.000	0.000
236	247.100	262.500	0.000
237	247.100	315.000	0.000
238	247.100	367.500	0.000
239	247.100	420.000	0.000
240	295.900	105.000	0.000
241	295.900	157.500	0.000
242	295.900	210.000	0.000
243	295.900	262.500	0.000
244	295.900	315.000	0.000
245	295.900	367.500	0.000
246	295.900	420.000	0.000
247	344.700	105.000	0.000
248	344.700	157.500	0.000
249	344.700	210.000	0.000
250	344.700	262.500	0.000
251	344.700	315.000	0.000
252	344.700	367.500	0.000
253	344.700	420.000	0.000
254	393.500	105.000	0.000
255	393.500	157.500	0.000
256	393.500	210.000	0.000
257	393.500	262.500	0.000
258	393.500	315.000	0.000
259	393.500	367.500	0.000
260	393.500	420.000	0.000
261	442.400	105.000	0.000
262	442.400	157.500	0.000
263	442.400	210.000	0.000
264	442.400	262.500	0.000
265	442.400	315.000	0.000
266	442.400	367.500	0.000
267	442.400	420.000	0.000
268	491.200	105.000	0.000
269	491.200	157.500	0.000
270	491.200	210.000	0.000
271	491.200	262.500	0.000
272	491.200	315.000	0.000
273	491.200	367.500	0.000
274	491.200	420.000	0.000
275	543.000	105.000	0.000
276	543.000	157.500	0.000
277	513.000	210.000	0.000
278	513.000	262.500	0.000
279	513.000	315.000	0.000
280	513.000	367.500	0.000
281	593.300	52.500	0.000
282	593.300	105.000	0.000
283	593.300	157.500	0.000
284	593.300	210.000	0.000
285	593.300	262.500	0.000
286	593.300	315.000	0.000
287	593.300	367.500	0.000
288	593.300	420.000	0.000
289	491.200	471.900	0.000
290	513.000	471.900	0.000
291	442.400	471.900	0.000
292	393.500	471.900	0.000
293	344.700	471.900	0.000
294	295.900	471.900	0.000
295	247.100	471.900	0.000
296	198.300	471.900	0.000
297	149.500	471.900	0.000
298	100.600	471.900	0.000
299	100.600	523.800	0.000
300	100.600	575.600	0.000
301	100.600	627.500	0.000
302	100.600	679.400	0.000
303	100.600	731.300	0.000
304	149.500	523.800	0.000
305	149.500	575.600	0.000
306	149.500	627.500	0.000
307	149.500	679.400	0.000
308	149.500	731.300	0.000
309	198.300	523.800	0.000
310	198.300	575.600	0.000
311	198.300	627.500	0.000
312	198.300	679.400	0.000
313	198.300	731.300	0.000
314	247.100	523.800	0.000
315	247.100	575.600	0.000
316	247.100	627.500	0.000

317	247.100	679.400	0.000
318	247.100	731.300	0.000
319	295.900	523.800	0.000
320	295.900	575.600	0.000
321	295.900	627.500	0.000
322	295.900	679.400	0.000
323	295.900	731.300	0.000
324	344.700	523.800	0.000
325	344.700	575.600	0.000
326	341.000	627.500	0.000
327	341.000	679.400	0.000
328	341.000	731.300	0.000
329	341.000	783.100	0.000
330	393.500	523.800	0.000
331	393.500	575.600	0.000
332	442.400	523.800	0.000
333	442.400	575.600	0.000
334	393.500	627.500	0.000
335	442.400	627.500	0.000
336	393.500	679.400	0.000
337	442.400	679.400	0.000
338	393.500	731.300	0.000
339	442.400	731.300	0.000
340	491.200	523.800	0.000
341	491.200	575.600	0.000
342	491.200	627.500	0.000
343	491.200	679.400	0.000
344	491.200	731.300	0.000
345	513.000	523.800	0.000
346	513.000	575.600	0.000
347	513.000	627.500	0.000
348	540.000	679.400	0.000
349	540.000	731.300	0.000
350	593.300	471.900	0.000
351	593.300	523.800	0.000
352	593.300	575.600	0.000
353	593.300	627.500	0.000
354	593.300	679.400	0.000
355	593.300	731.300	0.000
356	593.300	783.100	0.000
357	646.700	-53.000	0.000
358	646.700	5.000	0.000
359	700.000	-53.000	0.000
360	700.000	5.000	0.000
361	753.300	-53.000	0.000
362	753.300	5.000	0.000
363	806.700	-53.000	0.000
364	806.700	5.000	0.000
365	853.000	-53.000	0.000
366	908.400	-53.000	0.000
367	908.400	5.000	0.000
368	806.700	52.500	0.000
369	853.000	52.500	0.000
370	753.300	52.500	0.000
371	700.000	52.500	0.000
372	646.700	52.500	0.000
373	646.700	830.000	0.000
374	646.700	888.000	0.000
375	700.000	830.000	0.000
376	700.000	888.000	0.000
377	771.000	888.000	0.000
378	806.700	888.000	0.000
379	806.700	830.000	0.000
380	860.000	830.000	0.000
381	860.000	888.000	0.000
382	908.400	830.000	0.000
383	908.400	888.000	0.000
384	806.700	783.100	0.000
385	860.000	783.100	0.000
386	646.700	783.100	0.000
387	700.000	783.100	0.000
388	646.700	105.000	0.000
389	646.700	157.500	0.000
390	646.700	210.000	0.000
391	646.700	262.500	0.000
392	646.700	315.000	0.000
393	646.700	367.500	0.000
394	646.700	420.000	0.000
395	700.000	105.000	0.000
396	700.000	157.500	0.000
397	700.000	210.000	0.000
398	700.000	262.500	0.000
399	700.000	315.000	0.000
400	700.000	367.500	0.000
401	700.000	420.000	0.000

402	753.300	105.000	0.000
403	753.300	157.500	0.000
404	753.300	210.000	0.000
405	753.300	262.500	0.000
406	753.300	315.000	0.000
407	753.300	367.500	0.000
408	753.300	420.000	0.000
409	806.700	105.000	0.000
410	806.700	157.500	0.000
411	806.700	210.000	0.000
412	806.700	262.500	0.000
413	806.700	315.000	0.000
414	806.700	367.500	0.000
415	806.700	420.000	0.000
416	853.000	105.000	0.000
417	853.000	157.500	0.000
418	876.000	210.000	0.000
419	883.000	262.500	0.000
420	883.000	315.000	0.000
421	883.000	367.500	0.000
422	908.400	52.500	0.000
423	908.400	105.000	0.000
424	908.400	157.500	0.000
425	908.400	210.000	0.000
426	908.400	262.500	0.000
427	908.400	315.000	0.000
428	908.400	367.500	0.000
429	908.400	420.000	0.000
430	806.700	471.900	0.000
431	883.000	471.900	0.000
432	753.300	471.900	0.000
433	700.000	471.900	0.000
434	646.700	471.900	0.000
435	646.700	523.800	0.000
436	646.700	575.600	0.000
437	646.700	627.500	0.000
438	646.700	679.400	0.000
439	646.700	731.300	0.000
440	700.000	523.800	0.000
441	700.000	575.600	0.000
442	700.000	627.500	0.000
443	700.000	679.400	0.000
444	700.000	731.300	0.000
445	753.300	523.800	0.000
446	753.300	575.600	0.000
447	771.000	627.500	0.000
448	771.000	679.400	0.000
449	771.000	731.300	0.000
450	771.000	783.100	0.000
451	806.700	523.800	0.000
452	806.700	575.600	0.000
453	883.000	523.800	0.000
454	883.000	575.600	0.000
455	806.700	627.500	0.000
456	883.000	627.500	0.000
457	806.700	679.400	0.000
458	860.000	679.400	0.000
459	806.700	731.300	0.000
460	860.000	731.300	0.000
461	908.400	471.900	0.000
462	908.400	523.800	0.000
463	908.400	575.600	0.000
464	908.400	627.500	0.000
465	908.400	679.400	0.000
466	908.400	731.300	0.000
467	908.400	783.100	0.000
468	956.700	-53.000	0.000
469	956.700	5.000	0.000
470	1005.100	-53.000	0.000
471	1005.100	5.000	0.000
472	1053.500	-53.000	0.000
473	1053.500	5.000	0.000
474	1101.800	-53.000	0.000
475	1101.800	5.000	0.000
476	1150.200	-53.000	0.000
477	1150.200	5.000	0.000
478	1198.500	-53.000	0.000
479	1198.500	5.000	0.000
480	1246.900	-53.000	0.000
481	1246.900	5.000	0.000
482	1295.300	-53.000	0.000
483	1295.300	5.000	0.000
484	1343.600	-53.000	0.000
485	1343.600	5.000	0.000

486	1393.000	-53.000	0.000
487	1439.500	-53.000	0.000
488	1439.500	5.000	0.000
489	1343.600	52.500	0.000
490	1393.000	52.500	0.000
491	1295.300	52.500	0.000
492	1246.900	52.500	0.000
493	1198.500	52.500	0.000
494	1150.200	52.500	0.000
495	1101.800	52.500	0.000
496	1053.500	52.500	0.000
497	1005.100	52.500	0.000
498	956.700	52.500	0.000
499	956.700	830.000	0.000
500	956.700	888.000	0.000
501	1005.100	830.000	0.000
502	1005.100	888.000	0.000
503	1055.000	888.000	0.000
504	1101.800	888.000	0.000
505	1101.800	830.000	0.000
506	1150.200	830.000	0.000
507	1150.200	888.000	0.000
508	1198.500	830.000	0.000
509	1198.500	888.000	0.000
510	1246.900	830.000	0.000
511	1246.900	888.000	0.000
512	1295.300	830.000	0.000
513	1295.300	888.000	0.000
514	1343.600	830.000	0.000
515	1343.600	888.000	0.000
516	1393.000	888.000	0.000
517	1439.500	830.000	0.000
518	1439.500	888.000	0.000
519	1343.600	783.100	0.000
520	1393.000	783.100	0.000
521	1295.300	783.100	0.000
522	1246.900	783.100	0.000
523	1198.500	783.100	0.000
524	1150.200	783.100	0.000
525	1101.800	783.100	0.000
526	956.700	783.100	0.000
527	1005.100	783.100	0.000
528	956.700	105.000	0.000
529	956.700	157.500	0.000
530	956.700	210.000	0.000
531	956.700	262.500	0.000
532	956.700	315.000	0.000
533	956.700	367.500	0.000
534	956.700	420.000	0.000
535	1005.100	105.000	0.000
536	1005.100	157.500	0.000
537	1005.100	210.000	0.000
538	1005.100	262.500	0.000
539	1005.100	315.000	0.000
540	1005.100	367.500	0.000
541	1005.100	420.000	0.000
542	1053.500	105.000	0.000
543	1053.500	157.500	0.000
544	1053.500	210.000	0.000
545	1053.500	262.500	0.000
546	1053.500	315.000	0.000
547	1053.500	367.500	0.000
548	1053.500	420.000	0.000
549	1101.800	105.000	0.000
550	1101.800	157.500	0.000
551	1101.800	210.000	0.000
552	1101.800	262.500	0.000
553	1101.800	315.000	0.000
554	1101.800	367.500	0.000
555	1101.800	420.000	0.000
556	1150.200	105.000	0.000
557	1150.200	157.500	0.000
558	1150.200	210.000	0.000
559	1150.200	262.500	0.000
560	1150.200	315.000	0.000
561	1150.200	367.500	0.000
562	1150.200	420.000	0.000
563	1198.500	105.000	0.000
564	1198.500	157.500	0.000
565	1198.500	210.000	0.000
566	1198.500	262.500	0.000
567	1198.500	315.000	0.000
568	1198.500	367.500	0.000
569	1198.500	420.000	0.000
570	1246.900	105.000	0.000

571	1246.900	157.500	0.000
572	1246.900	210.000	0.000
573	1246.900	262.500	0.000
574	1246.900	315.000	0.000
575	1246.900	367.500	0.000
576	1246.900	420.000	0.000
577	1295.300	105.000	0.000
578	1295.300	157.500	0.000
579	1295.300	210.000	0.000
580	1295.300	262.500	0.000
581	1295.300	315.000	0.000
582	1295.300	367.500	0.000
583	1295.300	420.000	0.000
584	1343.600	105.000	0.000
585	1343.600	157.500	0.000
586	1343.600	210.000	0.000
587	1343.600	262.500	0.000
588	1343.600	315.000	0.000
589	1343.600	367.500	0.000
590	1343.600	420.000	0.000
591	1393.000	105.000	0.000
592	1393.000	157.500	0.000
593	1393.000	210.000	0.000
594	1393.000	262.500	0.000
595	1393.000	315.000	0.000
596	1393.000	367.500	0.000
597	1439.500	52.500	0.000
598	1439.500	105.000	0.000
599	1439.500	157.500	0.000
600	1439.500	210.000	0.000
601	1439.500	262.500	0.000
602	1439.500	315.000	0.000
603	1439.500	367.500	0.000
604	1439.500	420.000	0.000
605	1343.600	471.900	0.000
606	1393.000	471.900	0.000
607	1295.300	471.900	0.000
608	1246.900	471.900	0.000
609	1198.500	471.900	0.000
610	1150.200	471.900	0.000
611	1101.800	471.900	0.000
612	1053.500	471.900	0.000
613	1005.100	471.900	0.000
614	956.700	471.900	0.000
615	956.700	523.800	0.000
616	956.700	575.600	0.000
617	956.700	627.500	0.000
618	956.700	679.400	0.000
619	956.700	731.300	0.000
620	1005.100	523.800	0.000
621	1005.100	575.600	0.000
622	1005.100	627.500	0.000
623	1005.100	679.400	0.000
624	1005.100	731.300	0.000
625	1053.500	523.800	0.000
626	1053.500	575.600	0.000
627	1055.000	627.500	0.000
628	1055.000	679.400	0.000
629	1055.000	731.300	0.000
630	1055.000	783.100	0.000
631	1101.800	523.800	0.000
632	1101.800	575.600	0.000
633	1150.200	523.800	0.000
634	1150.200	575.600	0.000
635	1101.800	627.500	0.000
636	1150.200	627.500	0.000
637	1101.800	679.400	0.000
638	1150.200	679.400	0.000
639	1101.800	731.300	0.000
640	1150.200	731.300	0.000
641	1198.500	523.800	0.000
642	1198.500	585.000	0.000
643	1198.500	627.500	0.000
644	1198.500	679.400	0.000
645	1198.500	731.300	0.000
646	1246.900	523.800	0.000
647	1246.900	585.000	0.000
648	1246.900	627.500	0.000
649	1246.900	679.400	0.000
650	1246.900	731.300	0.000
651	1295.300	523.800	0.000
652	1295.300	585.000	0.000
653	1295.300	627.500	0.000
654	1295.300	679.400	0.000
655	1295.300	731.300	0.000

656	1343.600	523.800	0.000
657	1343.600	585.000	0.000
658	1343.600	627.500	0.000
659	1343.600	679.400	0.000
660	1343.600	731.300	0.000
661	1393.000	523.800	0.000
662	1393.000	585.000	0.000
663	1393.000	627.500	0.000
664	1393.000	679.400	0.000
665	1393.000	731.300	0.000
666	1439.500	471.900	0.000
667	1439.500	523.800	0.000
668	1439.500	585.000	0.000
669	1439.500	627.500	0.000
670	1439.500	679.400	0.000
671	1439.500	731.300	0.000
672	1439.500	783.100	0.000
673	1487.000	-53.000	0.000
674	1487.000	5.000	0.000
675	1534.500	-53.000	0.000
676	1534.500	5.000	0.000
677	1582.000	-53.000	0.000
678	1582.000	5.000	0.000
679	1582.000	52.500	0.000
680	1534.500	52.500	0.000
681	1487.000	52.500	0.000
682	1487.000	830.000	0.000
683	1487.000	888.000	0.000
684	1534.500	830.000	0.000
685	1534.500	888.000	0.000
686	1582.000	830.000	0.000
687	1582.000	888.000	0.000
688	1582.000	783.100	0.000
689	1534.500	783.100	0.000
690	1487.000	783.100	0.000
691	1487.000	105.000	0.000
692	1487.000	157.500	0.000
693	1487.000	210.000	0.000
694	1487.000	262.500	0.000
695	1487.000	315.000	0.000
696	1487.000	367.500	0.000
697	1487.000	420.000	0.000
698	1534.500	105.000	0.000
699	1534.500	157.500	0.000
700	1534.500	210.000	0.000
701	1534.500	262.500	0.000
702	1534.500	315.000	0.000
703	1534.500	367.500	0.000
704	1534.500	420.000	0.000
705	1582.000	105.000	0.000
706	1582.000	157.500	0.000
707	1582.000	210.000	0.000
708	1582.000	262.500	0.000
709	1582.000	315.000	0.000
710	1582.000	367.500	0.000
711	1582.000	420.000	0.000
712	1582.000	471.900	0.000
713	1534.500	471.900	0.000
714	1487.000	471.900	0.000
715	1487.000	523.800	0.000
716	1487.000	585.000	0.000
717	1487.000	627.500	0.000
718	1487.000	679.400	0.000
719	1487.000	731.300	0.000
720	1534.500	523.800	0.000
721	1534.500	585.000	0.000
722	1534.500	627.500	0.000
723	1534.500	679.400	0.000
724	1534.500	731.300	0.000
725	1582.000	523.800	0.000
726	1582.000	585.000	0.000
727	1582.000	627.500	0.000
728	1582.000	679.400	0.000
729	1582.000	731.300	0.000

ASTE--	Proprieta'	Nodo ini z.	Nodo fin.	Rilasci i n.	Rilasci fin.	num. =	Orient.
1	3	1	2			189	0.0
2	2	3	4				0.0
3	1	5	6				0.0
4	3	7	8				0.0
5	1	9	10				0.0
6	3	11	12				0.0
7	3	13	14				0.0
8	3	15	16				0.0

9	3	17	18	0.0
10	2	19	20	0.0
11	2	21	22	0.0
12	2	23	24	0.0
13	2	25	26	0.0
14	2	27	28	0.0
15	1	29	30	0.0
16	4	16	20	0.0
17	4	20	22	0.0
18	4	22	10	0.0
19	4	10	12	0.0
20	4	18	4	0.0
21	4	4	42	0.0
22	4	28	30	0.0
23	4	30	14	0.0
24	4	2	24	0.0
25	4	24	26	0.0
26	4	26	6	0.0
27	4	6	8	0.0
28	6	31	2	0.0
29	6	8	32	0.0
30	6	33	18	0.0
31	6	14	34	0.0
32	6	35	16	0.0
33	6	12	36	0.0
54	6	16	2	0.0
55	6	2	18	0.0
56	6	8	14	0.0
57	6	12	8	0.0
58	2	41	42	0.0
60	4	42	28	0.0
65	5	168	19	180.0
66	5	166	168	180.0
67	5	164	166	180.0
68	5	162	164	180.0
69	5	160	162	180.0
70	5	158	160	180.0
71	5	156	158	180.0
72	5	154	156	180.0
73	5	152	154	180.0
74	5	47	152	180.0
75	5	15	47	180.0
87	5	364	21	180.0
88	5	362	364	180.0
89	5	360	362	180.0
90	5	358	360	180.0
91	5	171	358	180.0
92	5	19	171	180.0
99	5	485	9	180.0
100	5	483	485	180.0
101	5	481	483	180.0
102	5	479	481	180.0
103	5	477	479	180.0
104	5	475	477	180.0
105	5	473	475	180.0
106	5	471	473	180.0
107	5	469	471	180.0
108	5	367	469	180.0
109	5	21	367	180.0
121	5	54	11	180.0
122	5	678	54	180.0
123	5	676	678	180.0
124	5	674	676	180.0
125	5	488	674	180.0
126	5	9	488	180.0
137	5	197	199	180.0
138	5	195	197	180.0
139	5	194	195	180.0
140	5	188	190	180.0
141	5	186	188	180.0
142	5	184	186	180.0
143	5	182	184	180.0
144	5	67	182	180.0
145	5	17	67	180.0
155	5	3	194	180.0
156	5	190	3	180.0
159	5	379	380	180.0
160	5	373	375	180.0
161	5	201	373	180.0
162	5	199	201	180.0
167	5	41	379	180.0
168	5	375	41	180.0
171	5	514	29	180.0
172	5	512	514	180.0
173	5	510	512	180.0

174	5	508	510	180.0
175	5	506	508	180.0
176	5	505	506	180.0
177	5	499	501	180.0
178	5	382	499	180.0
179	5	380	382	180.0
189	5	27	505	180.0
190	5	501	27	180.0
193	5	60	13	180.0
194	5	686	60	180.0
195	5	684	686	180.0
196	5	682	684	180.0
197	5	517	682	180.0
198	5	29	517	180.0
207	5	15	49	180.0
208	5	49	72	180.0
209	5	72	74	180.0
210	5	74	76	180.0
211	5	76	78	180.0
212	5	78	80	180.0
213	5	80	82	180.0
214	5	82	1	180.0
215	5	1	93	180.0
216	5	93	95	180.0
217	5	95	97	180.0
218	5	97	99	180.0
219	5	99	101	180.0
220	5	101	103	180.0
221	5	103	70	180.0
222	5	70	17	180.0
243	5	11	55	180.0
244	5	55	112	180.0
245	5	112	115	180.0
246	5	115	118	180.0
247	5	118	121	180.0
248	5	121	124	180.0
249	5	124	127	180.0
250	5	127	7	180.0
251	5	7	132	180.0
252	5	132	135	180.0
253	5	135	138	180.0
254	5	138	141	180.0
255	5	141	144	180.0
256	5	144	147	180.0
257	5	147	62	180.0
258	5	62	13	180.0
277	5	1	91	180.0
278	5	91	218	180.0
279	5	218	225	180.0
280	5	225	232	180.0
281	5	232	239	180.0
282	5	239	246	180.0
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570	1	661	606	666	667
571	1	662	661	667	668
572	1	663	662	668	669
573	1	664	663	669	670
574	1	665	664	670	671
575	1	520	665	671	672
576	1	29	520	672	517
577	1	488	487	673	674
578	1	674	673	675	676
579	1	676	675	677	678
580	1	678	677	53	54

581	1	679	678	54	111
582	1	680	676	678	679
583	1	681	674	676	680
584	1	597	488	674	681
585	1	518	517	682	683
586	1	683	682	684	685
587	1	685	684	686	687
588	1	687	686	60	61
589	1	686	688	150	60
590	1	684	689	688	686
591	1	682	690	689	684
592	1	517	672	690	682
593	1	598	597	681	691
594	1	599	598	691	692
595	1	600	599	692	693
596	1	601	600	693	694
597	1	602	601	694	695
598	1	603	602	695	696
599	1	604	603	696	697
600	1	691	681	680	698
601	1	692	691	698	699
602	1	693	692	699	700
603	1	694	693	700	701
604	1	695	694	701	702
605	1	696	695	702	703
606	1	697	696	703	704
607	1	698	680	679	705
608	1	699	698	705	706
609	1	700	699	706	707
610	1	701	700	707	708
611	1	702	701	708	709
612	1	703	702	709	710
613	1	704	703	710	711
614	1	705	679	111	114
615	1	706	705	114	117
616	1	707	706	117	120
617	1	708	707	120	123
618	1	709	708	123	126
619	1	710	709	126	129
620	1	711	710	129	131
621	1	712	711	131	134
622	1	713	704	711	712
623	1	714	697	704	713
624	1	666	604	697	714
625	1	667	666	714	715
626	1	668	667	715	716
627	1	669	668	716	717
628	1	670	669	717	718
629	1	671	670	718	719
630	1	672	671	719	690
631	1	715	714	713	720
632	1	716	715	720	721
633	1	717	716	721	722
634	1	718	717	722	723
635	1	719	718	723	724
636	1	690	719	724	689
637	1	720	713	712	725
638	1	721	720	725	726
639	1	722	721	726	727
640	1	723	722	727	728
641	1	724	723	728	729
642	1	689	724	729	688
643	1	725	712	134	137
644	1	726	725	137	140
645	1	727	726	140	143
646	1	728	727	143	146
647	1	729	728	146	149
648	1	688	729	149	150

PROPRIETA` ASTE----	-----	-----	-----	-----	num. =	6
Nome	Materiale	Base	Altezza	Area	Area tag. Y	Area tag. Z
		Kw vertic.	Kw orizz.	J tors.	J fless. Y	J fless. Z
1	1	25. 00	25. 00	6. 25000E+02	5. 20833E+02	5. 20833E+02
		0. 000000	0. 000000	5. 50122E+04	3. 25521E+04	3. 25521E+04
2	1	25. 00	70. 00	1. 75000E+03	1. 45833E+03	1. 45833E+03
		0. 000000	0. 000000	2. 82661E+05	9. 11458E+04	7. 14583E+05
3	1	70. 00	25. 00	1. 75000E+03	1. 45833E+03	1. 45833E+03
		0. 000000	0. 000000	2. 82661E+05	7. 14583E+05	9. 11458E+04
4	1	25. 00	45. 00	1. 12500E+03	9. 37500E+02	9. 37500E+02
		0. 000000	0. 000000	1. 52993E+05	5. 85938E+04	1. 89844E+05
5	1	35. 00	65. 00	2. 27500E+03	1. 89583E+03	1. 89583E+03
		1. 000000	1. 000000	6. 16029E+05	2. 32240E+05	8. 00990E+05
6	1	25. 00	20. 00	5. 00000E+02	4. 16667E+02	4. 16667E+02
		0. 000000	0. 000000	3. 42131E+04	2. 60417E+04	1. 66667E+04

PROPRIETA` GUSCI	----	-----	-----	-----	num. =	1
Nome	Material e	Sp. membr.	Sp. piastra	Kw		
1	1	15.00	15.00	3.000000		

MATERIALE	-----	-----	-----	-----	num. =	1
Nome	Mod. elast.	Coeff. nu	Mod. tang.	Peso spec.	Dil. te.	
1	3.00000E+05	1.50000E-01	1.30000E+05	2.50000E-03	1.00000E-05	

VINCOLI	-----	-----	-----	-----	-----	num. =	16
Nodo	Ri gi d. X	Ri gi d. Y	Ri gi d. Z	Ri gi d. RX	Ri gi d. RY	Ri gi d. RZ	
1	bl occato	bl occato	libero	libero	libero	libero	
5	bl occato	bl occato	libero	libero	libero	libero	
7	bl occato	bl occato	libero	libero	libero	libero	
23	bl occato	bl occato	libero	libero	libero	libero	
25	bl occato	bl occato	libero	libero	libero	libero	
15	bl occato	bl occato	libero	libero	libero	libero	
9	bl occato	bl occato	libero	libero	libero	libero	
11	bl occato	bl occato	libero	libero	libero	libero	
19	bl occato	bl occato	libero	libero	libero	libero	
21	bl occato	bl occato	libero	libero	libero	libero	
17	bl occato	bl occato	libero	libero	libero	libero	
3	bl occato	bl occato	libero	libero	libero	libero	
41	bl occato	bl occato	libero	libero	libero	libero	
27	bl occato	bl occato	libero	libero	libero	libero	
29	bl occato	bl occato	libero	libero	libero	libero	
13	bl occato	bl occato	libero	libero	libero	libero	

CARICHI NODI	-----	-----	-----	-----	num. =	204
Nome	Nodo	Di rezione	Intensi ta`			
1 -	116 :	Forze Di nami che	(Autovettori)			
117 -	160 :	Forze Si smi che	(Analisi Semplici cata)			
161 -	204 :	Momenti Torcenti	Addizionali			

CARICHI DI SOLAI	-----	-----	-----	-----	num. =	6
Nome	Cos X	Cos Y	Cos Z	Cond. Ri fer.	Intens.	Quota
1	0.0000	0.9955	0.0948	1 glob	-0.04500	308.10
2	0.0000	0.9954	-0.0959	1 glob	-0.04500	360.00
3	0.0000	0.9955	0.0948	2 glob	-0.01000	308.10
4	0.0000	0.9954	-0.0959	2 glob	-0.01000	360.00
5	0.0000	0.9955	0.0948	3 glob	-0.01800	308.10
6	0.0000	0.9954	-0.0959	3 glob	-0.01800	360.00

CARICHI ASTE	-----	-----	-----	-----	-----	num. =	417	
Nome	Asta	Dir	Tip	RIF	Parametro 1	Parametro 2	Parametro 3	Parametro 4
230	S001-Perm_Cop	27	Z	FT glo	-2.084	-2.084	0.000	0.000
231	S001-Perm_Cop	24	Z	FT glo	-2.084	-2.084	0.000	0.000
232	S001-Perm_Cop	26	Z	FT glo	-2.084	-2.084	0.000	0.000
233	S001-Perm_Cop	25	Z	FT glo	-2.084	-2.084	0.000	0.000
234	S001-Perm_Cop	19	Z	FT glo	-3.390	-3.390	0.000	0.000
235	S001-Perm_Cop	16	Z	FT glo	-3.390	-3.390	0.000	0.000
236	S001-Perm_Cop	18	Z	FT glo	-3.390	-3.390	0.000	0.000
237	S001-Perm_Cop	17	Z	FT glo	-3.390	-3.390	0.000	0.000
238	S001-Perm_Cop	32	Z	FT glo	-3.390	-3.390	0.000	0.000
239	S001-Perm_Cop	28	Z	FT glo	-2.084	-2.084	0.000	0.000
240	S001-Perm_Cop	29	Z	FT glo	-2.084	-2.084	0.000	0.000
241	S001-Perm_Cop	33	Z	FT glo	-3.390	-3.390	0.000	0.000
242	S002-Perm_Cop	27	Z	FT glo	-2.059	-2.059	0.000	0.000
243	S002-Perm_Cop	24	Z	FT glo	-2.059	-2.059	0.000	0.000
244	S002-Perm_Cop	26	Z	FT glo	-2.059	-2.059	0.000	0.000
245	S002-Perm_Cop	25	Z	FT glo	-2.059	-2.059	0.000	0.000
246	S002-Perm_Cop	20	Z	FT glo	-3.366	-3.366	0.000	0.000
247	S002-Perm_Cop	22	Z	FT glo	-3.366	-3.366	0.000	0.000
248	S002-Perm_Cop	23	Z	FT glo	-3.366	-3.366	0.000	0.000
249	S002-Perm_Cop	28	Z	FT glo	-2.059	-2.059	0.000	0.000
250	S002-Perm_Cop	30	Z	FT glo	-3.366	-3.366	0.000	0.000
251	S002-Perm_Cop	31	Z	FT glo	-3.366	-3.366	0.000	0.000
252	S002-Perm_Cop	29	Z	FT glo	-2.059	-2.059	0.000	0.000
253	S002-Perm_Cop	21	Z	FT glo	-3.366	-3.366	0.000	0.000
254	S002-Perm_Cop	60	Z	FT glo	-3.366	-3.366	0.000	0.000
255	S001-Neve	27	Z	FT glo	-3.752	-3.752	0.000	0.000
256	S001-Neve	24	Z	FT glo	-3.752	-3.752	0.000	0.000
257	S001-Neve	26	Z	FT glo	-3.752	-3.752	0.000	0.000
258	S001-Neve	25	Z	FT glo	-3.752	-3.752	0.000	0.000
259	S001-Neve	19	Z	FT glo	-6.102	-6.102	0.000	0.000
260	S001-Neve	16	Z	FT glo	-6.102	-6.102	0.000	0.000
261	S001-Neve	18	Z	FT glo	-6.102	-6.102	0.000	0.000
262	S001-Neve	17	Z	FT glo	-6.102	-6.102	0.000	0.000
263	S001-Neve	32	Z	FT glo	-6.102	-6.102	0.000	0.000
264	S001-Neve	28	Z	FT glo	-3.752	-3.752	0.000	0.000
265	S001-Neve	29	Z	FT glo	-3.752	-3.752	0.000	0.000
266	S001-Neve	33	Z	FT glo	-6.102	-6.102	0.000	0.000
267	S002-Neve	27	Z	FT glo	-3.707	-3.707	0.000	0.000
268	S002-Neve	24	Z	FT glo	-3.707	-3.707	0.000	0.000
269	S002-Neve	26	Z	FT glo	-3.707	-3.707	0.000	0.000
270	S002-Neve	25	Z	FT glo	-3.707	-3.707	0.000	0.000

271	S002-Neve	20	Z	FT	glo	-6.058	-6.058	0.000	0.000
272	S002-Neve	22	Z	FT	glo	-6.058	-6.058	0.000	0.000
273	S002-Neve	23	Z	FT	glo	-6.058	-6.058	0.000	0.000
274	S002-Neve	28	Z	FT	glo	-3.707	-3.707	0.000	0.000
275	S002-Neve	30	Z	FT	glo	-6.058	-6.058	0.000	0.000
276	S002-Neve	31	Z	FT	glo	-6.058	-6.058	0.000	0.000
277	S002-Neve	29	Z	FT	glo	-3.707	-3.707	0.000	0.000
278	S002-Neve	21	Z	FT	glo	-6.058	-6.058	0.000	0.000
279	S002-Neve	60	Z	FT	glo	-6.058	-6.058	0.000	0.000
280	Massa_Si smi ca_Muri	14	Z	FD	glo	-14.000			
281	Massa_Si smi ca_Muri	15	Z	FD	glo	-14.000			
282	Massa_Si smi ca_Muri	7	Z	FD	glo	-14.000			
283	Massa_Si smi ca_Muri	6	Z	FD	glo	-14.000			
284	Massa_Si smi ca_Muri	9	Z	FD	glo	-16.000			
285	Massa_Si smi ca_Muri	2	Z	FD	glo	-16.000			
286	Massa_Si smi ca_Muri	58	Z	FD	glo	-16.000			
287	Massa_Si smi ca_Muri	1	Z	FD	glo	-18.000			
288	Massa_Si smi ca_Muri	8	Z	FD	glo	-18.000			
289	Massa_Si smi ca_Muri	10	Z	FD	glo	-18.000			
290	Massa_Si smi ca_Muri	11	Z	FD	glo	-18.000			
291	Massa_Si smi ca_Muri	5	Z	FD	glo	-18.000			
292	Massa_Si smi ca_Muri	3	Z	FD	glo	-18.000			
293	Massa_Si smi ca_Muri	4	Z	FD	glo	-18.000			
294	Tamp_Peri metral e	208	Z	FD	glo	-12.000			
295	Tamp_Peri metral e	209	Z	FD	glo	-12.000			
296	Tamp_Peri metral e	210	Z	FD	glo	-12.000			
297	Tamp_Peri metral e	211	Z	FD	glo	-12.000			
298	Tamp_Peri metral e	212	Z	FD	glo	-12.000			
299	Tamp_Peri metral e	213	Z	FD	glo	-12.000			
300	Tamp_Peri metral e	214	Z	FD	glo	-12.000			
301	Tamp_Peri metral e	215	Z	FD	glo	-12.000			
302	Tamp_Peri metral e	216	Z	FD	glo	-12.000			
303	Tamp_Peri metral e	217	Z	FD	glo	-12.000			
304	Tamp_Peri metral e	218	Z	FD	glo	-12.000			
305	Tamp_Peri metral e	219	Z	FD	glo	-12.000			
306	Tamp_Peri metral e	220	Z	FD	glo	-12.000			
307	Tamp_Peri metral e	221	Z	FD	glo	-12.000			
308	Tamp_Peri metral e	323	Z	FD	glo	-12.000			
309	Tamp_Peri metral e	324	Z	FD	glo	-12.000			
310	Tamp_Peri metral e	325	Z	FD	glo	-12.000			
311	Tamp_Peri metral e	326	Z	FD	glo	-12.000			
312	Tamp_Peri metral e	296	Z	FD	glo	-12.000			
313	Tamp_Peri metral e	297	Z	FD	glo	-12.000			
314	Tamp_Peri metral e	298	Z	FD	glo	-12.000			
315	Tamp_Peri metral e	299	Z	FD	glo	-12.000			
316	Tamp_Peri metral e	300	Z	FD	glo	-12.000			
317	Tamp_Peri metral e	301	Z	FD	glo	-12.000			
318	Tamp_Peri metral e	302	Z	FD	glo	-12.000			
319	Tamp_Peri metral e	303	Z	FD	glo	-12.000			
320	Tamp_Peri metral e	304	Z	FD	glo	-12.000			
321	Tamp_Peri metral e	307	Z	FD	glo	-12.000			
322	Tamp_Peri metral e	308	Z	FD	glo	-12.000			
323	Tamp_Peri metral e	309	Z	FD	glo	-12.000			
324	Tamp_Peri metral e	305	Z	FD	glo	-12.000			
325	Tamp_Peri metral e	310	Z	FD	glo	-12.000			
326	Tamp_Peri metral e	327	Z	FD	glo	-12.000			
327	Tamp_Peri metral e	244	Z	FD	glo	-12.000			
328	Tamp_Peri metral e	245	Z	FD	glo	-12.000			
329	Tamp_Peri metral e	246	Z	FD	glo	-12.000			
330	Tamp_Peri metral e	247	Z	FD	glo	-12.000			
331	Tamp_Peri metral e	248	Z	FD	glo	-12.000			
332	Tamp_Peri metral e	249	Z	FD	glo	-12.000			
333	Tamp_Peri metral e	250	Z	FD	glo	-12.000			
334	Tamp_Peri metral e	251	Z	FD	glo	-12.000			
335	Tamp_Peri metral e	252	Z	FD	glo	-12.000			
336	Tamp_Peri metral e	255	Z	FD	glo	-12.000			
337	Tamp_Peri metral e	256	Z	FD	glo	-12.000			
338	Tamp_Peri metral e	257	Z	FD	glo	-12.000			
339	Tamp_Peri metral e	253	Z	FD	glo	-12.000			
340	Tamp_Peri metral e	254	Z	FD	glo	-12.000			
341	Tamp_Peri metral e	322	Z	FD	glo	-12.000			
342	Tamp_Peri metral e	66	Z	FD	glo	-12.000			
343	Tamp_Peri metral e	67	Z	FD	glo	-12.000			
344	Tamp_Peri metral e	68	Z	FD	glo	-12.000			
345	Tamp_Peri metral e	69	Z	FD	glo	-12.000			
346	Tamp_Peri metral e	70	Z	FD	glo	-12.000			
347	Tamp_Peri metral e	71	Z	FD	glo	-12.000			
348	Tamp_Peri metral e	72	Z	FD	glo	-12.000			
349	Tamp_Peri metral e	73	Z	FD	glo	-12.000			
350	Tamp_Peri metral e	74	Z	FD	glo	-12.000			
351	Tamp_Peri metral e	75	Z	FD	glo	-12.000			
352	Tamp_Peri metral e	88	Z	FD	glo	-12.000			
353	Tamp_Peri metral e	89	Z	FD	glo	-12.000			
354	Tamp_Peri metral e	90	Z	FD	glo	-12.000			
355	Tamp_Peri metral e	91	Z	FD	glo	-12.000			

356	Tamp_Perimetrale	100	Z	FD glo	-12.000
357	Tamp_Perimetrale	101	Z	FD glo	-12.000
358	Tamp_Perimetrale	102	Z	FD glo	-12.000
359	Tamp_Perimetrale	103	Z	FD glo	-12.000
360	Tamp_Perimetrale	104	Z	FD glo	-12.000
361	Tamp_Perimetrale	105	Z	FD glo	-12.000
362	Tamp_Perimetrale	106	Z	FD glo	-12.000
363	Tamp_Perimetrale	107	Z	FD glo	-12.000
364	Tamp_Perimetrale	108	Z	FD glo	-12.000
365	Tamp_Perimetrale	122	Z	FD glo	-12.000
366	Tamp_Perimetrale	123	Z	FD glo	-12.000
367	Tamp_Perimetrale	124	Z	FD glo	-12.000
368	Tamp_Perimetrale	125	Z	FD glo	-12.000
369	Tamp_Perimetrale	207	Z	FD glo	-12.000
370	Tamp_Perimetrale	99	Z	FD glo	-12.000
371	Tamp_Perimetrale	126	Z	FD glo	-12.000
372	Tamp_Perimetrale	295	Z	FD glo	-12.000
373	Tamp_Perimetrale	121	Z	FD glo	-12.000
374	Tamp_Perimetrale	243	Z	FD glo	-12.000
375	Tamp_Perimetrale	65	Z	FD glo	-12.000
376	Tamp_Perimetrale	92	Z	FD glo	-12.000
377	Tamp_Perimetrale	87	Z	FD glo	-12.000
378	Tamp_Perimetrale	109	Z	FD glo	-12.000
379	Tamp_Perimetrale	137	Z	FD glo	-12.000
380	Tamp_Perimetrale	138	Z	FD glo	-12.000
381	Tamp_Perimetrale	139	Z	FD glo	-12.000
382	Tamp_Perimetrale	140	Z	FD glo	-12.000
383	Tamp_Perimetrale	141	Z	FD glo	-12.000
384	Tamp_Perimetrale	142	Z	FD glo	-12.000
385	Tamp_Perimetrale	143	Z	FD glo	-12.000
386	Tamp_Perimetrale	144	Z	FD glo	-12.000
387	Tamp_Perimetrale	145	Z	FD glo	-12.000
388	Tamp_Perimetrale	159	Z	FD glo	-12.000
389	Tamp_Perimetrale	160	Z	FD glo	-12.000
390	Tamp_Perimetrale	161	Z	FD glo	-12.000
391	Tamp_Perimetrale	162	Z	FD glo	-12.000
392	Tamp_Perimetrale	172	Z	FD glo	-12.000
393	Tamp_Perimetrale	173	Z	FD glo	-12.000
394	Tamp_Perimetrale	174	Z	FD glo	-12.000
395	Tamp_Perimetrale	175	Z	FD glo	-12.000
396	Tamp_Perimetrale	176	Z	FD glo	-12.000
397	Tamp_Perimetrale	177	Z	FD glo	-12.000
398	Tamp_Perimetrale	178	Z	FD glo	-12.000
399	Tamp_Perimetrale	179	Z	FD glo	-12.000
400	Tamp_Perimetrale	194	Z	FD glo	-12.000
401	Tamp_Perimetrale	195	Z	FD glo	-12.000
402	Tamp_Perimetrale	196	Z	FD glo	-12.000
403	Tamp_Perimetrale	197	Z	FD glo	-12.000
404	Tamp_Perimetrale	222	Z	FD glo	-12.000
405	Tamp_Perimetrale	155	Z	FD glo	-12.000
406	Tamp_Perimetrale	156	Z	FD glo	-12.000
407	Tamp_Perimetrale	167	Z	FD glo	-12.000
408	Tamp_Perimetrale	168	Z	FD glo	-12.000
409	Tamp_Perimetrale	189	Z	FD glo	-12.000
410	Tamp_Perimetrale	190	Z	FD glo	-12.000
411	Tamp_Perimetrale	171	Z	FD glo	-12.000
412	Tamp_Perimetrale	198	Z	FD glo	-12.000
413	Tamp_Perimetrale	306	Z	FD glo	-12.000
414	Tamp_Perimetrale	193	Z	FD glo	-12.000
415	Tamp_Perimetrale	258	Z	FD glo	-12.000
416	Vento_X	32	X	FD glo	1.000
417	Vento_X	33	X	FD glo	1.000
418	Vento_X	19	X	FD glo	1.000
419	Vento_X	16	X	FD glo	1.000
420	Vento_X	18	X	FD glo	1.000
421	Vento_X	17	X	FD glo	1.000
422	Vento_X	30	X	FD glo	1.000
423	Vento_X	20	X	FD glo	1.000
424	Vento_X	21	X	FD glo	1.000
425	Vento_X	60	X	FD glo	1.000
426	Vento_X	22	X	FD glo	1.000
427	Vento_X	31	X	FD glo	1.000
428	Vento_X	23	X	FD glo	1.000
429	Vento_Y	54	Y	FD glo	1.250
430	Vento_Y	55	Y	FD glo	1.250
431	Vento_Y	57	Y	FD glo	1.250
432	Vento_Y	56	Y	FD glo	1.250

PESI	PROPRI	ASTE--	-----	-----	-----	-----	-----
Cond.	Nome Carichi	Aste					
1	433-471	1-33, 54-58, 60					
5	472-621	65-75, 87-92, 99-109, 121-126, 137-145, 155-156, 159-162, 167-168, 171-179, 189-190, 193-198, 207-222, 243-258, 277-320, 322-327					

CARICHI	DI LINEA	numero coordi nata	Cond.	Di rez.	Intensi ta	num. =
Nome	ini zio	fi ne			ini zio	fi ne Descr i zione

CARICHI	GUSCI	-----	-----	-----	-----	num. =
Nome						1392

622	Vesp_Pav_Tram_Sovr	593	Z	FD glo	-0.08000
623	Vesp_Pav_Tram_Sovr	594	Z	FD glo	-0.08000
624	Vesp_Pav_Tram_Sovr	595	Z	FD glo	-0.08000
625	Vesp_Pav_Tram_Sovr	596	Z	FD glo	-0.08000
626	Vesp_Pav_Tram_Sovr	597	Z	FD glo	-0.08000
627	Vesp_Pav_Tram_Sovr	598	Z	FD glo	-0.08000
628	Vesp_Pav_Tram_Sovr	599	Z	FD glo	-0.08000
629	Vesp_Pav_Tram_Sovr	600	Z	FD glo	-0.08000
630	Vesp_Pav_Tram_Sovr	601	Z	FD glo	-0.08000
631	Vesp_Pav_Tram_Sovr	602	Z	FD glo	-0.08000
632	Vesp_Pav_Tram_Sovr	603	Z	FD glo	-0.08000
633	Vesp_Pav_Tram_Sovr	604	Z	FD glo	-0.08000
634	Vesp_Pav_Tram_Sovr	605	Z	FD glo	-0.08000
635	Vesp_Pav_Tram_Sovr	606	Z	FD glo	-0.08000
636	Vesp_Pav_Tram_Sovr	607	Z	FD glo	-0.08000
637	Vesp_Pav_Tram_Sovr	608	Z	FD glo	-0.08000
638	Vesp_Pav_Tram_Sovr	609	Z	FD glo	-0.08000
639	Vesp_Pav_Tram_Sovr	610	Z	FD glo	-0.08000
640	Vesp_Pav_Tram_Sovr	611	Z	FD glo	-0.08000
641	Vesp_Pav_Tram_Sovr	612	Z	FD glo	-0.08000
642	Vesp_Pav_Tram_Sovr	613	Z	FD glo	-0.08000
643	Vesp_Pav_Tram_Sovr	614	Z	FD glo	-0.08000
644	Vesp_Pav_Tram_Sovr	615	Z	FD glo	-0.08000
645	Vesp_Pav_Tram_Sovr	616	Z	FD glo	-0.08000
646	Vesp_Pav_Tram_Sovr	617	Z	FD glo	-0.08000
647	Vesp_Pav_Tram_Sovr	618	Z	FD glo	-0.08000
648	Vesp_Pav_Tram_Sovr	619	Z	FD glo	-0.08000
649	Vesp_Pav_Tram_Sovr	620	Z	FD glo	-0.08000
650	Vesp_Pav_Tram_Sovr	621	Z	FD glo	-0.08000
651	Vesp_Pav_Tram_Sovr	622	Z	FD glo	-0.08000
652	Vesp_Pav_Tram_Sovr	623	Z	FD glo	-0.08000
653	Vesp_Pav_Tram_Sovr	624	Z	FD glo	-0.08000
654	Vesp_Pav_Tram_Sovr	625	Z	FD glo	-0.08000
655	Vesp_Pav_Tram_Sovr	628	Z	FD glo	-0.08000
656	Vesp_Pav_Tram_Sovr	629	Z	FD glo	-0.08000
657	Vesp_Pav_Tram_Sovr	630	Z	FD glo	-0.08000
658	Vesp_Pav_Tram_Sovr	631	Z	FD glo	-0.08000
659	Vesp_Pav_Tram_Sovr	634	Z	FD glo	-0.08000
660	Vesp_Pav_Tram_Sovr	635	Z	FD glo	-0.08000
661	Vesp_Pav_Tram_Sovr	636	Z	FD glo	-0.08000
662	Vesp_Pav_Tram_Sovr	637	Z	FD glo	-0.08000
663	Vesp_Pav_Tram_Sovr	640	Z	FD glo	-0.08000
664	Vesp_Pav_Tram_Sovr	641	Z	FD glo	-0.08000
665	Vesp_Pav_Tram_Sovr	642	Z	FD glo	-0.08000
666	Vesp_Pav_Tram_Sovr	643	Z	FD glo	-0.08000
667	Vesp_Pav_Tram_Sovr	646	Z	FD glo	-0.08000
668	Vesp_Pav_Tram_Sovr	647	Z	FD glo	-0.08000
669	Vesp_Pav_Tram_Sovr	648	Z	FD glo	-0.08000
670	Vesp_Pav_Tram_Sovr	626	Z	FD glo	-0.08000
671	Vesp_Pav_Tram_Sovr	627	Z	FD glo	-0.08000
672	Vesp_Pav_Tram_Sovr	632	Z	FD glo	-0.08000
673	Vesp_Pav_Tram_Sovr	633	Z	FD glo	-0.08000
674	Vesp_Pav_Tram_Sovr	638	Z	FD glo	-0.08000
675	Vesp_Pav_Tram_Sovr	639	Z	FD glo	-0.08000
676	Vesp_Pav_Tram_Sovr	644	Z	FD glo	-0.08000
677	Vesp_Pav_Tram_Sovr	645	Z	FD glo	-0.08000
678	Vesp_Pav_Tram_Sovr	490	Z	FD glo	-0.08000
679	Vesp_Pav_Tram_Sovr	491	Z	FD glo	-0.08000
680	Vesp_Pav_Tram_Sovr	492	Z	FD glo	-0.08000
681	Vesp_Pav_Tram_Sovr	493	Z	FD glo	-0.08000
682	Vesp_Pav_Tram_Sovr	494	Z	FD glo	-0.08000
683	Vesp_Pav_Tram_Sovr	495	Z	FD glo	-0.08000
684	Vesp_Pav_Tram_Sovr	496	Z	FD glo	-0.08000
685	Vesp_Pav_Tram_Sovr	569	Z	FD glo	-0.08000
686	Vesp_Pav_Tram_Sovr	570	Z	FD glo	-0.08000
687	Vesp_Pav_Tram_Sovr	573	Z	FD glo	-0.08000
688	Vesp_Pav_Tram_Sovr	574	Z	FD glo	-0.08000
689	Vesp_Pav_Tram_Sovr	575	Z	FD glo	-0.08000
690	Vesp_Pav_Tram_Sovr	571	Z	FD glo	-0.08000
691	Vesp_Pav_Tram_Sovr	572	Z	FD glo	-0.08000
692	Vesp_Pav_Tram_Sovr	45	Z	FD glo	-0.08000
693	Vesp_Pav_Tram_Sovr	47	Z	FD glo	-0.08000
694	Vesp_Pav_Tram_Sovr	49	Z	FD glo	-0.08000
695	Vesp_Pav_Tram_Sovr	51	Z	FD glo	-0.08000
696	Vesp_Pav_Tram_Sovr	53	Z	FD glo	-0.08000
697	Vesp_Pav_Tram_Sovr	55	Z	FD glo	-0.08000
698	Vesp_Pav_Tram_Sovr	57	Z	FD glo	-0.08000
699	Vesp_Pav_Tram_Sovr	59	Z	FD glo	-0.08000
700	Vesp_Pav_Tram_Sovr	61	Z	FD glo	-0.08000

30

31

32

33

1041	Vesp_Pav_Tram_Sovr	604	Z	FD glo	-0.10000
1042	Vesp_Pav_Tram_Sovr	605	Z	FD glo	-0.10000
1043	Vesp_Pav_Tram_Sovr	606	Z	FD glo	-0.10000
1044	Vesp_Pav_Tram_Sovr	607	Z	FD glo	-0.10000
1045	Vesp_Pav_Tram_Sovr	608	Z	FD glo	-0.10000
1046	Vesp_Pav_Tram_Sovr	609	Z	FD glo	-0.10000
1047	Vesp_Pav_Tram_Sovr	610	Z	FD glo	-0.10000
1048	Vesp_Pav_Tram_Sovr	611	Z	FD glo	-0.10000
1049	Vesp_Pav_Tram_Sovr	612	Z	FD glo	-0.10000
1050	Vesp_Pav_Tram_Sovr	613	Z	FD glo	-0.10000
1051	Vesp_Pav_Tram_Sovr	614	Z	FD glo	-0.10000
1052	Vesp_Pav_Tram_Sovr	615	Z	FD glo	-0.10000
1053	Vesp_Pav_Tram_Sovr	616	Z	FD glo	-0.10000
1054	Vesp_Pav_Tram_Sovr	617	Z	FD glo	-0.10000
1055	Vesp_Pav_Tram_Sovr	618	Z	FD glo	-0.10000
1056	Vesp_Pav_Tram_Sovr	619	Z	FD glo	-0.10000
1057	Vesp_Pav_Tram_Sovr	620	Z	FD glo	-0.10000
1058	Vesp_Pav_Tram_Sovr	621	Z	FD glo	-0.10000
1059	Vesp_Pav_Tram_Sovr	622	Z	FD glo	-0.10000
1060	Vesp_Pav_Tram_Sovr	623	Z	FD glo	-0.10000
1061	Vesp_Pav_Tram_Sovr	624	Z	FD glo	-0.10000
1062	Vesp_Pav_Tram_Sovr	625	Z	FD glo	-0.10000
1063	Vesp_Pav_Tram_Sovr	628	Z	FD glo	-0.10000
1064	Vesp_Pav_Tram_Sovr	629	Z	FD glo	-0.10000
1065	Vesp_Pav_Tram_Sovr	630	Z	FD glo	-0.10000
1066	Vesp_Pav_Tram_Sovr	631	Z	FD glo	-0.10000
1067	Vesp_Pav_Tram_Sovr	634	Z	FD glo	-0.10000
1068	Vesp_Pav_Tram_Sovr	635	Z	FD glo	-0.10000
1069	Vesp_Pav_Tram_Sovr	636	Z	FD glo	-0.10000
1070	Vesp_Pav_Tram_Sovr	637	Z	FD glo	-0.10000
1071	Vesp_Pav_Tram_Sovr	640	Z	FD glo	-0.10000
1072	Vesp_Pav_Tram_Sovr	641	Z	FD glo	-0.10000
1073	Vesp_Pav_Tram_Sovr	642	Z	FD glo	-0.10000
1074	Vesp_Pav_Tram_Sovr	643	Z	FD glo	-0.10000
1075	Vesp_Pav_Tram_Sovr	646	Z	FD glo	-0.10000
1076	Vesp_Pav_Tram_Sovr	647	Z	FD glo	-0.10000
1077	Vesp_Pav_Tram_Sovr	648	Z	FD glo	-0.10000
1078	Vesp_Pav_Tram_Sovr	626	Z	FD glo	-0.10000
1079	Vesp_Pav_Tram_Sovr	627	Z	FD glo	-0.10000
1080	Vesp_Pav_Tram_Sovr	558	Z	FD glo	-0.10000
1081	Vesp_Pav_Tram_Sovr	559	Z	FD glo	-0.10000
1082	Vesp_Pav_Tram_Sovr	632	Z	FD glo	-0.10000
1083	Vesp_Pav_Tram_Sovr	633	Z	FD glo	-0.10000
1084	Vesp_Pav_Tram_Sovr	638	Z	FD glo	-0.10000
1085	Vesp_Pav_Tram_Sovr	639	Z	FD glo	-0.10000
1086	Vesp_Pav_Tram_Sovr	644	Z	FD glo	-0.10000
1087	Vesp_Pav_Tram_Sovr	645	Z	FD glo	-0.10000
1088	Vesp_Pav_Tram_Sovr	552	Z	FD glo	-0.10000
1089	Vesp_Pav_Tram_Sovr	553	Z	FD glo	-0.10000
1090	Vesp_Pav_Tram_Sovr	540	Z	FD glo	-0.10000
1091	Vesp_Pav_Tram_Sovr	541	Z	FD glo	-0.10000
1092	Vesp_Pav_Tram_Sovr	546	Z	FD glo	-0.10000
1093	Vesp_Pav_Tram_Sovr	547	Z	FD glo	-0.10000
1094	Vesp_Pav_Tram_Sovr	236	Z	FD glo	-0.10000
1095	Vesp_Pav_Tram_Sovr	249	Z	FD glo	-0.10000
1096	Vesp_Pav_Tram_Sovr	235	Z	FD glo	-0.10000
1097	Vesp_Pav_Tram_Sovr	247	Z	FD glo	-0.10000
1098	Vesp_Pav_Tram_Sovr	233	Z	FD glo	-0.10000
1099	Vesp_Pav_Tram_Sovr	243	Z	FD glo	-0.10000
1100	Vesp_Pav_Tram_Sovr	234	Z	FD glo	-0.10000
1101	Vesp_Pav_Tram_Sovr	245	Z	FD glo	-0.10000
1102	Vesp_Pav_Tram_Sovr	356	Z	FD glo	-0.10000
1103	Vesp_Pav_Tram_Sovr	369	Z	FD glo	-0.10000
1104	Vesp_Pav_Tram_Sovr	355	Z	FD glo	-0.10000
1105	Vesp_Pav_Tram_Sovr	367	Z	FD glo	-0.10000
1106	Vesp_Pav_Tram_Sovr	353	Z	FD glo	-0.10000
1107	Vesp_Pav_Tram_Sovr	363	Z	FD glo	-0.10000
1108	Vesp_Pav_Tram_Sovr	354	Z	FD glo	-0.10000
1109	Vesp_Pav_Tram_Sovr	365	Z	FD glo	-0.10000
1110	Vesp_Pav_Tram_Sovr	524	Z	FD glo	-0.10000
1111	Vesp_Pav_Tram_Sovr	537	Z	FD glo	-0.10000
1112	Vesp_Pav_Tram_Sovr	523	Z	FD glo	-0.10000
1113	Vesp_Pav_Tram_Sovr	535	Z	FD glo	-0.10000
1114	Vesp_Pav_Tram_Sovr	521	Z	FD glo	-0.10000
1115	Vesp_Pav_Tram_Sovr	531	Z	FD glo	-0.10000
1116	Vesp_Pav_Tram_Sovr	522	Z	FD glo	-0.10000
1117	Vesp_Pav_Tram_Sovr	533	Z	FD glo	-0.10000
1118	Vesp_Pav_Tram_Sovr	482	Z	FD glo	-0.10000
1119	Vesp_Pav_Tram_Sovr	483	Z	FD glo	-0.10000
1120	Vesp_Pav_Tram_Sovr	484	Z	FD glo	-0.10000
1121	Vesp_Pav_Tram_Sovr	485	Z	FD glo	-0.10000
1122	Vesp_Pav_Tram_Sovr	486	Z	FD glo	-0.10000
1123	Vesp_Pav_Tram_Sovr	487	Z	FD glo	-0.10000
1124	Vesp_Pav_Tram_Sovr	488	Z	FD glo	-0.10000
1125	Vesp_Pav_Tram_Sovr	490	Z	FD glo	-0.10000

35

36

1296	Vesp_Pav_Tram_Sovr	12	Z	FD glo	-0.10000
1297	Vesp_Pav_Tram_Sovr	42	Z	FD glo	-0.10000
1298	Vesp_Pav_Tram_Sovr	94	Z	FD glo	-0.10000
1299	Vesp_Pav_Tram_Sovr	95	Z	FD glo	-0.10000
1300	Vesp_Pav_Tram_Sovr	96	Z	FD glo	-0.10000
1301	Vesp_Pav_Tram_Sovr	97	Z	FD glo	-0.10000
1302	Vesp_Pav_Tram_Sovr	98	Z	FD glo	-0.10000
1303	Vesp_Pav_Tram_Sovr	100	Z	FD glo	-0.10000
1304	Vesp_Pav_Tram_Sovr	102	Z	FD glo	-0.10000
1305	Vesp_Pav_Tram_Sovr	103	Z	FD glo	-0.10000
1306	Vesp_Pav_Tram_Sovr	104	Z	FD glo	-0.10000
1307	Vesp_Pav_Tram_Sovr	105	Z	FD glo	-0.10000
1308	Vesp_Pav_Tram_Sovr	106	Z	FD glo	-0.10000
1309	Vesp_Pav_Tram_Sovr	107	Z	FD glo	-0.10000
1310	Vesp_Pav_Tram_Sovr	108	Z	FD glo	-0.10000
1311	Vesp_Pav_Tram_Sovr	109	Z	FD glo	-0.10000
1312	Vesp_Pav_Tram_Sovr	110	Z	FD glo	-0.10000
1313	Vesp_Pav_Tram_Sovr	111	Z	FD glo	-0.10000
1314	Vesp_Pav_Tram_Sovr	112	Z	FD glo	-0.10000
1315	Vesp_Pav_Tram_Sovr	270	Z	FD glo	-0.10000
1316	Vesp_Pav_Tram_Sovr	282	Z	FD glo	-0.10000
1317	Vesp_Pav_Tram_Sovr	283	Z	FD glo	-0.10000
1318	Vesp_Pav_Tram_Sovr	285	Z	FD glo	-0.10000
1319	Vesp_Pav_Tram_Sovr	287	Z	FD glo	-0.10000
1320	Vesp_Pav_Tram_Sovr	288	Z	FD glo	-0.10000
1321	Vesp_Pav_Tram_Sovr	289	Z	FD glo	-0.10000
1322	Vesp_Pav_Tram_Sovr	290	Z	FD glo	-0.10000
1323	Vesp_Pav_Tram_Sovr	378	Z	FD glo	-0.10000
1324	Vesp_Pav_Tram_Sovr	400	Z	FD glo	-0.10000
1325	Vesp_Pav_Tram_Sovr	401	Z	FD glo	-0.10000
1326	Vesp_Pav_Tram_Sovr	403	Z	FD glo	-0.10000
1327	Vesp_Pav_Tram_Sovr	405	Z	FD glo	-0.10000
1328	Vesp_Pav_Tram_Sovr	406	Z	FD glo	-0.10000
1329	Vesp_Pav_Tram_Sovr	407	Z	FD glo	-0.10000
1330	Vesp_Pav_Tram_Sovr	408	Z	FD glo	-0.10000
1331	Vesp_Pav_Tram_Sovr	412	Z	FD glo	-0.10000
1332	Vesp_Pav_Tram_Sovr	413	Z	FD glo	-0.10000
1333	Vesp_Pav_Tram_Sovr	414	Z	FD glo	-0.10000
1334	Vesp_Pav_Tram_Sovr	415	Z	FD glo	-0.10000
1335	Vesp_Pav_Tram_Sovr	416	Z	FD glo	-0.10000
1336	Vesp_Pav_Tram_Sovr	417	Z	FD glo	-0.10000
1337	Vesp_Pav_Tram_Sovr	418	Z	FD glo	-0.10000
1338	Vesp_Pav_Tram_Sovr	585	Z	FD glo	-0.10000
1339	Vesp_Pav_Tram_Sovr	586	Z	FD glo	-0.10000
1340	Vesp_Pav_Tram_Sovr	587	Z	FD glo	-0.10000
1341	Vesp_Pav_Tram_Sovr	588	Z	FD glo	-0.10000
1342	Vesp_Pav_Tram_Sovr	589	Z	FD glo	-0.10000
1343	Vesp_Pav_Tram_Sovr	590	Z	FD glo	-0.10000
1344	Vesp_Pav_Tram_Sovr	591	Z	FD glo	-0.10000
1345	Vesp_Pav_Tram_Sovr	592	Z	FD glo	-0.10000
1346	Vesp_Pav_Tram_Sovr	237	Z	FD glo	-0.10000
1347	Vesp_Pav_Tram_Sovr	250	Z	FD glo	-0.10000
1348	Vesp_Pav_Tram_Sovr	99	Z	FD glo	-0.10000
1349	Vesp_Pav_Tram_Sovr	101	Z	FD glo	-0.10000
1350	Vesp_Pav_Tram_Sovr	357	Z	FD glo	-0.10000
1351	Vesp_Pav_Tram_Sovr	370	Z	FD glo	-0.10000
1352	Vesp_Pav_Tram_Sovr	284	Z	FD glo	-0.10000
1353	Vesp_Pav_Tram_Sovr	286	Z	FD glo	-0.10000
1354	Vesp_Pav_Tram_Sovr	525	Z	FD glo	-0.10000
1355	Vesp_Pav_Tram_Sovr	538	Z	FD glo	-0.10000
1356	Vesp_Pav_Tram_Sovr	402	Z	FD glo	-0.10000
1357	Vesp_Pav_Tram_Sovr	404	Z	FD glo	-0.10000
1358	Vesp_Pav_Tram_Sovr	409	Z	FD glo	-0.10000
1359	Vesp_Pav_Tram_Sovr	410	Z	FD glo	-0.10000
1360	Vesp_Pav_Tram_Sovr	411	Z	FD glo	-0.10000
1361	Vesp_Pav_Tram_Sovr	576	Z	FD glo	-0.10000
1362	Vesp_Pav_Tram_Sovr	7	Z	FD glo	-0.10000
1363	Vesp_Pav_Tram_Sovr	8	Z	FD glo	-0.10000
1364	Vesp_Pav_Tram_Sovr	9	Z	FD glo	-0.10000
1365	Vesp_Pav_Tram_Sovr	72	Z	FD glo	-0.10000

PESI PROPRI GUSCI - ----- ----- ----- ----- -----				
Cond.	Nome Carichi	Gusci		
5	1366-2013	1-648		

CONDIZIONI DI CARICO----- ----- ----- ----- num. = 18				
Nome				
1	Peso proprio_____	N. carichi :	64	
	Lista carichi :	205-229, 433-471		
2	Permanente_____	N. carichi :	25	
	Lista carichi :	230-254		
3	Neve(<1000m slm)_____	N. carichi :	25	
	Lista carichi :	255-279		

4	Massa_Sismica_Muri	N. carichi :	14
	Lista carichi :	280-293	
5	PP_Fonda	N. carichi :	798
	Lista carichi :	472-621, 1366-2013	
6	Perm_Fonda	N. carichi :	866
	Lista carichi :	294-415, 622-1365	
7	Vento_X	N. carichi :	13
	Lista carichi :	416-428	
8	Vento_Y	N. carichi :	4
	Lista carichi :	429-432	
9	Autovett_001_(X)	N. carichi :	7
	Lista carichi :	1-7	
10	Autovett_001_(Y)	N. carichi :	22
	Lista carichi :	8-29	
11	Autovett_002_(X)	N. carichi :	22
	Lista carichi :	30-51	
12	Autovett_002_(Y)	N. carichi :	21
	Lista carichi :	52-72	
13	Autovett_003_(X)	N. carichi :	22
	Lista carichi :	73-94	
14	Autovett_003_(Y)	N. carichi :	22
	Lista carichi :	95-116	
15	Sisma_X	N. carichi :	22
	Lista carichi :	117-138	
16	Sisma_Y	N. carichi :	22
	Lista carichi :	139-160	
17	Torcente_add._X	N. carichi :	22
	Lista carichi :	161-182	
18	Torcente_add._Y	N. carichi :	22
	Lista carichi :	183-204	

RI SULTANTI DEI CARICHI (punto di applicazione nell'origine degli assi):

cond.	FX	FY	FZ	MX	MY	MZ
1	0.000000E+00	0.000000E+00	-1.249167E+05	-5.276172E+07	1.044638E+08	0.000000E+00
2	0.000000E+00	0.000000E+00	-1.951043E+04	-8.145872E+06	1.638876E+07	0.000000E+00
3	0.000000E+00	0.000000E+00	-3.511878E+04	-1.466257E+07	2.949977E+07	0.000000E+00
4	0.000000E+00	0.000000E+00	-7.584800E+04	-3.224397E+07	6.778684E+07	0.000000E+00
5	0.000000E+00	0.000000E+00	-1.054680E+05	-4.432416E+07	9.120688E+07	0.000000E+00
6	0.000000E+00	0.000000E+00	-2.596280E+05	-1.089675E+08	2.390532E+08	0.000000E+00
7	3.580000E+03	0.000000E+00	0.000000E+00	0.000000E+00	1.147390E+06	-1.494650E+06
8	0.000000E+00	2.071935E+03	0.000000E+00	-7.049758E+05	0.000000E+00	1.741461E+06
9	1.400000E+00	0.000000E+00	0.000000E+00	0.000000E+00	4.530450E+02	-1.116900E+03
10	0.000000E+00	4.445230E+04	0.000000E+00	-1.485986E+07	0.000000E+00	3.818000E+07
11	8.633880E+03	0.000000E+00	0.000000E+00	0.000000E+00	2.886249E+06	-6.705623E+05
12	0.000000E+00	7.220000E+00	0.000000E+00	-2.219605E+03	0.000000E+00	-2.443139E+05
13	3.583144E+04	0.000000E+00	0.000000E+00	0.000000E+00	1.197647E+07	-1.804262E+07
14	0.000000E+00	6.950000E+00	0.000000E+00	-2.230240E+03	0.000000E+00	-1.146552E+05
15	4.446718E+04	0.000000E+00	0.000000E+00	0.000000E+00	1.486242E+07	-1.872013E+07
16	0.000000E+00	4.446718E+04	0.000000E+00	-1.486242E+07	0.000000E+00	3.781921E+07
17	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	-2.241656E+02	-1.834271E+06
18	0.000000E+00	0.000000E+00	0.000000E+00	-3.094329E+03	0.000000E+00	3.979813E+06

9. DATI ANALISI SISMICA

ANALISI DINAMICA

Lavoro : \CNCRSP

PARAMETRI DI CALCOLO:

Modello generale

Assi di vibrazione: X Y

Combinazione quadratica completa (CQC)

DATI PROGETTO

Edificio sito in località CUNEO (long. 7.534 lat. 44.401200)

Categoria del suolo di fondazione = B

Coeff. di amplificazione stratigrafica $S_s = 1.200$

Coeff. di amplificazione topografica $ST = 1.000$

$S = 1.200$

Vita nominale dell'opera VN = 50 anni

Coefficiente d'uso CU = 1.0

Periodo di riferimento VR = 50.0

PVR : probabilità di superamento in VR = 10 %

Tempo di ritorno = 474

Coeff. di smorzamento viscoso = 5.0

Valori risultanti per :

ag 1.302 [g/10]

Fo 2.481

TC* 0.280

Fattore di comportamento q = 1.500

Rapporto spettro di esercizio / spettro di progetto = 0.564

CONDIZIONI DI RIFERIMENTO	COEFFICIENTE	PESO RISULTANTE [daN]
1.	1.000	124916.7
2.	1.000	19510.4
4.	1.000	75848.0

*** TABELLA AUTOVETTORI ***

n	PERIODO [sec]	MASSA ATTIVATA			COEFFICIENTI DI CORRELAZIONE						
		%X	%Y	%Z	n+1	n+2	n+3	n+4	n+5	n+6	n+7
1	0.291473	0.003	99.965	0.000	0.051	0.029					
2	0.190964	19.416	0.016	0.000	0.351						
3	0.166730	80.579	0.016	0.000							
MASSA TOTALE		99.998	99.997	0.000							

10. DESCRIZIONE CASI DI CARICO

NOME	DESCRIZIONE	VERIFICA	TIPO	CONDIZ. INSERITE			CASI INSERITI	
				Num.	Coeff.	Segno	Num.	Coeff.
1	SLU	S. L. U.	somma	1	1.300	+		
				2	1.500	+		
				3	1.500	+		
				5	1.300	+		
				6	1.500	+		
2	SLU VENTOX	S. L. U.	somma	1	1.300	+		
				2	1.500	+		
				3	1.500	+		
				5	1.300	+		
				6	1.500	+		
3	SLU VENTOY	S. L. U.	somma	1	1.300	+		
				2	1.500	+		
				3	1.500	+		
				5	1.300	+		
				6	1.500	+		
4	SISMAX SLU	nessuna	somma	9	1.000	quadr.		
				11	1.000	quadr.		
				13	1.000	quadr.		
				17	1.000	±		
5	SISMAY SLU	nessuna	somma	10	1.000	quadr.		
				12	1.000	quadr.		
				14	1.000	quadr.		
				18	1.000	±		
6	SLU con SISMAX PRINC	S. L. U.	somma	1	1.000	+	4	1.000
				2	1.000	+	5	0.300
				5	1.000	+		
				6	1.000	+		
7	SLU con SISMAY PRINC	S. L. U.	somma	1	1.000	+	5	1.000
				2	1.000	+	4	0.300
				5	1.000	+		
				6	1.000	+		
8	SLD con SISMAX PRINC	S. L. Danno	somma	1	1.000	+	4	0.564
				2	1.000	+	5	0.169
				5	1.000	+		
				6	1.000	+		
9	SLD con SISMAY PRINC	S. L. Danno	somma	1	1.000	+	5	0.564
				2	1.000	+	4	0.169
				5	1.000	+		
				6	1.000	+		
10	SLU FON con SISMAX P	SLU_FON	somma	1	1.000	+	4	1.100
				2	1.000	+	5	0.330
				5	1.000	+		
				6	1.000	+		
11	SLU FON con SISMAY P	SLU_FON	somma	1	1.000	+	5	1.100
				2	1.000	+	4	0.330
				5	1.000	+		
				6	1.000	+		
12	SLUGeo	SLU_GEO	somma	1	1.000	+		
				2	1.300	+		
				3	1.300	+		
				5	1.000	+		
				6	1.300	+		
13	SLUGeo VENTOX	SLU_GEO	somma	1	1.000	+		
				2	1.300	+		
				3	1.300	+		

				5	1.000	+		
				6	1.300	+		
				7	1.300	±		
14	SLUGeo VENTOY	SLU_GEO	somma	1	1.000	+		
				2	1.300	+		
				3	1.300	+		
				5	1.000	+		
				6	1.300	+		
				8	1.300	±		
15	SLUEqu	SLU_EQU	somma	1	0.900	+		
				2	1.500	+		
				3	1.500	+		
				5	0.900	+		
				6	1.500	+		
16	SLUEqu VENTOX	SLU_EQU	somma	1	0.900	+		
				2	1.500	+		
				3	1.500	+		
				5	0.900	+		
				6	1.500	+		
				7	1.500	±		
17	SLUEqu VENTOY	SLU_EQU	somma	1	0.900	+		
				2	1.500	+		
				3	1.500	+		
				5	0.900	+		
				6	1.500	+		
				8	1.500	±		
18	Rara	Rara	somma	1	1.000	+		
				2	1.000	+		
				3	1.000	+		
				5	1.000	+		
				6	1.000	+		
19	Rara VentoX	Rara	somma	1	1.000	+		
				2	1.000	+		
				3	1.000	+		
				5	1.000	+		
				6	1.000	+		
				7	1.000	±		
20	Rara VentoY	Rara	somma	1	1.000	+		
				2	1.000	+		
				3	1.000	+		
				5	1.000	+		
				6	1.000	+		
				8	1.000	±		
21	Frequente	Freq.	somma	1	1.000	+		
				2	1.000	+		
				3	0.200	+		
				5	1.000	+		
				6	1.000	+		
22	Frequente VentoX	Freq.	somma	1	1.000	+		
				2	1.000	+		
				3	0.200	+		
				5	1.000	+		
				6	1.000	+		
				7	0.200	±		
23	Frequente VentoY	Freq.	somma	1	1.000	+		
				2	1.000	+		
				3	0.200	+		
				5	1.000	+		
				6	1.000	+		
				8	0.200	±		
24	Quasi Perm	Quasi Perm.	somma	1	1.000	+		
				2	1.000	+		
				5	1.000	+		
				6	1.000	+		

11. SPOSTAMENTI NODALI

VERIFICA SPOSTAMENTI SISMICI DI ESERCIZIO (NTC 7.3.6.1)

spostamento limite interpiano = 0.5% dell'altezza

CASO n. 8 - SLD con SISMAX PRINC:

Zinf [cm]	Zsup [cm]	h [cm]	spost.max [cm]	%h	nodo	sest.	ver.
0.00	320.50	320.50	0.175328	0.055	12	5	SI

CASO n. 9 - SLD con SISMAX PRINC:

Zinf [cm]	Zsup [cm]	h [cm]	spost.max [cm]	%h	nodo	sest.	ver.
0.00	360.00	360.00	0.350121	0.097	8	2	SI

VERIFICA SPOSTAMENTI SISMICI DI S.L.V. (NTC 7.3.3.3)

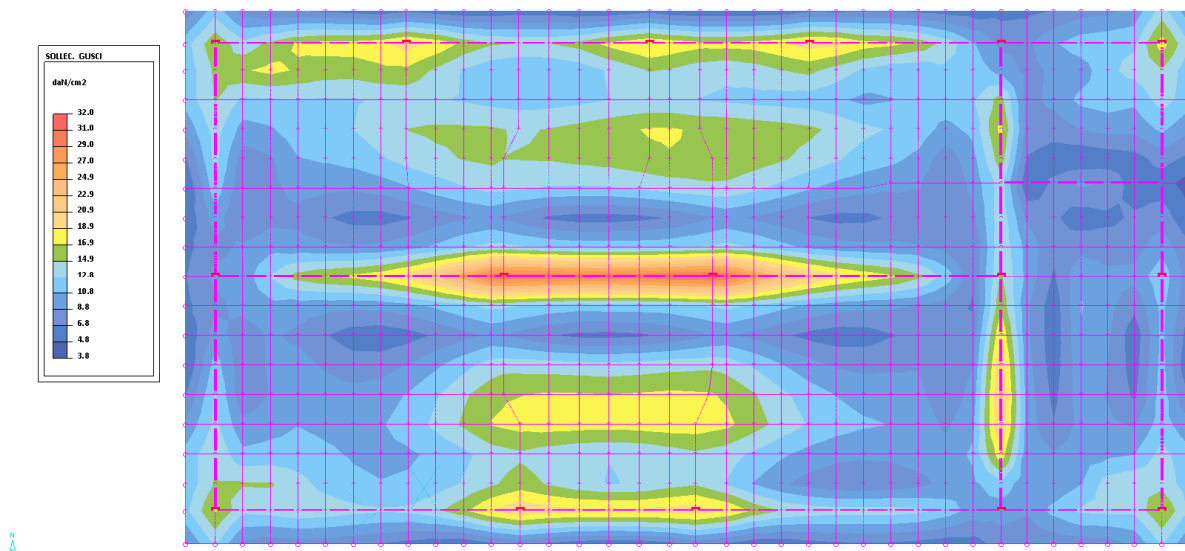
Fattore Mud = 1.683

Quota [cm]	DX_max [cm]	nodo	DY_max [cm]	nodo
---------------	----------------	------	----------------	------

12. VERIFICA GUSCI IN C.A.

MACROGUSCIO Platea

Piano XY, Z = 0 cm



SOLLECITAZIONI MASSIME SLU (INVOLUPPO DEI CASI SLU) IN VALORE ASSOLUTO

VERIFICA ARMATURE EFFETTIVE (EFFETTO MEMBRANA + PIASTRA)

CASI DI CARICO: ->

Nome	Descrizione
1	SLU
2	SLU VENTOX
3	SLU VENTYO
6	SLU con SSMAX PRINC
7	SLU con SSMAY PRINC
15	SLUEqu
16	SLUEqu VENTOX
17	SLUEqu VENTYO

DATI:

tensione di snervamento acciaio (f_{yk}):	4500	daN/cm ²
coefficiente sicurezza acciaio	: 1.15	
deformazione ultima acciaio	: 1.96	per mille
deformazione ultima cls	: 3.5	per mille
rapporto rottura/snervamento (k):	1	
resistenza cilindrica cls (f_{ck}):	249	daN/cm ²
coefficiente sicurezza cls	: 1.5	
coefficiente riduttivo (alfa):	0.85	
copri ferro inferiore (asse armatura):	4	cm
copri ferro superiore (asse armatura):	4	cm
moltiplicatore sollecitazioni	: 1	

LEGENDA:

spess	= spessore guscio. Verifica effettuata su sezione BxH, con B=1 cm e H="spess" cm
Af	= area di sposta al lembo teso, in cm ² al metro
Afc	= area di sposta al lembo compresso, in cm ² al metro
Mom	= momento flettente [daNcm/cm]
Nor	= sforzo normale [daN]
epsC	= deformazione cls [per mille]
epsF	= deformazione acciaio [per mille]

<- L'armatura è sufficiente se le deformazioni dei materiali sono ovunque minori delle corrispondenti deformazioni ultime.

Per gli elementi non dissipativi la permanenza in campo elastico è ottenuta limitando

la deformazione dell'acciaio alla deformazione di snervamento (1.96 per mille) e quella del calcestruzzo al 2 per mille.

GUSCI	spess	INFERIORE ORIZZONTALE						INFERIORE VERTICALE					
		Af	Afc	Mom	Nor	epsC	epsF	Af	Afc	Mom	Nor	epsC	epsF
1	15	2.51	2.51	653.	0.	0.38	1.22	2.51	2.51	771.	0.	0.45	1.44
2	15	2.51	2.51	286.	0.	0.17	0.54	2.51	2.51	679.	0.	0.40	1.27
3	15	2.51	2.51	487.	0.	0.29	0.91	2.51	2.51	393.	0.	0.23	0.74
4	15	2.51	2.51	600.	0.	0.35	1.12	2.51	2.51	811.	0.	0.48	1.52
5	15	2.51	2.51	208.	0.	0.12	0.39	2.51	2.51	727.	0.	0.43	1.36
6	15	2.51	2.51	421.	0.	0.25	0.79	2.51	2.51	346.	0.	0.20	0.65
7	15	2.51	2.51	635.	0.	0.37	1.19	2.51	2.51	833.	0.	0.49	1.56
8	15	2.51	2.51	240.	0.	0.14	0.45	2.51	2.51	749.	0.	0.44	1.40
9	15	2.51	2.51	430.	0.	0.25	0.80	2.51	2.51	333.	0.	0.20	0.62
10	15	2.51	2.51	563.	0.	0.33	1.05	2.51	2.51	673.	0.	0.40	1.26
11	15	2.51	2.51	220.	0.	0.13	0.41	2.51	2.51	620.	0.	0.36	1.16
12	15	2.51	2.51	440.	0.	0.26	0.82	2.51	2.51	432.	0.	0.25	0.81
13	15	2.51	2.51	413.	0.	0.24	0.77	2.51	2.51	114.	1.	0.06	0.22
14	15	2.51	2.51	385.	0.	0.23	0.72	2.51	2.51	19.	0.	0.01	0.04
15	15	2.51	2.51	349.	0.	0.21	0.65	2.51	2.51	0.	0.	0.00	0.00
16	15	2.51	2.51	332.	0.	0.20	0.62	2.51	2.51	0.	0.	0.00	0.00
17	15	2.51	2.51	324.	0.	0.19	0.61	2.51	2.51	0.	0.	0.00	0.00
18	15	2.51	2.51	321.	0.	0.19	0.60	2.51	2.51	58.	0.	0.03	0.11
19	15	2.51	2.51	332.	0.	0.20	0.62	2.51	2.51	171.	0.	0.10	0.32
20	15	2.51	2.51	269.	0.	0.16	0.51	2.51	2.51	651.	0.	0.38	1.22
21	15	2.51	2.51	495.	1.	0.29	0.93	2.51	2.51	127.	0.	0.07	0.24
22	15	2.51	2.51	617.	0.	0.36	1.16	2.51	2.51	0.	0.	0.00	0.00
23	15	2.51	2.51	599.	0.	0.35	1.12	2.51	2.51	0.	0.	0.00	0.00
24	15	2.51	2.51	575.	0.	0.34	1.08	2.51	2.51	0.	0.	0.00	0.00
25	15	2.51	2.51	512.	0.	0.30	0.96	2.51	2.51	17.	0.	0.01	0.03
26	15	2.51	2.51	369.	0.	0.22	0.69	2.51	2.51	105.	0.	0.06	0.20
27	15	2.51	2.51	152.	0.	0.09	0.28	2.51	2.51	243.	0.	0.14	0.46
28	15	2.51	2.51	316.	0.	0.19	0.59	2.51	2.51	132.	0.	0.08	0.25
29	15	2.51	2.51	311.	0.	0.18	0.58	2.51	2.51	49.	0.	0.03	0.09
30	15	2.51	2.51	320.	0.	0.19	0.60	2.51	2.51	7.	0.	0.00	0.01
31	15	2.51	2.51	341.	0.	0.20	0.64	2.51	2.51	0.	0.	0.00	0.00
32	15	2.51	2.51	374.	0.	0.22	0.70	2.51	2.51	24.	0.	0.01	0.04
33	15	2.51	2.51	394.	0.	0.23	0.74	2.51	2.51	77.	0.	0.05	0.14
34	15	2.51	2.51	406.	0.	0.24	0.76	2.51	2.51	176.	0.	0.10	0.33
35	15	2.51	2.51	156.	0.	0.09	0.29	2.51	2.51	210.	0.	0.12	0.39
36	15	2.51	2.51	373.	0.	0.22	0.70	2.51	2.51	75.	0.	0.04	0.14
37	15	2.51	2.51	528.	0.	0.31	0.99	2.51	2.51	0.	0.	0.00	0.00
38	15	2.51	2.51	633.	0.	0.37	1.18	2.51	2.51	0.	0.	0.00	0.00
39	15	2.51	2.51	723.	0.	0.43	1.35	2.51	2.51	4.	0.	0.00	0.01
40	15	2.51	2.51	714.	0.	0.42	1.34	2.51	2.51	72.	0.	0.04	0.14
41	15	2.51	2.51	558.	0.	0.33	1.04	2.51	2.51	411.	0.	0.24	0.77
42	15	2.51	2.51	317.	0.	0.19	0.59	2.51	2.51	824.	0.	0.49	1.54
43	15	2.51	2.51	242.	0.	0.14	0.45	2.51	2.51	639.	0.	0.38	1.20
44	15	2.51	2.51	371.	0.	0.22	0.69	2.51	2.51	118.	0.	0.07	0.22
45	15	2.51	2.51	432.	0.	0.25	0.81	2.51	2.51	149.	0.	0.09	0.28
46	15	2.51	2.51	361.	0.	0.21	0.67	2.51	2.51	49.	0.	0.03	0.09
47	15	2.51	2.51	561.	0.	0.33	1.05	2.51	2.51	41.	0.	0.02	0.08
48	15	2.51	2.51	344.	0.	0.20	0.64	2.51	2.51	4.	0.	0.00	0.01
49	15	2.51	2.51	582.	0.	0.34	1.09	2.51	2.51	0.	0.	0.00	0.00
50	15	2.51	2.51	321.	0.	0.19	0.60	2.51	2.51	0.	0.	0.00	0.00
51	15	2.51	2.51	566.	0.	0.33	1.06	2.51	2.51	0.	0.	0.00	0.00
52	15	2.51	2.51	314.	0.	0.18	0.59	2.51	2.51	7.	0.	0.00	0.01
53	15	2.51	2.51	556.	0.	0.33	1.04	2.51	2.51	0.	0.	0.00	0.00
54	15	2.51	2.51	321.	0.	0.19	0.60	2.51	2.51	65.	0.	0.04	0.12
55	15	2.51	2.51	585.	0.	0.34	1.09	2.51	2.51	48.	0.	0.03	0.09
56	15	2.51	2.51	343.	0.	0.20	0.64	2.51	2.51	178.	0.	0.10	0.33
57	15	2.51	2.51	648.	0.	0.38	1.21	2.51	2.51	144.	0.	0.08	0.27
58	15	2.51	2.51	335.	0.	0.20	0.63	2.51	2.51	165.	0.	0.10	0.31
59	15	2.51	2.51	620.	0.	0.37	1.16	2.51	2.51	188.	0.	0.11	0.35
60	15	2.51	2.51	322.	0.	0.19	0.60	2.51	2.51	90.	0.	0.05	0.17
61	15	2.51	2.51	456.	0.	0.27	0.85	2.51	2.51	141.	0.	0.08	0.26
62	15	2.51	2.51	318.	0.	0.19	0.60	2.51	2.51	36.	0.	0.02	0.07
63	15	2.51	2.51	211.	0.	0.12	0.39	2.51	2.51	156.	0.	0.09	0.29
64	15	2.51	2.51	313.	0.	0.18	0.58	2.51	2.51	0.	0.	0.00	0.00
65	15	2.51	2.51	160.	0.	0.09	0.30	2.51	2.51	105.	0.	0.06	0.20
66	15	2.51	2.51	318.	0.	0.19	0.59	2.51	2.51	0.	0.	0.00	0.00
67	15	2.51	2.51	307.	0.	0.18	0.57	2.51	2.51	0.	0.	0.00	0.00
68	15	2.51	2.51	331.	0.	0.19	0.62	2.51	2.51	0.	0.	0.00	0.00
69	15	2.51	2.51	416.	0.	0.24	0.78	2.51	2.51	0.	0.	0.00	0.00
70	15	2.51	2.51	348.	0.	0.20	0.65	2.51	2.51	67.	0.	0.04	0.13
71	15	2.51	2.51	395.	0.	0.23	0.74	2.51	2.51	76.	0.	0.04	0.14
72	15	2.51	2.51	216.	0.	0.13	0.40	2.51	2.51	600.	0.	0.35	1.12
73	15	2.51	2.51	51.	0.	0.03	0.09	2.51	2.51	491.	0.	0.29	0.92
74	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	420.	0.	0.25	0.79
75	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	383.	0.	0.23	0.72
76	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	361.	0.	0.21	0.68
77	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	356.	0.	0.21	0.67
78	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	368.	0.	0.22	0.69
79	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	395.	0.	0.23	0.74
80	15	2.51	2.51	60.	0.	0.04	0.11	2.51	2.51	437.	0.	0.26	0.82

81	15	2.51	2.51	161.	0.	0.09	0.30	2.51	2.51	464.	0.	0.27	0.87
82	15	2.51	2.51	324.	0.	0.19	0.61	2.51	2.51	501.	0.	0.29	0.94
83	15	2.51	2.51	350.	0.	0.21	0.65	2.51	2.51	561.	0.	0.33	1.05
84	15	2.51	2.51	421.	0.	0.25	0.79	2.51	2.51	1480.	0.	998.	50998.50
85	15	2.51	2.51	238.	0.	0.14	0.44	2.51	2.51	1214.	0.	998.	50998.50
86	15	2.51	2.51	119.	0.	0.07	0.22	2.51	2.51	1043.	0.	0.61	1.95
87	15	2.51	2.51	27.	0.	0.02	0.05	2.51	2.51	929.	0.	0.55	1.74
88	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	860.	0.	0.51	1.61
89	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	825.	0.	0.49	1.54
90	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	820.	0.	0.48	1.53
91	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	834.	0.	0.49	1.56
92	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	843.	0.	0.50	1.58
93	15	2.51	2.51	61.	0.	0.03	0.12	2.51	2.51	825.	0.	0.49	1.54
94	15	2.51	2.51	85.	0.	0.05	0.16	2.51	2.51	502.	0.	0.30	0.94
95	15	2.51	2.51	61.	0.	0.04	0.11	2.51	2.51	497.	0.	0.29	0.93
96	15	2.51	2.51	60.	0.	0.04	0.11	2.51	2.51	500.	0.	0.29	0.94
97	15	2.51	2.51	101.	0.	0.06	0.19	2.51	2.51	495.	0.	0.29	0.93
98	15	2.51	2.51	173.	0.	0.10	0.32	2.51	2.51	484.	0.	0.28	0.91
99	15	2.51	2.51	269.	0.	0.16	0.50	2.51	2.51	475.	0.	0.28	0.89
100	15	2.51	2.51	163.	0.	0.10	0.30	2.51	2.51	501.	0.	0.30	0.94
101	15	2.51	2.51	314.	0.	0.18	0.59	2.51	2.51	508.	0.	0.30	0.95
102	15	2.51	2.51	68.	0.	0.04	0.13	2.51	2.51	483.	0.	0.28	0.90
103	15	2.51	2.51	2.	0.	0.00	0.00	2.51	2.51	455.	0.	0.27	0.85
104	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	434.	0.	0.26	0.81
105	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	948.	0.	0.56	1.77
106	15	2.51	2.51	38.	0.	0.02	0.07	2.51	2.51	1058.	0.	0.62	1.96
107	15	2.51	2.51	133.	0.	0.08	0.25	2.51	2.51	1224.	0.	998.	50998.50
108	15	2.51	2.51	186.	0.	0.11	0.35	2.51	2.51	1307.	0.	998.	50998.50
109	15	2.51	2.51	103.	0.	0.06	0.19	2.51	2.51	1207.	0.	998.	50998.50
110	15	2.51	2.51	69.	0.	0.04	0.13	2.51	2.51	1137.	0.	998.	50998.50
111	15	2.51	2.51	79.	0.	0.05	0.15	2.51	2.51	1062.	0.	0.62	1.96
112	15	2.51	2.51	141.	0.	0.08	0.26	2.51	2.51	958.	0.	0.56	1.79
113	15	2.51	2.51	17.	0.	0.01	0.04	2.51	2.51	86.	0.	0.05	0.16
114	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
115	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
116	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
117	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
118	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	88.	0.	0.05	0.16
119	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	371.	0.	0.22	0.69
120	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
121	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
122	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
123	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
124	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
125	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	24.	0.	0.01	0.05
126	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	488.	0.	0.29	0.91
127	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
128	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
129	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
130	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
131	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
132	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	29.	0.	0.02	0.05
133	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	545.	0.	0.32	1.02
134	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
135	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
136	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
137	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
138	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
139	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	54.	0.	0.03	0.10
140	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	575.	0.	0.34	1.07
141	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
142	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
143	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
144	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
145	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
146	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	86.	0.	0.05	0.16
147	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	623.	0.	0.37	1.16
148	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
149	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
150	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
151	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
152	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
153	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	141.	0.	0.08	0.26
154	15	2.51	2.51	3.	0.	0.00	0.01	2.51	2.51	717.	0.	0.42	1.34
155	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
156	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
157	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
158	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
159	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
160	15	2.51	2.51	62.	0.	0.04	0.12	2.51	2.51	216.	0.	0.13	0.40
161	15	2.51	2.51	110.	0.	0.06	0.21	2.51	2.51	877.	0.	0.52	1.64
162	15	2.51	2.51	55.	0.	0.03	0.10	2.51	2.51	0.	0.	0.00	0.00
163	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
164	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
165	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00

166	15	2.51	2.51	13.	0.	0.01	0.03	2.51	2.51	0.	0.	0.00	0.00	
167	15	2.51	2.51	160.	0.	0.09	0.30	2.51	2.51	253.	0.	0.15	0.47	
168	15	2.51	2.51	245.	0.	0.14	0.46	2.51	2.51	1059.	0.	0.62	1.96	
169	15	2.51	2.51	157.	0.	0.09	0.29	2.51	2.51	11.	0.	0.01	0.02	
170	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
171	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
172	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
173	15	2.51	2.51	55.	0.	0.03	0.10	2.51	2.51	0.	0.	0.00	0.00	
174	15	2.51	2.51	279.	0.	0.16	0.52	2.51	2.51	263.	0.	0.15	0.49	
175	15	2.51	2.51	406.	0.	0.24	0.76	2.51	2.51	1279.	0.	998.50998.50		@
176	15	2.51	2.51	287.	0.	0.17	0.54	2.51	2.51	11.	0.	0.01	0.02	
177	15	2.51	2.51	53.	0.	0.03	0.10	2.51	2.51	0.	0.	0.00	0.00	
178	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
179	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
180	15	2.51	2.51	100.	0.	0.06	0.19	2.51	2.51	0.	0.	0.00	0.00	
181	15	2.51	2.51	371.	0.	0.22	0.69	2.51	2.51	225.	0.	0.13	0.42	
182	15	2.51	2.51	533.	0.	0.31	1.00	2.51	2.51	1373.	0.	998.50998.50		@
183	15	2.51	2.51	356.	0.	0.21	0.67	2.51	2.51	1499.	0.	998.50998.50		@
184	15	2.51	2.51	200.	0.	0.12	0.37	2.51	2.51	0.	0.	0.00	0.00	
185	15	2.51	2.51	1.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
186	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
187	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
188	15	2.51	2.51	37.	0.	0.02	0.07	2.51	2.51	0.	0.	0.00	0.00	
189	15	2.51	2.51	198.	0.	0.12	0.37	2.51	2.51	234.	0.	0.14	0.44	
190	15	2.51	2.51	384.	0.	0.23	0.72	2.51	2.51	1415.	0.	998.50998.50		@
191	15	2.51	2.51	519.	0.	0.31	0.97	2.51	2.51	1344.	0.	998.50998.50		@
192	15	2.51	2.51	394.	0.	0.23	0.74	2.51	2.51	1245.	0.	998.50998.50		@
193	15	2.51	2.51	220.	0.	0.13	0.41	2.51	2.51	1003.	0.	0.59	1.88	
194	15	2.51	2.51	91.	0.	0.05	0.17	2.51	2.51	829.	0.	0.49	1.55	
195	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	693.	0.	0.41	1.30	
196	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	610.	0.	0.36	1.14	
197	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	560.	0.	0.33	1.05	
198	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	526.	0.	0.31	0.98	
199	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	465.	0.	0.27	0.87	
200	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	346.	0.	0.20	0.65	
201	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	64.	0.	0.04	0.12	
202	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
203	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
204	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
205	15	2.51	2.51	39.	0.	0.02	0.07	2.51	2.51	0.	0.	0.00	0.00	
206	15	2.51	2.51	152.	0.	0.09	0.28	2.51	2.51	239.	0.	0.14	0.45	
207	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	7.	0.	0.00	0.01	
208	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
209	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
210	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
211	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
212	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	141.	0.	0.08	0.26	
213	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	9.	0.	0.01	0.02	
214	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
215	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
216	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
217	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
218	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	63.	0.	0.04	0.12	
219	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	32.	0.	0.02	0.06	
220	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
221	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
222	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
223	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
224	15	2.51	2.51	6.	0.	0.00	0.01	2.51	2.51	49.	0.	0.03	0.09	
225	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	63.	0.	0.04	0.12	
226	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
227	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
228	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
229	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
230	15	2.51	2.51	81.	0.	0.05	0.15	2.51	2.51	35.	0.	0.02	0.07	
231	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	122.	0.	0.07	0.23	
232	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
233	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
234	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
235	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
236	15	2.51	2.51	181.	0.	0.11	0.34	2.51	2.51	0.	0.	0.00	0.00	
237	15	2.51	2.51	313.	0.	0.18	0.59	2.51	2.51	1451.	0.	998.50998.50		@
238	15	2.51	2.51	67.	0.	0.04	0.13	2.51	2.51	206.	0.	0.12	0.39	
239	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
240	15	2.51	2.51	160.	0.	0.09	0.30	2.51	2.51	253.	0.	0.15	0.47	
241	15	2.51	2.51	24.	0.	0.01	0.05	2.51	2.51	0.	0.	0.00	0.00	
242	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
243	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
244	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
245	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
246	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
247	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
248	15	2.51	2.51	66.	0.	0.04	0.12	2.51	2.51	0.	0.	0.00	0.00	
249	15	2.51	2.51	174.	0.	0.10	0.33	2.51	2.51	0.	0.	0.00	0.00	
250	15	2.51	2.51	297.	0.	0.17	0.56	2.51	2.51	1459.	0.	998.50998.50		@

251	15	2.51	2.51	281.	0.	0.17	0.53	2.51	2.51	272.	0.	0.16	0.51	
252	15	2.51	2.51	65.	0.	0.04	0.12	2.51	2.51	0.	0.	0.00	0.00	
253	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
254	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
255	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
256	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
257	15	2.51	2.51	372.	0.	0.22	0.70	2.51	2.51	238.	0.	0.14	0.45	
258	15	2.51	2.51	104.	0.	0.06	0.19	2.51	2.51	0.	0.	0.00	0.00	
259	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
260	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
261	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
262	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
263	15	2.51	2.51	375.	0.	0.22	0.70	2.51	2.51	1404.	0.	998.50	998.50	@
264	15	2.51	2.51	202.	0.	0.12	0.38	2.51	2.51	251.	0.	0.15	0.47	
265	15	2.51	2.51	32.	0.	0.02	0.06	2.51	2.51	0.	0.	0.00	0.00	
266	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
267	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
268	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
269	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
270	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	909.	0.	0.54	1.70	
271	15	2.51	2.51	209.	0.	0.12	0.39	2.51	2.51	567.	0.	0.33	1.06	
272	15	2.51	2.51	130.	0.	0.08	0.24	2.51	2.51	561.	0.	0.33	1.05	
273	15	2.51	2.51	119.	0.	0.07	0.22	2.51	2.51	557.	0.	0.33	1.04	
274	15	2.51	2.51	186.	0.	0.11	0.35	2.51	2.51	564.	0.	0.33	1.05	
275	15	2.51	2.51	306.	0.	0.18	0.57	2.51	2.51	561.	0.	0.33	1.05	
276	15	2.51	2.51	296.	0.	0.17	0.55	2.51	2.51	533.	0.	0.31	1.00	
277	15	2.51	2.51	315.	0.	0.19	0.59	2.51	2.51	1422.	1.	998.50	998.50	@
278	15	2.51	2.51	185.	0.	0.11	0.35	2.51	2.51	1252.	0.	998.50	998.50	@
279	15	2.51	2.51	119.	0.	0.07	0.22	2.51	2.51	1153.	0.	998.50	998.50	@
280	15	2.51	2.51	129.	0.	0.08	0.24	2.51	2.51	1188.	0.	998.50	998.50	@
281	15	2.51	2.51	207.	0.	0.12	0.39	2.51	2.51	1298.	0.	998.50	998.50	@
282	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	436.	0.	0.26	0.82	
283	15	2.51	2.51	70.	0.	0.04	0.13	2.51	2.51	454.	0.	0.27	0.85	
284	15	2.51	2.51	235.	0.	0.14	0.44	2.51	2.51	510.	0.	0.30	0.95	
285	15	2.51	2.51	146.	0.	0.09	0.27	2.51	2.51	508.	0.	0.30	0.95	
286	15	2.51	2.51	221.	0.	0.13	0.41	2.51	2.51	476.	0.	0.28	0.89	
287	15	2.51	2.51	77.	0.	0.04	0.14	2.51	2.51	497.	0.	0.29	0.93	
288	15	2.51	2.51	144.	0.	0.08	0.27	2.51	2.51	1281.	0.	998.50	998.50	@
289	15	2.51	2.51	78.	0.	0.05	0.15	2.51	2.51	1095.	0.	98.95	98.95	@
290	15	2.51	2.51	4.	0.	0.00	0.01	2.51	2.51	947.	0.	0.56	1.77	
291	15	2.51	2.51	65.	0.	0.04	0.12	2.51	2.51	0.	0.	0.00	0.00	
292	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
293	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
294	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
295	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
296	15	2.51	2.51	73.	0.	0.04	0.14	2.51	2.51	157.	0.	0.09	0.29	
297	15	2.51	2.51	183.	0.	0.11	0.34	2.51	2.51	1246.	0.	998.50	998.50	@
298	15	2.51	2.51	2.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
299	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
300	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
301	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
302	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
303	15	2.51	2.51	1.	0.	0.00	0.00	2.51	2.51	141.	0.	0.08	0.26	
304	15	2.51	2.51	120.	0.	0.07	0.22	2.51	2.51	1216.	0.	998.50	998.50	@
305	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
306	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
307	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
308	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
309	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
310	15	2.51	2.51	9.	0.	0.01	0.02	2.51	2.51	147.	0.	0.09	0.28	
311	15	2.51	2.51	122.	0.	0.07	0.23	2.51	2.51	1215.	0.	998.50	998.50	@
312	15	2.51	2.51	51.	0.	0.03	0.10	2.51	2.51	0.	0.	0.00	0.00	
313	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
314	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
315	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
316	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
317	15	2.51	2.51	82.	0.	0.05	0.15	2.51	2.51	167.	0.	0.10	0.31	
318	15	2.51	2.51	186.	0.	0.11	0.35	2.51	2.51	1253.	0.	998.50	998.50	@
319	15	2.51	2.51	175.	0.	0.10	0.33	2.51	2.51	0.	0.	0.00	0.00	
320	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
321	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
322	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
323	15	2.51	2.51	39.	0.	0.02	0.07	2.51	2.51	0.	0.	0.00	0.00	
324	15	2.51	2.51	210.	0.	0.12	0.39	2.51	2.51	232.	0.	0.14	0.43	
325	15	2.51	2.51	385.	0.	0.23	0.72	2.51	2.51	1424.	0.	998.50	998.50	@
326	15	2.51	2.51	371.	0.	0.22	0.69	2.51	2.51	1485.	0.	998.50	998.50	@
327	15	2.51	2.51	245.	0.	0.14	0.46	2.51	2.51	0.	0.	0.00	0.00	
328	15	2.51	2.51	32.	0.	0.02	0.06	2.51	2.51	0.	0.	0.00	0.00	
329	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
330	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
331	15	2.51	2.51	85.	0.	0.05	0.16	2.51	2.51	0.	0.	0.00	0.00	
332	15	2.51	2.51	360.	0.	0.21	0.67	2.51	2.51	223.	0.	0.13	0.42	
333	15	2.51	2.51	539.	0.	0.32	1.01	2.51	2.51	1413.	0.	998.50	998.50	@
334	15	2.51	2.51	378.	0.	0.22	0.71	2.51	2.51	1415.	0.	998.50	998.50	@
335	15	2.51	2.51	199.	0.	0.12	0.37	2.51	2.51	1254.	0.	998.50	998.50	@

336	15	2.51	2.51	120.	0.	0.07	0.22	2.51	2.51	1214.	0.998.50998.50	@
337	15	2.51	2.51	125.	0.	0.07	0.23	2.51	2.51	1210.	0.998.50998.50	@
338	15	2.51	2.51	199.	0.	0.12	0.37	2.51	2.51	1239.	0.998.50998.50	@
339	15	2.51	2.51	81.	0.	0.05	0.15	2.51	2.51	179.	0.0.11.0.33	@
340	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.0.00.0.00	
341	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.0.00.0.00	
342	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.0.00.0.00	
343	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.0.00.0.00	
344	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.0.00.0.00	
345	15	2.51	2.51	9.	0.	0.01	0.02	2.51	2.51	160.	0.0.09.0.30	
346	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.0.00.0.00	
347	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.0.00.0.00	
348	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.0.00.0.00	
349	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.0.00.0.00	
350	15	2.51	2.51	11.	0.	0.01	0.02	2.51	2.51	0.	0.0.00.0.00	
351	15	2.51	2.51	12.	0.	0.01	0.02	2.51	2.51	162.	0.0.10.0.30	
352	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.0.00.0.00	
353	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.0.00.0.00	
354	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.0.00.0.00	
355	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.0.00.0.00	
356	15	2.51	2.51	137.	0.	0.08	0.26	2.51	2.51	0.	0.0.00.0.00	
357	15	2.51	2.51	246.	0.	0.14	0.46	2.51	2.51	1414.	0.998.50998.50	@
358	15	2.51	2.51	86.	0.	0.05	0.16	2.51	2.51	179.	0.0.11.0.34	@
359	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.0.00.0.00	
360	15	2.51	2.51	214.	0.	0.13	0.40	2.51	2.51	243.	0.0.14.0.45	
361	15	2.51	2.51	34.	0.	0.02	0.06	2.51	2.51	0.	0.0.00.0.00	
362	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.0.00.0.00	
363	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.0.00.0.00	
364	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.0.00.0.00	
365	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.0.00.0.00	
366	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.0.00.0.00	
367	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.0.00.0.00	
368	15	2.51	2.51	58.	0.	0.03	0.11	2.51	2.51	0.	0.0.00.0.00	
369	15	2.51	2.51	138.	0.	0.08	0.26	2.51	2.51	0.	0.0.00.0.00	
370	15	2.51	2.51	254.	0.	0.15	0.48	2.51	2.51	1407.	0.998.50998.50	@
371	15	2.51	2.51	517.	0.	0.30	0.97	2.51	2.51	1384.	0.998.50998.50	@
372	15	2.51	2.51	358.	0.	0.21	0.67	2.51	2.51	229.	0.0.13.0.43	@
373	15	2.51	2.51	89.	0.	0.05	0.17	2.51	2.51	0.	0.0.00.0.00	
374	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.0.00.0.00	
375	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.0.00.0.00	
376	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.0.00.0.00	
377	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.0.00.0.00	
378	15	2.51	2.51	80.	0.	0.05	0.15	2.51	2.51	1165.	0.998.50998.50	@
379	15	2.51	2.51	140.	0.	0.08	0.26	2.51	2.51	483.	0.0.28.0.90	
380	15	2.51	2.51	48.	0.	0.03	0.09	2.51	2.51	457.	0.0.27.0.86	
381	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	427.	0.0.25.0.80	
382	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	408.	0.0.24.0.76	
383	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	402.	0.0.24.0.75	
384	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	414.	0.0.24.0.77	
385	15	2.51	2.51	18.	0.	0.01	0.03	2.51	2.51	455.	0.0.27.0.85	
386	15	2.51	2.51	91.	0.	0.05	0.17	2.51	2.51	476.	0.0.28.0.89	
387	15	2.51	2.51	168.	0.	0.10	0.31	2.51	2.51	487.	0.0.29.0.91	
388	15	2.51	2.51	347.	0.	0.20	0.65	2.51	2.51	516.	0.0.30.0.96	
389	15	2.51	2.51	315.	0.	0.19	0.59	2.51	2.51	518.	0.0.31.0.97	
390	15	2.51	2.51	444.	0.	0.26	0.83	2.51	2.51	287.	0.0.17.0.54	
391	15	2.51	2.51	217.	0.	0.13	0.41	2.51	2.51	494.	0.0.29.0.92	
392	15	2.51	2.51	77.	0.	0.05	0.14	2.51	2.51	616.	0.0.36.1.15	
393	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	632.	0.0.37.1.18	
394	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	590.	0.0.35.1.10	
395	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	588.	0.0.35.1.10	
396	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	632.	0.0.37.1.18	
397	15	2.51	2.51	14.	0.	0.01	0.03	2.51	2.51	727.	0.0.43.1.36	
398	15	2.51	2.51	96.	0.	0.06	0.18	2.51	2.51	928.	0.0.55.1.73	
399	15	2.51	2.51	209.	0.	0.12	0.39	2.51	2.51	1170.	0.998.50998.50	@
400	15	2.51	2.51	78.	0.	0.05	0.15	2.51	2.51	516.	0.0.30.0.96	
401	15	2.51	2.51	117.	0.	0.07	0.22	2.51	2.51	523.	0.0.31.0.98	
402	15	2.51	2.51	210.	0.	0.12	0.39	2.51	2.51	512.	0.0.30.0.96	
403	15	2.51	2.51	109.	0.	0.06	0.20	2.51	2.51	490.	0.0.29.0.92	
404	15	2.51	2.51	183.	0.	0.11	0.34	2.51	2.51	472.	0.0.28.0.88	
405	15	2.51	2.51	56.	0.	0.03	0.11	2.51	2.51	499.	0.0.29.0.93	
406	15	2.51	2.51	49.	0.	0.03	0.09	2.51	2.51	506.	0.0.30.0.95	
407	15	2.51	2.51	74.	0.	0.04	0.14	2.51	2.51	508.	0.0.30.0.95	
408	15	2.51	2.51	121.	0.	0.07	0.23	2.51	2.51	504.	0.0.30.0.94	
409	15	2.51	2.51	221.	0.	0.13	0.41	2.51	2.51	505.	0.0.30.0.94	
410	15	2.51	2.51	193.	0.	0.11	0.36	2.51	2.51	486.	0.0.29.0.91	
411	15	2.51	2.51	374.	0.	0.22	0.70	2.51	2.51	324.	0.0.19.0.61	
412	15	2.51	2.51	185.	0.	0.11	0.35	2.51	2.51	580.	0.0.34.1.09	
413	15	2.51	2.51	89.	0.	0.05	0.17	2.51	2.51	806.	0.0.47.1.51	
414	15	2.51	2.51	58.	0.	0.03	0.11	2.51	2.51	941.	0.0.55.1.76	
415	15	2.51	2.51	65.	0.	0.04	0.12	2.51	2.51	1060.	0.0.62.1.96	
416	15	2.51	2.51	129.	0.	0.08	0.24	2.51	2.51	1275.	0.998.50998.50	@
417	15	2.51	2.51	114.	0.	0.07	0.21	2.51	2.51	1234.	0.998.50998.50	@
418	15	2.51	2.51	79.	0.	0.05	0.15	2.51	2.51	1144.	0.998.50998.50	@
419	15	2.51	2.51	125.	0.	0.07	0.23	2.51	2.51	0.	0.0.00.0.00	
420	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.0.00.0.00	

421	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
422	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
423	15	2.51	2.51	46.	0.	0.03	0.09	2.51	2.51	0.	0.	0.00	0.00	
424	15	2.51	2.51	271.	0.	0.16	0.51	2.51	2.51	264.	0.	0.16	0.49	
425	15	2.51	2.51	397.	0.	0.23	0.74	2.51	2.51	1313.	0.	998.50	998.50	@
426	15	2.51	2.51	30.	0.	0.02	0.06	2.51	2.51	0.	0.	0.00	0.00	
427	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
428	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
429	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
430	15	2.51	2.51	3.	0.	0.00	0.01	2.51	2.51	0.	0.	0.00	0.00	
431	15	2.51	2.51	156.	0.	0.09	0.29	2.51	2.51	252.	0.	0.15	0.47	
432	15	2.51	2.51	235.	0.	0.14	0.44	2.51	2.51	1093.	0.	0.68	1.96	
433	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
434	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
435	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
436	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
437	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
438	15	2.51	2.51	59.	0.	0.03	0.11	2.51	2.51	217.	0.	0.13	0.41	
439	15	2.51	2.51	109.	0.	0.06	0.20	2.51	2.51	924.	0.	0.54	1.73	
440	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
441	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
442	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
443	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
444	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
445	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	146.	0.	0.09	0.27	
446	15	2.51	2.51	11.	0.	0.01	0.02	2.51	2.51	778.	0.	0.46	1.46	
447	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
448	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
449	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
450	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
451	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
452	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	91.	0.	0.05	0.17	
453	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	676.	0.	0.40	1.26	
454	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
455	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
456	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
457	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
458	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
459	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	60.	0.	0.04	0.11	
460	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	619.	0.	0.36	1.16	
461	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
462	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
463	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
464	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
465	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
466	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	40.	0.	0.02	0.08	
467	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	567.	0.	0.33	1.06	
468	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
469	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
470	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
471	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
472	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
473	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	51.	0.	0.03	0.10	
474	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	491.	0.	0.29	0.92	
475	15	2.51	2.51	187.	0.	0.11	0.35	2.51	2.51	63.	0.	0.04	0.12	
476	15	2.51	2.51	46.	0.	0.03	0.09	2.51	2.51	0.	0.	0.00	0.00	
477	15	2.51	2.51	6.	0.	0.00	0.01	2.51	2.51	0.	0.	0.00	0.00	
478	15	2.51	2.51	8.	0.	0.00	0.02	2.51	2.51	0.	0.	0.00	0.00	
479	15	2.51	2.51	47.	0.	0.03	0.09	2.51	2.51	0.	0.	0.00	0.00	
480	15	2.51	2.51	87.	0.	0.05	0.16	2.51	2.51	118.	0.	0.07	0.22	
481	15	2.51	2.51	51.	0.	0.03	0.10	2.51	2.51	373.	0.	0.22	0.70	
482	15	2.51	2.51	677.	0.	0.40	1.27	2.51	2.51	69.	0.	0.04	0.13	
483	15	2.51	2.51	815.	0.	0.48	1.52	2.51	2.51	0.	0.	0.00	0.00	
484	15	2.51	2.51	817.	0.	0.48	1.53	2.51	2.51	0.	0.	0.00	0.00	
485	15	2.51	2.51	771.	0.	0.45	1.44	2.51	2.51	0.	0.	0.00	0.00	
486	15	2.51	2.51	681.	0.	0.40	1.27	2.51	2.51	15.	0.	0.01	0.03	
487	15	2.51	2.51	492.	0.	0.29	0.92	2.51	2.51	104.	0.	0.06	0.19	
488	15	2.51	2.51	264.	0.	0.16	0.49	2.51	2.51	219.	0.	0.13	0.41	
489	15	2.51	2.51	337.	0.	0.20	0.63	2.51	2.51	203.	0.	0.12	0.38	
490	15	2.51	2.51	552.	0.	0.32	1.03	2.51	2.51	7.	0.	0.00	0.01	
491	15	2.51	2.51	707.	0.	0.42	1.32	2.51	2.51	0.	0.	0.00	0.00	
492	15	2.51	2.51	781.	0.	0.46	1.46	2.51	2.51	0.	0.	0.00	0.00	
493	15	2.51	2.51	817.	0.	0.48	1.53	2.51	2.51	0.	0.	0.00	0.00	
494	15	2.51	2.51	856.	0.	0.50	1.60	2.51	2.51	13.	0.	0.01	0.03	
495	15	2.51	2.51	921.	0.	0.54	1.72	2.51	2.51	90.	0.	0.05	0.17	
496	15	2.51	2.51	1042.	0.	0.61	1.95	2.51	2.51	236.	0.	0.14	0.44	
497	15	2.51	2.51	282.	0.	0.17	0.53	2.51	2.51	227.	0.	0.13	0.42	
498	15	2.51	2.51	65.	0.	0.04	0.12	2.51	2.51	382.	0.	0.22	0.71	
499	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	501.	0.	0.30	0.94	
500	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	576.	0.	0.34	1.08	
501	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	628.	0.	0.37	1.18	
502	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	682.	0.	0.40	1.27	
503	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	765.	0.	0.45	1.43	
504	15	2.51	2.51	93.	0.	0.05	0.17	2.51	2.51	896.	0.	0.53	1.68	
505	15	2.51	2.51	223.	0.	0.13	0.42	2.51	2.51	1059.	0.	0.62	1.96	

506	15	2.51	2.51	377.	0.	0.22	0.71	2.51	2.51	1277.	0.	998.50	998.50	@
507	15	2.51	2.51	269.	0.	0.16	0.50	2.51	2.51	267.	0.	0.16	0.50	
508	15	2.51	2.51	49.	0.	0.03	0.09	2.51	2.51	0.	0.	0.00	0.00	
509	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
510	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
511	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
512	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
513	15	2.51	2.51	153.	0.	0.09	0.29	2.51	2.51	251.	0.	0.15	0.47	
514	15	2.51	2.51	4.	0.	0.00	0.01	2.51	2.51	0.	0.	0.00	0.00	
515	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
516	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
517	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
518	15	2.51	2.51	16.	0.	0.01	0.03	2.51	2.51	0.	0.	0.00	0.00	
519	15	2.51	2.51	59.	0.	0.03	0.11	2.51	2.51	210.	0.	0.12	0.39	
520	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
521	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
522	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
523	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
524	15	2.51	2.51	92.	0.	0.05	0.17	2.51	2.51	0.	0.	0.00	0.00	
525	15	2.51	2.51	209.	0.	0.12	0.39	2.51	2.51	1404.	0.	998.50	998.50	@
526	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	135.	0.	0.08	0.25	
527	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
528	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	82.	0.	0.05	0.15	
529	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
530	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
531	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
532	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
533	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
534	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
535	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
536	15	2.51	2.51	35.	0.	0.02	0.07	2.51	2.51	5.	0.	0.00	0.01	
537	15	2.51	2.51	120.	0.	0.07	0.23	2.51	2.51	0.	0.	0.00	0.00	
538	15	2.51	2.51	236.	0.	0.14	0.44	2.51	2.51	1498.	0.	998.50	998.50	@
539	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	53.	0.	0.03	0.10	
540	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
541	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
542	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
543	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
544	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
545	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	40.	0.	0.02	0.07	
546	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
547	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
548	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
549	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
550	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	14.	0.	0.01	0.03	
551	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	61.	0.	0.04	0.11	
552	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
553	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
554	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
555	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00	
556	15	2.51	2.51	21.	0.	0.01	0.04	2.51	2.51	83.	0.	0.05	0.16	
557	15	2.51	2.51	102.	0.	0.06	0.19	2.51	2.51	128.	0.	0.08	0.24	
558	15	2.51	2.51	83.	0.	0.05	0.16	2.51	2.51	0.	0.	0.00	0.00	
559	15	2.51	2.51	24.	0.	0.01	0.04	2.51	2.51	0.	0.	0.00	0.00	
560	15	2.51	2.51	34.	0.	0.02	0.06	2.51	2.51	0.	0.	0.00	0.00	
561	15	2.51	2.51	98.	0.	0.06	0.18	2.51	2.51	0.	0.	0.00	0.00	
562	15	2.51	2.51	209.	0.	0.12	0.39	2.51	2.51	136.	0.	0.08	0.25	
563	15	2.51	2.51	526.	0.	0.31	0.98	2.51	2.51	109.	0.	0.06	0.20	
564	15	2.51	2.51	785.	0.	0.46	1.47	2.51	2.51	15.	0.	0.01	0.03	
565	15	2.51	2.51	896.	0.	0.53	1.68	2.51	2.51	0.	0.	0.00	0.00	
566	15	2.51	2.51	890.	0.	0.52	1.66	2.51	2.51	0.	0.	0.00	0.00	
567	15	2.51	2.51	829.	0.	0.49	1.55	2.51	2.51	4.	0.	0.00	0.01	
568	15	2.51	2.51	642.	0.	0.38	1.20	2.51	2.51	104.	0.	0.06	0.19	
569	15	2.51	2.51	952.	0.	0.56	1.78	2.51	2.51	273.	0.	0.16	0.51	
570	15	2.51	2.51	643.	0.	0.38	1.20	2.51	2.51	165.	0.	0.10	0.31	
571	15	2.51	2.51	344.	0.	0.20	0.64	2.51	2.51	99.	0.	0.06	0.19	
572	15	2.51	2.51	203.	0.	0.12	0.38	2.51	2.51	53.	0.	0.03	0.10	
573	15	2.51	2.51	381.	0.	0.22	0.71	2.51	2.51	0.	0.	0.00	0.00	
574	15	2.51	2.51	482.	0.	0.28	0.90	2.51	2.51	0.	0.	0.00	0.00	
575	15	2.51	2.51	384.	0.	0.23	0.72	2.51	2.51	0.	0.	0.00	0.00	
576	15	2.51	2.51	228.	0.	0.13	0.43	2.51	2.51	172.	0.	0.10	0.32	
577	15	2.51	2.51	207.	0.	0.12	0.39	2.51	2.51	502.	0.	0.30	0.94	
578	15	2.51	2.51	131.	0.	0.08	0.25	2.51	2.51	489.	0.	0.29	0.91	
579	15	2.51	2.51	86.	0.	0.05	0.16	2.51	2.51	522.	0.	0.31	0.98	
580	15	2.51	2.51	82.	0.	0.05	0.15	2.51	2.51	587.	0.	0.35	1.10	
581	15	2.51	2.51	115.	0.	0.07	0.22	2.51	2.51	800.	1.	0.47	1.50	
582	15	2.51	2.51	72.	0.	0.04	0.13	2.51	2.51	740.	0.	0.44	1.39	
583	15	2.51	2.51	62.	0.	0.04	0.12	2.51	2.51	599.	0.	0.35	1.12	
584	15	2.51	2.51	164.	0.	0.10	0.31	2.51	2.51	389.	0.	0.23	0.73	
585	15	2.51	2.51	112.	0.	0.07	0.21	2.51	2.51	470.	0.	0.28	0.88	
586	15	2.51	2.51	59.	0.	0.03	0.11	2.51	2.51	462.	0.	0.27	0.86	
587	15	2.51	2.51	34.	0.	0.02	0.06	2.51	2.51	523.	0.	0.31	0.98	
588	15	2.51	2.51	59.	0.	0.03	0.11	2.51	2.51	599.	0.	0.35	1.12	
589	15	2.51	2.51	71.	0.	0.04	0.13	2.51	2.51	713.	0.	0.42	1.34	
590	15	2.51	2.51	22.	0.	0.01	0.04	2.51	2.51	632.	0.	0.37	1.18	

591	15	2.51	2.51	6.	0.	0.00	0.01	2.51	2.51	520.	0.	0.31	0.97
592	15	2.51	2.51	59.	0.	0.03	0.11	2.51	2.51	320.	0.	0.19	0.60
593	15	2.51	2.51	165.	0.	0.10	0.31	2.51	2.51	24.	0.	0.01	0.05
594	15	2.51	2.51	70.	0.	0.04	0.13	2.51	2.51	0.	0.	0.00	0.00
595	15	2.51	2.51	63.	0.	0.04	0.12	2.51	2.51	0.	0.	0.00	0.00
596	15	2.51	2.51	78.	0.	0.05	0.15	2.51	2.51	0.	0.	0.00	0.00
597	15	2.51	2.51	97.	0.	0.06	0.18	2.51	2.51	0.	0.	0.00	0.00
598	15	2.51	2.51	122.	0.	0.07	0.23	2.51	2.51	18.	0.	0.01	0.03
599	15	2.51	2.51	143.	0.	0.08	0.27	2.51	2.51	109.	0.	0.06	0.20
600	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
601	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
602	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
603	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
604	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
605	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
606	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
607	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
608	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
609	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
610	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
611	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
612	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
613	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
614	15	2.51	2.51	86.	0.	0.05	0.16	2.51	2.51	122.	0.	0.07	0.23
615	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
616	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
617	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
618	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
619	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
620	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	12.	0.	0.01	0.02
621	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	78.	0.	0.05	0.15
622	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
623	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
624	15	2.51	2.51	210.	0.	0.12	0.39	2.51	2.51	186.	0.	0.11	0.35
625	15	2.51	2.51	222.	0.	0.13	0.42	2.51	2.51	120.	0.	0.07	0.22
626	15	2.51	2.51	156.	0.	0.09	0.29	2.51	2.51	208.	0.	0.12	0.39
627	15	2.51	2.51	68.	0.	0.04	0.13	2.51	2.51	209.	0.	0.12	0.39
628	15	2.51	2.51	74.	0.	0.04	0.14	2.51	2.51	0.	0.	0.00	0.00
629	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
630	15	2.51	2.51	3.	0.	0.00	0.01	2.51	2.51	0.	0.	0.00	0.00
631	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	16.	0.	0.01	0.03
632	15	2.51	2.51	31.	0.	0.02	0.06	2.51	2.51	334.	0.	0.20	0.62
633	15	2.51	2.51	3.	0.	0.00	0.00	2.51	2.51	356.	0.	0.21	0.67
634	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
635	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
636	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
637	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
638	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	334.	0.	0.20	0.62
639	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	378.	0.	0.22	0.71
640	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
641	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
642	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
643	15	2.51	2.51	28.	0.	0.02	0.05	2.51	2.51	69.	0.	0.04	0.13
644	15	2.51	2.51	54.	0.	0.03	0.10	2.51	2.51	252.	0.	0.15	0.47
645	15	2.51	2.51	34.	0.	0.02	0.06	2.51	2.51	291.	0.	0.17	0.54
646	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
647	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
648	15	2.51	2.51	13.	0.	0.01	0.02	2.51	2.51	13.	0.	0.01	0.02

GUSCI	spess	SUPERIORE ORIZZONTALE						SUPERIORE VERTICALE					
		Af	Afc	Mom	Nor	epsC	epsF	Af	Afc	Mom	Nor	epsC	epsF
1	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
2	15	2.51	2.51	64.	0.	0.04	0.12	2.51	2.51	0.	0.	0.00	0.00
3	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	1.	0.00	0.01
4	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
5	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
6	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
7	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
8	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
9	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
10	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
11	15	2.51	2.51	60.	0.	0.04	0.11	2.51	2.51	0.	0.	0.00	0.00
12	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	2.	0.	0.00	0.00
13	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	14.	0.	0.00	0.03
14	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	53.	0.	0.03	0.10
15	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	78.	0.	0.05	0.15
16	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	78.	0.	0.05	0.15
17	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	56.	0.	0.03	0.10
18	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	21.	0.	0.01	0.04
19	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
20	15	2.51	2.51	125.	0.	0.07	0.24	2.51	2.51	35.	0.	0.02	0.06
21	15	2.51	2.51	64.	1.	0.03	0.13	2.51	2.51	211.	0.	0.12	0.39
22	15	2.51	2.51	0.	1.	0.00	0.01	2.51	2.51	158.	0.	0.09	0.30
23	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	138.	0.	0.08	0.26
24	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	144.	0.	0.08	0.27

25	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	184.	0.	0.11	0.35
26	15	2.51	2.51	81.	0.	0.05	0.15	2.51	2.51	170.	0.	0.10	0.32
27	15	2.51	2.51	59.	0.	0.03	0.11	2.51	2.51	17.	0.	0.01	0.03
28	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
29	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	11.	0.	0.01	0.02
30	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	45.	0.	0.03	0.08
31	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	75.	0.	0.04	0.14
32	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	89.	0.	0.05	0.17
33	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	83.	0.	0.05	0.15
34	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	49.	0.	0.03	0.09
35	15	2.51	2.51	38.	0.	0.02	0.07	2.51	2.51	0.	0.	0.00	0.00
36	15	2.51	2.51	15.	0.	0.01	0.03	2.51	2.51	132.	0.	0.08	0.25
37	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	115.	0.	0.07	0.22
38	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	120.	0.	0.07	0.22
39	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	150.	0.	0.09	0.28
40	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	246.	0.	0.14	0.46
41	15	2.51	2.51	138.	0.	0.08	0.26	2.51	2.51	301.	0.	0.18	0.56
42	15	2.51	2.51	184.	0.	0.11	0.34	2.51	2.51	106.	0.	0.06	0.20
43	15	2.51	2.51	62.	0.	0.04	0.12	2.51	2.51	52.	0.	0.03	0.10
44	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	21.	0.	0.01	0.04
45	15	2.51	2.51	87.	0.	0.05	0.16	2.51	2.51	213.	0.	0.12	0.40
46	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	54.	0.	0.03	0.10
47	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	172.	0.	0.10	0.32
48	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	68.	0.	0.04	0.13
49	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	118.	0.	0.07	0.22
50	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	61.	0.	0.04	0.11
51	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	90.	0.	0.05	0.17
52	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	35.	0.	0.02	0.06
53	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	57.	0.	0.03	0.11
54	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
55	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	14.	0.	0.01	0.03
56	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
57	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
58	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
59	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
60	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
61	15	2.51	2.51	9.	0.	0.01	0.02	2.51	2.51	146.	0.	0.09	0.27
62	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	23.	0.	0.01	0.04
63	15	2.51	2.51	32.	0.	0.02	0.06	2.51	2.51	70.	0.	0.04	0.13
64	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	50.	0.	0.03	0.09
65	15	2.51	2.51	33.	0.	0.02	0.06	2.51	2.51	36.	0.	0.02	0.07
66	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	49.	0.	0.03	0.09
67	15	2.51	2.51	18.	0.	0.01	0.03	2.51	2.51	182.	0.	0.11	0.34
68	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	37.	0.	0.02	0.07
69	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	137.	0.	0.08	0.26
70	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	7.	0.	0.00	0.01
71	15	2.51	2.51	22.	0.	0.01	0.04	2.51	2.51	179.	0.	0.11	0.33
72	15	2.51	2.51	20.	0.	0.01	0.04	2.51	2.51	8.	0.	0.00	0.01
73	15	2.51	2.51	141.	0.	0.08	0.26	2.51	2.51	0.	0.	0.00	0.00
74	15	2.51	2.51	189.	0.	0.11	0.35	2.51	2.51	0.	0.	0.00	0.00
75	15	2.51	2.51	202.	0.	0.12	0.38	2.51	2.51	0.	0.	0.00	0.00
76	15	2.51	2.51	195.	0.	0.11	0.37	2.51	2.51	0.	0.	0.00	0.00
77	15	2.51	2.51	175.	0.	0.10	0.33	2.51	2.51	0.	0.	0.00	0.00
78	15	2.51	2.51	140.	0.	0.08	0.26	2.51	2.51	0.	0.	0.00	0.00
79	15	2.51	2.51	100.	0.	0.06	0.19	2.51	2.51	0.	0.	0.00	0.00
80	15	2.51	2.51	42.	0.	0.02	0.08	2.51	2.51	0.	0.	0.00	0.00
81	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
82	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
83	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
84	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
85	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
86	15	2.51	2.51	74.	0.	0.04	0.14	2.51	2.51	0.	0.	0.00	0.00
87	15	2.51	2.51	134.	0.	0.08	0.25	2.51	2.51	0.	0.	0.00	0.00
88	15	2.51	2.51	168.	0.	0.10	0.31	2.51	2.51	0.	0.	0.00	0.00
89	15	2.51	2.51	188.	0.	0.11	0.35	2.51	2.51	0.	0.	0.00	0.00
90	15	2.51	2.51	207.	0.	0.12	0.39	2.51	2.51	0.	0.	0.00	0.00
91	15	2.51	2.51	232.	0.	0.14	0.43	2.51	2.51	0.	0.	0.00	0.00
92	15	2.51	2.51	280.	0.	0.16	0.53	2.51	2.51	0.	0.	0.00	0.00
93	15	2.51	2.51	327.	0.	0.19	0.61	2.51	2.51	55.	0.	0.03	0.10
94	15	2.51	2.51	107.	0.	0.06	0.20	2.51	2.51	0.	0.	0.00	0.00
95	15	2.51	2.51	108.	0.	0.06	0.20	2.51	2.51	0.	0.	0.00	0.00
96	15	2.51	2.51	74.	0.	0.04	0.14	2.51	2.51	0.	0.	0.00	0.00
97	15	2.51	2.51	21.	0.	0.01	0.04	2.51	2.51	0.	0.	0.00	0.00
98	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
99	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
100	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
101	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
102	15	2.51	2.51	17.	0.	0.01	0.03	2.51	2.51	0.	0.	0.00	0.00
103	15	2.51	2.51	56.	0.	0.03	0.10	2.51	2.51	0.	0.	0.00	0.00
104	15	2.51	2.51	65.	0.	0.04	0.12	2.51	2.51	0.	0.	0.00	0.00
105	15	2.51	2.51	62.	0.	0.04	0.12	2.51	2.51	0.	0.	0.00	0.00
106	15	2.51	2.51	34.	0.	0.02	0.06	2.51	2.51	0.	0.	0.00	0.00
107	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
108	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
109	15	2.51	2.51	55.	0.	0.03	0.10	2.51	2.51	0.	0.	0.00	0.00

110	15	2.51	2.51	139.	0.	0.08	0.26	2.51	2.51	0.	0.	0.00	0.00
111	15	2.51	2.51	251.	0.	0.15	0.47	2.51	2.51	0.	0.	0.00	0.00
112	15	2.51	2.51	354.	0.	0.21	0.66	2.51	2.51	61.	0.	0.03	0.11
113	15	2.51	2.51	413.	0.	0.24	0.78	2.51	2.51	346.	0.	0.20	0.65
114	15	2.51	2.51	395.	0.	0.23	0.74	2.51	2.51	384.	0.	0.23	0.72
115	15	2.51	2.51	313.	0.	0.18	0.59	2.51	2.51	297.	0.	0.17	0.56
116	15	2.51	2.51	364.	0.	0.21	0.68	2.51	2.51	327.	0.	0.19	0.61
117	15	2.51	2.51	397.	0.	0.23	0.74	2.51	2.51	328.	0.	0.19	0.61
118	15	2.51	2.51	375.	0.	0.22	0.70	2.51	2.51	242.	0.	0.14	0.45
119	15	2.51	2.51	231.	0.	0.14	0.43	2.51	2.51	0.	0.	0.00	0.00
120	15	2.51	2.51	467.	0.	0.27	0.88	2.51	2.51	370.	0.	0.22	0.69
121	15	2.51	2.51	489.	0.	0.29	0.92	2.51	2.51	450.	0.	0.26	0.84
122	15	2.51	2.51	467.	0.	0.27	0.88	2.51	2.51	384.	0.	0.23	0.72
123	15	2.51	2.51	486.	0.	0.29	0.91	2.51	2.51	386.	0.	0.23	0.72
124	15	2.51	2.51	482.	0.	0.28	0.90	2.51	2.51	346.	0.	0.20	0.65
125	15	2.51	2.51	427.	0.	0.25	0.80	2.51	2.51	226.	0.	0.13	0.42
126	15	2.51	2.51	222.	0.	0.13	0.42	2.51	2.51	0.	0.	0.00	0.00
127	15	2.51	2.51	388.	0.	0.23	0.73	2.51	2.51	340.	0.	0.20	0.64
128	15	2.51	2.51	419.	0.	0.25	0.78	2.51	2.51	459.	0.	0.27	0.86
129	15	2.51	2.51	416.	0.	0.24	0.78	2.51	2.51	425.	0.	0.25	0.79
130	15	2.51	2.51	425.	0.	0.25	0.80	2.51	2.51	401.	0.	0.24	0.75
131	15	2.51	2.51	416.	0.	0.24	0.78	2.51	2.51	341.	0.	0.20	0.64
132	15	2.51	2.51	357.	0.	0.21	0.67	2.51	2.51	168.	0.	0.10	0.31
133	15	2.51	2.51	205.	0.	0.12	0.38	2.51	2.51	0.	0.	0.00	0.00
134	15	2.51	2.51	308.	0.	0.18	0.58	2.51	2.51	319.	0.	0.19	0.60
135	15	2.51	2.51	319.	0.	0.19	0.60	2.51	2.51	458.	0.	0.27	0.86
136	15	2.51	2.51	317.	0.	0.19	0.59	2.51	2.51	442.	0.	0.26	0.83
137	15	2.51	2.51	322.	0.	0.19	0.60	2.51	2.51	405.	0.	0.24	0.76
138	15	2.51	2.51	317.	0.	0.19	0.59	2.51	2.51	317.	0.	0.19	0.59
139	15	2.51	2.51	283.	0.	0.17	0.53	2.51	2.51	127.	0.	0.07	0.24
140	15	2.51	2.51	180.	0.	0.11	0.34	2.51	2.51	0.	0.	0.00	0.00
141	15	2.51	2.51	261.	0.	0.15	0.49	2.51	2.51	326.	0.	0.19	0.61
142	15	2.51	2.51	257.	0.	0.15	0.48	2.51	2.51	477.	0.	0.28	0.89
143	15	2.51	2.51	232.	0.	0.14	0.44	2.51	2.51	458.	0.	0.27	0.86
144	15	2.51	2.51	238.	0.	0.14	0.45	2.51	2.51	419.	0.	0.25	0.78
145	15	2.51	2.51	242.	0.	0.14	0.45	2.51	2.51	322.	0.	0.19	0.60
146	15	2.51	2.51	234.	0.	0.14	0.44	2.51	2.51	118.	0.	0.07	0.22
147	15	2.51	2.51	152.	0.	0.09	0.28	2.51	2.51	0.	0.	0.00	0.00
148	15	2.51	2.51	241.	0.	0.14	0.45	2.51	2.51	358.	0.	0.21	0.67
149	15	2.51	2.51	229.	0.	0.13	0.43	2.51	2.51	519.	0.	0.31	0.97
150	15	2.51	2.51	186.	0.	0.11	0.35	2.51	2.51	496.	0.	0.29	0.93
151	15	2.51	2.51	184.	0.	0.11	0.35	2.51	2.51	450.	0.	0.26	0.84
152	15	2.51	2.51	201.	0.	0.12	0.38	2.51	2.51	351.	0.	0.21	0.66
153	15	2.51	2.51	205.	0.	0.12	0.38	2.51	2.51	136.	0.	0.08	0.25
154	15	2.51	2.51	121.	0.	0.07	0.23	2.51	2.51	0.	0.	0.00	0.00
155	15	2.51	2.51	230.	0.	0.13	0.43	2.51	2.51	401.	0.	0.24	0.75
156	15	2.51	2.51	216.	0.	0.13	0.41	2.51	2.51	577.	0.	0.34	1.08
157	15	2.51	2.51	159.	0.	0.09	0.30	2.51	2.51	553.	0.	0.33	1.03
158	15	2.51	2.51	149.	0.	0.09	0.28	2.51	2.51	496.	0.	0.29	0.93
159	15	2.51	2.51	172.	0.	0.10	0.32	2.51	2.51	398.	0.	0.23	0.74
160	15	2.51	2.51	176.	0.	0.10	0.33	2.51	2.51	165.	0.	0.10	0.31
161	15	2.51	2.51	72.	0.	0.04	0.13	2.51	2.51	0.	0.	0.00	0.00
162	15	2.51	2.51	207.	0.	0.12	0.39	2.51	2.51	442.	0.	0.26	0.83
163	15	2.51	2.51	199.	0.	0.12	0.37	2.51	2.51	641.	0.	0.38	1.20
164	15	2.51	2.51	147.	0.	0.09	0.28	2.51	2.51	621.	0.	0.37	1.16
165	15	2.51	2.51	115.	0.	0.07	0.22	2.51	2.51	552.	0.	0.32	1.03
166	15	2.51	2.51	131.	0.	0.08	0.24	2.51	2.51	450.	0.	0.26	0.84
167	15	2.51	2.51	126.	0.	0.07	0.24	2.51	2.51	194.	0.	0.11	0.36
168	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
169	15	2.51	2.51	158.	0.	0.09	0.30	2.51	2.51	472.	0.	0.28	0.88
170	15	2.51	2.51	160.	0.	0.09	0.30	2.51	2.51	699.	0.	0.41	1.31
171	15	2.51	2.51	123.	0.	0.07	0.23	2.51	2.51	678.	0.	0.40	1.27
172	15	2.51	2.51	84.	0.	0.05	0.16	2.51	2.51	596.	0.	0.35	1.11
173	15	2.51	2.51	84.	0.	0.05	0.16	2.51	2.51	493.	0.	0.29	0.92
174	15	2.51	2.51	40.	0.	0.02	0.07	2.51	2.51	218.	0.	0.13	0.41
175	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
176	15	2.51	2.51	53.	0.	0.03	0.10	2.51	2.51	474.	0.	0.28	0.89
177	15	2.51	2.51	89.	0.	0.05	0.17	2.51	2.51	726.	0.	0.43	1.36
178	15	2.51	2.51	82.	0.	0.05	0.15	2.51	2.51	723.	0.	0.43	1.35
179	15	2.51	2.51	59.	0.	0.03	0.11	2.51	2.51	609.	0.	0.36	1.14
180	15	2.51	2.51	18.	0.	0.01	0.03	2.51	2.51	501.	0.	0.30	0.94
181	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	158.	0.	0.09	0.30
182	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
183	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
184	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	403.	0.	0.24	0.75
185	15	2.51	2.51	81.	0.	0.05	0.15	2.51	2.51	725.	0.	0.43	1.36
186	15	2.51	2.51	100.	0.	0.06	0.19	2.51	2.51	736.	0.	0.43	1.38
187	15	2.51	2.51	74.	0.	0.04	0.14	2.51	2.51	670.	0.	0.39	1.25
188	15	2.51	2.51	26.	0.	0.02	0.05	2.51	2.51	491.	0.	0.29	0.92
189	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	155.	0.	0.09	0.29
190	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
191	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
192	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
193	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
194	15	2.51	2.51	69.	0.	0.04	0.13	2.51	2.51	0.	0.	0.00	0.00

195	15	2.51	2.51	121.	0.	0.07	0.23	2.51	2.51	0.	0.	0.00	0.00
196	15	2.51	2.51	153.	0.	0.09	0.29	2.51	2.51	0.	0.	0.00	0.00
197	15	2.51	2.51	182.	0.	0.11	0.34	2.51	2.51	0.	0.	0.00	0.00
198	15	2.51	2.51	206.	0.	0.12	0.39	2.51	2.51	0.	0.	0.00	0.00
199	15	2.51	2.51	221.	0.	0.13	0.41	2.51	2.51	0.	0.	0.00	0.00
200	15	2.51	2.51	217.	0.	0.13	0.41	2.51	2.51	0.	0.	0.00	0.00
201	15	2.51	2.51	331.	0.	0.19	0.62	2.51	2.51	219.	0.	0.13	0.41
202	15	2.51	2.51	338.	0.	0.20	0.63	2.51	2.51	307.	0.	0.18	0.57
203	15	2.51	2.51	279.	0.	0.16	0.52	2.51	2.51	297.	0.	0.17	0.56
204	15	2.51	2.51	338.	0.	0.20	0.63	2.51	2.51	386.	0.	0.23	0.72
205	15	2.51	2.51	440.	0.	0.26	0.82	2.51	2.51	492.	0.	0.29	0.92
206	15	2.51	2.51	457.	0.	0.27	0.86	2.51	2.51	425.	0.	0.25	0.79
207	15	2.51	2.51	402.	0.	0.24	0.75	2.51	2.51	226.	0.	0.13	0.42
208	15	2.51	2.51	435.	0.	0.26	0.81	2.51	2.51	352.	0.	0.21	0.66
209	15	2.51	2.51	428.	0.	0.25	0.80	2.51	2.51	391.	0.	0.23	0.73
210	15	2.51	2.51	499.	0.	0.29	0.93	2.51	2.51	498.	0.	0.29	0.93
211	15	2.51	2.51	529.	0.	0.31	0.99	2.51	2.51	575.	0.	0.34	1.07
212	15	2.51	2.51	504.	0.	0.30	0.94	2.51	2.51	458.	0.	0.27	0.86
213	15	2.51	2.51	347.	0.	0.20	0.65	2.51	2.51	183.	0.	0.11	0.34
214	15	2.51	2.51	390.	0.	0.23	0.73	2.51	2.51	356.	0.	0.21	0.67
215	15	2.51	2.51	390.	0.	0.23	0.73	2.51	2.51	440.	0.	0.26	0.82
216	15	2.51	2.51	443.	0.	0.26	0.83	2.51	2.51	550.	0.	0.32	1.03
217	15	2.51	2.51	448.	0.	0.26	0.84	2.51	2.51	590.	0.	0.35	1.10
218	15	2.51	2.51	402.	0.	0.24	0.75	2.51	2.51	418.	0.	0.25	0.78
219	15	2.51	2.51	281.	0.	0.17	0.53	2.51	2.51	152.	0.	0.09	0.28
220	15	2.51	2.51	306.	0.	0.18	0.57	2.51	2.51	359.	0.	0.21	0.67
221	15	2.51	2.51	301.	0.	0.18	0.56	2.51	2.51	475.	0.	0.28	0.89
222	15	2.51	2.51	321.	0.	0.19	0.60	2.51	2.51	568.	0.	0.33	1.06
223	15	2.51	2.51	320.	0.	0.19	0.60	2.51	2.51	592.	0.	0.35	1.11
224	15	2.51	2.51	272.	0.	0.16	0.51	2.51	2.51	375.	0.	0.22	0.70
225	15	2.51	2.51	238.	0.	0.14	0.44	2.51	2.51	149.	0.	0.09	0.28
226	15	2.51	2.51	241.	0.	0.14	0.45	2.51	2.51	379.	0.	0.22	0.71
227	15	2.51	2.51	231.	0.	0.14	0.43	2.51	2.51	511.	0.	0.30	0.96
228	15	2.51	2.51	198.	0.	0.12	0.37	2.51	2.51	575.	0.	0.34	1.07
229	15	2.51	2.51	192.	0.	0.11	0.36	2.51	2.51	582.	0.	0.34	1.09
230	15	2.51	2.51	143.	0.	0.08	0.27	2.51	2.51	349.	0.	0.21	0.65
231	15	2.51	2.51	212.	0.	0.12	0.40	2.51	2.51	167.	0.	0.10	0.31
232	15	2.51	2.51	208.	0.	0.12	0.39	2.51	2.51	414.	0.	0.24	0.77
233	15	2.51	2.51	190.	0.	0.11	0.36	2.51	2.51	554.	0.	0.33	1.04
234	15	2.51	2.51	155.	0.	0.09	0.29	2.51	2.51	620.	0.	0.37	1.16
235	15	2.51	2.51	89.	0.	0.05	0.17	2.51	2.51	567.	0.	0.33	1.06
236	15	2.51	2.51	7.	0.	0.00	0.01	2.51	2.51	316.	0.	0.19	0.59
237	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
238	15	2.51	2.51	187.	0.	0.11	0.35	2.51	2.51	191.	0.	0.11	0.36
239	15	2.51	2.51	187.	0.	0.11	0.35	2.51	2.51	459.	0.	0.27	0.86
240	15	2.51	2.51	138.	0.	0.08	0.26	2.51	2.51	210.	0.	0.12	0.39
241	15	2.51	2.51	162.	0.	0.10	0.30	2.51	2.51	496.	0.	0.29	0.93
242	15	2.51	2.51	159.	0.	0.09	0.30	2.51	2.51	622.	0.	0.37	1.16
243	15	2.51	2.51	177.	0.	0.10	0.33	2.51	2.51	595.	0.	0.35	1.11
244	15	2.51	2.51	153.	0.	0.09	0.29	2.51	2.51	677.	0.	0.40	1.27
245	15	2.51	2.51	148.	0.	0.09	0.28	2.51	2.51	661.	0.	0.39	1.24
246	15	2.51	2.51	146.	0.	0.09	0.27	2.51	2.51	627.	0.	0.37	1.17
247	15	2.51	2.51	109.	0.	0.06	0.20	2.51	2.51	616.	0.	0.36	1.15
248	15	2.51	2.51	106.	0.	0.06	0.20	2.51	2.51	376.	0.	0.22	0.70
249	15	2.51	2.51	16.	0.	0.01	0.03	2.51	2.51	349.	0.	0.21	0.65
250	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
251	15	2.51	2.51	51.	0.	0.03	0.10	2.51	2.51	222.	0.	0.13	0.41
252	15	2.51	2.51	116.	0.	0.07	0.22	2.51	2.51	516.	0.	0.30	0.97
253	15	2.51	2.51	144.	0.	0.08	0.27	2.51	2.51	631.	0.	0.37	1.18
254	15	2.51	2.51	151.	0.	0.09	0.28	2.51	2.51	680.	0.	0.40	1.27
255	15	2.51	2.51	155.	0.	0.09	0.29	2.51	2.51	621.	0.	0.37	1.16
256	15	2.51	2.51	145.	0.	0.09	0.27	2.51	2.51	383.	0.	0.23	0.72
257	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	152.	0.	0.09	0.29
258	15	2.51	2.51	49.	0.	0.03	0.09	2.51	2.51	504.	0.	0.30	0.94
259	15	2.51	2.51	124.	0.	0.07	0.23	2.51	2.51	619.	0.	0.36	1.16
260	15	2.51	2.51	131.	0.	0.08	0.24	2.51	2.51	655.	0.	0.39	1.23
261	15	2.51	2.51	146.	0.	0.09	0.27	2.51	2.51	594.	0.	0.35	1.11
262	15	2.51	2.51	150.	0.	0.09	0.28	2.51	2.51	369.	0.	0.22	0.69
263	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
264	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	137.	0.	0.08	0.26
265	15	2.51	2.51	40.	0.	0.02	0.07	2.51	2.51	472.	0.	0.28	0.88
266	15	2.51	2.51	93.	0.	0.05	0.17	2.51	2.51	608.	0.	0.36	1.14
267	15	2.51	2.51	140.	0.	0.08	0.26	2.51	2.51	652.	0.	0.38	1.22
268	15	2.51	2.51	152.	0.	0.09	0.28	2.51	2.51	609.	0.	0.36	1.14
269	15	2.51	2.51	150.	0.	0.09	0.28	2.51	2.51	360.	0.	0.21	0.67
270	15	2.51	2.51	76.	0.	0.04	0.14	2.51	2.51	0.	0.	0.00	0.00
271	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
272	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
273	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
274	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
275	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
276	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
277	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	1.	0.00	0.01
278	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
279	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00

280	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
281	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
282	15	2.51	2.51	48.	0.	0.03	0.09	2.51	2.51	0.	0.	0.00	0.00
283	15	2.51	2.51	4.	0.	0.00	0.01	2.51	2.51	0.	0.	0.00	0.00
284	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
285	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
286	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
287	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
288	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
289	15	2.51	2.51	23.	0.	0.01	0.04	2.51	2.51	0.	0.	0.00	0.00
290	15	2.51	2.51	61.	0.	0.04	0.11	2.51	2.51	0.	0.	0.00	0.00
291	15	2.51	2.51	31.	0.	0.02	0.06	2.51	2.51	374.	0.	0.22	0.70
292	15	2.51	2.51	99.	0.	0.06	0.19	2.51	2.51	705.	0.	0.41	1.32
293	15	2.51	2.51	106.	0.	0.06	0.20	2.51	2.51	759.	0.	0.45	1.42
294	15	2.51	2.51	99.	0.	0.06	0.18	2.51	2.51	672.	0.	0.40	1.26
295	15	2.51	2.51	96.	0.	0.06	0.18	2.51	2.51	490.	0.	0.29	0.92
296	15	2.51	2.51	46.	0.	0.03	0.09	2.51	2.51	103.	0.	0.06	0.19
297	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
298	15	2.51	2.51	77.	0.	0.04	0.14	2.51	2.51	377.	0.	0.22	0.71
299	15	2.51	2.51	119.	0.	0.07	0.22	2.51	2.51	686.	0.	0.40	1.28
300	15	2.51	2.51	123.	0.	0.07	0.23	2.51	2.51	744.	0.	0.44	1.39
301	15	2.51	2.51	122.	0.	0.07	0.23	2.51	2.51	659.	0.	0.39	1.23
302	15	2.51	2.51	110.	0.	0.06	0.21	2.51	2.51	482.	0.	0.28	0.90
303	15	2.51	2.51	73.	0.	0.04	0.14	2.51	2.51	101.	0.	0.06	0.19
304	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
305	15	2.51	2.51	81.	0.	0.05	0.15	2.51	2.51	380.	0.	0.22	0.71
306	15	2.51	2.51	121.	0.	0.07	0.23	2.51	2.51	688.	0.	0.40	1.29
307	15	2.51	2.51	127.	0.	0.07	0.24	2.51	2.51	748.	0.	0.44	1.40
308	15	2.51	2.51	127.	0.	0.07	0.24	2.51	2.51	665.	0.	0.39	1.24
309	15	2.51	2.51	117.	0.	0.07	0.22	2.51	2.51	490.	0.	0.29	0.92
310	15	2.51	2.51	80.	0.	0.05	0.15	2.51	2.51	109.	0.	0.06	0.20
311	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
312	15	2.51	2.51	38.	0.	0.02	0.07	2.51	2.51	378.	0.	0.22	0.71
313	15	2.51	2.51	101.	0.	0.06	0.19	2.51	2.51	706.	0.	0.42	1.32
314	15	2.51	2.51	111.	0.	0.07	0.21	2.51	2.51	751.	0.	0.44	1.41
315	15	2.51	2.51	109.	0.	0.06	0.20	2.51	2.51	674.	0.	0.40	1.26
316	15	2.51	2.51	99.	0.	0.06	0.18	2.51	2.51	500.	0.	0.29	0.94
317	15	2.51	2.51	52.	0.	0.03	0.10	2.51	2.51	112.	0.	0.07	0.21
318	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
319	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	406.	0.	0.24	0.76
320	15	2.51	2.51	82.	0.	0.05	0.15	2.51	2.51	728.	0.	0.43	1.36
321	15	2.51	2.51	100.	0.	0.06	0.19	2.51	2.51	755.	0.	0.44	1.41
322	15	2.51	2.51	79.	0.	0.05	0.15	2.51	2.51	673.	0.	0.40	1.26
323	15	2.51	2.51	17.	0.	0.01	0.03	2.51	2.51	494.	0.	0.29	0.92
324	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	148.	0.	0.09	0.28
325	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
326	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
327	15	2.51	2.51	49.	0.	0.03	0.09	2.51	2.51	469.	0.	0.28	0.88
328	15	2.51	2.51	95.	0.	0.06	0.18	2.51	2.51	731.	0.	0.43	1.37
329	15	2.51	2.51	90.	0.	0.05	0.17	2.51	2.51	742.	0.	0.44	1.39
330	15	2.51	2.51	65.	0.	0.04	0.12	2.51	2.51	626.	0.	0.37	1.17
331	15	2.51	2.51	31.	0.	0.02	0.06	2.51	2.51	513.	0.	0.30	0.96
332	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	154.	0.	0.09	0.29
333	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
334	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
335	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
336	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
337	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
338	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
339	15	2.51	2.51	45.	0.	0.03	0.08	2.51	2.51	82.	0.	0.05	0.15
340	15	2.51	2.51	98.	0.	0.06	0.18	2.51	2.51	456.	0.	0.27	0.85
341	15	2.51	2.51	118.	0.	0.07	0.22	2.51	2.51	614.	0.	0.36	1.15
342	15	2.51	2.51	157.	0.	0.09	0.29	2.51	2.51	676.	0.	0.40	1.26
343	15	2.51	2.51	172.	0.	0.10	0.32	2.51	2.51	642.	0.	0.38	1.20
344	15	2.51	2.51	169.	0.	0.10	0.32	2.51	2.51	390.	0.	0.23	0.73
345	15	2.51	2.51	71.	0.	0.04	0.13	2.51	2.51	82.	0.	0.05	0.15
346	15	2.51	2.51	115.	0.	0.07	0.22	2.51	2.51	458.	0.	0.27	0.86
347	15	2.51	2.51	129.	0.	0.08	0.24	2.51	2.51	617.	0.	0.36	1.15
348	15	2.51	2.51	155.	0.	0.09	0.29	2.51	2.51	712.	0.	0.42	1.33
349	15	2.51	2.51	165.	0.	0.10	0.31	2.51	2.51	669.	0.	0.39	1.25
350	15	2.51	2.51	152.	0.	0.09	0.29	2.51	2.51	402.	0.	0.24	0.75
351	15	2.51	2.51	73.	0.	0.04	0.14	2.51	2.51	88.	0.	0.05	0.16
352	15	2.51	2.51	107.	0.	0.06	0.20	2.51	2.51	459.	0.	0.27	0.86
353	15	2.51	2.51	114.	0.	0.07	0.21	2.51	2.51	633.	0.	0.37	1.18
354	15	2.51	2.51	116.	0.	0.07	0.22	2.51	2.51	727.	0.	0.43	1.36
355	15	2.51	2.51	112.	0.	0.07	0.21	2.51	2.51	678.	0.	0.40	1.27
356	15	2.51	2.51	62.	0.	0.04	0.12	2.51	2.51	427.	0.	0.25	0.80
357	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
358	15	2.51	2.51	46.	0.	0.03	0.09	2.51	2.51	97.	0.	0.06	0.18
359	15	2.51	2.51	71.	0.	0.04	0.13	2.51	2.51	471.	0.	0.28	0.88
360	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	141.	0.	0.08	0.26
361	15	2.51	2.51	29.	0.	0.02	0.05	2.51	2.51	494.	0.	0.29	0.92
362	15	2.51	2.51	76.	0.	0.04	0.14	2.51	2.51	652.	0.	0.38	1.22
363	15	2.51	2.51	80.	0.	0.05	0.15	2.51	2.51	639.	0.	0.38	1.20
364	15	2.51	2.51	104.	0.	0.06	0.19	2.51	2.51	720.	0.	0.42	1.35

365	15	2.51	2.51	88.	0.	0.05	0.16	2.51	2.51	732.	0.	0.43	1.37
366	15	2.51	2.51	98.	0.	0.06	0.18	2.51	2.51	641.	0.	0.38	1.20
367	15	2.51	2.51	77.	0.	0.05	0.14	2.51	2.51	664.	0.	0.39	1.24
368	15	2.51	2.51	50.	0.	0.03	0.09	2.51	2.51	370.	0.	0.22	0.69
369	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	368.	0.	0.22	0.69
370	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
371	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
372	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	155.	0.	0.09	0.29
373	15	2.51	2.51	44.	0.	0.03	0.08	2.51	2.51	528.	0.	0.31	0.99
374	15	2.51	2.51	108.	0.	0.06	0.20	2.51	2.51	655.	0.	0.39	1.23
375	15	2.51	2.51	111.	0.	0.07	0.21	2.51	2.51	699.	0.	0.41	1.31
376	15	2.51	2.51	84.	0.	0.05	0.16	2.51	2.51	634.	0.	0.37	1.19
377	15	2.51	2.51	82.	0.	0.05	0.15	2.51	2.51	357.	0.	0.21	0.67
378	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
379	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
380	15	2.51	2.51	36.	0.	0.02	0.07	2.51	2.51	0.	0.	0.00	0.00
381	15	2.51	2.51	82.	0.	0.05	0.15	2.51	2.51	0.	0.	0.00	0.00
382	15	2.51	2.51	116.	0.	0.07	0.22	2.51	2.51	0.	0.	0.00	0.00
383	15	2.51	2.51	132.	0.	0.08	0.25	2.51	2.51	0.	0.	0.00	0.00
384	15	2.51	2.51	128.	0.	0.08	0.24	2.51	2.51	0.	0.	0.00	0.00
385	15	2.51	2.51	105.	0.	0.06	0.20	2.51	2.51	0.	0.	0.00	0.00
386	15	2.51	2.51	58.	0.	0.03	0.11	2.51	2.51	0.	0.	0.00	0.00
387	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
388	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
389	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
390	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	18.	0.	0.01	0.03
391	15	2.51	2.51	180.	0.	0.11	0.34	2.51	2.51	91.	0.	0.05	0.17
392	15	2.51	2.51	188.	0.	0.11	0.35	2.51	2.51	0.	0.	0.00	0.00
393	15	2.51	2.51	157.	0.	0.09	0.29	2.51	2.51	0.	0.	0.00	0.00
394	15	2.51	2.51	154.	0.	0.09	0.29	2.51	2.51	0.	0.	0.00	0.00
395	15	2.51	2.51	151.	0.	0.09	0.28	2.51	2.51	0.	0.	0.00	0.00
396	15	2.51	2.51	139.	0.	0.08	0.26	2.51	2.51	0.	0.	0.00	0.00
397	15	2.51	2.51	112.	0.	0.07	0.21	2.51	2.51	0.	0.	0.00	0.00
398	15	2.51	2.51	64.	0.	0.04	0.12	2.51	2.51	0.	0.	0.00	0.00
399	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
400	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
401	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
402	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
403	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
404	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
405	15	2.51	2.51	27.	0.	0.02	0.05	2.51	2.51	0.	0.	0.00	0.00
406	15	2.51	2.51	57.	0.	0.03	0.11	2.51	2.51	0.	0.	0.00	0.00
407	15	2.51	2.51	58.	0.	0.03	0.11	2.51	2.51	0.	0.	0.00	0.00
408	15	2.51	2.51	27.	0.	0.02	0.05	2.51	2.51	0.	0.	0.00	0.00
409	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
410	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
411	15	2.51	2.51	74.	0.	0.04	0.14	2.51	2.51	102.	0.	0.06	0.19
412	15	2.51	2.51	271.	0.	0.16	0.51	2.51	2.51	98.	0.	0.06	0.18
413	15	2.51	2.51	226.	0.	0.13	0.42	2.51	2.51	0.	0.	0.00	0.00
414	15	2.51	2.51	134.	0.	0.08	0.25	2.51	2.51	0.	0.	0.00	0.00
415	15	2.51	2.51	65.	0.	0.04	0.12	2.51	2.51	0.	0.	0.00	0.00
416	15	2.51	2.51	7.	0.	0.00	0.01	2.51	2.51	0.	0.	0.00	0.00
417	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
418	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
419	15	2.51	2.51	153.	0.	0.09	0.29	2.51	2.51	470.	0.	0.28	0.88
420	15	2.51	2.51	156.	0.	0.09	0.29	2.51	2.51	709.	0.	0.42	1.33
421	15	2.51	2.51	124.	0.	0.07	0.23	2.51	2.51	692.	0.	0.41	1.29
422	15	2.51	2.51	90.	0.	0.05	0.17	2.51	2.51	616.	0.	0.36	1.15
423	15	2.51	2.51	88.	0.	0.05	0.16	2.51	2.51	509.	0.	0.30	0.95
424	15	2.51	2.51	40.	0.	0.02	0.07	2.51	2.51	217.	0.	0.13	0.41
425	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
426	15	2.51	2.51	198.	0.	0.12	0.37	2.51	2.51	448.	0.	0.26	0.84
427	15	2.51	2.51	193.	0.	0.11	0.36	2.51	2.51	657.	0.	0.39	1.23
428	15	2.51	2.51	149.	0.	0.09	0.28	2.51	2.51	641.	0.	0.38	1.20
429	15	2.51	2.51	123.	0.	0.07	0.23	2.51	2.51	576.	0.	0.34	1.08
430	15	2.51	2.51	135.	0.	0.08	0.25	2.51	2.51	469.	0.	0.28	0.88
431	15	2.51	2.51	126.	0.	0.07	0.24	2.51	2.51	197.	0.	0.12	0.37
432	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
433	15	2.51	2.51	219.	0.	0.13	0.41	2.51	2.51	414.	0.	0.24	0.77
434	15	2.51	2.51	210.	0.	0.12	0.39	2.51	2.51	602.	0.	0.35	1.13
435	15	2.51	2.51	163.	0.	0.10	0.31	2.51	2.51	582.	0.	0.34	1.09
436	15	2.51	2.51	161.	0.	0.09	0.30	2.51	2.51	528.	0.	0.31	0.99
437	15	2.51	2.51	177.	0.	0.10	0.33	2.51	2.51	421.	0.	0.25	0.79
438	15	2.51	2.51	177.	0.	0.10	0.33	2.51	2.51	172.	0.	0.10	0.32
439	15	2.51	2.51	62.	0.	0.04	0.12	2.51	2.51	0.	0.	0.00	0.00
440	15	2.51	2.51	228.	0.	0.13	0.43	2.51	2.51	381.	0.	0.22	0.71
441	15	2.51	2.51	222.	0.	0.13	0.42	2.51	2.51	553.	0.	0.33	1.03
442	15	2.51	2.51	190.	0.	0.11	0.35	2.51	2.51	532.	0.	0.31	0.99
443	15	2.51	2.51	197.	0.	0.12	0.37	2.51	2.51	485.	0.	0.29	0.91
444	15	2.51	2.51	207.	0.	0.12	0.39	2.51	2.51	379.	0.	0.22	0.71
445	15	2.51	2.51	208.	0.	0.12	0.39	2.51	2.51	148.	0.	0.09	0.28
446	15	2.51	2.51	108.	0.	0.06	0.20	2.51	2.51	0.	0.	0.00	0.00
447	15	2.51	2.51	244.	0.	0.14	0.46	2.51	2.51	360.	0.	0.21	0.67
448	15	2.51	2.51	247.	0.	0.15	0.46	2.51	2.51	521.	0.	0.31	0.97
449	15	2.51	2.51	233.	0.	0.14	0.44	2.51	2.51	498.	0.	0.29	0.93

450	15	2.51	2.51	245.	0.	0.14	0.46	2.51	2.51	455.	0.	0.27	0.85
451	15	2.51	2.51	249.	0.	0.15	0.47	2.51	2.51	351.	0.	0.21	0.66
452	15	2.51	2.51	236.	0.	0.14	0.44	2.51	2.51	135.	0.	0.08	0.25
453	15	2.51	2.51	133.	0.	0.08	0.25	2.51	2.51	0.	0.	0.00	0.00
454	15	2.51	2.51	281.	0.	0.17	0.53	2.51	2.51	363.	0.	0.21	0.68
455	15	2.51	2.51	304.	0.	0.18	0.57	2.51	2.51	508.	0.	0.30	0.95
456	15	2.51	2.51	301.	0.	0.18	0.56	2.51	2.51	479.	0.	0.28	0.90
457	15	2.51	2.51	313.	0.	0.18	0.58	2.51	2.51	435.	0.	0.26	0.81
458	15	2.51	2.51	311.	0.	0.18	0.58	2.51	2.51	341.	0.	0.20	0.64
459	15	2.51	2.51	276.	0.	0.16	0.52	2.51	2.51	145.	0.	0.09	0.27
460	15	2.51	2.51	157.	0.	0.09	0.29	2.51	2.51	0.	0.	0.00	0.00
461	15	2.51	2.51	338.	0.	0.20	0.63	2.51	2.51	391.	0.	0.23	0.73
462	15	2.51	2.51	376.	0.	0.22	0.70	2.51	2.51	507.	0.	0.30	0.95
463	15	2.51	2.51	372.	0.	0.22	0.70	2.51	2.51	457.	0.	0.27	0.85
464	15	2.51	2.51	382.	0.	0.22	0.71	2.51	2.51	418.	0.	0.25	0.78
465	15	2.51	2.51	379.	0.	0.22	0.71	2.51	2.51	344.	0.	0.20	0.64
466	15	2.51	2.51	330.	0.	0.19	0.62	2.51	2.51	180.	0.	0.11	0.34
467	15	2.51	2.51	170.	0.	0.10	0.32	2.51	2.51	0.	0.	0.00	0.00
468	15	2.51	2.51	377.	0.	0.22	0.71	2.51	2.51	422.	0.	0.25	0.79
469	15	2.51	2.51	400.	0.	0.24	0.75	2.51	2.51	496.	0.	0.29	0.93
470	15	2.51	2.51	377.	0.	0.22	0.71	2.51	2.51	414.	0.	0.24	0.77
471	15	2.51	2.51	383.	0.	0.23	0.72	2.51	2.51	382.	0.	0.22	0.71
472	15	2.51	2.51	389.	0.	0.23	0.73	2.51	2.51	339.	0.	0.20	0.63
473	15	2.51	2.51	358.	0.	0.21	0.67	2.51	2.51	218.	0.	0.13	0.41
474	15	2.51	2.51	169.	0.	0.10	0.32	2.51	2.51	0.	0.	0.00	0.00
475	15	2.51	2.51	285.	0.	0.17	0.53	2.51	2.51	390.	0.	0.23	0.73
476	15	2.51	2.51	264.	0.	0.16	0.49	2.51	2.51	422.	0.	0.25	0.79
477	15	2.51	2.51	182.	0.	0.11	0.34	2.51	2.51	320.	0.	0.19	0.60
478	15	2.51	2.51	200.	0.	0.12	0.37	2.51	2.51	300.	0.	0.18	0.56
479	15	2.51	2.51	253.	0.	0.15	0.47	2.51	2.51	292.	0.	0.17	0.55
480	15	2.51	2.51	257.	0.	0.15	0.48	2.51	2.51	197.	0.	0.12	0.37
481	15	2.51	2.51	130.	0.	0.08	0.24	2.51	2.51	0.	0.	0.00	0.00
482	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	191.	0.	0.11	0.36
483	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	166.	0.	0.10	0.31
484	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	140.	0.	0.08	0.26
485	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	116.	0.	0.07	0.22
486	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	88.	0.	0.05	0.16
487	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	35.	0.	0.02	0.07
488	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
489	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
490	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	91.	0.	0.05	0.17
491	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	123.	0.	0.07	0.23
492	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	109.	0.	0.06	0.20
493	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	77.	0.	0.05	0.14
494	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	44.	0.	0.03	0.08
495	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
496	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
497	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
498	15	2.51	2.51	146.	0.	0.09	0.27	2.51	2.51	0.	0.	0.00	0.00
499	15	2.51	2.51	176.	0.	0.10	0.33	2.51	2.51	0.	0.	0.00	0.00
500	15	2.51	2.51	173.	0.	0.10	0.32	2.51	2.51	0.	0.	0.00	0.00
501	15	2.51	2.51	159.	0.	0.09	0.30	2.51	2.51	0.	0.	0.00	0.00
502	15	2.51	2.51	133.	0.	0.08	0.25	2.51	2.51	0.	0.	0.00	0.00
503	15	2.51	2.51	108.	0.	0.06	0.20	2.51	2.51	0.	0.	0.00	0.00
504	15	2.51	2.51	60.	0.	0.04	0.11	2.51	2.51	0.	0.	0.00	0.00
505	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
506	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
507	15	2.51	2.51	46.	0.	0.03	0.09	2.51	2.51	224.	0.	0.13	0.42
508	15	2.51	2.51	110.	0.	0.06	0.21	2.51	2.51	536.	0.	0.32	1.00
509	15	2.51	2.51	130.	0.	0.08	0.24	2.51	2.51	659.	0.	0.39	1.23
510	15	2.51	2.51	131.	0.	0.08	0.24	2.51	2.51	709.	0.	0.42	1.33
511	15	2.51	2.51	120.	0.	0.07	0.23	2.51	2.51	629.	0.	0.37	1.18
512	15	2.51	2.51	93.	0.	0.05	0.17	2.51	2.51	349.	0.	0.21	0.65
513	15	2.51	2.51	134.	0.	0.08	0.25	2.51	2.51	210.	0.	0.12	0.39
514	15	2.51	2.51	158.	0.	0.09	0.30	2.51	2.51	512.	0.	0.30	0.96
515	15	2.51	2.51	156.	0.	0.09	0.29	2.51	2.51	645.	0.	0.38	1.21
516	15	2.51	2.51	145.	0.	0.09	0.27	2.51	2.51	700.	0.	0.41	1.31
517	15	2.51	2.51	129.	0.	0.08	0.24	2.51	2.51	630.	0.	0.37	1.18
518	15	2.51	2.51	84.	0.	0.05	0.16	2.51	2.51	348.	0.	0.21	0.65
519	15	2.51	2.51	185.	0.	0.11	0.35	2.51	2.51	191.	0.	0.11	0.36
520	15	2.51	2.51	189.	0.	0.11	0.35	2.51	2.51	473.	0.	0.28	0.89
521	15	2.51	2.51	179.	0.	0.11	0.34	2.51	2.51	613.	0.	0.36	1.15
522	15	2.51	2.51	152.	0.	0.09	0.28	2.51	2.51	674.	0.	0.40	1.26
523	15	2.51	2.51	114.	0.	0.07	0.21	2.51	2.51	613.	0.	0.36	1.15
524	15	2.51	2.51	31.	0.	0.02	0.06	2.51	2.51	332.	0.	0.20	0.62
525	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
526	15	2.51	2.51	214.	0.	0.13	0.40	2.51	2.51	169.	0.	0.10	0.32
527	15	2.51	2.51	213.	0.	0.13	0.40	2.51	2.51	431.	0.	0.25	0.81
528	15	2.51	2.51	243.	0.	0.14	0.45	2.51	2.51	156.	0.	0.09	0.29
529	15	2.51	2.51	254.	0.	0.15	0.47	2.51	2.51	402.	0.	0.24	0.75
530	15	2.51	2.51	245.	0.	0.14	0.46	2.51	2.51	526.	0.	0.31	0.98
531	15	2.51	2.51	202.	0.	0.12	0.38	2.51	2.51	571.	0.	0.34	1.07
532	15	2.51	2.51	227.	0.	0.13	0.42	2.51	2.51	601.	0.	0.35	1.12
533	15	2.51	2.51	168.	0.	0.10	0.31	2.51	2.51	634.	0.	0.37	1.19
534	15	2.51	2.51	228.	0.	0.13	0.43	2.51	2.51	615.	0.	0.36	1.15

535	15	2.51	2.51	135.	0.	0.08	0.25	2.51	2.51	606.	0.	0.36	1.13
536	15	2.51	2.51	184.	0.	0.11	0.34	2.51	2.51	380.	0.	0.22	0.71
537	15	2.51	2.51	71.	0.	0.04	0.13	2.51	2.51	358.	0.	0.21	0.67
538	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
539	15	2.51	2.51	285.	0.	0.17	0.53	2.51	2.51	162.	0.	0.10	0.30
540	15	2.51	2.51	315.	0.	0.19	0.59	2.51	2.51	384.	0.	0.23	0.72
541	15	2.51	2.51	309.	0.	0.18	0.58	2.51	2.51	488.	0.	0.29	0.91
542	15	2.51	2.51	336.	0.	0.20	0.63	2.51	2.51	590.	0.	0.35	1.10
543	15	2.51	2.51	337.	0.	0.20	0.63	2.51	2.51	621.	0.	0.37	1.16
544	15	2.51	2.51	290.	0.	0.17	0.54	2.51	2.51	409.	0.	0.24	0.76
545	15	2.51	2.51	342.	0.	0.20	0.64	2.51	2.51	194.	0.	0.11	0.36
546	15	2.51	2.51	381.	0.	0.22	0.71	2.51	2.51	369.	0.	0.22	0.69
547	15	2.51	2.51	375.	0.	0.22	0.70	2.51	2.51	454.	0.	0.27	0.85
548	15	2.51	2.51	431.	0.	0.25	0.81	2.51	2.51	565.	0.	0.33	1.06
549	15	2.51	2.51	437.	0.	0.26	0.82	2.51	2.51	617.	0.	0.36	1.15
550	15	2.51	2.51	393.	0.	0.23	0.73	2.51	2.51	453.	0.	0.27	0.85
551	15	2.51	2.51	368.	0.	0.22	0.69	2.51	2.51	228.	0.	0.19	0.43
552	15	2.51	2.51	390.	0.	0.23	0.73	2.51	2.51	350.	0.	0.21	0.65
553	15	2.51	2.51	368.	0.	0.22	0.69	2.51	2.51	389.	0.	0.23	0.73
554	15	2.51	2.51	443.	0.	0.26	0.83	2.51	2.51	502.	0.	0.30	0.94
555	15	2.51	2.51	480.	0.	0.28	0.90	2.51	2.51	597.	0.	0.35	1.12
556	15	2.51	2.51	458.	0.	0.27	0.86	2.51	2.51	490.	0.	0.29	0.92
557	15	2.51	2.51	255.	0.	0.15	0.48	2.51	2.51	200.	0.	0.12	0.37
558	15	2.51	2.51	243.	0.	0.14	0.45	2.51	2.51	279.	0.	0.16	0.52
559	15	2.51	2.51	169.	0.	0.10	0.32	2.51	2.51	274.	0.	0.16	0.51
560	15	2.51	2.51	234.	0.	0.14	0.44	2.51	2.51	379.	0.	0.22	0.71
561	15	2.51	2.51	343.	0.	0.20	0.64	2.51	2.51	503.	0.	0.30	0.94
562	15	2.51	2.51	376.	0.	0.22	0.70	2.51	2.51	451.	0.	0.27	0.84
563	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	25.	0.	0.01	0.05
564	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	55.	0.	0.03	0.10
565	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	87.	0.	0.05	0.16
566	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	134.	0.	0.08	0.25
567	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	199.	0.	0.12	0.37
568	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	310.	0.	0.18	0.58
569	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
570	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	38.	0.	0.02	0.07
571	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	83.	0.	0.05	0.15
572	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	67.	0.	0.04	0.13
573	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	197.	0.	0.12	0.37
574	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	166.	0.	0.10	0.31
575	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	112.	0.	0.07	0.21
576	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
577	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
578	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
579	15	2.51	2.51	12.	0.	0.01	0.02	2.51	2.51	0.	0.	0.00	0.00
580	15	2.51	2.51	20.	0.	0.01	0.04	2.51	2.51	0.	0.	0.00	0.00
581	15	2.51	2.51	236.	0.	0.14	0.44	2.51	2.51	6.	0.	0.00	0.01
582	15	2.51	2.51	118.	0.	0.07	0.22	2.51	2.51	0.	0.	0.00	0.00
583	15	2.51	2.51	43.	0.	0.03	0.08	2.51	2.51	0.	0.	0.00	0.00
584	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
585	15	2.51	2.51	0.	0.	0.00	0.00	2.51	2.51	0.	0.	0.00	0.00
586	15	2.51	2.51	24.	0.	0.01	0.05	2.51	2.51	0.	0.	0.00	0.00
587	15	2.51	2.51	41.	0.	0.02	0.08	2.51	2.51	0.	0.	0.00	0.00
588	15	2.51	2.51	24.	0.	0.01	0.05	2.51	2.51	0.	0.	0.00	0.00
589	15	2.51	2.51	201.	0.	0.12	0.38	2.51	2.51	28.	0.	0.02	0.05
590	15	2.51	2.51	137.	0.	0.08	0.26	2.51	2.51	0.	0.	0.00	0.00
591	15	2.51	2.51	89.	0.	0.05	0.17	2.51	2.51	0.	0.	0.00	0.00
592	15	2.51	2.51	49.	0.	0.03	0.09	2.51	2.51	0.	0.	0.00	0.00
593	15	2.51	2.51	142.	0.	0.08	0.27	2.51	2.51	247.	0.	0.15	0.46
594	15	2.51	2.51	171.	0.	0.10	0.32	2.51	2.51	295.	0.	0.17	0.55
595	15	2.51	2.51	144.	0.	0.08	0.27	2.51	2.51	239.	0.	0.14	0.45
596	15	2.51	2.51	121.	0.	0.07	0.23	2.51	2.51	179.	0.	0.11	0.33
597	15	2.51	2.51	111.	0.	0.07	0.21	2.51	2.51	128.	0.	0.08	0.24
598	15	2.51	2.51	103.	0.	0.06	0.19	2.51	2.51	72.	0.	0.04	0.13
599	15	2.51	2.51	124.	0.	0.07	0.23	2.51	2.51	8.	0.	0.00	0.01
600	15	2.51	2.51	270.	0.	0.16	0.50	2.51	2.51	236.	0.	0.14	0.44
601	15	2.51	2.51	370.	0.	0.22	0.69	2.51	2.51	312.	0.	0.18	0.58
602	15	2.51	2.51	400.	0.	0.24	0.75	2.51	2.51	277.	0.	0.16	0.52
603	15	2.51	2.51	409.	0.	0.24	0.76	2.51	2.51	215.	0.	0.13	0.40
604	15	2.51	2.51	417.	0.	0.25	0.78	2.51	2.51	165.	0.	0.10	0.31
605	15	2.51	2.51	420.	0.	0.25	0.79	2.51	2.51	120.	0.	0.07	0.22
606	15	2.51	2.51	426.	0.	0.25	0.80	2.51	2.51	96.	0.	0.06	0.18
607	15	2.51	2.51	371.	0.	0.22	0.69	2.51	2.51	288.	0.	0.17	0.54
608	15	2.51	2.51	463.	0.	0.27	0.87	2.51	2.51	352.	0.	0.21	0.66
609	15	2.51	2.51	485.	0.	0.29	0.91	2.51	2.51	288.	0.	0.17	0.54
610	15	2.51	2.51	489.	0.	0.29	0.92	2.51	2.51	218.	0.	0.13	0.41
611	15	2.51	2.51	488.	0.	0.29	0.91	2.51	2.51	165.	0.	0.10	0.31
612	15	2.51	2.51	493.	0.	0.29	0.92	2.51	2.51	123.	0.	0.07	0.23
613	15	2.51	2.51	491.	0.	0.29	0.92	2.51	2.51	102.	0.	0.06	0.19
614	15	2.51	2.51	351.	0.	0.21	0.66	2.51	2.51	303.	0.	0.18	0.57
615	15	2.51	2.51	370.	0.	0.22	0.69	2.51	2.51	337.	0.	0.20	0.63
616	15	2.51	2.51	344.	0.	0.20	0.64	2.51	2.51	267.	0.	0.16	0.50
617	15	2.51	2.51	321.	0.	0.19	0.60	2.51	2.51	198.	0.	0.12	0.37
618	15	2.51	2.51	314.	0.	0.18	0.59	2.51	2.51	147.	0.	0.09	0.27
619	15	2.51	2.51	312.	0.	0.18	0.58	2.51	2.51	103.	0.	0.06	0.19

620	15	2.51	2.51	330.	0.	0.19	0.62	2.51	2.51	72.	0.	0.04	0.14
621	15	2.51	2.51	353.	0.	0.21	0.66	2.51	2.51	141.	0.	0.08	0.26
622	15	2.51	2.51	459.	0.	0.27	0.86	2.51	2.51	148.	0.	0.09	0.28
623	15	2.51	2.51	417.	0.	0.25	0.78	2.51	2.51	148.	0.	0.09	0.28
624	15	2.51	2.51	197.	0.	0.12	0.37	2.51	2.51	104.	0.	0.06	0.20
625	15	2.51	2.51	221.	0.	0.13	0.41	2.51	2.51	209.	0.	0.12	0.39
626	15	2.51	2.51	150.	0.	0.09	0.28	2.51	2.51	137.	0.	0.08	0.26
627	15	2.51	2.51	98.	0.	0.06	0.18	2.51	2.51	85.	0.	0.05	0.16
628	15	2.51	2.51	187.	0.	0.11	0.35	2.51	2.51	314.	0.	0.18	0.59
629	15	2.51	2.51	168.	0.	0.10	0.31	2.51	2.51	344.	0.	0.20	0.64
630	15	2.51	2.51	148.	0.	0.09	0.28	2.51	2.51	256.	0.	0.15	0.48
631	15	2.51	2.51	359.	0.	0.21	0.67	2.51	2.51	210.	0.	0.12	0.39
632	15	2.51	2.51	195.	0.	0.12	0.37	2.51	2.51	47.	0.	0.03	0.09
633	15	2.51	2.51	80.	0.	0.05	0.15	2.51	2.51	0.	0.	0.00	0.00
634	15	2.51	2.51	260.	0.	0.15	0.49	2.51	2.51	329.	0.	0.19	0.62
635	15	2.51	2.51	283.	0.	0.17	0.53	2.51	2.51	409.	0.	0.24	0.76
636	15	2.51	2.51	235.	0.	0.14	0.44	2.51	2.51	286.	0.	0.17	0.53
637	15	2.51	2.51	354.	0.	0.21	0.66	2.51	2.51	175.	0.	0.10	0.33
638	15	2.51	2.51	147.	0.	0.09	0.27	2.51	2.51	0.	0.	0.00	0.00
639	15	2.51	2.51	82.	0.	0.05	0.15	2.51	2.51	0.	0.	0.00	0.00
640	15	2.51	2.51	250.	0.	0.15	0.47	2.51	2.51	293.	0.	0.17	0.55
641	15	2.51	2.51	314.	0.	0.18	0.59	2.51	2.51	405.	0.	0.24	0.76
642	15	2.51	2.51	305.	0.	0.18	0.57	2.51	2.51	334.	0.	0.20	0.62
643	15	2.51	2.51	314.	0.	0.18	0.59	2.51	2.51	197.	0.	0.12	0.37
644	15	2.51	2.51	202.	0.	0.12	0.38	2.51	2.51	91.	0.	0.05	0.17
645	15	2.51	2.51	146.	0.	0.09	0.27	2.51	2.51	43.	0.	0.03	0.08
646	15	2.51	2.51	232.	0.	0.14	0.43	2.51	2.51	284.	0.	0.17	0.53
647	15	2.51	2.51	231.	0.	0.14	0.43	2.51	2.51	317.	0.	0.19	0.59
648	15	2.51	2.51	266.	0.	0.16	0.50	2.51	2.51	305.	0.	0.18	0.57

@ = ARMATURA INSUFFICIENTE! In detta area, oltre all'armatura di ffusa, è stata integrata armatura aggiuntiva per soddisfare le verifiche.

MACROGUSCIO Platea

VERIFICHE A FESSURAZIONE (EFFETTO MEMBRANA + PIASTRA)

CASI DI CARICO: ->

Nome	Descrizione
18	Rara (RARA)
19	Rara VentoX (RARA)
20	Rara VentoY (RARA)
21	Frequente (FREQUENTE)
22	Frequente VentoX (FREQUENTE)
23	Frequente VentoY (FREQUENTE)
24	Quasi Perm (QUASI PERMANENTE)

DATI:

copri ferro inferiore (asse armatura): 4 cm
copri ferro superiore (asse armatura): 4 cm

Af = area effettiva tesa (cm2 al metro)

Afc = area effettiva compressa (cm2 al metro)

Mom = momento flettente [daNcm/cm]

Nor = sforzo normale [daN]

σc = tensione calcestruzzo [daN/cm2]

valore max per combinazione rara = 149.4 daN/cm2
quasi permanente = 112 daN/cm2

σf = tensione acciaio [daN/cm2]

valore max per combinazione rara = 3600 daN/cm2

wkF = apertura caratteristica per combinazione frequente (mm) - valore max = 0.4 mm

wkP = apertura caratteristica per combinazione quasi permanente (mm) - valore max = 0.3 mm

<-

ARMATURA INFERIORE ORIZZONTALE

GUSCI	COMBINAZIONE RARA						COMB. FREQUENTE			COMB. QUASI PERMANENTE			
	Af	Afc	Mom	Nor	σc	σf	Mom	Nor	wkF	Mom	Nor	σc	wkP
1	2.51	2.51	364	0.	29.60	1373.	312	0.	0.084	191	0.	15.52	0.051
2	2.51	2.51	180	0.	14.60	680.	158	0.	0.043	104	0.	8.47	0.028
3	2.51	2.51	338	0.	27.46	1276.	297	0.	0.080	227	0.	18.41	0.061
4	2.51	2.51	285	0.	23.12	1070.	251	0.	0.067	155	0.	12.62	0.041
5	2.51	2.51	86	0.	7.02	325.	80	0.	0.021	83	0.	6.70	0.022
6	2.51	2.51	275	0.	22.33	1033.	248	0.	0.066	196	0.	15.87	0.052
7	2.51	2.51	245	0.	19.90	922.	228	0.	0.061	172	0.	14.00	0.046
8	2.51	2.51	154	0.	12.54	581.	139	0.	0.037	91	0.	7.41	0.024
9	2.51	2.51	276	0.	22.38	1036.	255	0.	0.068	189	0.	15.35	0.051
10	2.51	2.51	230	0.	18.64	863.	204	0.	0.055	147	0.	11.93	0.039
11	2.51	2.51	111	0.	9.03	419.	103	0.	0.028	92	0.	7.48	0.025
12	2.51	2.51	281	0.	22.82	1057.	254	0.	0.068	201	0.	16.34	0.054

13	2.51	2.51	315	0.	25.56	1183.	281	0.	0.075	177	0.	14.38	0.047
14	2.51	2.51	268	0.	21.74	1008.	246	0.	0.066	161	0.	13.10	0.043
15	2.51	2.51	249	0.	20.23	938.	219	0.	0.059	143	0.	11.61	0.038
16	2.51	2.51	239	0.	19.37	897.	210	0.	0.056	134	0.	10.86	0.036
17	2.51	2.51	235	0.	19.06	882.	207	0.	0.055	127	0.	10.29	0.034
18	2.51	2.51	237	0.	19.25	891.	206	0.	0.055	123	0.	9.95	0.033
19	2.51	2.51	245	0.	19.89	921.	210	0.	0.056	129	0.	10.45	0.034
20	2.51	2.51	202	0.	16.46	768.	193	0.	0.053	143	0.	11.61	0.039
21	2.51	2.51	384	0.	31.19	1452.	360	0.	0.098	255	0.	20.76	0.070
22	2.51	2.51	439	0.	35.63	1654.	410	0.	0.110	295	0.	23.95	0.080
23	2.51	2.51	416	0.	33.81	1568.	386	0.	0.104	271	0.	22.01	0.073
24	2.51	2.51	403	0.	32.69	1515.	374	0.	0.100	270	0.	21.89	0.072
25	2.51	2.51	368	0.	29.89	1384.	337	0.	0.090	248	0.	20.12	0.066
26	2.51	2.51	262	0.	21.31	987.	238	0.	0.064	182	0.	14.75	0.049
27	2.51	2.51	98	0.	7.94	368.	89	0.	0.024	57	0.	4.66	0.015
28	2.51	2.51	228	0.	18.53	858.	196	0.	0.052	131	0.	10.65	0.035
29	2.51	2.51	225	0.	18.27	845.	195	0.	0.052	131	0.	10.63	0.035
30	2.51	2.51	235	0.	19.08	883.	205	0.	0.055	139	0.	11.25	0.037
31	2.51	2.51	246	0.	20.01	926.	220	0.	0.059	148	0.	12.05	0.040
32	2.51	2.51	268	0.	21.79	1009.	238	0.	0.064	164	0.	13.35	0.044
33	2.51	2.51	280	0.	22.72	1052.	250	0.	0.067	174	0.	14.14	0.047
34	2.51	2.51	284	0.	23.03	1066.	258	0.	0.069	180	0.	14.58	0.048
35	2.51	2.51	110	0.	8.97	415.	103	0.	0.028	66	0.	5.39	0.018
36	2.51	2.51	302	0.	24.49	1134.	276	0.	0.074	184	0.	14.95	0.049
37	2.51	2.51	396	0.	32.17	1489.	364	0.	0.097	258	0.	20.92	0.069
38	2.51	2.51	468	0.	38.01	1759.	427	0.	0.114	285	0.	23.15	0.076
39	2.51	2.51	510	0.	41.37	1915.	466	0.	0.124	347	0.	28.17	0.093
40	2.51	2.51	495	0.	40.15	1859.	453	0.	0.121	358	0.	29.05	0.096
41	2.51	2.51	398	0.	32.28	1495.	365	0.	0.098	299	0.	24.31	0.080
42	2.51	2.51	239	0.	19.37	897.	218	0.	0.058	167	0.	13.54	0.045
43	2.51	2.51	198	0.	16.04	742.	176	0.	0.047	124	0.	10.10	0.033
44	2.51	2.51	270	0.	21.95	1016.	248	0.	0.066	160	0.	13.03	0.043
45	2.51	2.51	319	0.	25.86	1196.	285	0.	0.076	231	0.	18.74	0.062
46	2.51	2.51	254	0.	20.58	953.	232	0.	0.062	156	0.	12.64	0.042
47	2.51	2.51	392	0.	31.86	1474.	353	0.	0.094	271	0.	22.03	0.072
48	2.51	2.51	237	0.	19.25	891.	216	0.	0.058	147	0.	11.93	0.039
49	2.51	2.51	408	0.	33.10	1532.	369	0.	0.099	267	0.	21.69	0.071
50	2.51	2.51	226	0.	18.34	849.	206	0.	0.055	136	0.	11.01	0.036
51	2.51	2.51	398	0.	32.31	1496.	361	0.	0.096	247	0.	20.09	0.066
52	2.51	2.51	221	0.	17.98	832.	201	0.	0.054	132	0.	10.68	0.035
53	2.51	2.51	388	0.	31.54	1460.	354	0.	0.094	243	0.	19.72	0.065
54	2.51	2.51	232	0.	18.85	873.	210	0.	0.056	131	0.	10.65	0.035
55	2.51	2.51	403	0.	32.69	1514.	371	0.	0.099	262	0.	21.31	0.070
56	2.51	2.51	245	0.	19.87	920.	221	0.	0.059	141	0.	11.43	0.038
57	2.51	2.51	466	0.	37.83	1752.	425	0.	0.113	289	0.	23.46	0.077
58	2.51	2.51	225	0.	18.28	846.	210	0.	0.056	143	0.	11.59	0.038
59	2.51	2.51	453	0.	36.78	1702.	405	0.	0.108	289	0.	23.43	0.077
60	2.51	2.51	223	0.	18.08	837.	208	0.	0.056	139	0.	11.30	0.037
61	2.51	2.51	340	0.	27.63	1278.	302	0.	0.081	221	0.	17.92	0.059
62	2.51	2.51	220	0.	17.84	826.	203	0.	0.054	134	0.	10.86	0.036
63	2.51	2.51	182	0.	14.81	685.	164	0.	0.044	76	0.	6.16	0.020
64	2.51	2.51	213	0.	17.30	800.	199	0.	0.053	130	0.	10.57	0.035
65	2.51	2.51	123	0.	9.95	461.	118	0.	0.031	83	0.	6.77	0.022
66	2.51	2.51	220	0.	17.83	825.	205	0.	0.055	131	0.	10.61	0.035
67	2.51	2.51	227	0.	18.45	854.	214	0.	0.057	171	0.	13.86	0.046
68	2.51	2.51	233	0.	18.95	877.	216	0.	0.058	135	0.	10.93	0.036
69	2.51	2.51	275	0.	22.34	1034.	257	0.	0.069	173	0.	14.07	0.046
70	2.51	2.51	245	0.	19.91	921.	227	0.	0.061	142	0.	11.53	0.038
71	2.51	2.51	303	0.	24.60	1140.	281	0.	0.075	198	0.	16.05	0.053
72	2.51	2.51	182	0.	14.77	684.	169	0.	0.045	115	0.	9.37	0.031
73	2.51	2.51	0.	0.	0.00	1.	4	0.	0.001	12	0.	0.99	0.003
74	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
75	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
76	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
77	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
78	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
79	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
80	2.51	2.51	48	0.	3.92	182.	38	0.	0.010	4	0.	0.33	0.001
81	2.51	2.51	123	0.	9.98	462.	98	0.	0.026	59	0.	4.82	0.016
82	2.51	2.51	244	0.	19.79	917.	197	0.	0.053	150	0.	12.21	0.040
83	2.51	2.51	263	0.	21.38	990.	223	0.	0.060	184	0.	14.91	0.049
84	2.51	2.51	261	0.	21.19	982.	218	0.	0.058	207	0.	16.82	0.055
85	2.51	2.51	151	0.	12.23	567.	126	0.	0.034	110	0.	8.95	0.030
86	2.51	2.51	71	0.	5.78	268.	60	0.	0.016	46	0.	3.70	0.012
87	2.51	2.51	10	0.	0.78	37.	10	0.	0.003	0.	0.	0.00	0.000
88	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
89	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
90	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
91	2.51	2.51	0.	0.	0.00	2.	0.	0.	0.000	0.	0.	0.00	0.000
92	2.51	2.51	0.	0.	0.00	3.	0.	0.	0.000	0.	0.	0.00	0.000
93	2.51	2.51	8	0.	0.64	33.	18	0.	0.005	26	0.	2.10	0.008
94	2.51	2.51	55	0.	4.50	209.	54	0.	0.014	38	0.	3.06	0.010
95	2.51	2.51	38	0.	3.06	142.	37	0.	0.010	24	0.	1.91	0.006
96	2.51	2.51	35	0.	2.86	132.	33	0.	0.009	23	0.	1.83	0.006
97	2.51	2.51	53	0.	4.33	201.	46	0.	0.012	36	0.	2.96	0.010

98	2.51	2.51	95	0.	7.71	357.	80	0.	0.021	69	0.	5.62	0.018
99	2.51	2.51	169	0.	13.69	634.	142	0.	0.038	120	0.	9.73	0.032
100	2.51	2.51	110	0.	8.90	412.	95	0.	0.025	78	0.	6.32	0.021
101	2.51	2.51	235	0.	19.06	883.	197	0.	0.053	157	0.	12.75	0.042
102	2.51	2.51	42	0.	3.44	160.	38	0.	0.010	26	0.	2.07	0.007
103	2.51	2.51	0.	0.	0.00	0.	1	0.	0.000	0.	0.	0.00	0.000
104	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
105	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
106	2.51	2.51	33	0.	2.65	123.	29	0.	0.008	7	0.	0.54	0.002
107	2.51	2.51	100	0.	8.11	376.	86	0.	0.023	55	0.	4.50	0.015
108	2.51	2.51	129	0.	10.51	486.	108	0.	0.029	93	0.	7.53	0.025
109	2.51	2.51	73	0.	5.89	272.	60	0.	0.016	51	0.	4.15	0.014
110	2.51	2.51	26	0.	2.08	96.	22	0.	0.006	36	0.	2.90	0.010
111	2.51	2.51	51	0.	4.13	192.	46	0.	0.012	47	0.	3.82	0.013
112	2.51	2.51	96	0.	7.77	360.	88	0.	0.023	87	0.	7.08	0.023
113	2.51	2.51	0.	0.	0.00	4.	0.	0.	0.000	0.	0.	0.00	0.001
114	2.51	2.51	0.	0.	0.00	5.	0.	0.	0.001	0.	0.	0.00	0.001
115	2.51	2.51	0.	0.	0.00	4.	0.	0.	0.000	0.	0.	0.00	0.000
116	2.51	2.51	0.	0.	0.00	2.	0.	0.	0.000	0.	0.	0.00	0.000
117	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
118	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
119	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
120	2.51	2.51	0.	0.	0.00	3.	0.	0.	0.000	0.	0.	0.00	0.000
121	2.51	2.51	0.	0.	0.00	2.	0.	0.	0.000	0.	0.	0.00	0.000
122	2.51	2.51	0.	0.	0.00	2.	0.	0.	0.000	0.	0.	0.00	0.000
123	2.51	2.51	0.	0.	0.00	2.	0.	0.	0.000	0.	0.	0.00	0.000
124	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
125	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
126	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
127	2.51	2.51	0.	0.	0.00	2.	0.	0.	0.000	0.	0.	0.00	0.000
128	2.51	2.51	0.	0.	0.00	2.	0.	0.	0.000	0.	0.	0.00	0.000
129	2.51	2.51	0.	0.	0.00	2.	0.	0.	0.000	0.	0.	0.00	0.000
130	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
131	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
132	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
133	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
134	2.51	2.51	0.	0.	0.00	2.	0.	0.	0.000	0.	0.	0.00	0.000
135	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
136	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
137	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
138	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
139	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
140	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
141	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
142	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
143	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
144	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
145	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
146	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
147	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
148	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
149	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
150	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
151	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
152	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
153	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
154	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
155	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
156	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
157	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
158	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
159	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
160	2.51	2.51	33	0.	2.66	123.	26	0.	0.007	21	0.	1.67	0.006
161	2.51	2.51	76	0.	6.18	286.	63	0.	0.017	46	0.	3.71	0.012
162	2.51	2.51	14	0.	1.11	52.	10	0.	0.003	0.	0.	0.00	0.000
163	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
164	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
165	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
166	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
167	2.51	2.51	100	0.	8.15	377.	85	0.	0.023	77	0.	6.23	0.021
168	2.51	2.51	176	0.	14.32	663.	149	0.	0.040	122	0.	9.89	0.033
169	2.51	2.51	78	0.	6.36	295.	65	0.	0.017	40	0.	3.21	0.011
170	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
171	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
172	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
173	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	8	0.	0.65	0.002
174	2.51	2.51	168	0.	13.67	633.	144	0.	0.038	134	0.	10.88	0.036
175	2.51	2.51	289	0.	23.43	1085.	250	0.	0.067	215	0.	17.41	0.057
176	2.51	2.51	133	0.	10.84	502.	112	0.	0.030	99	0.	8.02	0.026
177	2.51	2.51	21	0.	1.71	80.	17	0.	0.005	0.	0.	0.00	0.000
178	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
179	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
180	2.51	2.51	27	0.	2.16	100.	25	0.	0.007	36	0.	2.95	0.010
181	2.51	2.51	212	0.	17.17	795.	183	0.	0.049	170	0.	13.83	0.046
182	2.51	2.51	353	0.	28.66	1327.	308	0.	0.082	275	0.	22.35	0.074

183	2.51	2.51	260	0.	21.08	976.	226	0.	0.060	187	0.	15.17	0.050
184	2.51	2.51	97	0.	7.85	364.	84	0.	0.022	65	0.	5.29	0.017
185	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
186	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
187	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
188	2.51	2.51	5	0.	0.44	21.	3	0.	0.001	0.	0.	0.01	0.000
189	2.51	2.51	115	0.	9.34	432.	96	0.	0.026	81	0.	6.58	0.022
190	2.51	2.51	294	0.	23.83	1103.	249	0.	0.067	189	0.	15.32	0.050
191	2.51	2.51	276	0.	22.39	1037.	244	0.	0.065	244	0.	19.77	0.065
192	2.51	2.51	223	0.	18.13	839.	197	0.	0.053	188	0.	15.24	0.050
193	2.51	2.51	121	0.	9.83	455.	102	0.	0.027	91	0.	7.43	0.024
194	2.51	2.51	29	0.	2.37	110.	24	0.	0.007	22	0.	1.77	0.006
195	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
196	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
197	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
198	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
199	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
200	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
201	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
202	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
203	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
204	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
205	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
206	2.51	2.51	43	0.	3.53	164.	44	0.	0.012	57	0.	4.62	0.015
207	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
208	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
209	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
210	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
211	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
212	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
213	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
214	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
215	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
216	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
217	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
218	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
219	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
220	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
221	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
222	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
223	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
224	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
225	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
226	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
227	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
228	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
229	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
230	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
231	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
232	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
233	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
234	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
235	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
236	2.51	2.51	36	0.	2.92	135.	27	0.	0.007	46	0.	3.72	0.012
237	2.51	2.51	201	0.	16.35	758.	166	0.	0.044	147	0.	11.97	0.039
238	2.51	2.51	25	0.	2.03	94.	19	0.	0.005	23	0.	1.85	0.006
239	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
240	2.51	2.51	98	0.	7.95	368.	82	0.	0.022	80	0.	6.53	0.022
241	2.51	2.51	8	0.	0.61	28.	5	0.	0.001	0.	0.	0.00	0.000
242	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
243	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
244	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
245	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
246	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
247	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
248	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
249	2.51	2.51	72	0.	5.81	269.	60	0.	0.016	51	0.	4.11	0.014
250	2.51	2.51	206	0.	16.76	776.	175	0.	0.047	132	0.	10.73	0.035
251	2.51	2.51	185	0.	15.02	695.	156	0.	0.042	138	0.	11.20	0.037
252	2.51	2.51	31	0.	2.48	115.	26	0.	0.007	12	0.	1.00	0.003
253	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
254	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
255	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
256	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
257	2.51	2.51	197	0.	15.96	739.	169	0.	0.045	175	0.	14.17	0.047
258	2.51	2.51	44	0.	3.59	166.	40	0.	0.011	37	0.	2.99	0.010
259	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
260	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
261	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
262	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
263	2.51	2.51	274	0.	22.25	1030.	237	0.	0.063	201	0.	16.35	0.054
264	2.51	2.51	150	0.	12.17	563.	129	0.	0.034	82	0.	6.66	0.022
265	2.51	2.51	13	0.	1.02	47.	10	0.	0.003	0.	0.	0.00	0.000
266	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
267	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000

268	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
269	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
270	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
271	2.51	2.51	154	0.	12.52	580.	133	0.0035	111	0.	9.03	0.030
272	2.51	2.51	91	0.	7.38	342.	80	0.0021	65	0.	5.26	0.017
273	2.51	2.51	86	0.	6.95	322.	74	0.0020	58	0.	4.73	0.016
274	2.51	2.51	143	0.	11.58	536.	119	0.0032	98	0.	7.98	0.026
275	2.51	2.51	237	0.	19.27	892.	197	0.0053	161	0.	13.03	0.043
276	2.51	2.51	223	0.	18.13	840.	191	0.0051	147	0.	11.96	0.039
277	2.51	2.51	239	0.	19.39	898.	202	0.0054	169	0.	13.70	0.045
278	2.51	2.51	153	0.	12.46	577.	131	0.0035	92	0.	7.48	0.025
279	2.51	2.51	100	0.	8.15	377.	87	0.0023	55	0.	4.50	0.015
280	2.51	2.51	105	0.	8.50	393.	92	0.0025	61	0.	4.94	0.016
281	2.51	2.51	162	0.	13.17	610.	142	0.0038	105	0.	8.51	0.028
282	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
283	2.51	2.51	53	0.	4.32	200.	45	0.0012	28	0.	2.27	0.007
284	2.51	2.51	158	0.	12.80	593.	132	0.0035	109	0.	8.87	0.029
285	2.51	2.51	113	0.	9.14	423.	97	0.0026	77	0.	6.22	0.021
286	2.51	2.51	168	0.	13.67	633.	139	0.0037	114	0.	9.27	0.031
287	2.51	2.51	58	0.	4.67	216.	50	0.0013	34	0.	2.75	0.009
288	2.51	2.51	111	0.	9.02	418.	95	0.0025	74	0.	6.03	0.020
289	2.51	2.51	46	0.	3.74	173.	40	0.0011	24	0.	1.97	0.007
290	2.51	2.51	5	0.	0.40	19.	5	0.0001	0.	0.	0.00	0.000
291	2.51	2.51	31	0.	2.51	116.	27	0.0007	4	0.	0.32	0.001
292	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
293	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
294	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
295	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
296	2.51	2.51	26	0.	2.10	97.	22	0.0006	19	0.	1.56	0.005
297	2.51	2.51	135	0.	10.98	508.	115	0.0031	94	0.	7.66	0.025
298	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
299	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
300	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
301	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
302	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
303	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
304	2.51	2.51	75	0.	6.10	282.	65	0.0017	52	0.	4.26	0.014
305	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
306	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
307	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
308	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
309	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
310	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
311	2.51	2.51	73	0.	5.95	275.	64	0.0017	58	0.	4.71	0.015
312	2.51	2.51	26	0.	2.10	97.	22	0.0006	0.	0.	0.00	0.000
313	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
314	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
315	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
316	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
317	2.51	2.51	32	0.	2.58	119.	28	0.0008	25	0.	2.02	0.007
318	2.51	2.51	133	0.	10.76	498.	116	0.0031	101	0.	8.18	0.027
319	2.51	2.51	83	0.	6.77	314.	71	0.0019	56	0.	4.52	0.015
320	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
321	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
322	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
323	2.51	2.51	8	0.	0.65	30.	4	0.0001	0.	0.	0.00	0.000
324	2.51	2.51	114	0.	9.23	427.	96	0.0026	88	0.	7.16	0.024
325	2.51	2.51	292	0.	23.67	1096.	250	0.0067	196	0.	15.92	0.052
326	2.51	2.51	227	0.	18.44	854.	199	0.0053	165	0.	13.40	0.044
327	2.51	2.51	97	0.	7.87	365.	84	0.0022	78	0.	6.31	0.021
328	2.51	2.51	5	0.	0.43	20.	4	0.0001	0.	0.	0.00	0.000
329	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
330	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
331	2.51	2.51	10	0.	0.84	39.	10	0.0003	25	0.	2.06	0.007
332	2.51	2.51	203	0.	16.51	765.	176	0.0047	165	0.	13.38	0.044
333	2.51	2.51	371	0.	30.09	1393.	319	0.0085	281	0.	22.78	0.075
334	2.51	2.51	280	0.	22.71	1051.	239	0.0064	206	0.	16.76	0.055
335	2.51	2.51	147	0.	11.94	553.	126	0.0034	106	0.	8.64	0.028
336	2.51	2.51	89	0.	7.24	335.	77	0.0021	58	0.	4.72	0.016
337	2.51	2.51	92	0.	7.50	347.	81	0.0022	59	0.	4.75	0.016
338	2.51	2.51	144	0.	11.68	541.	125	0.0033	104	0.	8.47	0.028
339	2.51	2.51	46	0.	3.76	174.	42	0.0011	24	0.	1.92	0.006
340	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
341	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
342	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
343	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
344	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
345	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
346	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
347	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
348	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
349	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
350	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
351	2.51	2.51	0.	0.	0.02	1.	0.	0.0000	0.	0.	0.00	0.000
352	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000

353	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
354	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
355	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
356	2.51	2.51	26	0.	2.12	98.	18	0.0005	29	0.	2.38	0.008
357	2.51	2.51	153	0.	12.45	576.	130	0.0035	105	0.	8.53	0.028
358	2.51	2.51	55	0.	4.47	207.	47	0.0013	28	0.	2.26	0.007
359	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
360	2.51	2.51	160	0.	12.96	600.	136	0.0036	90	0.	7.29	0.024
361	2.51	2.51	19	0.	1.56	72.	14	0.0004	0.	0.	0.01	0.000
362	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
363	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
364	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
365	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
366	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
367	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
368	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
369	2.51	2.51	58	0.	4.72	219.	51	0.0014	41	0.	3.37	0.011
370	2.51	2.51	184	0.	14.98	694.	157	0.0042	129	0.	10.44	0.034
371	2.51	2.51	303	0.	24.61	1140.	264	0.0071	257	0.	20.83	0.069
372	2.51	2.51	201	0.	16.32	755.	176	0.0047	167	0.	13.55	0.045
373	2.51	2.51	40	0.	3.21	149.	36	0.0010	29	0.	2.36	0.008
374	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
375	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
376	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
377	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
378	2.51	2.51	57	0.	4.59	213.	49	0.0013	39	0.	3.15	0.010
379	2.51	2.51	106	0.	8.60	398.	88	0.0024	53	0.	4.34	0.014
380	2.51	2.51	35	0.	2.84	131.	29	0.0008	1	0.	0.12	0.000
381	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
382	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
383	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
384	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
385	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
386	2.51	2.51	28	0.	2.28	106.	30	0.0008	38	0.	3.07	0.010
387	2.51	2.51	126	0.	10.24	474.	111	0.0030	90	0.	7.32	0.024
388	2.51	2.51	261	0.	21.18	980.	224	0.0060	164	0.	13.30	0.044
389	2.51	2.51	218	0.	17.72	820.	176	0.0047	154	0.	12.48	0.041
390	2.51	2.51	361	0.	29.33	1358.	322	0.0086	236	0.	19.14	0.063
391	2.51	2.51	111	0.	9.00	417.	101	0.0027	110	0.	8.90	0.029
392	2.51	2.51	43	0.	3.47	161.	43	0.0012	30	0.	2.48	0.008
393	2.51	2.51	0.	0.	0.00	0.	2	0.0001	0.	0.	0.00	0.000
394	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
395	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
396	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
397	2.51	2.51	7	0.	0.59	28.	9	0.0002	0.	0.	0.00	0.000
398	2.51	2.51	52	0.	4.25	197.	46	0.0012	35	0.	2.86	0.009
399	2.51	2.51	131	0.	10.62	492.	112	0.0030	97	0.	7.84	0.026
400	2.51	2.51	59	0.	4.77	221.	51	0.0014	37	0.	3.03	0.010
401	2.51	2.51	92	0.	7.50	348.	79	0.0021	61	0.	4.98	0.016
402	2.51	2.51	155	0.	12.58	583.	132	0.0035	109	0.	8.82	0.029
403	2.51	2.51	59	0.	4.82	223.	53	0.0014	43	0.	3.46	0.011
404	2.51	2.51	149	0.	12.13	562.	119	0.0032	84	0.	6.82	0.023
405	2.51	2.51	28	0.	2.30	107.	28	0.0008	19	0.	1.54	0.005
406	2.51	2.51	29	0.	2.32	108.	29	0.0008	18	0.	1.47	0.005
407	2.51	2.51	50	0.	4.06	188.	48	0.0013	33	0.	2.69	0.009
408	2.51	2.51	86	0.	7.02	325.	79	0.0021	61	0.	4.94	0.016
409	2.51	2.51	158	0.	12.79	592.	141	0.0038	104	0.	8.46	0.028
410	2.51	2.51	116	0.	9.45	438.	101	0.0027	88	0.	7.18	0.024
411	2.51	2.51	310	0.	25.19	1166.	284	0.0076	198	0.	16.07	0.053
412	2.51	2.51	116	0.	9.42	436.	107	0.0029	107	0.	8.70	0.029
413	2.51	2.51	55	0.	4.50	208.	51	0.0014	55	0.	4.46	0.015
414	2.51	2.51	32	0.	2.60	121.	21	0.0006	31	0.	2.48	0.008
415	2.51	2.51	44	0.	3.55	164.	39	0.0010	33	0.	2.71	0.009
416	2.51	2.51	88	0.	7.14	331.	75	0.0020	64	0.	5.19	0.017
417	2.51	2.51	83	0.	6.71	311.	70	0.0019	53	0.	4.28	0.014
418	2.51	2.51	48	0.	3.90	181.	42	0.0011	35	0.	2.81	0.009
419	2.51	2.51	50	0.	4.02	186.	43	0.0011	18	0.	1.45	0.005
420	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
421	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
422	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
423	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	3	0.	0.28	0.001
424	2.51	2.51	159	0.	12.92	598.	136	0.0036	128	0.	10.41	0.034
425	2.51	2.51	283	0.	22.96	1063.	243	0.0065	212	0.	17.17	0.056
426	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
427	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
428	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
429	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
430	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
431	2.51	2.51	93	0.	7.56	350.	79	0.0021	73	0.	5.90	0.019
432	2.51	2.51	163	0.	13.23	612.	140	0.0037	118	0.	9.59	0.032
433	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
434	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
435	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
436	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
437	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000

438	2.51	2.51	29	0.	2.37	110.	23	0.	0.006	18	0.	1.46	0.005
439	2.51	2.51	72	0.	5.86	271.	61	0.	0.016	46	0.	3.71	0.012
440	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
441	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
442	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
443	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
444	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
445	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
446	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
447	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
448	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
449	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
450	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
451	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
452	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
453	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
454	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
455	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
456	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
457	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
458	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
459	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
460	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
461	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
462	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
463	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
464	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
465	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
466	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
467	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
468	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
469	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
470	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
471	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
472	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
473	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
474	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
475	2.51	2.51	37	0.	3.02	140.	37	0.	0.010	72	0.	5.84	0.019
476	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
477	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
478	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
479	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
480	2.51	2.51	4	0.	0.35	16.	4	0.	0.001	21	0.	1.69	0.006
481	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	8	0.	0.61	0.002
482	2.51	2.51	515	0.	41.84	1936.	470	0.	0.125	361	0.	29.28	0.096
483	2.51	2.51	586	0.	47.53	2200.	537	0.	0.143	416	0.	33.75	0.111
484	2.51	2.51	573	0.	46.49	2152.	528	0.	0.141	402	0.	32.67	0.107
485	2.51	2.51	541	0.	43.95	2034.	496	0.	0.132	385	0.	31.23	0.103
486	2.51	2.51	479	0.	38.88	1800.	441	0.	0.118	355	0.	28.81	0.095
487	2.51	2.51	361	0.	29.34	1358.	329	0.	0.088	270	0.	21.91	0.072
488	2.51	2.51	240	0.	19.48	902.	216	0.	0.058	120	0.	9.74	0.032
489	2.51	2.51	228	0.	18.50	856.	226	0.	0.060	173	0.	14.01	0.046
490	2.51	2.51	414	0.	33.63	1556.	388	0.	0.103	300	0.	24.37	0.080
491	2.51	2.51	525	0.	42.59	1971.	469	0.	0.125	360	0.	29.22	0.096
492	2.51	2.51	565	0.	45.84	2122.	507	0.	0.135	399	0.	32.43	0.107
493	2.51	2.51	581	0.	47.18	2184.	524	0.	0.140	424	0.	34.42	0.113
494	2.51	2.51	617	0.	50.05	2317.	553	0.	0.148	450	0.	36.52	0.120
495	2.51	2.51	676	0.	54.85	2539.	602	0.	0.161	483	0.	39.19	0.129
496	2.51	2.51	742	0.	60.26	2789.	657	0.	0.175	542	0.	43.97	0.145
497	2.51	2.51	252	0.	20.50	949.	225	0.	0.060	135	0.	11.00	0.036
498	2.51	2.51	11	0.	0.89	41.	12	0.	0.003	24	0.	1.92	0.006
499	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
500	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
501	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
502	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
503	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
504	2.51	2.51	28	0.	2.27	105.	24	0.	0.006	29	0.	2.34	0.008
505	2.51	2.51	111	0.	9.03	418.	97	0.	0.026	98	0.	7.97	0.026
506	2.51	2.51	227	0.	18.44	853.	197	0.	0.053	189	0.	15.35	0.050
507	2.51	2.51	171	0.	13.90	643.	149	0.	0.040	130	0.	10.53	0.035
508	2.51	2.51	21	0.	1.69	78.	19	0.	0.005	4	0.	0.32	0.001
509	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
510	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
511	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
512	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
513	2.51	2.51	90	0.	7.32	339.	78	0.	0.021	73	0.	5.96	0.020
514	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
515	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
516	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
517	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
518	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
519	2.51	2.51	21	0.	1.72	79.	17	0.	0.005	18	0.	1.43	0.005
520	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
521	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
522	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000

523	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
524	2.51	2.51	7	0.	0.55	26.	3	0.0001	14	0.	1.18	0.004
525	2.51	2.51	152	0.	12.32	571.	129	0.0034	104	0.	8.46	0.028
526	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
527	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
528	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
529	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
530	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
531	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
532	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
533	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
534	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
535	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
536	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
537	2.51	2.51	28	0.	2.31	107.	22	0.0006	14	0.	1.16	0.004
538	2.51	2.51	164	0.	13.33	617.	137	0.0037	107	0.	8.73	0.029
539	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
540	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
541	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
542	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
543	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
544	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
545	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
546	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
547	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
548	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
549	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
550	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
551	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
552	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
553	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
554	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
555	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
556	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
557	2.51	2.51	1	0.	0.08	4.	2	0.0001	33	0.	2.71	0.009
558	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
559	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
560	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
561	2.51	2.51	0.	0.	0.00	0.	0.	0.000	1	0.	0.06	0.000
562	2.51	2.51	83	0.	6.75	313.	77	0.0021	90	0.	7.34	0.024
563	2.51	2.51	426	0.	34.61	1602.	393	0.0105	290	0.	23.52	0.077
564	2.51	2.51	585	0.	47.46	2197.	542	0.0145	414	0.	33.58	0.110
565	2.51	2.51	624	0.	50.61	2343.	580	0.0155	448	0.	36.40	0.120
566	2.51	2.51	600	0.	48.67	2253.	557	0.0149	437	0.	35.44	0.117
567	2.51	2.51	573	0.	46.52	2153.	529	0.0141	428	0.	34.75	0.114
568	2.51	2.51	471	0.	38.27	1771.	434	0.0116	346	0.	28.10	0.092
569	2.51	2.51	692	0.	56.19	2600.	611	0.0163	513	0.	41.61	0.137
570	2.51	2.51	503	0.	40.82	1889.	447	0.0119	352	0.	28.57	0.094
571	2.51	2.51	305	0.	24.78	1147.	274	0.0073	155	0.	12.57	0.041
572	2.51	2.51	195	0.	15.81	732.	179	0.0048	88	0.	7.13	0.023
573	2.51	2.51	318	0.	25.81	1195.	293	0.0078	218	0.	17.72	0.058
574	2.51	2.51	342	0.	27.75	1285.	318	0.0085	224	0.	18.22	0.060
575	2.51	2.51	270	0.	21.96	1016.	248	0.0066	188	0.	15.25	0.050
576	2.51	2.51	154	0.	12.46	577.	136	0.0036	99	0.	8.06	0.027
577	2.51	2.51	147	0.	11.92	552.	127	0.0034	91	0.	7.41	0.024
578	2.51	2.51	96	0.	7.77	359.	84	0.0022	55	0.	4.48	0.015
579	2.51	2.51	63	0.	5.10	236.	59	0.0016	38	0.	3.11	0.010
580	2.51	2.51	52	0.	4.21	195.	52	0.0014	38	0.	3.09	0.010
581	2.51	2.51	65	0.	5.27	244.	60	0.0016	67	0.	5.43	0.018
582	2.51	2.51	60	0.	4.90	227.	56	0.0015	26	0.	2.11	0.007
583	2.51	2.51	50	0.	4.03	187.	44	0.0012	3	0.	0.26	0.001
584	2.51	2.51	70	0.	5.71	264.	86	0.0023	77	0.	6.29	0.021
585	2.51	2.51	68	0.	5.49	254.	59	0.0016	43	0.	3.52	0.012
586	2.51	2.51	39	0.	3.13	145.	35	0.0009	20	0.	1.65	0.005
587	2.51	2.51	33	0.	2.70	125.	31	0.0008	14	0.	1.17	0.004
588	2.51	2.51	45	0.	3.65	169.	41	0.0011	26	0.	2.13	0.007
589	2.51	2.51	40	0.	3.28	152.	35	0.0009	37	0.	3.04	0.010
590	2.51	2.51	0.	0.	0.00	1.	0.	0.000	0.	0.	0.00	0.000
591	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
592	2.51	2.51	10	0.	0.80	37.	13	0.0003	19	0.	1.57	0.005
593	2.51	2.51	11	0.	0.93	43.	68	0.0018	59	0.	4.75	0.016
594	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
595	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
596	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
597	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
598	2.51	2.51	0.	0.	0.00	0.	0.	0.000	1	0.	0.11	0.000
599	2.51	2.51	98	0.	7.94	368.	92	0.0024	18	0.	1.45	0.005
600	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
601	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
602	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
603	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
604	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
605	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
606	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
607	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000

608	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
609	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
610	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
611	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
612	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
613	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
614	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	12	0.	0.95	0.003
615	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
616	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
617	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
618	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
619	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
620	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
621	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
622	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
623	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
624	2.51	2.51	102	0.	8.27	383.	94	0.	0.025	64	0.	5.18	0.017
625	2.51	2.51	74	0.	6.03	279.	71	0.	0.019	95	0.	7.70	0.025
626	2.51	2.51	118	0.	9.55	442.	84	0.	0.022	76	0.	6.17	0.020
627	2.51	2.51	11	0.	0.87	40.	14	0.	0.004	37	0.	3.02	0.010
628	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	12	0.	1.00	0.003
629	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
630	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
631	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
632	2.51	2.51	0.	0.	0.00	0.	15	0.	0.004	6	0.	0.49	0.002
633	2.51	2.51	0.	0.	0.00	0.	1	0.	0.000	0.	0.	0.00	0.000
634	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
635	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
636	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
637	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
638	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
639	2.51	2.51	1	0.	0.05	3.	6	0.	0.002	0.	0.	0.00	0.000
640	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
641	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
642	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
643	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
644	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
645	2.51	2.51	10	0.	0.79	37.	16	0.	0.004	27	0.	2.19	0.007
646	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
647	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
648	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000

ARMATURA I NFERI ORE VERTI CALE

GUSCI			COMBI NAZI ONE RARA				COMB. FREQUENTE			COMB. QUASI PERMANENTE			
	Af	Afc	Mom	Nor	σc	σf	Mom	Nor	WkF	Mom	Nor	σc	WkP
1	2.51	2.51	362	0.	29.36	1357.	324	0.	0.086	216	0.	17.55	0.058
2	2.51	2.51	375	0.	30.49	1413.	337	0.	0.090	247	0.	20.04	0.066
3	2.51	2.51	254	0.	20.64	959.	220	0.	0.059	145	0.	11.78	0.040
4	2.51	2.51	352	0.	28.61	1324.	320	0.	0.085	196	0.	15.95	0.052
5	2.51	2.51	363	0.	29.44	1363.	323	0.	0.086	227	0.	18.44	0.061
6	2.51	2.51	218	0.	17.71	820.	190	0.	0.051	135	0.	10.98	0.036
7	2.51	2.51	379	0.	30.78	1425.	336	0.	0.090	208	0.	16.88	0.055
8	2.51	2.51	360	0.	29.22	1353.	330	0.	0.088	233	0.	18.88	0.062
9	2.51	2.51	194	0.	15.74	729.	173	0.	0.046	119	0.	9.68	0.032
10	2.51	2.51	321	0.	26.02	1204.	276	0.	0.074	177	0.	14.40	0.047
11	2.51	2.51	353	0.	28.62	1325.	307	0.	0.082	222	0.	18.03	0.059
12	2.51	2.51	190	0.	15.46	716.	173	0.	0.046	154	0.	12.49	0.041
13	2.51	2.51	65	0.	5.33	251.	56	0.	0.016	48	0.	3.90	0.014
14	2.51	2.51	8	0.	0.66	33.	12	0.	0.004	2	0.	0.16	0.001
15	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
16	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
17	2.51	2.51	3	0.	0.27	12.	4	0.	0.001	0.	0.	0.00	0.000
18	2.51	2.51	47	0.	3.78	175.	37	0.	0.010	23	0.	1.85	0.006
19	2.51	2.51	123	0.	9.97	461.	99	0.	0.026	66	0.	5.33	0.017
20	2.51	2.51	285	0.	23.12	1066.	252	0.	0.067	177	0.	14.33	0.047
21	2.51	2.51	55	0.	4.51	212.	54	0.	0.015	61	0.	4.98	0.017
22	2.51	2.51	0.	0.	0.00	3.	0.	0.	0.000	0.	0.	0.00	0.000
23	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
24	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
25	2.51	2.51	0.	0.	0.01	1.	3	0.	0.001	5	0.	0.41	0.001
26	2.51	2.51	56	0.	4.59	212.	51	0.	0.014	50	0.	4.07	0.013
27	2.51	2.51	210	0.	17.07	790.	180	0.	0.048	122	0.	9.88	0.032
28	2.51	2.51	105	0.	8.50	394.	78	0.	0.021	46	0.	3.77	0.012
29	2.51	2.51	26	0.	2.14	99.	17	0.	0.005	4	0.	0.29	0.001
30	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
31	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
32	2.51	2.51	9	0.	0.76	35.	14	0.	0.004	9	0.	0.73	0.002
33	2.51	2.51	44	0.	3.58	166.	47	0.	0.013	39	0.	3.15	0.010
34	2.51	2.51	101	0.	8.21	380.	93	0.	0.025	79	0.	6.45	0.021
35	2.51	2.51	190	0.	15.45	715.	160	0.	0.043	102	0.	8.31	0.027
36	2.51	2.51	43	0.	3.50	162.	36	0.	0.010	35	0.	2.85	0.009
37	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
38	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
39	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000

40	2.51	2.51	24	0.	1.92	89.	29	0.	0.008	38	0.	3.07	0.010
41	2.51	2.51	111	0.	8.99	416.	109	0.	0.029	115	0.	9.31	0.031
42	2.51	2.51	335	0.	27.18	1257.	306	0.	0.082	223	0.	18.07	0.059
43	2.51	2.51	267	0.	21.71	1005.	237	0.	0.063	176	0.	14.30	0.047
44	2.51	2.51	100	0.	8.12	376.	80	0.	0.021	55	0.	4.46	0.015
45	2.51	2.51	72	0.	5.81	269.	63	0.	0.017	74	0.	6.01	0.020
46	2.51	2.51	20	0.	1.65	76.	20	0.	0.005	21	0.	1.67	0.006
47	2.51	2.51	31	0.	2.50	116.	30	0.	0.008	16	0.	1.26	0.004
48	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
49	2.51	2.51	1	0.	0.04	2.	5	0.	0.001	0.	0.	0.00	0.000
50	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
51	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
52	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
53	2.51	2.51	4	0.	0.34	16.	3	0.	0.001	0.	0.	0.00	0.000
54	2.51	2.51	46	0.	3.77	175.	40	0.	0.011	22	0.	1.76	0.006
55	2.51	2.51	39	0.	3.13	145.	33	0.	0.009	9	0.	0.75	0.002
56	2.51	2.51	127	0.	10.33	479.	104	0.	0.028	77	0.	6.26	0.021
57	2.51	2.51	108	0.	8.80	408.	86	0.	0.023	57	0.	4.66	0.015
58	2.51	2.51	127	0.	10.34	479.	96	0.	0.026	69	0.	5.56	0.018
59	2.51	2.51	138	0.	11.20	519.	112	0.	0.030	84	0.	6.84	0.023
60	2.51	2.51	73	0.	5.91	273.	56	0.	0.015	32	0.	2.58	0.008
61	2.51	2.51	73	0.	5.93	274.	62	0.	0.017	62	0.	5.02	0.017
62	2.51	2.51	26	0.	2.15	99.	38	0.	0.010	7	0.	0.55	0.002
63	2.51	2.51	130	0.	10.55	488.	118	0.	0.031	76	0.	6.18	0.020
64	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
65	2.51	2.51	111	0.	8.97	415.	108	0.	0.029	40	0.	3.21	0.011
66	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
67	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
68	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
69	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
70	2.51	2.51	47	0.	3.78	176.	44	0.	0.012	28	0.	2.28	0.008
71	2.51	2.51	24	0.	1.94	90.	21	0.	0.006	27	0.	2.19	0.007
72	2.51	2.51	223	0.	18.14	839.	194	0.	0.052	137	0.	11.15	0.037
73	2.51	2.51	326	0.	26.49	1227.	297	0.	0.079	207	0.	16.84	0.056
74	2.51	2.51	286	0.	23.21	1076.	265	0.	0.071	183	0.	14.90	0.049
75	2.51	2.51	263	0.	21.34	988.	244	0.	0.065	166	0.	13.44	0.044
76	2.51	2.51	249	0.	20.17	934.	231	0.	0.062	153	0.	12.45	0.041
77	2.51	2.51	241	0.	19.53	904.	223	0.	0.060	149	0.	12.06	0.040
78	2.51	2.51	245	0.	19.89	921.	226	0.	0.060	152	0.	12.31	0.040
79	2.51	2.51	266	0.	21.56	998.	244	0.	0.065	162	0.	13.19	0.043
80	2.51	2.51	300	0.	24.36	1127.	273	0.	0.073	182	0.	14.74	0.048
81	2.51	2.51	318	0.	25.78	1193.	287	0.	0.077	192	0.	15.61	0.051
82	2.51	2.51	339	0.	27.51	1273.	305	0.	0.081	203	0.	16.46	0.054
83	2.51	2.51	383	0.	31.09	1439.	338	0.	0.090	215	0.	17.46	0.057
84	2.51	2.51	856	0.	69.46	3215.	733	0.	0.196	560	0.	45.42	0.149
85	2.51	2.51	710	0.	57.67	2669.	613	0.	0.164	446	0.	36.23	0.119
86	2.51	2.51	573	0.	46.53	2154.	499	0.	0.133	358	0.	29.03	0.095
87	2.51	2.51	454	0.	36.84	1705.	401	0.	0.107	294	0.	23.86	0.078
88	2.51	2.51	369	0.	29.97	1388.	333	0.	0.089	240	0.	19.51	0.064
89	2.51	2.51	359	0.	29.13	1349.	328	0.	0.088	227	0.	18.44	0.061
90	2.51	2.51	379	0.	30.74	1423.	347	0.	0.093	238	0.	19.35	0.064
91	2.51	2.51	408	0.	33.08	1532.	373	0.	0.100	261	0.	21.16	0.070
92	2.51	2.51	419	0.	33.98	1573.	383	0.	0.102	292	0.	23.72	0.078
93	2.51	2.51	366	0.	29.73	1375.	328	0.	0.088	277	0.	22.48	0.074
94	2.51	2.51	348	0.	28.25	1308.	308	0.	0.082	212	0.	17.23	0.057
95	2.51	2.51	353	0.	28.66	1326.	314	0.	0.084	218	0.	17.72	0.058
96	2.51	2.51	354	0.	28.77	1331.	315	0.	0.084	220	0.	17.88	0.059
97	2.51	2.51	353	0.	28.66	1326.	312	0.	0.083	218	0.	17.66	0.058
98	2.51	2.51	343	0.	27.82	1288.	302	0.	0.081	212	0.	17.19	0.057
99	2.51	2.51	333	0.	27.01	1250.	290	0.	0.078	203	0.	16.51	0.054
100	2.51	2.51	353	0.	28.63	1325.	315	0.	0.084	209	0.	16.96	0.056
101	2.51	2.51	351	0.	28.53	1320.	313	0.	0.083	210	0.	17.08	0.056
102	2.51	2.51	338	0.	27.46	1271.	302	0.	0.081	200	0.	16.20	0.053
103	2.51	2.51	317	0.	25.77	1193.	286	0.	0.076	186	0.	15.12	0.050
104	2.51	2.51	309	0.	25.07	1160.	276	0.	0.074	179	0.	14.49	0.048
105	2.51	2.51	470	0.	38.19	1768.	427	0.	0.114	303	0.	24.56	0.081
106	2.51	2.51	545	0.	44.23	2048.	487	0.	0.130	350	0.	28.41	0.093
107	2.51	2.51	663	0.	53.81	2491.	585	0.	0.156	421	0.	34.20	0.113
108	2.51	2.51	751	0.	60.98	2821.	675	0.	0.180	517	0.	41.93	0.138
109	2.51	2.51	702	0.	57.00	2637.	637	0.	0.170	491	0.	39.86	0.131
110	2.51	2.51	650	0.	52.73	2440.	592	0.	0.158	473	0.	38.43	0.126
111	2.51	2.51	592	0.	48.03	2223.	542	0.	0.145	441	0.	35.76	0.118
112	2.51	2.51	488	0.	39.61	1833.	447	0.	0.119	362	0.	29.42	0.097
113	2.51	2.51	0.	0.	0.01	0.	0.	0.	0.000	15	0.	1.21	0.004
114	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
115	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
116	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
117	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
118	2.51	2.51	13	0.	1.03	48.	21	0.	0.006	30	0.	2.45	0.008
119	2.51	2.51	270	0.	21.95	1016.	245	0.	0.065	211	0.	17.14	0.056
120	2.51	2.51	0.	0.	0.01	0.	0.	0.	0.000	0.	0.	0.01	0.000
121	2.51	2.51	0.	0.	0.01	0.	0.	0.	0.000	0.	0.	0.01	0.000
122	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
123	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
124	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000

125	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
126	2.51	2.51	338	0.	27.44	1270.	311	0.0.083	236	0.	19.16	0.063
127	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
128	2.51	2.51	0.	0.	0.01	0.	0.	0.0.000	0.	0.	0.00	0.000
129	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
130	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
131	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
132	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
133	2.51	2.51	391	0.	31.74	1469.	349	0.0.093	265	0.	21.54	0.071
134	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
135	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
136	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
137	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
138	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
139	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
140	2.51	2.51	406	0.	32.98	1526.	363	0.0.097	287	0.	23.27	0.077
141	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
142	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
143	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
144	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
145	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
146	2.51	2.51	24	0.	1.93	89.	21	0.0.006	6	0.	0.48	0.002
147	2.51	2.51	431	0.	35.00	1620.	385	0.0.103	313	0.	25.38	0.083
148	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
149	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
150	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
151	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
152	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
153	2.51	2.51	101	0.	8.20	379.	88	0.0.024	41	0.	3.36	0.011
154	2.51	2.51	503	0.	40.81	1889.	447	0.0.119	361	0.	29.34	0.096
155	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
156	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
157	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
158	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
159	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
160	2.51	2.51	149	0.	12.07	558.	129	0.0.034	75	0.	6.12	0.020
161	2.51	2.51	639	0.	51.89	2401.	566	0.0.151	448	0.	36.33	0.119
162	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
163	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
164	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
165	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
166	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
167	2.51	2.51	173	0.	14.02	648.	149	0.0.040	89	0.	7.25	0.024
168	2.51	2.51	769	0.	62.41	2888.	676	0.0.180	538	0.	43.63	0.143
169	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
170	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
171	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
172	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
173	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
174	2.51	2.51	184	0.	14.92	690.	158	0.0.042	79	0.	6.41	0.021
175	2.51	2.51	900	0.	73.05	3381.	791	0.0.211	638	0.	51.77	0.170
176	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
177	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
178	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
179	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
180	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
181	2.51	2.51	145	0.	11.79	546.	123	0.0.033	50	0.	4.09	0.013
182	2.51	2.51	934	0.	75.84	3510.	819	0.0.219	688	0.	55.84	0.184
183	2.51	2.51	874	0.	70.92	3283.	748	0.0.200	570	0.	46.31	0.152
184	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
185	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
186	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
187	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
188	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
189	2.51	2.51	131	0.	10.62	492.	111	0.0.029	16	0.	1.32	0.004
190	2.51	2.51	965	0.	78.37	3627.	835	0.0.223	668	0.	54.20	0.178
191	2.51	2.51	939	0.	76.21	3528.	800	0.0.214	692	0.	56.16	0.185
192	2.51	2.51	896	0.	72.72	3366.	767	0.0.205	639	0.	51.90	0.171
193	2.51	2.51	754	0.	61.19	2832.	651	0.0.174	537	0.	43.57	0.143
194	2.51	2.51	629	0.	51.02	2361.	545	0.0.146	444	0.	36.06	0.119
195	2.51	2.51	500	0.	40.63	1880.	437	0.0.117	356	0.	28.88	0.095
196	2.51	2.51	433	0.	35.13	1625.	379	0.0.101	306	0.	24.81	0.082
197	2.51	2.51	406	0.	32.92	1524.	356	0.0.095	278	0.	22.58	0.074
198	2.51	2.51	389	0.	31.54	1459.	340	0.0.091	255	0.	20.69	0.068
199	2.51	2.51	348	0.	28.23	1306.	301	0.0.080	222	0.	18.06	0.059
200	2.51	2.51	271	0.	22.00	1018.	232	0.0.062	189	0.	15.31	0.050
201	2.51	2.51	9	0.	0.73	33.	12	0.0.003	18	0.	1.43	0.005
202	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
203	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
204	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
205	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
206	2.51	2.51	49	0.	3.97	183.	60	0.0.016	85	0.	6.92	0.023
207	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
208	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
209	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000

210	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
211	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
212	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	22	0.	1.80	0.006
213	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
214	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
215	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
216	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
217	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
218	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
219	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
220	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
221	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
222	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
223	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
224	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
225	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
226	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
227	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
228	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
229	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
230	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
231	2.51	2.51	50	0.	4.07	188.	36	0.0010	29	0.	2.33	0.008
232	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
233	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
234	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
235	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
236	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
237	2.51	2.51	802	0.	65.14	3015.	710	0.0190	561	0.	45.51	0.150
238	2.51	2.51	151	0.	12.22	566.	119	0.0032	68	0.	5.52	0.018
239	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
240	2.51	2.51	180	0.	14.65	678.	151	0.0040	89	0.	7.21	0.024
241	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
242	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
243	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
244	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
245	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
246	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
247	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
248	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
249	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
250	2.51	2.51	797	0.	64.70	2995.	693	0.0185	524	0.	42.54	0.140
251	2.51	2.51	195	0.	15.85	734.	164	0.0044	85	0.	6.88	0.023
252	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
253	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
254	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
255	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
256	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
257	2.51	2.51	159	0.	12.92	598.	132	0.0035	59	0.	4.83	0.016
258	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
259	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
260	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
261	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
262	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
263	2.51	2.51	967	0.	78.52	3634.	829	0.0221	674	0.	54.71	0.180
264	2.51	2.51	146	0.	11.82	547.	121	0.0032	27	0.	2.21	0.007
265	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
266	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
267	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
268	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
269	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
270	2.51	2.51	449	0.	36.48	1689.	419	0.0112	291	0.	23.60	0.078
271	2.51	2.51	402	0.	32.60	1509.	352	0.0094	226	0.	18.32	0.060
272	2.51	2.51	400	0.	32.46	1503.	352	0.0094	228	0.	18.55	0.061
273	2.51	2.51	390	0.	31.67	1466.	345	0.0092	229	0.	18.55	0.061
274	2.51	2.51	391	0.	31.77	1471.	346	0.0092	226	0.	18.38	0.060
275	2.51	2.51	392	0.	31.83	1473.	344	0.0092	212	0.	17.22	0.057
276	2.51	2.51	357	0.	28.98	1342.	311	0.0083	204	0.	16.58	0.055
277	2.51	2.51	872	0.	70.79	3277.	747	0.0200	559	0.	45.40	0.149
278	2.51	2.51	801	0.	65.00	3009.	688	0.0184	509	0.	41.34	0.136
279	2.51	2.51	755	0.	61.29	2837.	650	0.0174	475	0.	38.58	0.127
280	2.51	2.51	759	0.	61.63	2853.	653	0.0174	483	0.	39.18	0.129
281	2.51	2.51	816	0.	66.28	3068.	700	0.0187	517	0.	41.99	0.138
282	2.51	2.51	311	0.	25.28	1170.	277	0.0074	181	0.	14.65	0.048
283	2.51	2.51	330	0.	26.79	1240.	294	0.0079	188	0.	15.26	0.050
284	2.51	2.51	348	0.	28.24	1308.	306	0.0082	193	0.	15.67	0.052
285	2.51	2.51	350	0.	28.41	1315.	311	0.0083	203	0.	16.46	0.054
286	2.51	2.51	326	0.	26.49	1226.	291	0.0078	198	0.	16.07	0.053
287	2.51	2.51	349	0.	28.35	1312.	309	0.0083	206	0.	16.76	0.055
288	2.51	2.51	705	0.	57.27	2652.	623	0.0166	458	0.	37.16	0.122
289	2.51	2.51	563	0.	45.70	2115.	512	0.0137	370	0.	30.04	0.099
290	2.51	2.51	478	0.	38.82	1797.	449	0.0120	313	0.	25.44	0.084
291	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
292	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
293	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
294	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000

295	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
296	2.51	2.51	120	0.	9.77	452.	105	0.0.028	22	0.	1.80	0.006
297	2.51	2.51	912	0.	74.04	3427.	790	0.0.211	627	0.	50.91	0.167
298	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
299	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
300	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
301	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
302	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
303	2.51	2.51	101	0.	8.20	380.	87	0.0.023	8	0.	0.69	0.002
304	2.51	2.51	879	0.	71.37	3303.	764	0.0.204	607	0.	49.24	0.162
305	2.51	2.51	0.	0.	0.00	1.	0.	0.0.000	0.	0.	0.00	0.000
306	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
307	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
308	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
309	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
310	2.51	2.51	106	0.	8.59	397.	95	0.0.025	13	0.	1.09	0.004
311	2.51	2.51	877	0.	71.17	3294.	765	0.0.204	608	0.	49.34	0.162
312	2.51	2.51	0.	0.	0.00	1.	0.	0.0.000	0.	0.	0.00	0.000
313	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
314	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
315	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
316	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
317	2.51	2.51	115	0.	9.33	432.	101	0.0.027	27	0.	2.23	0.007
318	2.51	2.51	910	0.	73.87	3419.	796	0.0.212	634	0.	51.48	0.169
319	2.51	2.51	0.	0.	0.00	1.	0.	0.0.000	0.	0.	0.00	0.000
320	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
321	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
322	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
323	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
324	2.51	2.51	119	0.	9.68	448.	104	0.0.028	13	0.	1.04	0.003
325	2.51	2.51	973	0.	79.01	3656.	853	0.0.228	681	0.	55.29	0.182
326	2.51	2.51	838	0.	67.99	3147.	721	0.0.192	549	0.	44.54	0.146
327	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
328	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
329	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
330	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
331	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
332	2.51	2.51	155	0.	12.62	584.	137	0.0.037	47	0.	3.81	0.013
333	2.51	2.51	997	0.	80.96	3748.	869	0.0.232	699	0.	56.76	0.187
334	2.51	2.51	990	0.	80.34	3719.	852	0.0.228	688	0.	55.83	0.184
335	2.51	2.51	926	0.	75.14	3478.	798	0.0.213	636	0.	51.64	0.170
336	2.51	2.51	889	0.	72.20	3342.	767	0.0.205	610	0.	49.49	0.163
337	2.51	2.51	884	0.	71.75	3321.	762	0.0.204	610	0.	49.53	0.163
338	2.51	2.51	917	0.	74.41	3444.	790	0.0.211	633	0.	51.38	0.169
339	2.51	2.51	144	0.	11.66	540.	120	0.0.032	37	0.	2.99	0.010
340	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
341	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
342	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
343	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
344	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
345	2.51	2.51	122	0.	9.93	459.	102	0.0.027	22	0.	1.77	0.006
346	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
347	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
348	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
349	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
350	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
351	2.51	2.51	127	0.	10.28	476.	107	0.0.029	23	0.	1.90	0.006
352	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
353	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
354	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
355	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
356	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
357	2.51	2.51	702	0.	56.98	2637.	630	0.0.168	476	0.	38.62	0.127
358	2.51	2.51	131	0.	10.60	491.	109	0.0.029	36	0.	2.92	0.010
359	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
360	2.51	2.51	134	0.	10.86	503.	111	0.0.030	19	0.	1.55	0.005
361	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
362	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
363	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
364	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
365	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
366	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
367	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
368	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
369	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
370	2.51	2.51	735	0.	59.66	2762.	646	0.0.173	506	0.	41.10	0.135
371	2.51	2.51	998	0.	81.04	3751.	861	0.0.230	706	0.	57.29	0.188
372	2.51	2.51	170	0.	13.78	638.	142	0.0.038	50	0.	4.06	0.013
373	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
374	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
375	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
376	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
377	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
378	2.51	2.51	648	0.	52.60	2435.	577	0.0.154	424	0.	34.46	0.113
379	2.51	2.51	355	0.	28.81	1334.	309	0.0.083	196	0.	15.92	0.052

380	2.51	2.51	328	0.	26.62	1232.	287	0.	0.077	187	0.	15.19	0.050
381	2.51	2.51	299	0.	24.28	1124.	264	0.	0.071	173	0.	14.04	0.046
382	2.51	2.51	286	0.	23.22	1074.	255	0.	0.068	166	0.	13.44	0.044
383	2.51	2.51	281	0.	22.81	1056.	252	0.	0.067	165	0.	13.39	0.044
384	2.51	2.51	284	0.	23.07	1068.	257	0.	0.069	173	0.	14.01	0.046
385	2.51	2.51	300	0.	24.39	1129.	274	0.	0.073	195	0.	15.79	0.052
386	2.51	2.51	322	0.	26.16	1211.	292	0.	0.078	203	0.	16.48	0.054
387	2.51	2.51	338	0.	27.44	1270.	306	0.	0.082	199	0.	16.13	0.053
388	2.51	2.51	367	0.	29.80	1379.	329	0.	0.088	212	0.	17.18	0.056
389	2.51	2.51	358	0.	29.04	1344.	320	0.	0.085	223	0.	18.13	0.060
390	2.51	2.51	163	0.	13.27	614.	148	0.	0.040	142	0.	11.50	0.038
391	2.51	2.51	354	0.	28.75	1331.	325	0.	0.087	258	0.	20.95	0.069
392	2.51	2.51	439	0.	35.66	1651.	406	0.	0.108	300	0.	24.34	0.080
393	2.51	2.51	428	0.	34.74	1608.	402	0.	0.107	294	0.	23.83	0.078
394	2.51	2.51	397	0.	32.24	1492.	367	0.	0.098	261	0.	21.19	0.070
395	2.51	2.51	391	0.	31.72	1468.	359	0.	0.096	249	0.	20.23	0.067
396	2.51	2.51	408	0.	33.14	1534.	369	0.	0.099	258	0.	20.94	0.069
397	2.51	2.51	466	0.	37.86	1752.	414	0.	0.110	300	0.	24.35	0.080
398	2.51	2.51	571	0.	46.32	2144.	499	0.	0.133	359	0.	29.11	0.096
399	2.51	2.51	695	0.	56.43	2611.	603	0.	0.161	439	0.	35.66	0.117
400	2.51	2.51	358	0.	29.06	1345.	318	0.	0.085	213	0.	17.25	0.057
401	2.51	2.51	365	0.	29.62	1371.	323	0.	0.086	216	0.	17.52	0.058
402	2.51	2.51	362	0.	29.40	1361.	318	0.	0.085	209	0.	16.99	0.056
403	2.51	2.51	338	0.	27.47	1271.	301	0.	0.080	208	0.	16.86	0.055
404	2.51	2.51	329	0.	26.68	1235.	295	0.	0.079	200	0.	16.27	0.053
405	2.51	2.51	351	0.	28.50	1319.	312	0.	0.083	213	0.	17.32	0.057
406	2.51	2.51	353	0.	28.68	1328.	316	0.	0.084	217	0.	17.61	0.058
407	2.51	2.51	354	0.	28.74	1330.	318	0.	0.085	218	0.	17.66	0.058
408	2.51	2.51	353	0.	28.63	1325.	317	0.	0.085	215	0.	17.48	0.057
409	2.51	2.51	354	0.	28.76	1331.	318	0.	0.085	216	0.	17.57	0.058
410	2.51	2.51	338	0.	27.46	1271.	304	0.	0.081	209	0.	16.95	0.056
411	2.51	2.51	236	0.	19.19	888.	219	0.	0.058	155	0.	12.58	0.041
412	2.51	2.51	460	0.	37.36	1729.	420	0.	0.112	308	0.	25.04	0.082
413	2.51	2.51	583	0.	47.32	2190.	529	0.	0.141	396	0.	32.17	0.106
414	2.51	2.51	628	0.	51.00	2361.	567	0.	0.151	438	0.	35.56	0.117
415	2.51	2.51	678	0.	55.05	2549.	606	0.	0.162	463	0.	37.57	0.124
416	2.51	2.51	737	0.	59.82	2769.	652	0.	0.174	494	0.	40.12	0.132
417	2.51	2.51	697	0.	56.56	2617.	625	0.	0.167	462	0.	37.47	0.123
418	2.51	2.51	649	0.	52.72	2440.	582	0.	0.155	431	0.	34.95	0.115
419	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
420	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
421	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
422	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
423	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
424	2.51	2.51	173	0.	14.08	652.	152	0.	0.041	77	0.	6.23	0.021
425	2.51	2.51	950	0.	77.09	3569.	822	0.	0.220	640	0.	51.99	0.171
426	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
427	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
428	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
429	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
430	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
431	2.51	2.51	177	0.	14.36	665.	153	0.	0.041	86	0.	6.95	0.023
432	2.51	2.51	817	0.	66.32	3070.	707	0.	0.189	551	0.	44.71	0.147
433	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
434	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
435	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
436	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
437	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
438	2.51	2.51	157	0.	12.74	590.	135	0.	0.036	72	0.	5.85	0.019
439	2.51	2.51	679	0.	55.12	2551.	590	0.	0.157	469	0.	38.10	0.125
440	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
441	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
442	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
443	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
444	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
445	2.51	2.51	107	0.	8.72	404.	90	0.	0.024	40	0.	3.23	0.011
446	2.51	2.51	544	0.	44.20	2045.	476	0.	0.127	389	0.	31.62	0.104
447	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
448	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
449	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
450	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
451	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
452	2.51	2.51	58	0.	4.72	219.	49	0.	0.013	6	0.	0.46	0.002
453	2.51	2.51	484	0.	39.29	1819.	427	0.	0.114	339	0.	27.48	0.090
454	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
455	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
456	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
457	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
458	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
459	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
460	2.51	2.51	452	0.	36.66	1697.	401	0.	0.107	307	0.	24.96	0.082
461	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
462	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
463	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	
464	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000	

465	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
466	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
467	2.51	2.51	416	0.	33.75	1562.	372	0.0099	280	0.	22.70	0.075
468	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
469	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
470	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
471	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
472	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
473	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
474	2.51	2.51	371	0.	30.13	1395.	333	0.0089	251	0.	20.35	0.067
475	2.51	2.51	0.	0.	0.00	0.	0.	0.000	4	0.	0.35	0.001
476	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
477	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
478	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
479	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
480	2.51	2.51	22	0.	1.80	83.	19	0.0005	46	0.	3.73	0.012
481	2.51	2.51	276	0.	22.39	1036.	245	0.0065	209	0.	16.93	0.056
482	2.51	2.51	25	0.	2.06	95.	29	0.0008	40	0.	3.27	0.011
483	2.51	2.51	0.	0.	0.00	0.	2	0.0000	0.	0.	0.00	0.000
484	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
485	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
486	2.51	2.51	2	0.	0.20	9.	4	0.0001	4	0.	0.34	0.001
487	2.51	2.51	36	0.	2.90	134.	30	0.0008	47	0.	3.79	0.012
488	2.51	2.51	168	0.	13.61	630.	144	0.0038	117	0.	9.51	0.031
489	2.51	2.51	155	0.	12.57	582.	141	0.0038	80	0.	6.50	0.021
490	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
491	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
492	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
493	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
494	2.51	2.51	12	0.	0.97	45.	12	0.0003	0.	0.	0.01	0.000
495	2.51	2.51	72	0.	5.87	272.	61	0.0016	42	0.	3.40	0.011
496	2.51	2.51	176	0.	14.32	663.	148	0.0039	111	0.	8.98	0.030
497	2.51	2.51	159	0.	12.94	599.	134	0.0036	122	0.	9.87	0.032
498	2.51	2.51	285	0.	23.15	1072.	257	0.0069	213	0.	17.30	0.057
499	2.51	2.51	379	0.	30.78	1425.	343	0.0092	263	0.	21.34	0.070
500	2.51	2.51	422	0.	34.26	1586.	380	0.0101	288	0.	23.39	0.077
501	2.51	2.51	457	0.	37.07	1716.	408	0.0109	315	0.	25.55	0.084
502	2.51	2.51	487	0.	39.51	1829.	432	0.0115	345	0.	27.98	0.092
503	2.51	2.51	540	0.	43.82	2028.	475	0.0127	394	0.	31.99	0.105
504	2.51	2.51	660	0.	53.54	2478.	575	0.0154	472	0.	38.30	0.126
505	2.51	2.51	796	0.	64.59	2989.	692	0.0185	558	0.	45.32	0.149
506	2.51	2.51	931	0.	75.56	3497.	806	0.0215	650	0.	52.76	0.173
507	2.51	2.51	185	0.	15.00	694.	155	0.0041	78	0.	6.30	0.021
508	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
509	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
510	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
511	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
512	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
513	2.51	2.51	183	0.	14.86	688.	154	0.0041	83	0.	6.72	0.022
514	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
515	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
516	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
517	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
518	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
519	2.51	2.51	152	0.	12.35	572.	129	0.0034	66	0.	5.34	0.018
520	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
521	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
522	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
523	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
524	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
525	2.51	2.51	777	0.	63.05	2918.	692	0.0185	524	0.	42.54	0.140
526	2.51	2.51	90	0.	7.28	337.	75	0.0020	30	0.	2.46	0.008
527	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
528	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
529	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
530	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
531	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
532	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
533	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
534	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
535	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
536	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
537	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
538	2.51	2.51	796	0.	64.60	2990.	699	0.0187	543	0.	44.12	0.145
539	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
540	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
541	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
542	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
543	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
544	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
545	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
546	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
547	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
548	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
549	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000

550	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
551	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
552	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
553	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
554	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
555	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
556	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
557	2.51	2.51	30	0.	2.47	114.	30	0.0008	56	0.	4.57	0.015
558	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
559	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
560	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
561	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
562	2.51	2.51	0.	0.	0.00	0.	7	0.0002	48	0.	3.86	0.013
563	2.51	2.51	43	0.	3.48	161.	41	0.0011	57	0.	4.61	0.015
564	2.51	2.51	7	0.	0.56	26.	12	0.0003	7	0.	0.57	0.002
565	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
566	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
567	2.51	2.51	21	0.	1.67	77.	27	0.0007	7	0.	0.59	0.002
568	2.51	2.51	46	0.	3.74	173.	50	0.0013	64	0.	5.22	0.017
569	2.51	2.51	183	0.	14.87	689.	153	0.0041	122	0.	9.93	0.033
570	2.51	2.51	95	0.	7.70	356.	82	0.0022	69	0.	5.63	0.019
571	2.51	2.51	66	0.	5.33	247.	63	0.0017	36	0.	2.89	0.009
572	2.51	2.51	24	0.	1.92	89.	30	0.0008	21	0.	1.67	0.005
573	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
574	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
575	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
576	2.51	2.51	116	0.	9.45	438.	82	0.0022	47	0.	3.83	0.013
577	2.51	2.51	349	0.	28.31	1310.	313	0.0083	219	0.	17.74	0.058
578	2.51	2.51	342	0.	27.77	1285.	309	0.0083	215	0.	17.47	0.057
579	2.51	2.51	338	0.	27.46	1271.	307	0.0082	209	0.	17.00	0.056
580	2.51	2.51	344	0.	27.93	1293.	311	0.0083	205	0.	16.61	0.055
581	2.51	2.51	447	0.	36.27	1679.	392	0.0105	287	0.	23.29	0.077
582	2.51	2.51	482	0.	39.10	1810.	421	0.0112	309	0.	25.08	0.083
583	2.51	2.51	424	0.	34.44	1594.	369	0.0099	255	0.	20.70	0.068
584	2.51	2.51	292	0.	23.73	1099.	267	0.0071	212	0.	17.17	0.057
585	2.51	2.51	327	0.	26.52	1228.	295	0.0079	204	0.	16.52	0.054
586	2.51	2.51	323	0.	26.20	1213.	293	0.0078	201	0.	16.33	0.054
587	2.51	2.51	323	0.	26.23	1214.	293	0.0078	198	0.	16.07	0.053
588	2.51	2.51	336	0.	27.30	1264.	306	0.0082	198	0.	16.11	0.053
589	2.51	2.51	356	0.	28.86	1335.	321	0.0086	226	0.	18.33	0.060
590	2.51	2.51	375	0.	30.47	1410.	341	0.0091	238	0.	19.28	0.063
591	2.51	2.51	328	0.	26.66	1234.	298	0.0079	189	0.	15.34	0.050
592	2.51	2.51	221	0.	17.93	830.	209	0.0056	158	0.	12.85	0.042
593	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
594	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
595	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
596	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
597	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
598	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
599	2.51	2.51	60	0.	4.83	224.	46	0.0012	33	0.	2.66	0.009
600	2.51	2.51	0.	0.	0.00	1.	0.	0.000	0.	0.	0.00	0.000
601	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
602	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
603	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
604	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
605	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
606	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
607	2.51	2.51	0.	0.	0.00	1.	0.	0.000	0.	0.	0.00	0.000
608	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
609	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
610	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
611	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
612	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
613	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
614	2.51	2.51	0.	0.	0.00	1.	0.	0.000	35	0.	2.84	0.009
615	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
616	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
617	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
618	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
619	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
620	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
621	2.51	2.51	4	0.	0.29	14.	0.	0.000	0.	0.	0.00	0.000
622	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
623	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
624	2.51	2.51	106	0.	8.59	398.	85	0.0023	79	0.	6.42	0.021
625	2.51	2.51	63	0.	5.13	238.	53	0.0014	63	0.	5.14	0.017
626	2.51	2.51	178	0.	14.47	670.	163	0.0044	120	0.	9.75	0.032
627	2.51	2.51	159	0.	12.90	597.	154	0.0041	123	0.	9.95	0.033
628	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
629	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
630	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
631	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
632	2.51	2.51	212	0.	17.24	798.	195	0.0052	160	0.	12.96	0.043
633	2.51	2.51	222	0.	18.06	836.	212	0.0056	177	0.	14.38	0.047
634	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000

635	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
636	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
637	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
638	2.51	2.51	245	0.	19.91	922.	224	0.	0.060	134	0.	10.90	0.036
639	2.51	2.51	268	0.	21.76	1007.	253	0.	0.068	175	0.	14.17	0.047
640	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
641	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
642	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
643	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	17	0.	1.34	0.004
644	2.51	2.51	220	0.	17.84	826.	199	0.	0.053	145	0.	11.77	0.039
645	2.51	2.51	237	0.	19.23	890.	225	0.	0.060	152	0.	12.34	0.041
646	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
647	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
648	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000

ARMATURA SUPERIORE ORIZZONTALE

GUSCI			COMBINAZIONE RARA				COMB. FREQUENTE			COMB. QUASI PERMANENTE			
	Af	Afc	Mom	Nor	σ_c	σ_f	Mom	Nor	WkF	Mom	Nor	σ_c	WkP
1	2.51	2.51	0.	0.	0.00	3.	0.	0.	0.000	0.	0.	0.00	0.000
2	2.51	2.51	0.	0.	0.00	4.	0.	0.	0.001	0.	0.	0.00	0.000
3	2.51	2.51	0.	0.	0.00	6.	0.	0.	0.001	0.	0.	0.00	0.000
4	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
5	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
6	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
7	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
8	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
9	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
10	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
11	2.51	2.51	15	0.	1.26	59.	11	0.	0.003	13	0.	1.03	0.003
12	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
13	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
14	2.51	2.51	0.	0.	0.00	2.	0.	0.	0.000	0.	0.	0.00	0.000
15	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
16	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
17	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
18	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
19	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
20	2.51	2.51	0.	0.	0.00	8.	0.	0.	0.001	18	0.	1.47	0.006
21	2.51	2.51	0.	0.	0.00	10.	0.	0.	0.001	0.	0.	0.00	0.001
22	2.51	2.51	0.	0.	0.00	5.	0.	0.	0.001	0.	0.	0.00	0.001
23	2.51	2.51	0.	0.	0.00	3.	0.	0.	0.000	0.	0.	0.00	0.000
24	2.51	2.51	0.	0.	0.00	2.	0.	0.	0.000	0.	0.	0.00	0.000
25	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
26	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
27	2.51	2.51	19	0.	1.57	73.	22	0.	0.006	0.	0.	0.00	0.000
28	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
29	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
30	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
31	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
32	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
33	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
34	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
35	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
36	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
37	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
38	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
39	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
40	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
41	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
42	2.51	2.51	76	0.	6.21	288.	65	0.	0.018	80	0.	6.46	0.021
43	2.51	2.51	7	0.	0.56	25.	2	0.	0.000	3	0.	0.24	0.001
44	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
45	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
46	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
47	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
48	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
49	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
50	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
51	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
52	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
53	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
54	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
55	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
56	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
57	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
58	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
59	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
60	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
61	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
62	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
63	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
64	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
65	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	13	0.	1.06	0.004
66	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000

67	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
68	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
69	2.51	2.51	0.	0.	0.00	1.	0.	0.0000	0.	0.	0.00	0.000
70	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
71	2.51	2.51	0.	0.	0.00	1.	0.	0.0000	0.	0.	0.00	0.000
72	2.51	2.51	0.	0.	0.00	1.	0.	0.0000	0.	0.	0.00	0.000
73	2.51	2.51	86	0.	6.98	324.	71	0.0019	72	0.	5.82	0.019
74	2.51	2.51	111	0.	9.01	418.	92	0.0025	96	0.	7.83	0.026
75	2.51	2.51	121	0.	9.80	454.	100	0.0027	106	0.	8.58	0.028
76	2.51	2.51	120	0.	9.76	452.	98	0.0026	105	0.	8.52	0.028
77	2.51	2.51	115	0.	9.30	431.	94	0.0025	95	0.	7.73	0.026
78	2.51	2.51	97	0.	7.90	366.	79	0.0021	76	0.	6.16	0.020
79	2.51	2.51	67	0.	5.40	251.	52	0.0014	46	0.	3.73	0.012
80	2.51	2.51	0.	0.	0.00	1.	0.	0.0000	3	0.	0.26	0.001
81	2.51	2.51	0.	0.	0.00	1.	0.	0.0000	0.	0.	0.00	0.000
82	2.51	2.51	0.	0.	0.00	1.	0.	0.0000	0.	0.	0.00	0.000
83	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
84	2.51	2.51	0.	0.	0.00	2.	0.	0.0000	0.	0.	0.00	0.000
85	2.51	2.51	0.	0.	0.00	1.	0.	0.0000	0.	0.	0.00	0.000
86	2.51	2.51	0.	0.	0.00	1.	0.	0.0000	10	0.	0.83	0.003
87	2.51	2.51	43	0.	3.47	161.	33	0.0009	53	0.	4.27	0.014
88	2.51	2.51	81	0.	6.56	304.	65	0.0017	80	0.	6.48	0.021
89	2.51	2.51	106	0.	8.60	399.	86	0.0023	97	0.	7.87	0.026
90	2.51	2.51	118	0.	9.59	445.	96	0.0026	108	0.	8.75	0.029
91	2.51	2.51	121	0.	9.80	455.	99	0.0027	116	0.	9.42	0.031
92	2.51	2.51	113	0.	9.17	427.	94	0.0025	126	0.	10.24	0.034
93	2.51	2.51	104	0.	8.49	396.	89	0.0024	135	0.	11.00	0.037
94	2.51	2.51	44	0.	3.59	167.	36	0.0010	53	0.	4.27	0.014
95	2.51	2.51	44	0.	3.59	166.	37	0.0010	50	0.	4.08	0.013
96	2.51	2.51	24	0.	1.96	91.	21	0.0005	31	0.	2.54	0.008
97	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
98	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
99	2.51	2.51	0.	0.	0.00	1.	0.	0.0000	0.	0.	0.00	0.000
100	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
101	2.51	2.51	0.	0.	0.00	1.	0.	0.0000	0.	0.	0.00	0.000
102	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
103	2.51	2.51	19	0.	1.54	71.	13	0.0003	23	0.	1.84	0.006
104	2.51	2.51	25	0.	2.03	94.	19	0.0005	29	0.	2.35	0.008
105	2.51	2.51	31	0.	2.52	117.	25	0.0007	22	0.	1.82	0.006
106	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
107	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
108	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
109	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	4	0.	0.34	0.001
110	2.51	2.51	71	0.	5.76	267.	62	0.0017	50	0.	4.07	0.013
111	2.51	2.51	87	0.	7.04	326.	76	0.0020	94	0.	7.59	0.025
112	2.51	2.51	110	0.	8.92	413.	96	0.0026	140	0.	11.36	0.037
113	2.51	2.51	285	0.	23.16	1075.	256	0.0069	255	0.	20.74	0.069
114	2.51	2.51	293	0.	23.82	1107.	263	0.0071	230	0.	18.65	0.062
115	2.51	2.51	239	0.	19.44	903.	212	0.0057	168	0.	13.69	0.046
116	2.51	2.51	265	0.	21.54	999.	233	0.0062	204	0.	16.55	0.055
117	2.51	2.51	284	0.	23.07	1069.	251	0.0067	234	0.	19.02	0.063
118	2.51	2.51	264	0.	21.40	991.	233	0.0062	226	0.	18.38	0.060
119	2.51	2.51	92	0.	7.49	347.	80	0.0021	89	0.	7.21	0.024
120	2.51	2.51	297	0.	24.11	1118.	266	0.0071	276	0.	22.39	0.074
121	2.51	2.51	330	0.	26.83	1244.	297	0.0080	310	0.	25.18	0.083
122	2.51	2.51	310	0.	25.19	1168.	278	0.0074	283	0.	22.98	0.076
123	2.51	2.51	332	0.	26.98	1250.	295	0.0079	304	0.	24.67	0.081
124	2.51	2.51	353	0.	28.69	1329.	316	0.0085	300	0.	24.36	0.080
125	2.51	2.51	305	0.	24.76	1147.	271	0.0073	245	0.	19.92	0.066
126	2.51	2.51	120	0.	9.74	451.	104	0.0028	105	0.	8.53	0.028
127	2.51	2.51	253	0.	20.55	953.	225	0.0060	225	0.	18.26	0.060
128	2.51	2.51	296	0.	24.05	1115.	266	0.0071	264	0.	21.42	0.071
129	2.51	2.51	298	0.	24.22	1122.	268	0.0072	256	0.	20.78	0.069
130	2.51	2.51	307	0.	24.94	1156.	275	0.0074	269	0.	21.87	0.072
131	2.51	2.51	303	0.	24.63	1141.	271	0.0073	255	0.	20.71	0.068
132	2.51	2.51	253	0.	20.56	952.	225	0.0060	203	0.	16.44	0.054
133	2.51	2.51	122	0.	9.88	457.	105	0.0028	105	0.	8.50	0.028
134	2.51	2.51	199	0.	16.17	750.	175	0.0047	179	0.	14.55	0.048
135	2.51	2.51	221	0.	17.98	833.	201	0.0054	201	0.	16.30	0.054
136	2.51	2.51	219	0.	17.79	824.	202	0.0054	198	0.	16.04	0.053
137	2.51	2.51	232	0.	18.86	874.	208	0.0056	204	0.	16.53	0.054
138	2.51	2.51	228	0.	18.55	859.	204	0.0054	194	0.	15.76	0.052
139	2.51	2.51	198	0.	16.11	746.	175	0.0047	161	0.	13.08	0.043
140	2.51	2.51	116	0.	9.40	435.	100	0.0027	94	0.	7.66	0.025
141	2.51	2.51	164	0.	13.34	619.	142	0.0038	154	0.	12.49	0.041
142	2.51	2.51	172	0.	13.96	647.	151	0.0041	157	0.	12.74	0.042
143	2.51	2.51	169	0.	13.68	634.	149	0.0040	142	0.	11.50	0.038
144	2.51	2.51	167	0.	13.58	629.	150	0.0040	148	0.	12.02	0.040
145	2.51	2.51	171	0.	13.89	644.	152	0.0041	149	0.	12.12	0.040
146	2.51	2.51	161	0.	13.06	605.	140	0.0037	135	0.	10.94	0.036
147	2.51	2.51	99	0.	8.06	373.	86	0.0023	75	0.	6.09	0.020
148	2.51	2.51	147	0.	11.95	554.	125	0.0034	142	0.	11.57	0.038
149	2.51	2.51	142	0.	11.56	536.	123	0.0033	135	0.	10.93	0.036
150	2.51	2.51	134	0.	10.90	505.	118	0.0032	106	0.	8.58	0.028
151	2.51	2.51	122	0.	9.93	460.	109	0.0029	111	0.	9.02	0.030

152	2.51	2.51	136	0.	11.02	510.	119	0.	0.032	122	0.	9.94	0.033
153	2.51	2.51	143	0.	11.57	536.	123	0.	0.033	118	0.	9.55	0.031
154	2.51	2.51	72	0.	5.87	272.	62	0.	0.017	45	0.	3.67	0.012
155	2.51	2.51	136	0.	11.02	511.	115	0.	0.031	134	0.	10.88	0.036
156	2.51	2.51	131	0.	10.64	493.	113	0.	0.030	124	0.	10.10	0.033
157	2.51	2.51	109	0.	8.85	410.	102	0.	0.027	85	0.	6.86	0.023
158	2.51	2.51	82	0.	6.68	310.	82	0.	0.022	88	0.	7.15	0.024
159	2.51	2.51	112	0.	9.09	421.	98	0.	0.026	103	0.	8.38	0.028
160	2.51	2.51	98	0.	8.00	370.	86	0.	0.023	98	0.	7.96	0.026
161	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	1	0.	0.07	0.000
162	2.51	2.51	112	0.	9.10	422.	95	0.	0.025	117	0.	9.50	0.031
163	2.51	2.51	118	0.	9.62	446.	102	0.	0.027	114	0.	9.29	0.031
164	2.51	2.51	96	0.	7.83	363.	84	0.	0.022	78	0.	6.31	0.021
165	2.51	2.51	55	0.	4.47	207.	50	0.	0.013	65	0.	5.24	0.017
166	2.51	2.51	87	0.	7.04	326.	76	0.	0.020	80	0.	6.51	0.021
167	2.51	2.51	53	0.	4.28	198.	46	0.	0.012	64	0.	5.17	0.017
168	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
169	2.51	2.51	65	0.	5.29	245.	56	0.	0.015	82	0.	6.64	0.022
170	2.51	2.51	90	0.	7.28	337.	79	0.	0.021	93	0.	7.55	0.025
171	2.51	2.51	84	0.	6.83	317.	74	0.	0.020	66	0.	5.33	0.018
172	2.51	2.51	48	0.	3.94	183.	44	0.	0.012	49	0.	4.02	0.013
173	2.51	2.51	57	0.	4.64	215.	50	0.	0.013	46	0.	3.76	0.012
174	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	3	0.	0.28	0.001
175	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
176	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	8	0.	0.69	0.002
177	2.51	2.51	44	0.	3.54	165.	38	0.	0.010	55	0.	4.50	0.015
178	2.51	2.51	69	0.	5.58	259.	61	0.	0.016	55	0.	4.48	0.015
179	2.51	2.51	42	0.	3.42	159.	36	0.	0.010	35	0.	2.80	0.009
180	2.51	2.51	2	0.	0.15	7.	0.	0.	0.000	0.	0.	0.00	0.000
181	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
182	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
183	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
184	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
185	2.51	2.51	50	0.	4.09	189.	44	0.	0.012	42	0.	3.45	0.011
186	2.51	2.51	58	0.	4.74	220.	52	0.	0.014	67	0.	5.44	0.018
187	2.51	2.51	45	0.	3.63	168.	40	0.	0.011	36	0.	2.96	0.010
188	2.51	2.51	3	0.	0.24	11.	5	0.	0.001	4	0.	0.33	0.001
189	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
190	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
191	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
192	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
193	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
194	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
195	2.51	2.51	44	0.	3.57	165.	38	0.	0.010	44	0.	3.58	0.012
196	2.51	2.51	83	0.	6.72	311.	71	0.	0.019	76	0.	6.13	0.020
197	2.51	2.51	104	0.	8.41	389.	89	0.	0.024	95	0.	7.74	0.025
198	2.51	2.51	110	0.	8.93	413.	94	0.	0.025	105	0.	8.56	0.028
199	2.51	2.51	99	0.	8.06	373.	85	0.	0.023	106	0.	8.57	0.028
200	2.51	2.51	77	0.	6.28	291.	67	0.	0.018	88	0.	7.12	0.023
201	2.51	2.51	232	0.	18.80	870.	205	0.	0.055	203	0.	16.49	0.054
202	2.51	2.51	245	0.	19.88	920.	218	0.	0.058	196	0.	15.88	0.052
203	2.51	2.51	211	0.	17.11	792.	187	0.	0.050	150	0.	12.15	0.040
204	2.51	2.51	253	0.	20.57	952.	222	0.	0.059	179	0.	14.57	0.048
205	2.51	2.51	328	0.	26.60	1232.	287	0.	0.077	254	0.	20.62	0.068
206	2.51	2.51	324	0.	26.29	1217.	281	0.	0.075	282	0.	22.93	0.075
207	2.51	2.51	258	0.	20.93	969.	228	0.	0.061	234	0.	19.02	0.063
208	2.51	2.51	305	0.	24.74	1145.	272	0.	0.073	277	0.	22.49	0.074
209	2.51	2.51	283	0.	23.01	1065.	253	0.	0.068	266	0.	21.55	0.071
210	2.51	2.51	336	0.	27.28	1263.	298	0.	0.080	299	0.	24.28	0.080
211	2.51	2.51	372	0.	30.16	1396.	331	0.	0.088	334	0.	27.11	0.089
212	2.51	2.51	350	0.	28.38	1314.	312	0.	0.083	294	0.	23.84	0.078
213	2.51	2.51	229	0.	18.61	861.	202	0.	0.054	199	0.	16.12	0.053
214	2.51	2.51	269	0.	21.86	1012.	239	0.	0.064	243	0.	19.76	0.065
215	2.51	2.51	245	0.	19.92	922.	219	0.	0.059	244	0.	19.83	0.065
216	2.51	2.51	292	0.	23.74	1099.	261	0.	0.070	271	0.	22.01	0.072
217	2.51	2.51	330	0.	26.78	1240.	295	0.	0.079	281	0.	22.84	0.075
218	2.51	2.51	289	0.	23.50	1088.	258	0.	0.069	226	0.	18.32	0.060
219	2.51	2.51	179	0.	14.51	671.	156	0.	0.042	161	0.	13.07	0.043
220	2.51	2.51	213	0.	17.28	800.	188	0.	0.050	190	0.	15.40	0.051
221	2.51	2.51	199	0.	16.18	749.	178	0.	0.048	188	0.	15.28	0.050
222	2.51	2.51	222	0.	18.02	834.	199	0.	0.053	199	0.	16.12	0.053
223	2.51	2.51	233	0.	18.95	877.	209	0.	0.056	198	0.	16.07	0.053
224	2.51	2.51	175	0.	14.23	659.	158	0.	0.042	147	0.	11.95	0.039
225	2.51	2.51	143	0.	11.62	538.	124	0.	0.033	137	0.	11.11	0.037
226	2.51	2.51	163	0.	13.23	612.	143	0.	0.038	150	0.	12.18	0.040
227	2.51	2.51	145	0.	11.75	544.	128	0.	0.034	141	0.	11.49	0.038
228	2.51	2.51	133	0.	10.83	501.	121	0.	0.032	124	0.	10.09	0.033
229	2.51	2.51	139	0.	11.27	522.	126	0.	0.034	117	0.	9.46	0.031
230	2.51	2.51	76	0.	6.19	287.	71	0.	0.019	69	0.	5.62	0.019
231	2.51	2.51	100	0.	8.14	377.	87	0.	0.023	121	0.	9.84	0.032
232	2.51	2.51	134	0.	10.88	504.	116	0.	0.031	127	0.	10.33	0.034
233	2.51	2.51	118	0.	9.62	445.	104	0.	0.028	115	0.	9.35	0.031
234	2.51	2.51	116	0.	9.41	436.	103	0.	0.028	90	0.	7.28	0.024
235	2.51	2.51	69	0.	5.61	260.	63	0.	0.017	46	0.	3.71	0.012
236	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000

237	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
238	2.51	2.51	59	0.	4.78	221.	51	0.	0.014	103	0.	8.34	0.027
239	2.51	2.51	120	0.	9.70	449.	104	0.	0.028	115	0.	9.35	0.031
240	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	69	0.	5.56	0.018
241	2.51	2.51	91	0.	7.39	342.	79	0.	0.021	95	0.	7.72	0.025
242	2.51	2.51	94	0.	7.60	352.	81	0.	0.022	97	0.	7.85	0.026
243	2.51	2.51	114	0.	9.23	427.	100	0.	0.027	106	0.	8.58	0.028
244	2.51	2.51	97	0.	7.86	364.	84	0.	0.022	94	0.	7.60	0.025
245	2.51	2.51	87	0.	7.07	327.	77	0.	0.021	88	0.	7.14	0.023
246	2.51	2.51	103	0.	8.37	387.	90	0.	0.024	86	0.	6.95	0.023
247	2.51	2.51	60	0.	4.89	226.	53	0.	0.014	58	0.	4.69	0.015
248	2.51	2.51	45	0.	3.66	169.	39	0.	0.010	47	0.	3.80	0.012
249	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
250	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
251	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	7	0.	0.60	0.002
252	2.51	2.51	49	0.	3.95	183.	42	0.	0.011	61	0.	4.94	0.016
253	2.51	2.51	83	0.	6.74	312.	72	0.	0.019	84	0.	6.85	0.023
254	2.51	2.51	97	0.	7.85	363.	84	0.	0.022	92	0.	7.50	0.025
255	2.51	2.51	107	0.	8.70	403.	94	0.	0.025	95	0.	7.73	0.025
256	2.51	2.51	76	0.	6.16	285.	66	0.	0.018	75	0.	6.07	0.020
257	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
258	2.51	2.51	5	0.	0.39	18.	2	0.	0.001	11	0.	0.93	0.003
259	2.51	2.51	80	0.	6.52	302.	68	0.	0.018	64	0.	5.24	0.017
260	2.51	2.51	117	0.	9.46	438.	101	0.	0.027	84	0.	6.78	0.022
261	2.51	2.51	96	0.	7.79	360.	84	0.	0.022	85	0.	6.94	0.023
262	2.51	2.51	90	0.	7.34	340.	78	0.	0.021	81	0.	6.55	0.022
263	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
264	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
265	2.51	2.51	0.	0.	0.00	0.	1	0.	0.000	10	0.	0.78	0.003
266	2.51	2.51	64	0.	5.22	242.	58	0.	0.015	55	0.	4.49	0.015
267	2.51	2.51	92	0.	7.44	344.	82	0.	0.022	83	0.	6.72	0.022
268	2.51	2.51	112	0.	9.08	421.	100	0.	0.027	96	0.	7.77	0.026
269	2.51	2.51	97	0.	7.87	364.	83	0.	0.022	84	0.	6.81	0.022
270	2.51	2.51	32	0.	2.58	119.	26	0.	0.007	30	0.	2.47	0.008
271	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
272	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
273	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
274	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
275	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
276	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
277	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
278	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
279	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
280	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
281	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
282	2.51	2.51	9	0.	0.71	33.	6	0.	0.002	18	0.	1.45	0.005
283	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
284	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
285	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
286	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
287	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
288	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
289	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
290	2.51	2.51	9	0.	0.71	33.	6	0.	0.002	19	0.	1.55	0.005
291	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
292	2.51	2.51	54	0.	4.40	204.	47	0.	0.013	52	0.	4.25	0.014
293	2.51	2.51	79	0.	6.43	298.	69	0.	0.019	64	0.	5.18	0.017
294	2.51	2.51	69	0.	5.58	258.	60	0.	0.016	60	0.	4.89	0.016
295	2.51	2.51	63	0.	5.08	235.	54	0.	0.014	51	0.	4.15	0.014
296	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	1	0.	0.06	0.000
297	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
298	2.51	2.51	12	0.	0.96	45.	10	0.	0.003	28	0.	2.27	0.007
299	2.51	2.51	67	0.	5.47	253.	59	0.	0.016	69	0.	5.58	0.018
300	2.51	2.51	90	0.	7.28	337.	79	0.	0.021	76	0.	6.17	0.020
301	2.51	2.51	86	0.	6.98	323.	75	0.	0.020	73	0.	5.89	0.019
302	2.51	2.51	74	0.	5.98	277.	64	0.	0.017	61	0.	4.94	0.016
303	2.51	2.51	26	0.	2.12	98.	23	0.	0.006	24	0.	1.97	0.006
304	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
305	2.51	2.51	11	0.	0.93	43.	10	0.	0.003	31	0.	2.55	0.008
306	2.51	2.51	69	0.	5.56	258.	60	0.	0.016	70	0.	5.71	0.019
307	2.51	2.51	91	0.	7.39	342.	80	0.	0.021	78	0.	6.34	0.021
308	2.51	2.51	89	0.	7.25	335.	78	0.	0.021	76	0.	6.17	0.020
309	2.51	2.51	78	0.	6.32	293.	68	0.	0.018	65	0.	5.30	0.017
310	2.51	2.51	26	0.	2.14	99.	23	0.	0.006	26	0.	2.10	0.007
311	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
312	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	3	0.	0.27	0.001
313	2.51	2.51	49	0.	3.96	183.	48	0.	0.013	53	0.	4.32	0.014
314	2.51	2.51	67	0.	5.43	252.	72	0.	0.019	69	0.	5.56	0.018
315	2.51	2.51	76	0.	6.18	286.	67	0.	0.018	65	0.	5.27	0.017
316	2.51	2.51	64	0.	5.22	242.	56	0.	0.015	53	0.	4.34	0.014
317	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	4	0.	0.36	0.001
318	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
319	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
320	2.51	2.51	53	0.	4.29	199.	46	0.	0.012	43	0.	3.47	0.011
321	2.51	2.51	69	0.	5.58	258.	61	0.	0.016	67	0.	5.45	0.018

322	2.51	2.51	40	0.	3.24	150.	37	0.	0.010	41	0.	3.34	0.011
323	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.02	0.000
324	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
325	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
326	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
327	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	6	0.	0.51	0.002
328	2.51	2.51	47	0.	3.80	176.	41	0.	0.011	57	0.	4.64	0.015
329	2.51	2.51	75	0.	6.07	281.	66	0.	0.018	55	0.	4.44	0.015
330	2.51	2.51	43	0.	3.53	164.	38	0.	0.010	41	0.	3.29	0.011
331	2.51	2.51	17	0.	1.36	63.	13	0.	0.003	6	0.	0.46	0.002
332	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
333	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
334	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
335	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
336	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
337	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
338	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
339	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
340	2.51	2.51	47	0.	3.78	175.	39	0.	0.010	52	0.	4.19	0.014
341	2.51	2.51	68	0.	5.55	257.	58	0.	0.015	68	0.	5.53	0.018
342	2.51	2.51	98	0.	7.92	366.	84	0.	0.022	88	0.	7.15	0.024
343	2.51	2.51	124	0.	10.05	465.	108	0.	0.029	107	0.	8.65	0.028
344	2.51	2.51	101	0.	8.23	381.	88	0.	0.023	92	0.	7.46	0.025
345	2.51	2.51	7	0.	0.58	27.	6	0.	0.001	22	0.	1.75	0.006
346	2.51	2.51	57	0.	4.63	214.	49	0.	0.013	63	0.	5.08	0.017
347	2.51	2.51	69	0.	5.57	258.	59	0.	0.016	76	0.	6.18	0.020
348	2.51	2.51	94	0.	7.66	355.	83	0.	0.022	90	0.	7.27	0.024
349	2.51	2.51	117	0.	9.47	438.	102	0.	0.027	101	0.	8.21	0.027
350	2.51	2.51	81	0.	6.61	306.	72	0.	0.019	78	0.	6.34	0.021
351	2.51	2.51	7	0.	0.55	26.	6	0.	0.002	22	0.	1.79	0.006
352	2.51	2.51	55	0.	4.48	207.	49	0.	0.013	63	0.	5.13	0.017
353	2.51	2.51	71	0.	5.77	267.	63	0.	0.017	73	0.	5.91	0.019
354	2.51	2.51	84	0.	6.84	317.	75	0.	0.020	72	0.	5.86	0.019
355	2.51	2.51	83	0.	6.74	312.	75	0.	0.020	66	0.	5.40	0.018
356	2.51	2.51	21	0.	1.69	78.	22	0.	0.006	18	0.	1.43	0.005
357	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
358	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
359	2.51	2.51	38	0.	3.05	141.	33	0.	0.009	44	0.	3.54	0.012
360	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
361	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	2	0.	0.19	0.001
362	2.51	2.51	50	0.	4.07	188.	45	0.	0.012	46	0.	3.73	0.012
363	2.51	2.51	63	0.	5.11	237.	54	0.	0.015	51	0.	4.11	0.014
364	2.51	2.51	69	0.	5.61	259.	62	0.	0.017	65	0.	5.31	0.017
365	2.51	2.51	60	0.	4.85	225.	56	0.	0.015	54	0.	4.40	0.014
366	2.51	2.51	75	0.	6.05	280.	68	0.	0.018	55	0.	4.46	0.015
367	2.51	2.51	33	0.	2.70	125.	30	0.	0.008	35	0.	2.82	0.009
368	2.51	2.51	14	0.	1.17	54.	13	0.	0.004	15	0.	1.19	0.004
369	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
370	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
371	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
372	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
373	2.51	2.51	1	0.	0.08	4.	0.	0.	0.000	9	0.	0.73	0.002
374	2.51	2.51	70	0.	5.69	263.	59	0.	0.016	58	0.	4.69	0.015
375	2.51	2.51	97	0.	7.88	364.	84	0.	0.023	68	0.	5.55	0.018
376	2.51	2.51	60	0.	4.91	227.	54	0.	0.014	53	0.	4.34	0.014
377	2.51	2.51	37	0.	2.97	137.	32	0.	0.009	38	0.	3.05	0.010
378	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
379	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
380	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	2	0.	0.18	0.001
381	2.51	2.51	52	0.	4.26	197.	42	0.	0.011	39	0.	3.15	0.010
382	2.51	2.51	72	0.	5.89	272.	59	0.	0.016	61	0.	4.94	0.016
383	2.51	2.51	76	0.	6.20	287.	62	0.	0.017	70	0.	5.66	0.019
384	2.51	2.51	75	0.	6.12	283.	62	0.	0.016	66	0.	5.40	0.018
385	2.51	2.51	60	0.	4.91	227.	50	0.	0.013	51	0.	4.16	0.014
386	2.51	2.51	30	0.	2.43	112.	24	0.	0.007	23	0.	1.90	0.006
387	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
388	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
389	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
390	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
391	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	54	0.	4.36	0.014
392	2.51	2.51	27	0.	2.16	100.	24	0.	0.006	61	0.	4.98	0.016
393	2.51	2.51	55	0.	4.44	205.	45	0.	0.012	68	0.	5.52	0.018
394	2.51	2.51	71	0.	5.75	266.	58	0.	0.015	74	0.	5.99	0.020
395	2.51	2.51	74	0.	6.02	279.	60	0.	0.016	74	0.	5.99	0.020
396	2.51	2.51	62	0.	5.01	232.	48	0.	0.013	65	0.	5.26	0.017
397	2.51	2.51	34	0.	2.76	128.	25	0.	0.007	44	0.	3.56	0.012
398	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	7	0.	0.55	0.002
399	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
400	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
401	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
402	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
403	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
404	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
405	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	6	0.	0.45	0.002
406	2.51	2.51	15	0.	1.26	58.	12	0.	0.003	23	0.	1.89	0.006

407	2.51	2.51	12	0.	0.99	46.	10	0.	0.003	25	0.	2.03	0.007
408	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	10	0.	0.78	0.003
409	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
410	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
411	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	1	0.	0.11	0.000
412	2.51	2.51	57	0.	4.67	216.	56	0.	0.015	101	0.	8.20	0.027
413	2.51	2.51	61	0.	4.95	229.	57	0.	0.015	73	0.	5.94	0.020
414	2.51	2.51	40	0.	3.27	151.	54	0.	0.014	46	0.	3.72	0.012
415	2.51	2.51	1	0.	0.11	5.	3	0.	0.001	14	0.	1.17	0.004
416	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
417	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
418	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
419	2.51	2.51	64	0.	5.17	239.	52	0.	0.014	78	0.	6.30	0.021
420	2.51	2.51	91	0.	7.38	342.	78	0.	0.021	92	0.	7.49	0.025
421	2.51	2.51	87	0.	7.03	326.	75	0.	0.020	67	0.	5.43	0.018
422	2.51	2.51	55	0.	4.50	208.	49	0.	0.013	54	0.	4.34	0.014
423	2.51	2.51	61	0.	4.97	230.	53	0.	0.014	48	0.	3.91	0.013
424	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	2	0.	0.19	0.001
425	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
426	2.51	2.51	106	0.	8.64	400.	89	0.	0.024	110	0.	8.93	0.029
427	2.51	2.51	115	0.	9.37	434.	99	0.	0.027	112	0.	9.11	0.030
428	2.51	2.51	97	0.	7.88	365.	93	0.	0.025	80	0.	6.49	0.021
429	2.51	2.51	64	0.	5.16	239.	63	0.	0.017	70	0.	5.72	0.019
430	2.51	2.51	92	0.	7.44	345.	80	0.	0.021	83	0.	6.74	0.022
431	2.51	2.51	49	0.	3.99	185.	44	0.	0.012	63	0.	5.08	0.017
432	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
433	2.51	2.51	126	0.	10.23	474.	106	0.	0.028	125	0.	10.17	0.033
434	2.51	2.51	128	0.	10.36	479.	111	0.	0.029	123	0.	9.96	0.033
435	2.51	2.51	118	0.	9.56	443.	104	0.	0.028	89	0.	7.21	0.024
436	2.51	2.51	103	0.	8.33	386.	91	0.	0.024	96	0.	7.76	0.026
437	2.51	2.51	119	0.	9.64	446.	104	0.	0.028	108	0.	8.74	0.029
438	2.51	2.51	98	0.	7.97	369.	85	0.	0.023	98	0.	7.93	0.026
439	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
440	2.51	2.51	134	0.	10.91	505.	114	0.	0.030	132	0.	10.74	0.035
441	2.51	2.51	138	0.	11.23	520.	121	0.	0.032	133	0.	10.82	0.036
442	2.51	2.51	135	0.	10.95	507.	120	0.	0.032	109	0.	8.87	0.029
443	2.51	2.51	132	0.	10.68	494.	118	0.	0.031	119	0.	9.66	0.032
444	2.51	2.51	142	0.	11.56	535.	126	0.	0.034	128	0.	10.37	0.034
445	2.51	2.51	141	0.	11.49	532.	124	0.	0.033	118	0.	9.56	0.031
446	2.51	2.51	61	0.	4.93	228.	53	0.	0.014	38	0.	3.10	0.010
447	2.51	2.51	148	0.	12.04	557.	129	0.	0.035	141	0.	11.44	0.038
448	2.51	2.51	166	0.	13.46	623.	149	0.	0.040	154	0.	12.51	0.041
449	2.51	2.51	165	0.	13.41	621.	149	0.	0.040	144	0.	11.68	0.038
450	2.51	2.51	170	0.	13.79	638.	153	0.	0.041	152	0.	12.38	0.041
451	2.51	2.51	174	0.	14.13	654.	156	0.	0.042	153	0.	12.45	0.041
452	2.51	2.51	158	0.	12.79	592.	139	0.	0.037	134	0.	10.89	0.036
453	2.51	2.51	83	0.	6.71	311.	73	0.	0.019	65	0.	5.26	0.017
454	2.51	2.51	172	0.	13.96	646.	153	0.	0.041	160	0.	13.03	0.043
455	2.51	2.51	208	0.	16.90	782.	189	0.	0.051	192	0.	15.55	0.051
456	2.51	2.51	212	0.	17.21	797.	194	0.	0.052	186	0.	15.11	0.050
457	2.51	2.51	219	0.	17.77	822.	199	0.	0.053	197	0.	16.03	0.053
458	2.51	2.51	220	0.	17.84	826.	199	0.	0.053	191	0.	15.51	0.051
459	2.51	2.51	187	0.	15.14	701.	167	0.	0.045	157	0.	12.71	0.042
460	2.51	2.51	86	0.	6.97	322.	77	0.	0.020	79	0.	6.41	0.021
461	2.51	2.51	203	0.	16.48	763.	188	0.	0.050	194	0.	15.72	0.052
462	2.51	2.51	249	0.	20.23	936.	237	0.	0.063	239	0.	19.42	0.064
463	2.51	2.51	262	0.	21.25	984.	241	0.	0.064	232	0.	18.80	0.062
464	2.51	2.51	264	0.	21.41	991.	241	0.	0.064	241	0.	19.59	0.064
465	2.51	2.51	269	0.	21.87	1012.	246	0.	0.066	235	0.	19.11	0.063
466	2.51	2.51	228	0.	18.50	856.	207	0.	0.055	188	0.	15.26	0.050
467	2.51	2.51	92	0.	7.48	346.	83	0.	0.022	82	0.	6.68	0.022
468	2.51	2.51	222	0.	18.05	836.	206	0.	0.055	222	0.	18.04	0.059
469	2.51	2.51	269	0.	21.83	1010.	250	0.	0.067	258	0.	20.94	0.069
470	2.51	2.51	246	0.	19.98	925.	229	0.	0.061	231	0.	18.76	0.062
471	2.51	2.51	253	0.	20.51	949.	232	0.	0.062	239	0.	19.40	0.064
472	2.51	2.51	276	0.	22.42	1038.	254	0.	0.068	248	0.	20.16	0.066
473	2.51	2.51	246	0.	20.01	926.	226	0.	0.060	208	0.	16.92	0.056
474	2.51	2.51	79	0.	6.44	298.	71	0.	0.019	73	0.	5.94	0.020
475	2.51	2.51	183	0.	14.82	686.	174	0.	0.046	172	0.	13.97	0.046
476	2.51	2.51	191	0.	15.54	719.	181	0.	0.048	143	0.	11.65	0.038
477	2.51	2.51	135	0.	10.99	509.	129	0.	0.034	83	0.	6.71	0.022
478	2.51	2.51	142	0.	11.53	534.	131	0.	0.035	92	0.	7.44	0.024
479	2.51	2.51	169	0.	13.75	636.	157	0.	0.042	134	0.	10.91	0.036
480	2.51	2.51	168	0.	13.67	633.	156	0.	0.042	149	0.	12.08	0.040
481	2.51	2.51	40	0.	3.25	151.	36	0.	0.010	39	0.	3.16	0.010
482	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
483	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
484	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
485	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
486	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
487	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
488	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
489	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
490	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
491	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000

492	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
493	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
494	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
495	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
496	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
497	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
498	2.51	2.51	47	0.	3.83	177.	44	0.	0.012	47	0.	3.79	0.012
499	2.51	2.51	59	0.	4.78	221.	50	0.	0.013	76	0.	6.17	0.020
500	2.51	2.51	76	0.	6.20	287.	68	0.	0.018	84	0.	6.79	0.022
501	2.51	2.51	78	0.	6.36	294.	69	0.	0.018	80	0.	6.48	0.021
502	2.51	2.51	65	0.	5.27	244.	57	0.	0.015	65	0.	5.27	0.017
503	2.51	2.51	32	0.	2.63	121.	29	0.	0.008	37	0.	3.01	0.010
504	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
505	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
506	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
507	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	4	0.	0.36	0.001
508	2.51	2.51	46	0.	3.70	171.	38	0.	0.010	58	0.	4.68	0.015
509	2.51	2.51	72	0.	5.85	271.	62	0.	0.017	78	0.	6.33	0.021
510	2.51	2.51	77	0.	6.22	288.	68	0.	0.018	79	0.	6.41	0.021
511	2.51	2.51	79	0.	6.45	299.	71	0.	0.019	71	0.	5.79	0.019
512	2.51	2.51	46	0.	3.73	173.	42	0.	0.011	41	0.	3.29	0.011
513	2.51	2.51	0.	0.	0.02	1.	0.	0.	0.000	66	0.	5.34	0.018
514	2.51	2.51	89	0.	7.20	333.	76	0.	0.020	94	0.	7.60	0.025
515	2.51	2.51	87	0.	7.10	328.	77	0.	0.020	94	0.	7.66	0.025
516	2.51	2.51	85	0.	6.89	319.	75	0.	0.020	88	0.	7.11	0.023
517	2.51	2.51	88	0.	7.12	329.	79	0.	0.021	74	0.	6.04	0.020
518	2.51	2.51	35	0.	2.81	130.	33	0.	0.009	33	0.	2.72	0.009
519	2.51	2.51	58	0.	4.70	217.	49	0.	0.013	101	0.	8.20	0.027
520	2.51	2.51	115	0.	9.33	432.	100	0.	0.027	116	0.	9.43	0.031
521	2.51	2.51	99	0.	8.06	373.	88	0.	0.023	107	0.	8.72	0.029
522	2.51	2.51	85	0.	6.89	319.	77	0.	0.020	90	0.	7.32	0.024
523	2.51	2.51	78	0.	6.35	294.	72	0.	0.019	61	0.	4.93	0.016
524	2.51	2.51	0.	0.	0.00	0.	2	0.	0.001	0.	0.	0.00	0.000
525	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
526	2.51	2.51	94	0.	7.59	351.	81	0.	0.022	121	0.	9.81	0.032
527	2.51	2.51	137	0.	11.10	514.	121	0.	0.032	132	0.	10.75	0.035
528	2.51	2.51	137	0.	11.16	516.	121	0.	0.032	138	0.	11.24	0.037
529	2.51	2.51	163	0.	13.25	613.	147	0.	0.039	158	0.	12.83	0.042
530	2.51	2.51	141	0.	11.44	529.	128	0.	0.034	152	0.	12.30	0.040
531	2.51	2.51	133	0.	10.82	501.	119	0.	0.032	122	0.	9.91	0.033
532	2.51	2.51	152	0.	12.36	572.	139	0.	0.037	141	0.	11.43	0.038
533	2.51	2.51	102	0.	8.27	383.	101	0.	0.027	99	0.	8.00	0.026
534	2.51	2.51	164	0.	13.31	616.	149	0.	0.040	140	0.	11.38	0.037
535	2.51	2.51	77	0.	6.25	289.	77	0.	0.021	79	0.	6.39	0.021
536	2.51	2.51	109	0.	8.82	408.	98	0.	0.026	94	0.	7.61	0.025
537	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	20	0.	1.64	0.005
538	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
539	2.51	2.51	170	0.	13.77	637.	151	0.	0.040	162	0.	13.17	0.043
540	2.51	2.51	213	0.	17.27	799.	195	0.	0.052	198	0.	16.04	0.053
541	2.51	2.51	194	0.	15.75	729.	179	0.	0.048	193	0.	15.68	0.052
542	2.51	2.51	226	0.	18.31	847.	206	0.	0.055	209	0.	17.00	0.056
543	2.51	2.51	243	0.	19.69	911.	221	0.	0.059	210	0.	17.08	0.056
544	2.51	2.51	188	0.	15.28	707.	171	0.	0.046	158	0.	12.85	0.042
545	2.51	2.51	208	0.	16.91	783.	190	0.	0.051	197	0.	15.97	0.053
546	2.51	2.51	247	0.	20.07	929.	228	0.	0.061	245	0.	19.86	0.065
547	2.51	2.51	232	0.	18.81	871.	213	0.	0.057	237	0.	19.21	0.063
548	2.51	2.51	280	0.	22.72	1051.	257	0.	0.069	266	0.	21.61	0.071
549	2.51	2.51	317	0.	25.70	1189.	291	0.	0.078	279	0.	22.64	0.074
550	2.51	2.51	264	0.	21.47	994.	252	0.	0.067	222	0.	18.06	0.059
551	2.51	2.51	222	0.	18.01	834.	205	0.	0.055	217	0.	17.65	0.058
552	2.51	2.51	269	0.	21.86	1012.	251	0.	0.067	254	0.	20.62	0.068
553	2.51	2.51	237	0.	19.26	891.	222	0.	0.059	230	0.	18.65	0.061
554	2.51	2.51	293	0.	23.80	1102.	271	0.	0.072	268	0.	21.76	0.072
555	2.51	2.51	329	0.	26.74	1238.	304	0.	0.081	307	0.	24.95	0.082
556	2.51	2.51	310	0.	25.19	1166.	286	0.	0.076	270	0.	21.96	0.072
557	2.51	2.51	165	0.	13.40	620.	156	0.	0.042	149	0.	12.10	0.040
558	2.51	2.51	178	0.	14.43	668.	168	0.	0.045	121	0.	9.82	0.032
559	2.51	2.51	116	0.	9.40	435.	119	0.	0.032	66	0.	5.32	0.018
560	2.51	2.51	173	0.	14.04	650.	156	0.	0.042	108	0.	8.75	0.029
561	2.51	2.51	248	0.	20.16	933.	231	0.	0.062	191	0.	15.49	0.051
562	2.51	2.51	252	0.	20.42	945.	234	0.	0.063	231	0.	18.72	0.062
563	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
564	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
565	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
566	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
567	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
568	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
569	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
570	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
571	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
572	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
573	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
574	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
575	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
576	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000

577	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
578	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
579	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
580	2.51	2.51	0.	0.	0.00	1.	0.	0.000	3	0.	0.25	0.001
581	2.51	2.51	29	0.	2.33	108.	23	0.0006	61	0.	4.94	0.016
582	2.51	2.51	1	0.	0.08	4.	0.	0.000	31	0.	2.54	0.008
583	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
584	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
585	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
586	2.51	2.51	0.	0.	0.00	0.	0.	0.000	5	0.	0.38	0.001
587	2.51	2.51	1	0.	0.09	5.	0.	0.000	14	0.	1.17	0.004
588	2.51	2.51	0.	0.	0.00	0.	0.	0.000	7	0.	0.53	0.002
589	2.51	2.51	45	0.	3.63	169.	36	0.0010	56	0.	4.55	0.015
590	2.51	2.51	58	0.	4.69	218.	49	0.0013	46	0.	3.76	0.012
591	2.51	2.51	35	0.	2.85	132.	30	0.0008	29	0.	2.35	0.008
592	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
593	2.51	2.51	99	0.	8.01	370.	45	0.0012	80	0.	6.46	0.021
594	2.51	2.51	136	0.	11.08	513.	119	0.0032	80	0.	6.47	0.021
595	2.51	2.51	115	0.	9.37	434.	100	0.0027	50	0.	4.10	0.013
596	2.51	2.51	95	0.	7.75	358.	82	0.0022	29	0.	2.35	0.008
597	2.51	2.51	86	0.	6.94	321.	72	0.0019	18	0.	1.42	0.005
598	2.51	2.51	34	0.	2.77	128.	25	0.0007	7	0.	0.59	0.002
599	2.51	2.51	0.	0.	0.00	0.	0.	0.000	10	0.	0.79	0.003
600	2.51	2.51	150	0.	12.16	563.	131	0.0035	141	0.	11.45	0.038
601	2.51	2.51	263	0.	21.36	988.	232	0.0062	226	0.	18.34	0.060
602	2.51	2.51	290	0.	23.58	1091.	257	0.0069	254	0.	20.61	0.068
603	2.51	2.51	302	0.	24.52	1135.	267	0.0071	259	0.	20.99	0.069
604	2.51	2.51	309	0.	25.09	1161.	272	0.0073	259	0.	21.02	0.069
605	2.51	2.51	311	0.	25.24	1168.	272	0.0073	256	0.	20.82	0.068
606	2.51	2.51	307	0.	24.95	1155.	270	0.0072	262	0.	21.26	0.070
607	2.51	2.51	227	0.	18.44	853.	200	0.0053	201	0.	16.36	0.054
608	2.51	2.51	314	0.	25.48	1179.	276	0.0074	282	0.	22.88	0.075
609	2.51	2.51	334	0.	27.13	1256.	299	0.0080	306	0.	24.84	0.082
610	2.51	2.51	340	0.	27.60	1278.	310	0.0083	308	0.	24.99	0.082
611	2.51	2.51	342	0.	27.80	1287.	301	0.0080	307	0.	24.94	0.082
612	2.51	2.51	352	0.	28.59	1323.	310	0.0083	311	0.	25.25	0.083
613	2.51	2.51	365	0.	29.63	1372.	322	0.0086	307	0.	24.93	0.082
614	2.51	2.51	240	0.	19.49	902.	211	0.0056	210	0.	17.08	0.056
615	2.51	2.51	275	0.	22.32	1033.	241	0.0064	218	0.	17.71	0.058
616	2.51	2.51	259	0.	20.99	971.	225	0.0060	193	0.	15.67	0.052
617	2.51	2.51	242	0.	19.65	910.	210	0.0056	174	0.	14.15	0.047
618	2.51	2.51	233	0.	18.94	877.	202	0.0054	168	0.	13.60	0.045
619	2.51	2.51	229	0.	18.61	861.	199	0.0053	163	0.	13.26	0.044
620	2.51	2.51	247	0.	20.05	928.	214	0.0057	177	0.	14.36	0.047
621	2.51	2.51	254	0.	20.62	954.	221	0.0059	199	0.	16.17	0.053
622	2.51	2.51	350	0.	28.42	1316.	307	0.0082	275	0.	22.35	0.073
623	2.51	2.51	308	0.	25.00	1157.	271	0.0072	257	0.	20.89	0.069
624	2.51	2.51	36	0.	2.96	137.	29	0.0008	70	0.	5.69	0.019
625	2.51	2.51	139	0.	11.31	524.	120	0.0032	109	0.	8.82	0.029
626	2.51	2.51	94	0.	7.62	353.	13	0.0003	61	0.	4.95	0.016
627	2.51	2.51	6	0.	0.51	23.	0.	0.0000	17	0.	1.36	0.004
628	2.51	2.51	122	0.	9.94	460.	108	0.0029	113	0.	9.13	0.030
629	2.51	2.51	126	0.	10.23	473.	112	0.0030	87	0.	7.04	0.023
630	2.51	2.51	89	0.	7.25	336.	81	0.0022	87	0.	7.09	0.023
631	2.51	2.51	279	0.	22.68	1050.	228	0.0061	202	0.	16.37	0.054
632	2.51	2.51	71	0.	5.74	266.	16	0.0004	45	0.	3.69	0.012
633	2.51	2.51	7	0.	0.54	25.	1	0.0000	17	0.	1.37	0.005
634	2.51	2.51	144	0.	11.67	540.	127	0.0034	141	0.	11.44	0.038
635	2.51	2.51	196	0.	15.91	736.	174	0.0046	178	0.	14.41	0.047
636	2.51	2.51	168	0.	13.60	630.	148	0.0039	130	0.	10.58	0.035
637	2.51	2.51	271	0.	22.00	1018.	237	0.0063	190	0.	15.44	0.051
638	2.51	2.51	44	0.	3.55	164.	34	0.0009	46	0.	3.77	0.012
639	2.51	2.51	11	0.	0.89	41.	5	0.0001	25	0.	2.00	0.007
640	2.51	2.51	143	0.	11.64	539.	128	0.0034	137	0.	11.11	0.037
641	2.51	2.51	213	0.	17.27	800.	189	0.0051	190	0.	15.41	0.051
642	2.51	2.51	221	0.	17.94	831.	196	0.0053	175	0.	14.17	0.047
643	2.51	2.51	238	0.	19.28	892.	208	0.0055	188	0.	15.29	0.050
644	2.51	2.51	69	0.	5.60	259.	55	0.0015	47	0.	3.78	0.012
645	2.51	2.51	24	0.	1.97	91.	19	0.0005	46	0.	3.70	0.012
646	2.51	2.51	151	0.	12.29	569.	137	0.0037	145	0.	11.81	0.039
647	2.51	2.51	165	0.	13.41	621.	147	0.0039	121	0.	9.85	0.032
648	2.51	2.51	184	0.	14.97	693.	164	0.0044	166	0.	13.44	0.044

ARMATURA SUPERIORE VERTICALE

GUSCI	Af	Afc	COMBINAZIONE RARA				COMB. FREQUENTE			COMB. QUASI PERMANENTE			
			Mom	Nor	σc	σf	Mom	Nor	WkF	Mom	Nor	σc	WkP
1	2.51	2.51	0.	0.	0.01	0.	0.	0.0000	0.	0.	0.	0.00	0.000
2	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.	0.00	0.000
3	2.51	2.51	0.	0.	0.00	5.	0.	0.0001	0.	0.	0.	0.00	0.001
4	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.	0.00	0.000
5	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.	0.00	0.000
6	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.	0.00	0.000
7	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.	0.00	0.000
8	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.	0.00	0.000

9	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
10	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
11	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
12	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
13	2.51	2.51	0.	0.	0.00	5.	0.	0.	0.001	0.	0.	0.00	0.001
14	2.51	2.51	14	0.	1.14	55.	10	0.	0.003	20	0.	1.63	0.006
15	2.51	2.51	37	0.	3.02	141.	29	0.	0.008	36	0.	2.92	0.010
16	2.51	2.51	38	0.	3.11	144.	31	0.	0.008	38	0.	3.08	0.010
17	2.51	2.51	23	0.	1.84	85.	20	0.	0.005	28	0.	2.27	0.007
18	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	6	0.	0.46	0.001
19	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
20	2.51	2.51	0.	0.	0.02	0.	0.	0.	0.000	0.	0.	0.01	0.000
21	2.51	2.51	29	0.	2.40	114.	29	0.	0.008	51	0.	4.12	0.014
22	2.51	2.51	60	0.	4.91	230.	53	0.	0.015	54	0.	4.43	0.015
23	2.51	2.51	72	0.	5.88	273.	61	0.	0.017	57	0.	4.61	0.015
24	2.51	2.51	67	0.	5.44	253.	56	0.	0.015	58	0.	4.73	0.016
25	2.51	2.51	59	0.	4.78	221.	51	0.	0.014	60	0.	4.87	0.016
26	2.51	2.51	35	0.	2.82	131.	34	0.	0.009	59	0.	4.79	0.016
27	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
28	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
29	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
30	2.51	2.51	12	0.	0.97	45.	12	0.	0.003	20	0.	1.61	0.005
31	2.51	2.51	35	0.	2.85	132.	28	0.	0.007	33	0.	2.70	0.009
32	2.51	2.51	41	0.	3.34	154.	31	0.	0.008	37	0.	2.98	0.010
33	2.51	2.51	32	0.	2.60	120.	21	0.	0.006	31	0.	2.51	0.008
34	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	13	0.	1.08	0.004
35	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
36	2.51	2.51	7	0.	0.54	25.	12	0.	0.003	30	0.	2.41	0.008
37	2.51	2.51	42	0.	3.45	160.	37	0.	0.010	42	0.	3.38	0.011
38	2.51	2.51	65	0.	5.24	242.	51	0.	0.014	49	0.	3.96	0.013
39	2.51	2.51	79	0.	6.45	298.	63	0.	0.017	58	0.	4.73	0.016
40	2.51	2.51	87	0.	7.10	328.	71	0.	0.019	79	0.	6.38	0.021
41	2.51	2.51	96	0.	7.80	361.	77	0.	0.021	129	0.	10.50	0.035
42	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	19	0.	1.53	0.005
43	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
44	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
45	2.51	2.51	21	0.	1.67	77.	15	0.	0.004	65	0.	5.26	0.017
46	2.51	2.51	25	0.	2.01	93.	18	0.	0.005	20	0.	1.64	0.005
47	2.51	2.51	29	0.	2.34	109.	22	0.	0.006	54	0.	4.40	0.014
48	2.51	2.51	32	0.	2.63	122.	25	0.	0.007	30	0.	2.44	0.008
49	2.51	2.51	36	0.	2.89	134.	25	0.	0.007	46	0.	3.75	0.012
50	2.51	2.51	31	0.	2.48	115.	24	0.	0.006	28	0.	2.30	0.008
51	2.51	2.51	25	0.	2.05	95.	20	0.	0.005	37	0.	3.02	0.010
52	2.51	2.51	18	0.	1.45	67.	14	0.	0.004	14	0.	1.16	0.004
53	2.51	2.51	4	0.	0.35	16.	4	0.	0.001	21	0.	1.68	0.006
54	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
55	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
56	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
57	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
58	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
59	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
60	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
61	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	28	0.	2.24	0.007
62	2.51	2.51	8	0.	0.63	29.	0.	0.	0.000	10	0.	0.83	0.003
63	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	26	0.	2.07	0.007
64	2.51	2.51	22	0.	1.79	83.	12	0.	0.003	26	0.	2.13	0.007
65	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
66	2.51	2.51	29	0.	2.38	110.	15	0.	0.004	22	0.	1.83	0.006
67	2.51	2.51	49	0.	4.00	185.	37	0.	0.010	56	0.	4.58	0.015
68	2.51	2.51	24	0.	1.99	92.	11	0.	0.003	12	0.	1.00	0.003
69	2.51	2.51	30	0.	2.41	112.	22	0.	0.006	50	0.	4.09	0.013
70	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
71	2.51	2.51	10	0.	0.82	38.	8	0.	0.002	39	0.	3.18	0.010
72	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
73	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
74	2.51	2.51	0.	0.	0.00	2.	0.	0.	0.000	0.	0.	0.00	0.000
75	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
76	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
77	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
78	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
79	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
80	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
81	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
82	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
83	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
84	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
85	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
86	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
87	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
88	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
89	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
90	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
91	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
92	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
93	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.01	0.000

94	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
95	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
96	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
97	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
98	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
99	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
100	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
101	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
102	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
103	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
104	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
105	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
106	2.51	2.51	0.	0.	0.00	1.	0.	0.0000	0.	0.	0.00	0.000
107	2.51	2.51	0.	0.	0.00	1.	0.	0.0000	0.	0.	0.00	0.000
108	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
109	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
110	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
111	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
112	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
113	2.51	2.51	238	0.	19.28	889.	217	0.0058	212	0.	17.15	0.056
114	2.51	2.51	269	0.	21.80	1008.	245	0.0065	217	0.	17.62	0.058
115	2.51	2.51	212	0.	17.24	798.	190	0.0051	159	0.	12.94	0.043
116	2.51	2.51	227	0.	18.43	853.	204	0.0055	184	0.	14.92	0.049
117	2.51	2.51	227	0.	18.44	854.	205	0.0055	193	0.	15.69	0.052
118	2.51	2.51	170	0.	13.77	638.	153	0.0041	149	0.	12.10	0.040
119	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
120	2.51	2.51	261	0.	21.21	979.	240	0.0064	220	0.	17.86	0.059
121	2.51	2.51	328	0.	26.59	1229.	300	0.0080	283	0.	22.98	0.075
122	2.51	2.51	279	0.	22.67	1048.	254	0.0068	233	0.	18.92	0.062
123	2.51	2.51	282	0.	22.91	1060.	256	0.0068	239	0.	19.41	0.064
124	2.51	2.51	250	0.	20.26	938.	226	0.0060	223	0.	18.14	0.060
125	2.51	2.51	170	0.	13.80	639.	153	0.0041	126	0.	10.25	0.034
126	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
127	2.51	2.51	242	0.	19.61	906.	222	0.0059	191	0.	15.50	0.051
128	2.51	2.51	317	0.	25.70	1188.	290	0.0077	295	0.	23.93	0.079
129	2.51	2.51	288	0.	23.40	1082.	263	0.0070	267	0.	21.65	0.071
130	2.51	2.51	279	0.	22.62	1046.	253	0.0067	256	0.	20.79	0.068
131	2.51	2.51	239	0.	19.43	899.	216	0.0058	213	0.	17.32	0.057
132	2.51	2.51	128	0.	10.39	481.	115	0.0031	80	0.	6.49	0.021
133	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
134	2.51	2.51	224	0.	18.16	840.	204	0.0054	173	0.	14.07	0.046
135	2.51	2.51	310	0.	25.18	1164.	285	0.0076	293	0.	23.76	0.078
136	2.51	2.51	297	0.	24.12	1115.	272	0.0073	282	0.	22.88	0.075
137	2.51	2.51	279	0.	22.66	1048.	254	0.0068	259	0.	21.02	0.069
138	2.51	2.51	230	0.	18.69	865.	207	0.0055	199	0.	16.17	0.053
139	2.51	2.51	95	0.	7.68	355.	83	0.0022	49	0.	3.96	0.013
140	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
141	2.51	2.51	229	0.	18.62	862.	208	0.0055	176	0.	14.30	0.047
142	2.51	2.51	325	0.	26.37	1220.	297	0.0079	299	0.	24.25	0.080
143	2.51	2.51	317	0.	25.70	1189.	288	0.0077	289	0.	23.46	0.077
144	2.51	2.51	293	0.	23.79	1100.	265	0.0071	264	0.	21.41	0.070
145	2.51	2.51	236	0.	19.18	887.	211	0.0056	198	0.	16.06	0.053
146	2.51	2.51	26	0.	2.14	99.	22	0.0006	39	0.	3.20	0.010
147	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
148	2.51	2.51	256	0.	20.77	962.	230	0.0061	193	0.	15.65	0.051
149	2.51	2.51	373	0.	30.25	1400.	326	0.0087	319	0.	25.87	0.085
150	2.51	2.51	352	0.	28.58	1323.	318	0.0085	307	0.	24.89	0.082
151	2.51	2.51	321	0.	26.06	1206.	288	0.0077	278	0.	22.56	0.074
152	2.51	2.51	265	0.	21.48	994.	234	0.0062	212	0.	17.22	0.057
153	2.51	2.51	1	0.	0.11	5.	0.	0.0000	45	0.	3.63	0.012
154	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
155	2.51	2.51	284	0.	23.09	1069.	254	0.0068	213	0.	17.31	0.057
156	2.51	2.51	422	0.	34.29	1587.	372	0.0099	350	0.	28.42	0.093
157	2.51	2.51	394	0.	31.99	1481.	353	0.0094	337	0.	27.33	0.090
158	2.51	2.51	354	0.	28.73	1329.	316	0.0084	303	0.	24.57	0.081
159	2.51	2.51	299	0.	24.31	1125.	263	0.0070	238	0.	19.31	0.063
160	2.51	2.51	9	0.	0.75	35.	6	0.0002	55	0.	4.50	0.015
161	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
162	2.51	2.51	311	0.	25.28	1170.	276	0.0074	230	0.	18.66	0.061
163	2.51	2.51	470	0.	38.12	1764.	407	0.0109	387	0.	31.42	0.103
164	2.51	2.51	441	0.	35.84	1658.	392	0.0105	375	0.	30.46	0.100
165	2.51	2.51	405	0.	32.87	1521.	358	0.0096	335	0.	27.16	0.089
166	2.51	2.51	335	0.	27.20	1259.	293	0.0078	266	0.	21.63	0.071
167	2.51	2.51	8	0.	0.65	30.	5	0.0001	63	0.	5.08	0.017
168	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
169	2.51	2.51	328	0.	26.65	1234.	288	0.0077	236	0.	19.16	0.063
170	2.51	2.51	498	0.	40.41	1870.	435	0.0116	423	0.	34.30	0.113
171	2.51	2.51	483	0.	39.24	1816.	428	0.0114	409	0.	33.21	0.109
172	2.51	2.51	430	0.	34.92	1616.	379	0.0101	364	0.	29.57	0.097
173	2.51	2.51	359	0.	29.11	1347.	312	0.0083	287	0.	23.29	0.077
174	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	61	0.	4.92	0.016
175	2.51	2.51	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
176	2.51	2.51	332	0.	26.94	1247.	289	0.0077	218	0.	17.72	0.058
177	2.51	2.51	518	0.	42.01	1945.	458	0.0122	443	0.	35.93	0.118
178	2.51	2.51	516	0.	41.85	1937.	456	0.0122	438	0.	35.58	0.117

179	2.51	2.51	453	0.	36.74	1700.	398	0.	0.106	376	0.	30.56	0.100
180	2.51	2.51	365	0.	29.62	1371.	318	0.	0.085	296	0.	23.99	0.079
181	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	15	0.	1.20	0.004
182	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
183	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
184	2.51	2.51	296	0.	24.06	1114.	257	0.	0.069	168	0.	13.62	0.045
185	2.51	2.51	510	0.	41.43	1918.	453	0.	0.121	440	0.	35.71	0.118
186	2.51	2.51	544	0.	44.12	2042.	480	0.	0.128	456	0.	37.01	0.122
187	2.51	2.51	493	0.	40.04	1853.	433	0.	0.116	403	0.	32.71	0.108
188	2.51	2.51	362	0.	29.37	1359.	315	0.	0.084	286	0.	23.25	0.076
189	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
190	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
191	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
192	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
193	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
194	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
195	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
196	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
197	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
198	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
199	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
200	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
201	2.51	2.51	143	0.	11.63	538.	139	0.	0.037	138	0.	11.17	0.037
202	2.51	2.51	212	0.	17.19	795.	193	0.	0.051	176	0.	14.33	0.047
203	2.51	2.51	210	0.	17.02	787.	187	0.	0.050	161	0.	13.10	0.043
204	2.51	2.51	286	0.	23.22	1075.	251	0.	0.067	208	0.	16.85	0.055
205	2.51	2.51	354	0.	28.75	1330.	313	0.	0.083	277	0.	22.49	0.074
206	2.51	2.51	311	0.	25.23	1168.	269	0.	0.072	259	0.	21.02	0.069
207	2.51	2.51	159	0.	12.88	596.	150	0.	0.040	127	0.	10.34	0.034
208	2.51	2.51	250	0.	20.26	937.	227	0.	0.060	223	0.	18.11	0.060
209	2.51	2.51	294	0.	23.85	1103.	265	0.	0.071	237	0.	19.25	0.063
210	2.51	2.51	374	0.	30.35	1404.	333	0.	0.089	297	0.	24.13	0.079
211	2.51	2.51	427	0.	34.68	1605.	381	0.	0.102	355	0.	28.84	0.095
212	2.51	2.51	338	0.	27.42	1269.	294	0.	0.079	259	0.	21.05	0.069
213	2.51	2.51	132	0.	10.69	494.	121	0.	0.032	89	0.	7.25	0.024
214	2.51	2.51	252	0.	20.43	945.	227	0.	0.061	227	0.	18.45	0.061
215	2.51	2.51	310	0.	25.18	1165.	279	0.	0.074	275	0.	22.29	0.073
216	2.51	2.51	397	0.	32.25	1492.	353	0.	0.094	342	0.	27.73	0.091
217	2.51	2.51	423	0.	34.33	1589.	375	0.	0.100	374	0.	30.36	0.100
218	2.51	2.51	311	0.	25.25	1168.	270	0.	0.072	217	0.	17.65	0.058
219	2.51	2.51	106	0.	8.63	399.	97	0.	0.026	63	0.	5.11	0.017
220	2.51	2.51	257	0.	20.90	967.	231	0.	0.062	224	0.	18.20	0.060
221	2.51	2.51	322	0.	26.15	1210.	288	0.	0.077	296	0.	24.02	0.079
222	2.51	2.51	401	0.	32.59	1508.	357	0.	0.095	358	0.	29.08	0.096
223	2.51	2.51	420	0.	34.07	1576.	371	0.	0.099	371	0.	30.10	0.099
224	2.51	2.51	277	0.	22.52	1042.	239	0.	0.064	180	0.	14.57	0.048
225	2.51	2.51	100	0.	8.15	377.	89	0.	0.024	56	0.	4.52	0.015
226	2.51	2.51	270	0.	21.92	1014.	241	0.	0.064	230	0.	18.70	0.061
227	2.51	2.51	357	0.	28.98	1341.	318	0.	0.085	315	0.	25.60	0.084
228	2.51	2.51	408	0.	33.11	1532.	363	0.	0.097	361	0.	29.30	0.096
229	2.51	2.51	417	0.	33.88	1568.	369	0.	0.099	363	0.	29.45	0.097
230	2.51	2.51	249	0.	20.25	937.	214	0.	0.057	154	0.	12.54	0.041
231	2.51	2.51	43	0.	3.48	161.	37	0.	0.010	61	0.	4.92	0.016
232	2.51	2.51	298	0.	24.17	1119.	264	0.	0.070	248	0.	20.14	0.066
233	2.51	2.51	399	0.	32.38	1499.	353	0.	0.094	339	0.	27.55	0.091
234	2.51	2.51	433	0.	35.14	1626.	384	0.	0.102	383	0.	31.07	0.102
235	2.51	2.51	408	0.	33.15	1534.	361	0.	0.096	351	0.	28.48	0.094
236	2.51	2.51	220	0.	17.85	827.	190	0.	0.051	118	0.	9.62	0.032
237	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
238	2.51	2.51	13	0.	1.08	50.	12	0.	0.003	68	0.	5.52	0.018
239	2.51	2.51	336	0.	27.31	1264.	296	0.	0.079	271	0.	22.02	0.072
240	2.51	2.51	6	0.	0.47	22.	8	0.	0.002	70	0.	5.65	0.019
241	2.51	2.51	362	0.	29.35	1359.	317	0.	0.085	291	0.	23.60	0.078
242	2.51	2.51	449	0.	36.48	1688.	396	0.	0.106	383	0.	31.05	0.102
243	2.51	2.51	430	0.	34.90	1615.	379	0.	0.101	364	0.	29.58	0.097
244	2.51	2.51	486	0.	39.44	1825.	430	0.	0.115	421	0.	34.19	0.112
245	2.51	2.51	476	0.	38.61	1787.	422	0.	0.113	408	0.	33.13	0.109
246	2.51	2.51	460	0.	37.33	1728.	406	0.	0.108	392	0.	31.82	0.105
247	2.51	2.51	449	0.	36.42	1686.	397	0.	0.106	380	0.	30.85	0.101
248	2.51	2.51	283	0.	23.01	1065.	244	0.	0.065	177	0.	14.39	0.047
249	2.51	2.51	243	0.	19.75	914.	210	0.	0.056	136	0.	11.03	0.036
250	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
251	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	61	0.	4.93	0.016
252	2.51	2.51	372	0.	30.23	1399.	326	0.	0.087	298	0.	24.17	0.079
253	2.51	2.51	454	0.	36.89	1707.	400	0.	0.107	389	0.	31.61	0.104
254	2.51	2.51	483	0.	39.23	1816.	427	0.	0.114	425	0.	34.50	0.113
255	2.51	2.51	456	0.	37.01	1713.	402	0.	0.107	386	0.	31.35	0.103
256	2.51	2.51	285	0.	23.10	1070.	245	0.	0.065	188	0.	15.28	0.050
257	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	9	0.	0.75	0.002
258	2.51	2.51	368	0.	29.90	1384.	322	0.	0.086	295	0.	23.99	0.079
259	2.51	2.51	449	0.	36.44	1687.	396	0.	0.106	383	0.	31.06	0.102
260	2.51	2.51	484	0.	39.29	1819.	428	0.	0.114	401	0.	32.53	0.107
261	2.51	2.51	437	0.	35.51	1644.	386	0.	0.103	368	0.	29.84	0.098
262	2.51	2.51	272	0.	22.08	1022.	235	0.	0.063	186	0.	15.13	0.050
263	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000

264	2.51	2.51	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
265	2.51	2.51	351	0.	28.49	1319.	306	0.0.082	276	0.	22.44	0.074
266	2.51	2.51	443	0.	35.98	1665.	392	0.0.105	376	0.	30.56	0.100
267	2.51	2.51	484	0.	39.27	1817.	430	0.0.115	399	0.	32.40	0.107
268	2.51	2.51	425	0.	34.53	1598.	377	0.0.101	376	0.	30.49	0.100
269	2.51	2.51	274	0.	22.23	1029.	237	0.0.063	187	0.	15.17	0.050
270	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
271	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
272	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
273	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
274	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
275	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
276	2.51	2.51	0.	0.	0.00	1.	0.	0.0.000	0.	0.	0.00	0.000
277	2.51	2.51	0.	0.	0.00	1.	0.	0.0.000	0.	0.	0.00	0.000
278	2.51	2.51	0.	0.	0.00	1.	0.	0.0.000	0.	0.	0.00	0.000
279	2.51	2.51	0.	0.	0.00	1.	0.	0.0.000	0.	0.	0.00	0.000
280	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
281	2.51	2.51	0.	0.	0.00	1.	0.	0.0.000	0.	0.	0.00	0.000
282	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
283	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
284	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
285	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
286	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
287	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
288	2.51	2.51	0.	0.	0.00	1.	0.	0.0.000	0.	0.	0.00	0.000
289	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
290	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
291	2.51	2.51	275	0.	22.31	1033.	240	0.0.064	165	0.	13.37	0.044
292	2.51	2.51	502	0.	40.76	1887.	441	0.0.118	429	0.	34.86	0.115
293	2.51	2.51	524	0.	42.52	1968.	461	0.0.123	463	0.	37.57	0.124
294	2.51	2.51	477	0.	38.75	1794.	418	0.0.112	412	0.	33.43	0.110
295	2.51	2.51	356	0.	28.94	1339.	310	0.0.083	286	0.	23.24	0.076
296	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
297	2.51	2.51	0.	0.	0.00	1.	0.	0.0.000	0.	0.	0.00	0.000
298	2.51	2.51	274	0.	22.21	1028.	241	0.0.064	173	0.	14.06	0.046
299	2.51	2.51	498	0.	40.44	1872.	438	0.0.117	425	0.	34.47	0.113
300	2.51	2.51	520	0.	42.25	1956.	457	0.0.122	458	0.	37.17	0.122
301	2.51	2.51	472	0.	38.31	1773.	413	0.0.110	405	0.	32.85	0.108
302	2.51	2.51	355	0.	28.84	1335.	308	0.0.082	280	0.	22.74	0.075
303	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
304	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
305	2.51	2.51	273	0.	22.19	1027.	240	0.0.064	176	0.	14.25	0.047
306	2.51	2.51	498	0.	40.39	1870.	437	0.0.117	425	0.	34.54	0.114
307	2.51	2.51	521	0.	42.31	1958.	458	0.0.122	460	0.	37.35	0.123
308	2.51	2.51	477	0.	38.71	1792.	418	0.0.112	408	0.	33.14	0.109
309	2.51	2.51	360	0.	29.23	1353.	313	0.0.084	285	0.	23.16	0.076
310	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	1	0.	0.10	0.000
311	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
312	2.51	2.51	267	0.	21.64	1002.	236	0.0.063	168	0.	13.63	0.045
313	2.51	2.51	502	0.	40.71	1885.	443	0.0.118	431	0.	34.95	0.115
314	2.51	2.51	523	0.	42.49	1967.	461	0.0.123	461	0.	37.44	0.123
315	2.51	2.51	479	0.	38.90	1801.	421	0.0.112	414	0.	33.62	0.111
316	2.51	2.51	361	0.	29.28	1355.	314	0.0.084	294	0.	23.84	0.078
317	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	5	0.	0.39	0.001
318	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
319	2.51	2.51	282	0.	22.90	1060.	251	0.0.067	169	0.	13.75	0.045
320	2.51	2.51	520	0.	42.21	1954.	458	0.0.122	442	0.	35.86	0.118
321	2.51	2.51	550	0.	44.65	2067.	484	0.0.129	466	0.	37.85	0.124
322	2.51	2.51	470	0.	38.17	1767.	412	0.0.110	411	0.	33.39	0.110
323	2.51	2.51	345	0.	28.01	1297.	302	0.0.081	288	0.	23.37	0.077
324	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
325	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
326	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
327	2.51	2.51	331	0.	26.88	1244.	291	0.0.078	212	0.	17.24	0.057
328	2.51	2.51	522	0.	42.37	1961.	458	0.0.122	448	0.	36.33	0.119
329	2.51	2.51	542	0.	43.99	2036.	476	0.0.127	449	0.	36.47	0.120
330	2.51	2.51	457	0.	37.13	1719.	400	0.0.107	387	0.	31.38	0.103
331	2.51	2.51	364	0.	29.55	1368.	318	0.0.085	296	0.	24.07	0.079
332	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	10	0.	0.81	0.003
333	2.51	2.51	0.	0.	0.00	1.	0.	0.0.000	0.	0.	0.00	0.000
334	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
335	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
336	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
337	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
338	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
339	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
340	2.51	2.51	329	0.	26.69	1235.	289	0.0.077	268	0.	21.74	0.071
341	2.51	2.51	439	0.	35.61	1648.	387	0.0.103	381	0.	30.90	0.102
342	2.51	2.51	480	0.	38.99	1804.	425	0.0.113	416	0.	33.76	0.111
343	2.51	2.51	460	0.	37.36	1729.	406	0.0.108	396	0.	32.16	0.106
344	2.51	2.51	292	0.	23.67	1095.	252	0.0.067	203	0.	16.47	0.054
345	2.51	2.51	0.	0.	0.00	0.	0.	0.0.000	0.	0.	0.00	0.000
346	2.51	2.51	333	0.	27.05	1252.	292	0.0.078	267	0.	21.66	0.071
347	2.51	2.51	446	0.	36.23	1677.	394	0.0.105	382	0.	31.00	0.102
348	2.51	2.51	496	0.	40.30	1865.	439	0.0.117	437	0.	35.46	0.117

349	2.51	2.51	481	0.	39.01	1805.	424	0.	0.113	414	0.	33.58	0.110
350	2.51	2.51	298	0.	24.23	1121.	257	0.	0.069	207	0.	16.81	0.055
351	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
352	2.51	2.51	335	0.	27.21	1260.	296	0.	0.079	266	0.	21.57	0.071
353	2.51	2.51	455	0.	36.94	1709.	402	0.	0.107	391	0.	31.73	0.104
354	2.51	2.51	525	0.	42.65	1974.	466	0.	0.124	452	0.	36.66	0.121
355	2.51	2.51	486	0.	39.42	1824.	428	0.	0.114	425	0.	34.52	0.113
356	2.51	2.51	300	0.	24.33	1126.	257	0.	0.069	195	0.	15.86	0.052
357	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
358	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
359	2.51	2.51	343	0.	27.88	1290.	303	0.	0.081	277	0.	22.46	0.074
360	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
361	2.51	2.51	350	0.	28.45	1317.	319	0.	0.085	287	0.	23.31	0.077
362	2.51	2.51	454	0.	36.88	1707.	401	0.	0.107	403	0.	32.71	0.108
363	2.51	2.51	457	0.	37.13	1718.	403	0.	0.108	391	0.	31.77	0.104
364	2.51	2.51	510	0.	41.40	1916.	452	0.	0.121	439	0.	35.61	0.117
365	2.51	2.51	521	0.	42.32	1959.	462	0.	0.123	454	0.	36.84	0.121
366	2.51	2.51	469	0.	38.05	1761.	413	0.	0.110	402	0.	32.66	0.107
367	2.51	2.51	474	0.	38.44	1779.	419	0.	0.112	408	0.	33.13	0.109
368	2.51	2.51	274	0.	22.23	1029.	236	0.	0.063	164	0.	13.29	0.044
369	2.51	2.51	265	0.	21.49	995.	232	0.	0.062	158	0.	12.86	0.042
370	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
371	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
372	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	8	0.	0.61	0.002
373	2.51	2.51	372	0.	30.19	1397.	329	0.	0.088	308	0.	24.97	0.082
374	2.51	2.51	470	0.	38.15	1766.	414	0.	0.111	406	0.	32.97	0.108
375	2.51	2.51	507	0.	41.18	1906.	449	0.	0.120	429	0.	34.85	0.115
376	2.51	2.51	459	0.	37.24	1724.	405	0.	0.108	392	0.	31.81	0.105
377	2.51	2.51	267	0.	21.66	1003.	229	0.	0.061	162	0.	13.17	0.043
378	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
379	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
380	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
381	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
382	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
383	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
384	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
385	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
386	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
387	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
388	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
389	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
390	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
391	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
392	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
393	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
394	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
395	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
396	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
397	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
398	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
399	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
400	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
401	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
402	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
403	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
404	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
405	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
406	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
407	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
408	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
409	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
410	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
411	2.51	2.51	4	0.	0.35	16.	4	0.	0.001	39	0.	3.19	0.010
412	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
413	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
414	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
415	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
416	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
417	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
418	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
419	2.51	2.51	341	0.	27.64	1279.	297	0.	0.079	234	0.	18.99	0.062
420	2.51	2.51	509	0.	41.31	1912.	445	0.	0.119	430	0.	34.88	0.115
421	2.51	2.51	507	0.	41.19	1906.	444	0.	0.118	419	0.	33.99	0.112
422	2.51	2.51	454	0.	36.85	1705.	397	0.	0.106	378	0.	30.64	0.101
423	2.51	2.51	374	0.	30.35	1405.	326	0.	0.087	294	0.	23.90	0.079
424	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	58	0.	4.69	0.015
425	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
426	2.51	2.51	325	0.	26.42	1222.	283	0.	0.076	230	0.	18.68	0.061
427	2.51	2.51	474	0.	38.50	1781.	415	0.	0.111	398	0.	32.32	0.106
428	2.51	2.51	466	0.	37.81	1750.	408	0.	0.109	389	0.	31.55	0.104
429	2.51	2.51	413	0.	33.51	1551.	363	0.	0.097	350	0.	28.44	0.094
430	2.51	2.51	351	0.	28.52	1320.	307	0.	0.082	277	0.	22.46	0.074
431	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	61	0.	4.94	0.016
432	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
433	2.51	2.51	307	0.	24.88	1151.	267	0.	0.071	217	0.	17.61	0.058

434	2.51	2.51	432	0.	35.10	1624.	379	0.	0.101	366	0.	29.74	0.098
435	2.51	2.51	422	0.	34.30	1587.	371	0.	0.099	355	0.	28.81	0.095
436	2.51	2.51	379	0.	30.74	1423.	334	0.	0.089	322	0.	26.16	0.086
437	2.51	2.51	318	0.	25.81	1194.	278	0.	0.074	251	0.	20.37	0.067
438	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	56	0.	4.51	0.015
439	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
440	2.51	2.51	281	0.	22.78	1054.	245	0.	0.065	201	0.	16.35	0.054
441	2.51	2.51	393	0.	31.92	1477.	347	0.	0.093	340	0.	27.64	0.091
442	2.51	2.51	382	0.	31.01	1435.	338	0.	0.090	329	0.	26.68	0.088
443	2.51	2.51	347	0.	28.14	1302.	307	0.	0.082	299	0.	24.30	0.080
444	2.51	2.51	283	0.	22.94	1062.	248	0.	0.066	228	0.	18.49	0.061
445	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	48	0.	3.87	0.013
446	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
447	2.51	2.51	263	0.	21.32	987.	231	0.	0.062	192	0.	15.60	0.051
448	2.51	2.51	365	0.	29.63	1371.	325	0.	0.087	326	0.	26.47	0.087
449	2.51	2.51	350	0.	28.37	1313.	312	0.	0.083	314	0.	25.45	0.084
450	2.51	2.51	318	0.	25.83	1196.	284	0.	0.076	284	0.	23.07	0.076
451	2.51	2.51	257	0.	20.86	965.	228	0.	0.061	214	0.	17.40	0.057
452	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	45	0.	3.68	0.012
453	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
454	2.51	2.51	267	0.	21.63	1001.	237	0.	0.063	196	0.	15.91	0.052
455	2.51	2.51	357	0.	28.98	1341.	319	0.	0.085	323	0.	26.22	0.086
456	2.51	2.51	336	0.	27.29	1263.	302	0.	0.081	301	0.	24.47	0.080
457	2.51	2.51	305	0.	24.80	1148.	274	0.	0.073	274	0.	22.27	0.073
458	2.51	2.51	250	0.	20.32	940.	224	0.	0.060	213	0.	17.29	0.057
459	2.51	2.51	76	0.	6.17	286.	68	0.	0.018	57	0.	4.65	0.015
460	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
461	2.51	2.51	285	0.	23.13	1070.	256	0.	0.068	218	0.	17.74	0.058
462	2.51	2.51	355	0.	28.80	1333.	318	0.	0.085	325	0.	26.35	0.087
463	2.51	2.51	325	0.	26.35	1219.	293	0.	0.078	287	0.	23.28	0.077
464	2.51	2.51	292	0.	23.72	1098.	263	0.	0.070	262	0.	21.23	0.070
465	2.51	2.51	250	0.	20.26	937.	225	0.	0.060	219	0.	17.76	0.058
466	2.51	2.51	136	0.	11.03	510.	123	0.	0.033	86	0.	6.95	0.023
467	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
468	2.51	2.51	303	0.	24.63	1140.	275	0.	0.073	249	0.	20.20	0.066
469	2.51	2.51	337	0.	27.34	1265.	306	0.	0.082	310	0.	25.13	0.083
470	2.51	2.51	290	0.	23.55	1090.	263	0.	0.070	250	0.	20.31	0.067
471	2.51	2.51	257	0.	20.87	966.	232	0.	0.062	231	0.	18.73	0.062
472	2.51	2.51	241	0.	19.54	904.	218	0.	0.058	214	0.	17.33	0.057
473	2.51	2.51	160	0.	12.96	600.	147	0.	0.039	120	0.	9.74	0.032
474	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
475	2.51	2.51	256	0.	20.81	963.	234	0.	0.062	238	0.	19.31	0.063
476	2.51	2.51	254	0.	20.65	956.	230	0.	0.061	239	0.	19.40	0.064
477	2.51	2.51	201	0.	16.29	754.	180	0.	0.048	173	0.	14.04	0.046
478	2.51	2.51	172	0.	13.96	646.	154	0.	0.041	162	0.	13.15	0.043
479	2.51	2.51	169	0.	13.70	634.	153	0.	0.041	164	0.	13.29	0.044
480	2.51	2.51	121	0.	9.78	453.	112	0.	0.030	118	0.	9.61	0.032
481	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
482	2.51	2.51	29	0.	2.37	110.	26	0.	0.007	59	0.	4.82	0.016
483	2.51	2.51	39	0.	3.18	147.	31	0.	0.008	60	0.	4.91	0.016
484	2.51	2.51	42	0.	3.37	156.	33	0.	0.009	53	0.	4.31	0.014
485	2.51	2.51	26	0.	2.09	97.	19	0.	0.005	41	0.	3.31	0.011
486	2.51	2.51	5	0.	0.38	18.	3	0.	0.001	21	0.	1.73	0.006
487	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
488	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
489	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
490	2.51	2.51	33	0.	2.71	126.	21	0.	0.006	27	0.	2.23	0.007
491	2.51	2.51	60	0.	4.89	227.	49	0.	0.013	46	0.	3.72	0.012
492	2.51	2.51	55	0.	4.43	205.	44	0.	0.012	42	0.	3.40	0.011
493	2.51	2.51	46	0.	3.71	172.	37	0.	0.010	26	0.	2.14	0.007
494	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
495	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
496	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
497	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
498	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
499	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
500	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
501	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
502	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
503	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
504	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
505	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
506	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
507	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	59	0.	4.79	0.016
508	2.51	2.51	389	0.	31.56	1461.	341	0.	0.091	309	0.	25.07	0.082
509	2.51	2.51	486	0.	39.43	1825.	428	0.	0.114	408	0.	33.14	0.109
510	2.51	2.51	504	0.	40.92	1894.	446	0.	0.119	442	0.	35.90	0.118
511	2.51	2.51	459	0.	37.28	1725.	406	0.	0.108	391	0.	31.70	0.104
512	2.51	2.51	255	0.	20.68	957.	219	0.	0.059	156	0.	12.65	0.042
513	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	66	0.	5.36	0.018
514	2.51	2.51	379	0.	30.74	1422.	332	0.	0.088	300	0.	24.35	0.080
515	2.51	2.51	469	0.	38.07	1762.	413	0.	0.110	396	0.	32.18	0.106
516	2.51	2.51	493	0.	40.01	1852.	436	0.	0.116	432	0.	35.06	0.115
517	2.51	2.51	461	0.	37.41	1731.	408	0.	0.109	391	0.	31.77	0.104
518	2.51	2.51	251	0.	20.37	943.	216	0.	0.058	153	0.	12.41	0.041

519	2.51	2.51	1	0.	0.09	4.	1	0.	0.000	64	0.	5.18	0.017
520	2.51	2.51	354	0.	28.72	1329.	309	0.	0.083	280	0.	22.70	0.075
521	2.51	2.51	444	0.	36.06	1669.	392	0.	0.104	376	0.	30.48	0.100
522	2.51	2.51	475	0.	38.58	1786.	421	0.	0.112	416	0.	33.77	0.111
523	2.51	2.51	443	0.	35.93	1663.	394	0.	0.105	380	0.	30.83	0.101
524	2.51	2.51	235	0.	19.06	882.	203	0.	0.054	133	0.	10.81	0.036
525	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
526	2.51	2.51	1	0.	0.10	5.	0.	0.	0.000	57	0.	4.66	0.015
527	2.51	2.51	320	0.	26.00	1203.	281	0.	0.075	257	0.	20.87	0.069
528	2.51	2.51	74	0.	5.99	277.	64	0.	0.017	55	0.	4.50	0.015
529	2.51	2.51	293	0.	23.82	1102.	259	0.	0.069	242	0.	19.61	0.064
530	2.51	2.51	378	0.	30.71	1421.	336	0.	0.090	325	0.	26.36	0.087
531	2.51	2.51	411	0.	33.37	1544.	365	0.	0.097	350	0.	28.43	0.093
532	2.51	2.51	419	0.	34.05	1576.	374	0.	0.100	379	0.	30.79	0.101
533	2.51	2.51	435	0.	35.28	1633.	388	0.	0.103	391	0.	31.77	0.104
534	2.51	2.51	440	0.	35.69	1652.	392	0.	0.105	385	0.	31.22	0.103
535	2.51	2.51	432	0.	35.04	1622.	387	0.	0.103	378	0.	30.65	0.101
536	2.51	2.51	281	0.	22.82	1056.	245	0.	0.065	175	0.	14.20	0.047
537	2.51	2.51	255	0.	20.69	958.	223	0.	0.060	152	0.	12.36	0.041
538	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
539	2.51	2.51	123	0.	9.95	460.	109	0.	0.029	66	0.	5.35	0.018
540	2.51	2.51	283	0.	22.93	1061.	252	0.	0.067	238	0.	19.28	0.063
541	2.51	2.51	344	0.	27.91	1292.	306	0.	0.082	307	0.	24.93	0.082
542	2.51	2.51	421	0.	34.16	1581.	375	0.	0.100	372	0.	30.16	0.099
543	2.51	2.51	444	0.	36.01	1667.	395	0.	0.105	390	0.	31.68	0.104
544	2.51	2.51	306	0.	24.81	1148.	268	0.	0.072	202	0.	16.38	0.054
545	2.51	2.51	147	0.	11.92	552.	133	0.	0.036	94	0.	7.62	0.025
546	2.51	2.51	274	0.	22.26	1030.	246	0.	0.066	235	0.	19.05	0.063
547	2.51	2.51	313	0.	25.40	1176.	279	0.	0.075	281	0.	22.80	0.075
548	2.51	2.51	407	0.	33.05	1530.	363	0.	0.097	350	0.	28.44	0.094
549	2.51	2.51	441	0.	35.84	1659.	394	0.	0.105	392	0.	31.79	0.105
550	2.51	2.51	334	0.	27.11	1255.	300	0.	0.080	242	0.	19.62	0.065
551	2.51	2.51	168	0.	13.64	632.	155	0.	0.041	128	0.	10.37	0.034
552	2.51	2.51	252	0.	20.46	947.	228	0.	0.061	217	0.	17.65	0.058
553	2.51	2.51	257	0.	20.83	964.	229	0.	0.061	229	0.	18.55	0.061
554	2.51	2.51	359	0.	29.14	1349.	320	0.	0.086	299	0.	24.29	0.080
555	2.51	2.51	414	0.	33.58	1554.	370	0.	0.099	369	0.	29.95	0.098
556	2.51	2.51	356	0.	28.87	1336.	325	0.	0.087	283	0.	22.94	0.075
557	2.51	2.51	124	0.	10.05	465.	116	0.	0.031	120	0.	9.78	0.032
558	2.51	2.51	158	0.	12.83	594.	143	0.	0.038	151	0.	12.29	0.040
559	2.51	2.51	151	0.	12.26	567.	131	0.	0.035	138	0.	11.19	0.037
560	2.51	2.51	242	0.	19.66	910.	214	0.	0.057	202	0.	16.37	0.054
561	2.51	2.51	310	0.	25.19	1166.	277	0.	0.074	283	0.	22.99	0.076
562	2.51	2.51	308	0.	24.97	1156.	276	0.	0.074	275	0.	22.35	0.073
563	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
564	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	12	0.	0.96	0.003
565	2.51	2.51	28	0.	2.31	107.	14	0.	0.004	31	0.	2.55	0.008
566	2.51	2.51	41	0.	3.30	153.	29	0.	0.008	52	0.	4.18	0.014
567	2.51	2.51	46	0.	3.75	173.	35	0.	0.009	71	0.	5.78	0.019
568	2.51	2.51	52	0.	4.24	196.	43	0.	0.011	92	0.	7.48	0.025
569	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
570	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
571	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	9	0.	0.74	0.002
572	2.51	2.51	7	0.	0.55	26.	0.	0.	0.000	11	0.	0.88	0.003
573	2.51	2.51	72	0.	5.87	272.	57	0.	0.015	64	0.	5.23	0.017
574	2.51	2.51	94	0.	7.65	354.	77	0.	0.021	65	0.	5.26	0.017
575	2.51	2.51	58	0.	4.71	218.	45	0.	0.012	40	0.	3.28	0.011
576	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
577	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
578	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
579	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
580	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
581	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
582	2.51	2.51	0.	0.	0.00	1.	0.	0.	0.000	0.	0.	0.00	0.000
583	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
584	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
585	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
586	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
587	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
588	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
589	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
590	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
591	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
592	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
593	2.51	2.51	157	0.	12.72	589.	133	0.	0.036	146	0.	11.82	0.039
594	2.51	2.51	203	0.	16.47	763.	178	0.	0.048	166	0.	13.47	0.044
595	2.51	2.51	161	0.	13.09	606.	140	0.	0.037	128	0.	10.41	0.034
596	2.51	2.51	125	0.	10.13	469.	108	0.	0.029	91	0.	7.37	0.024
597	2.51	2.51	74	0.	6.02	279.	65	0.	0.017	59	0.	4.82	0.016
598	2.51	2.51	28	0.	2.30	107.	27	0.	0.007	23	0.	1.85	0.006
599	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
600	2.51	2.51	142	0.	11.57	536.	126	0.	0.034	125	0.	10.14	0.033
601	2.51	2.51	218	0.	17.72	820.	193	0.	0.051	195	0.	15.85	0.052
602	2.51	2.51	200	0.	16.24	752.	175	0.	0.047	169	0.	13.71	0.045
603	2.51	2.51	157	0.	12.73	590.	138	0.	0.037	131	0.	10.64	0.035

604	2.51	2.51	119	0.	9.67	447.	105	0.	0.028	99	0.	8.07	0.027
605	2.51	2.51	86	0.	6.96	322.	78	0.	0.021	71	0.	5.78	0.019
606	2.51	2.51	70	0.	5.70	264.	67	0.	0.018	57	0.	4.63	0.015
607	2.51	2.51	211	0.	17.15	794.	186	0.	0.050	157	0.	12.74	0.042
608	2.51	2.51	233	0.	18.89	874.	204	0.	0.055	217	0.	17.65	0.058
609	2.51	2.51	207	0.	16.78	777.	181	0.	0.048	180	0.	14.62	0.048
610	2.51	2.51	153	0.	12.44	576.	134	0.	0.036	135	0.	10.95	0.036
611	2.51	2.51	112	0.	9.07	420.	99	0.	0.026	102	0.	8.28	0.027
612	2.51	2.51	82	0.	6.63	307.	74	0.	0.020	79	0.	6.44	0.021
613	2.51	2.51	64	0.	5.21	241.	61	0.	0.016	70	0.	5.66	0.019
614	2.51	2.51	201	0.	16.34	757.	176	0.	0.047	181	0.	14.70	0.048
615	2.51	2.51	197	0.	15.98	740.	172	0.	0.046	192	0.	15.62	0.051
616	2.51	2.51	164	0.	13.31	616.	141	0.	0.038	147	0.	11.94	0.039
617	2.51	2.51	115	0.	9.33	432.	99	0.	0.027	108	0.	8.75	0.029
618	2.51	2.51	76	0.	6.21	288.	66	0.	0.018	79	0.	6.44	0.021
619	2.51	2.51	39	0.	3.20	148.	37	0.	0.010	53	0.	4.32	0.014
620	2.51	2.51	15	0.	1.26	58.	20	0.	0.005	33	0.	2.64	0.009
621	2.51	2.51	67	0.	5.46	253.	65	0.	0.018	83	0.	6.77	0.022
622	2.51	2.51	85	0.	6.90	319.	80	0.	0.021	93	0.	7.57	0.025
623	2.51	2.51	116	0.	9.39	435.	107	0.	0.029	101	0.	8.22	0.027
624	2.51	2.51	11	0.	0.87	40.	14	0.	0.004	46	0.	3.70	0.012
625	2.51	2.51	115	0.	9.35	433.	104	0.	0.028	123	0.	9.96	0.033
626	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	47	0.	3.83	0.013
627	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
628	2.51	2.51	219	0.	17.76	822.	188	0.	0.050	190	0.	15.43	0.051
629	2.51	2.51	259	0.	21.03	973.	226	0.	0.060	191	0.	15.46	0.051
630	2.51	2.51	186	0.	15.13	700.	161	0.	0.043	151	0.	12.30	0.040
631	2.51	2.51	128	0.	10.37	480.	115	0.	0.031	126	0.	10.25	0.034
632	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
633	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
634	2.51	2.51	225	0.	18.23	844.	194	0.	0.052	187	0.	15.14	0.050
635	2.51	2.51	308	0.	25.01	1157.	272	0.	0.072	253	0.	20.57	0.068
636	2.51	2.51	212	0.	17.21	797.	184	0.	0.049	167	0.	13.55	0.045
637	2.51	2.51	110	0.	8.96	415.	101	0.	0.027	93	0.	7.57	0.025
638	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
639	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
640	2.51	2.51	225	0.	18.27	846.	195	0.	0.052	165	0.	13.38	0.044
641	2.51	2.51	294	0.	23.86	1104.	256	0.	0.068	247	0.	20.09	0.066
642	2.51	2.51	256	0.	20.77	961.	218	0.	0.058	195	0.	15.80	0.052
643	2.51	2.51	120	0.	9.72	450.	109	0.	0.029	131	0.	10.61	0.035
644	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
645	2.51	2.51	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
646	2.51	2.51	195	0.	15.82	732.	169	0.	0.045	177	0.	14.36	0.047
647	2.51	2.51	200	0.	16.24	752.	172	0.	0.046	168	0.	13.62	0.045
648	2.51	2.51	204	0.	16.58	767.	177	0.	0.047	181	0.	14.66	0.048

© In detta area, oltre all'armatura di ffusa, è stata integrata armatura aggiuntiva per soddisfare le verifiche.

13. VERIFICA TRAVI CONTINUE - FONDAZIONE

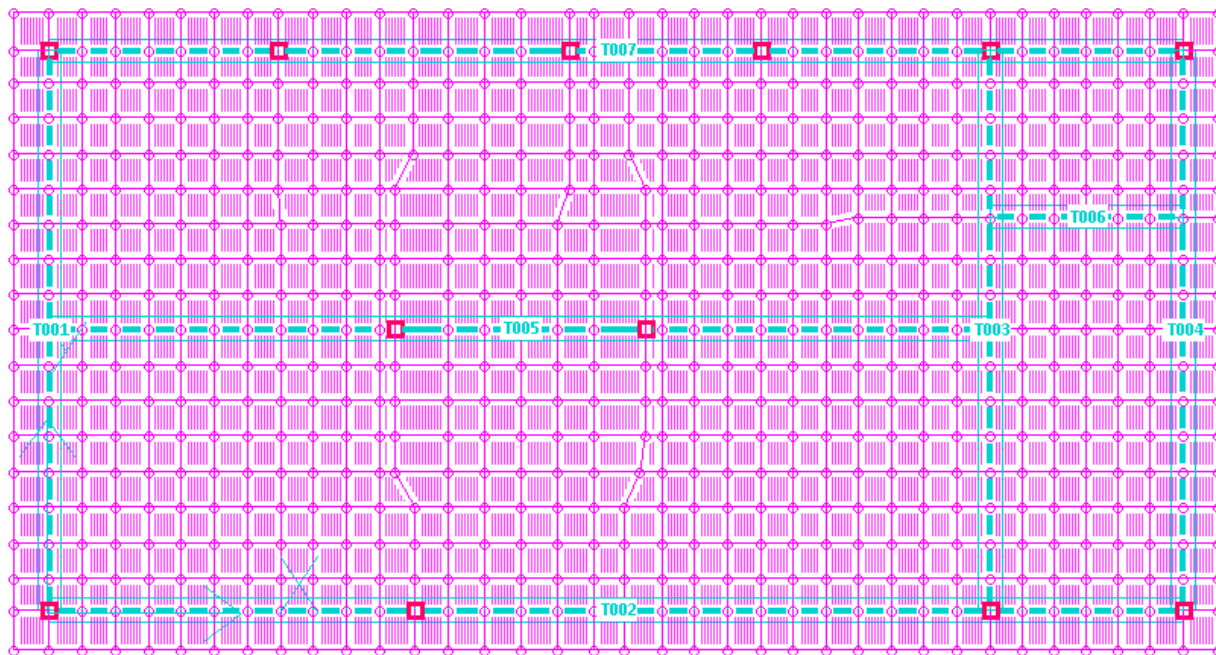


IMMAGINE MODELLO DI CALCOLO – NOMENCLATURA TRAVI DI FONDAZIONE

VERIFICA TRAVATA IN CEMENTO ARMATO

Nome travata : 2 - Travata T001 (fondazione)
 Metodo di verifica : stati limite (NTC18). ->
 Duttilità : non prevista (struttura non dissipativa).
 Unità di misura : cm; daN; daN/cm; daNcm; daN/cm2; deform. %.
 Unità particolari : fessure [Wk]:mm - ferri: mm e cm2 - sezioni: cm e derivate.
 Copri ferri (assi) : longitudinali= 3.5 ; staffe= 2.5

MATERIALI

CLS : Rck =300. ; fck=249. ; fctk= 17.9; fctm= 25.6; Ec= 314472. ;
 gc =1.5 ; fcd=141.1; fbd= 26.9; fctd= 11.9; Ecd=.2% (limite elastico)
 ACCIAIO : B450C; ftk=5175. ; fyk=4500. ; Es=2100000. ;
 gs =1.15; fyd=3913. ; ftd(k*fyd)=4500. ; fud=4439.8; Eud=.19% (limite elastico)

TENSIONI E FESSURE MASSIME IN ESERCIZIO

GRUPPO : ordinario.
 CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112. ; fbd(esercizio)= 26.9
 ACCIAIO : σ_f (rara)=3600.; Coeff. Omogeneizzazione= 15
 FESSURE : Wdmax(fre.)=.4 ; Wdmax(q.p.)=.3 [4.1.2.2.4.5];
 kt=.4 [EN 1992-1 7.3.4].

CASI DI CARICO DA MODELLO 3D

SLU		
Nome	Descrizione	Sest
1.	SLU	1.
2.	SLU VENTOX	2.
3.	SLU VENTOY	2.
6.	SLU con SISMAY PRINC16	
7.	SLU con SISMAY PRINC16	
10.	SLU FON con SISMAY P16	
11.	SLU FON con SISMAY P16	

RARE			FREQUENTI			QUASI PERMANENTI		
Nome	Descrizione	Sest	Nome	Descrizione	Sest	Nome	Descrizione	Sest
18.	Rara	1.	21.	Frequente	1.	24.	Quasi Perm	1.
19.	Rara VentoX	2.	22.	Frequente VentoX	2.			
20.	Rara VentoY	2.	23.	Frequente VentoY	2.			

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SEZIONI UTILIZZATE

3) Rettangolare: 35X65; A=2275.; Jg=800990.; E=314471.6

DESCRIZIONE CAMPATE

Cam.	Descriz.	S. ini	Sez.	S. fin	Incl.	L. assi	L. net.	lambda	K	r. Ar.	lam. max
1	A214	3	3	3	0	415.	322.	6.385	1.3	1.125	25.5
2	A222	3	3	3	0	410.	317.	6.308	1.3	1.131	25.651

VERIFICHE ALLO STATO LIMITE ULTIMO

FLESSIONE:

Progressive ve	SE	Ar	Msd	Epscl	Epsac	Mrd	Epscl	Epsac	Cam	x/d	Mr/Ms	VE	
> 0.	0.	3.	1.	-1548089.	! -054	161	-1787168.	-062	186	2.	251	1.154	SI
0.	0.	3.	1.	1960308.	! -067	166	2204890.	-076	186	2.	289	1.125	SI
262.	262.	3.	1.	94074.	-003	008	2204890.	-076	186	2.	289	23.44	SI
350.	350.	3.	2.	942321.	-021	04	4352666.	-106	186	2.	364	4.619	SI
415.	415.	3.	2.	-1097370.	-025	058	-3544374.	-084	186	2.	31	3.23	SI
415.	415.	3.	2.	1320611.	-03	056	4352666.	-106	186	2.	364	3.296	SI
> 415.	0.	3.	2.	-1107966.	-025	058	-3544374.	-084	186	2.	31	3.199	SI
415.	0.	3.	2.	1339122.	-031	057	4352666.	-106	186	2.	364	3.25	SI
566.	151.	3.	1.	125105.	-004	011	2204890.	-076	186	2.	289	17.62	SI
797.	382.	3.	1.	1948796.	! -066	165	2204890.	-076	186	2.	289	1.131	SI
825.	410.	3.	1.	-1622477.	! -056	169	-1787168.	-062	186	2.	251	1.102	SI
825.	410.	3.	1.	1948796.	-066	165	2204890.	-076	186	2.	289	1.131	SI

TAGLIO:

Progressive ve	Se	Ar	Vsd	VRd	VRcd	VRsd	Asw	s	ctgT	Ve
> 0.	0.	3.	-8926.	7397.	47129.	36289.	1.01	15.	2.5	SI
0.	0.	3.	3021.	7397.	47129.	36289.	1.01	15.	2.5	SI
43.	43.	3.	-9567.	7397.	47129.	36289.	1.01	15.	2.5	SI
58.	58.	3.	-8558.	8531.	47129.	36289.	1.01	15.	2.5	SI
366.	366.	3.	10595.	8531.	47129.	36289.	1.01	15.	2.5	SI
415.	415.	3.	-6185.	7397.	47129.	36289.	1.01	15.	2.5	SI
415.	415.	3.	9942.	7397.	47129.	36289.	1.01	15.	2.5	SI
> 415.	0.	3.	-10120.	7397.	47129.	36289.	1.01	15.	2.5	SI
415.	0.	3.	6468.	7397.	47129.	36289.	1.01	15.	2.5	SI
429.	14.	3.	-10307.	8531.	47129.	36289.	1.01	15.	2.5	SI
464.	49.	3.	-10773.	8531.	47129.	36289.	1.01	15.	2.5	SI
782.	367.	3.	9288.	7397.	47129.	36289.	1.01	15.	2.5	SI
825.	410.	3.	-3854.	7397.	47129.	36289.	1.01	15.	2.5	SI
825.	410.	3.	8639.	7397.	47129.	36289.	1.01	15.	2.5	SI

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

TENSIONI DI ESERCIZIO E FESSURAZIONE - RARE:

Progressive ve	Se	Ar	Momento	σc	σf	As	hc, ef	Eps%	Sr, max	Wd	Ve	
> 0.	0.	3.	1.	308712. !	-14.1 !	545.5	10.05	8.75	.0156	17.47	.027	SI
28.	28.	3.	1.	195722.	-8.9	345.9	10.05	8.75	.0099	17.47	.017	SI
174.	174.	3.	1.	-250878. !	-11.9	548. !	8.04	8.75	.0157	19.54	.031	SI
415.	415.	3.	2.	228835.	-7.3	204.8	20.11	8.75	.0059	13.32	.008	SI
> 415.	0.	3.	2.	232422.	-7.4	208.	20.11	8.75	.0059	13.32	.008	SI
653.	238.	3.	1.	-230189. !	-10.9	502.8 !	8.04	8.75	.0144	19.54	.028	SI
825.	410.	3.	1.	256785. !	-11.7	453.8	10.05	8.75	.013	17.47	.023	SI

TENSIONI DI ESERCIZIO E FESSURAZIONE - FREQUENTI:

Progressive ve	Se	Ar	Momento	σc	σf	As	hc, ef	Eps%	Sr, max	Wd	Ve	
> 0.	0.	3.	1.	226630. !	-10.3 !	400.5 !	10.05	8.75	.0114	17.47	.02	SI
43.	43.	3.	1.	80412.	-3.7	142.1	10.05	8.75	.0041	17.47	.007	SI
218.	218.	3.	1.	-203035. !	-9.6	443.5 !	8.04	8.75	.0127	19.54	.025 !	SI
415.	415.	3.	2.	135063.	-4.3	120.9	20.11	8.75	.0035	13.32	.005	SI
> 415.	0.	3.	2.	138947.	-4.4	124.4	20.11	8.75	.0036	13.32	.005	SI
610.	195.	3.	1.	-184502. !	-8.7 !	403. !	8.04	8.75	.0115	19.54	.022 !	SI
825.	410.	3.	1.	181884. !	-8.3	321.4	10.05	8.75	.0092	17.47	.016	SI

TENSIONI DI ESERCIZIO E FESSURAZIONE - QUASI PERMANENTI:

Progressive ve	Se	Ar	Momento	σ_c	σ_f	As	hc, ef	Eps%	Sr, max	Wd	Ve	
> 0.	0.	3.	1.	206109.!	-9.4!	364.2	10.05	8.75	.0104	17.47	.018	SI
43.	43.	3.	1.	68044.	-3.1	120.2	10.05	8.75	.0034	17.47	.006	SI
218.	218.	3.	1.	-192109.!	-9.1	419.7!	8.04	8.75	.012	19.54	.023!	SI
415.	415.	3.	2.	111620.	-3.6	99.9	20.11	8.75	.0029	13.32	.004	SI

> 415.	0.	3.	2.	115578.	-3.7	103.4	20.11	8.75	.003	13.32	.004	SI
610.	195.	3.	1.	-174691.	-8.3	381.6	8.04	8.75	.0109	19.54	.021	SI
825.	410.	3.	1.	163159.	-7.4	288.3	10.05	8.75	.0082	17.47	.014	SI

ARMATURE LONGITUDINALI (%=100*Af/Acl s - Acl s=area intera sezione)

Nro	Totale	%	Super.	%	Barre	Infer.	%	Barre
1	18.1	.795	8.04	.354	4d16	10.05	.442	5d16
2	36.19	1.591	16.08	.707	4d16 +4d16	20.11	.884	5d16 +5d16

VERIFICA TRAVATA IN CEMENTO ARMATO

Nome travata : 7 - Travata T002 (fondazione)
 Metodo di verifica : stati limite (NTC18). ->
 Duttilita' : non prevista (struttura non dissipativa).
 Unita' di misura : cm; daN; daN/cm; daN/cm2; daN/cm2; deForm. %.
 Unita' particolari : fessure [Wk]:mm - ferri: mm e cm2 - sezioni: cm e derivate.
 Copri ferri (assi) : longitudinali= 3.5 ; staffe= 2.5

MATERIALI

CLS : Rck =300. ; fck=249. ; fctk= 17.9; fctm= 25.6; Ec= 314472. ;
 gc =1.5 ; fcd=141.1; fbd= 26.9; fctd= 11.9; Ecu= .2% (limite elastico)
 ACCIAIO : B450C; ftk=5175. ; fyk=4500. ; Es=2100000. ;
 gs =1.15; fyd=3913. ; ftd(k*fyd)=4500. ; Fud=4439.8; Eud=.19% (limite elastico)

TENSIONI E FESSURE MASSIME IN ESERCIZIO

GRUPPO : ordinario.
 CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112. ; fbd(esercizio)= 26.9
 ACCIAIO : σ_f (rara)=3600. ; Coeff. Omogeneizzazione= 15
 FESSURE : Wdmax(fre.)=.4 ; Wdmax(q.p.)=.3 [4.1.2.2.4.5];
 kt=.4 [EN 1992-1 7.3.4].

CASI DI CARICO DA MODELLO 3D

Nome	Descrizione	Sest
1.	SLU	1.
2.	SLU VENTOX	2.
3.	SLU VENTOY	2.
6.	SLU con SISMAX PRINC16	
7.	SLU con SISMAX PRINC16	
10.	SLU FON con SISMAX P16	
11.	SLU FON con SISMAX P16	

RARE			FREQUENTI			QUASI PERMANENTI		
Nome	Descrizione	Sest	Nome	Descrizione	Sest	Nome	Descrizione	Sest
18.	Rara	1.	21.	Frequente	1.	24.	Quasi Perm	1.
19.	Rara VentoX	2.	22.	Frequente VentoX	2.			
20.	Rara VentoY	2.	23.	Frequente VentoY	2.			

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SEZIONI UTILIZZATE

3) Rettangolare: 35X65; A=2275. ; Jg=800990. ; E=314471.6

DESCRIZIONE CAMPATE

Cam.	Descriz.	S. ini	Sez.	S. fin	Incl.	L. assi	L. net.	lambda	K	r. Ar.	lam. max
1	A65	3	3	3	0	540.	492.	8.308	1.3	1.834	53.514
2	A87	3	3	3	0	310.	240.	4.769	1.5	2.427	81.718
3	A99	3	3	3	0	540.	492.	8.308	1.5	1.853	62.395
4	A121	3	3	3	0	285.	260.	4.385	1.3	3.345	97.611

VERIFICHE ALLO STATO LIMITE ULTIMO

FLESSIONE:

Progressive	SE	Ar	Msd	Epscl	Epsac	Mrd	Epscl	Epsac	Cam	x/d	Mr/Ms	VE	
> 0.	0.	3.	1.	-342782.	-.016	.062	-1034851.	-.05	.186	2.	.21	3.019	SI
0.	0.	3.	1.	272640.	-.013	.049	1034851.	-.05	.186	2.	.21	3.796	SI
202.	202.	3.	1.	-599018.	-.028	.108	-1034851.	-.05	.186	2.	.21	1.728	SI
338.	338.	3.	1.	295.	0.	0.	1034851.	-.05	.186	2.	.21	3504.	SI
429.	429.	3.	2.	-392973.	-.016	.07	-1041841.	-.044	.186	2.	.192	2.651	SI
429.	429.	3.	2.	447681.	-.016	.041	2013710.	-.077	.186	2.	.294	4.498	SI
475.	475.	3.	3.	792020.	-.026	.072	2038644.	-.07	.186	2.	.272	2.574	SI
512.	512.	3.	3.	1111528.	-.037	.101	2038644.	-.07	.186	2.	.272	1.834	SI
540.	540.	3.	3.	-349843.	-.011	.032	-2038644.	-.07	.186	2.	.272	5.827	SI
540.	540.	3.	3.	1111528.	-.037	.101	2038644.	-.07	.186	2.	.272	1.834	SI

> 540.	0.	3.	3.	-66821.	- .002	.006	-2038644.	- .07	.186	2.	.272	30.51	SI
540.	0.	3.	3.	839885.	- .028	.077	2038644.	- .07	.186	2.	.272	2.427	SI
641.	101.	3.	1.	-89722.	- .004	.016	-1034851.	- .05	.186	2.	.21	11.53	SI
787.	247.	3.	1.	540191.	- .025	.097	1034851.	- .05	.186	2.	.21	1.916	SI
801.	261.	3.	3.	-136041.	- .004	.012	-2038644.	- .07	.186	2.	.272	14.99	SI
850.	310.	3.	3.	-111754.	- .004	.01	-2038644.	- .07	.186	2.	.272	18.24	SI
850.	310.	3.	3.	753582.	- .025	.069	2038644.	- .07	.186	2.	.272	2.705	SI
> 850.	0.	3.	3.	-344293.	- .011	.031	-2038644.	- .07	.186	2.	.272	5.921	SI
850.	0.	3.	3.	1099986.	- .037	.1	2038644.	- .07	.186	2.	.272	1.853	SI
961.	111.	3.	2.	-368886.	- .015	.066	-1041841.	- .044	.186	2.	.192	2.824	SI
961.	111.	3.	2.	424985.	- .015	.039	2013710.	- .077	.186	2.	.294	4.738	SI
1143.	293.	3.	1.	-455892.	- .021	.082	-1034851.	- .05	.186	2.	.21	2.27	SI
1378.	528.	3.	3.	-4378.	0.	0.	-2038644.	- .07	.186	2.	.272	465.6	SI
1390.	540.	3.	3.	551031.	- .018	.05	2038644.	- .07	.186	2.	.272	3.7	SI
>1390.	0.	3.	3.	609380.	- .02	.056	2038644.	- .07	.186	2.	.272	3.345	SI
1418.	28.	3.	3.	-47086.	- .002	.004	-2038644.	- .07	.186	2.	.272	43.3	SI
1455.	65.	3.	1.	438441.	- .02	.079	1034851.	- .05	.186	2.	.21	2.36	SI
1675.	285.	3.	1.	-302510.	- .014	.054	-1034851.	- .05	.186	2.	.21	3.421	SI
1675.	285.	3.	1.	264815.	- .012	.048	1034851.	- .05	.186	2.	.21	3.908	SI

TAGLIO:

Progressive	Se	Vsd	VRd	VRcd	VRsd	Asw	s	ctgT	Ve	
> 0.	0.	3.	-5971.	7397.	47129.	36289.	1.01	15.	2.5	SI
0.	0.	3.	1324.	7397.	47129.	36289.	1.01	15.	2.5	SI
40.	40.	3.	-6368.	7397.	47129.	36289.	1.01	15.	2.5	SI
491.	491.	3.	9210.	7397.	47129.	36289.	1.01	15.	2.5	SI
540.	540.	3.	-4.	7397.	47129.	36289.	1.01	15.	2.5	SI
540.	540.	3.	8622.	7397.	47129.	36289.	1.01	15.	2.5	SI
> 540.	0.	3.	-6586.	7397.	47129.	36289.	1.01	15.	2.5	SI
589.	49.	3.	-7445.	7397.	47129.	36289.	1.01	15.	2.5	SI
815.	275.	3.	6515.	7397.	47129.	36289.	1.01	15.	2.5	SI
850.	310.	3.	5916.	7397.	47129.	36289.	1.01	15.	2.5	SI
> 850.	0.	3.	-8435.	7397.	47129.	36289.	1.01	15.	2.5	SI
899.	49.	3.	-9018.	7397.	47129.	36289.	1.01	15.	2.5	SI
1350.	500.	3.	6822.	7397.	47129.	36289.	1.01	15.	2.5	SI
1390.	540.	3.	6099.	7397.	47129.	36289.	1.01	15.	2.5	SI
>1390.	0.	3.	-5290.	7397.	47129.	36289.	1.01	15.	2.5	SI
1430.	40.	3.	-6007.	7397.	47129.	36289.	1.01	15.	2.5	SI
1635.	245.	3.	4783.	7397.	47129.	36289.	1.01	15.	2.5	SI
1675.	285.	3.	-3382.	7397.	47129.	36289.	1.01	15.	2.5	SI
1675.	285.	3.	4387.	7397.	47129.	36289.	1.01	15.	2.5	SI

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

TENSIONI DI ESERCIZIO E FESSURAZIONE - RARE:

Progressive	Se	Ar	Momento	σc	σf	As	hc, ef	Eps%	Sr, max	Wd	Ve	
12.	12.	3.	1.	-85302.	-5.5	321.7	4.62	8.75	.0092	25.3	.023	SI
28.	28.	3.	1.	-133120.	-8.7	502.1	4.62	8.75	.0143	25.3	.036	SI
202.	202.	3.	1.	-438702.	-28.5	1654.6	4.62	8.75	.0473	25.3	.12	SI
540.	540.	3.	3.	539172.	-24.7	1031.6	9.24	8.75	.0297	17.41	.052	SI
> 540.	0.	3.	3.	534840.	-24.5	1023.3	9.24	8.75	.0293	17.41	.051	SI
713.	173.	3.	1.	31040.	-2.	117.1	4.62	8.75	.0033	25.3	.008	SI
850.	310.	3.	3.	448928.	-20.6	858.9	9.24	8.75	.0245	17.41	.043	SI
> 850.	0.	3.	3.	531492.	-24.3	1016.9	9.24	8.75	.0291	17.41	.051	SI
1143.	293.	3.	1.	-331145.	-21.5	1249.	4.62	8.75	.0357	25.3	.09	SI
1390.	540.	3.	3.	399341.	-18.3	764.1	9.24	8.75	.0218	17.41	.038	SI
>1390.	0.	3.	3.	440046.	-20.2	841.9	9.24	8.75	.0241	17.41	.042	SI
1455.	65.	3.	1.	178835.	-11.6	674.5	4.62	8.75	.0193	25.3	.049	SI
1610.	220.	3.	1.	-93861.	-6.1	354.	4.62	8.75	.0101	25.3	.026	SI
1675.	285.	3.	1.	-46854.	-3.	176.7	4.62	8.75	.005	25.3	.013	SI

TENSIONI DI ESERCIZIO E FESSURAZIONE - FREQUENTI:

Progressive	Se	Ar	Momento	σc	σf	As	hc, ef	Eps%	Sr, max	Wd	Ve	
12.	12.	3.	1.	-58699.	-3.8	221.4	4.62	8.75	.0063	25.3	.016	SI
28.	28.	3.	1.	-99569.	-6.5	375.5	4.62	8.75	.0107	25.3	.027	SI
202.	202.	3.	1.	-368001.	-23.9	1388.	4.62	8.75	.0397	25.3	.1	SI
540.	540.	3.	3.	417751.	-19.1	799.3	9.24	8.75	.0228	17.41	.04	SI
> 540.	0.	3.	3.	426014.	-19.5	815.1	9.24	8.75	.0233	17.41	.041	SI
713.	173.	3.	1.	23194.	-1.5	87.5	4.62	8.75	.0025	25.3	.006	SI
850.	310.	3.	3.	354719.	-16.2	678.7	9.24	8.75	.0194	17.41	.034	SI
> 850.	0.	3.	3.	411429.	-18.8	787.2	9.24	8.75	.0225	17.41	.039	SI
1143.	293.	3.	1.	-282444.	-18.4	1065.3	4.62	8.75	.0304	25.3	.077	SI
1390.	540.	3.	3.	325706.	-14.9	623.2	9.24	8.75	.0178	17.41	.031	SI
>1390.	0.	3.	3.	365174.	-16.7	698.7	9.24	8.75	.02	17.41	.035	SI
1455.	65.	3.	1.	147026.	-9.6	554.5	4.62	8.75	.0158	25.3	.04	SI
1571.	181.	3.	1.	-68527.	-4.5	258.5	4.62	8.75	.0074	25.3	.019	SI
1675.	285.	3.	1.	-24449.	-1.6	92.2	4.62	8.75	.0026	25.3	.007	SI

TENSIONI DI ESERCIZIO E FESSURAZIONE - QUASI PERMANENTI:

Progressive	Se	Ar	Momento	σc	σf	As	hc,ef	Eps%	Sr, max	Wd	Ve
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12.	12.	3.	1.	-52049.	-3.4	196.3	4.62	8.75	.0056	25.3	.014	SI
28.	28.	3.	1.	-91181.	-5.9	343.9	4.62	8.75	.0098	25.3	.025	SI
202.	202.	3.	1.	-350326.	-22.8	1321.3	4.62	8.75	.0378	25.3	.096	SI
540.	540.	3.	3.	387396.	-17.7	741.2	9.24	8.75	.0212	17.41	.037	SI
> 540.	0.	3.	3.	398807.	-18.3	763.	9.24	8.75	.0218	17.41	.038	SI
713.	173.	3.	1.	21232.	-1.4	80.1	4.62	8.75	.0023	25.3	.006	SI
850.	310.	3.	3.	331167.	-15.2	633.6	9.24	8.75	.0181	17.41	.032	SI
> 850.	0.	3.	3.	381413.	-17.5	729.8	9.24	8.75	.0209	17.41	.036	SI
1143.	293.	3.	1.	-270269.	-17.6	1019.4	4.62	8.75	.0291	25.3	.074	SI
1390.	540.	3.	3.	307298.	-14.1	588.	9.24	8.75	.0168	17.41	.029	SI
>1390.	0.	3.	3.	346456.	-15.9	662.9	9.24	8.75	.0189	17.41	.033	SI
1455.	65.	3.	1.	139074.	-9.	524.5	4.62	8.75	.015	25.3	.038	SI
1571.	181.	3.	1.	-62601.	-4.1	236.1	4.62	8.75	.0067	25.3	.017	SI
1675.	285.	3.	1.	-18847.	-1.2	71.1	4.62	8.75	.002	25.3	.005	SI

ARMATURE LONGITUDINALI (%=100*Af/Acl s - Acl s=area intera sezione)

Nro	Totale	%	Super.	%	Barre	Infer.	%	Barre
1	9.24	.406	4.62	.203	3d14	4.62	.203	3d14
2	13.85	.609	4.62	.203	3d14	9.24	.406	3d14 +3d14
3	18.47	.812	9.24	.406	3d14 +3d14	9.24	.406	3d14 +3d14

VERIFICA TRAVATA IN CEMENTO ARMATO

Nome travata : 5 - Travata T003 (fondazione)
 Metodo di verifica : stati limite (NTC18). ->
 Duttilita' : non prevista (struttura non dissipativa).
 Unità di misura : cm; daN; daN/cm; daNcm; daN/cm2; deform. %.
 Unità particolari : fessure [Wk]:mm - ferri:mm e cm2 - sezioni:cm e derivate.
 Copri ferri (assi) : longitudinali= 3.5 ; staffe= 2.5

MATERIALI

CLS : Rck =300. ; fck=249. ; fctk= 17.9; fctm= 25.6; Ec= 314472. ;
 gc =1.5 ; fcd=141.1; fbd= 26.9; fctd= 11.9; Ecud=. 2% (limite elastico)
 ACCIAIO : B450C; ftk=5175. ; fyk=4500. ; Es=2100000. ;
 gs =1.15; fyd=3913. ; ftd(k*fyd)=4500. ; fud=4439.8; Eud=. 19% (limite elastico)

TENSIONI E FESSURE MASSIME IN ESERCIZIO

GRUPPO : ordinario.
 CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112. ; fbd(esercizio)= 26.9
 ACCIAIO : σ_f (rara)=3600. ; Coeff.Omogeneizzazi one= 15
 FESSURE : Wdmax(fre.)=. 4 ; Wdmax(q.p.)=. 3 [4.1.2.2.4.5];
 kt=. 4 [EN 1992-1 7.3.4].

CASI DI CARICO DA MODELLO 3D

Nome	Descrizione	Sest
1.	SLU	1.
2.	SLU VENTOX	2.
3.	SLU VENTOY	2.
6.	SLU con SISMAX PRINC16	
7.	SLU con SISMAX PRINC16	
10.	SLU FON con SISMAX P16	
11.	SLU FON con SISMAX P16	

Nome	Descrizione	Sest	Nome	Descrizione	Sest	Nome	Descrizione	Sest
18.	Rara	1.	21.	Frequente	1.	24.	Quasi Perm	1.
19.	Rara VentoX	2.	22.	Frequente VentoX	2.			
20.	Rara VentoY	2.	23.	Frequente VentoY	2.			

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SEZIONI UTILIZZATE

3) Rettangolare: 35X65; A=2275. ; Jg=800990. ; E=314471.6

DESCRIZIONE CAMPATE

Cam.	Descriz.	S. ini	Sez.	S. fin	Incl.	L. assi	L. net.	Lambda	K	r. Ar.	I am. max
1	A302	3	3	3	0	415.	390.	6.385	1.3	5.	145.887
2	A306	3	3	3	0	410.	385.	6.308	1.3	2.921	85.223

VERIFICHE ALLO STATO LIMITE ULTIMO

FLESSIONE:

Progressive|SE|Ar| Msd Epscl Epsac| Mrd Epscl Epsac Cam x/d |Mr/Ms|VE|

>	0.	0.	3.	1.	-321909.	-.015	.058	-1034851.	-.05	.186	2.	.21	3.215	SI
	0.	0.	3.	1.	333137.	-.016	.06	1034851.	-.05	.186	2.	.21	3.106	SI
	146.	146.	3.	1.	-459899.	-.022	.083	-1034851.	-.05	.186	2.	.21	2.25	SI
	350.	350.	3.	2.	-133963.	-.004	.012	-2038644.	-.07	.186	2.	.272	15.22	SI
	350.	350.	3.	2.	152424.	-.005	.014	2038644.	-.07	.186	2.	.272	13.38	SI
	387.	387.	3.	2.	-6704.	0.	.001	-2038644.	-.07	.186	2.	.272	304.1	SI
	387.	387.	3.	2.	348186.	-.011	.032	2038644.	-.07	.186	2.	.272	5.855	SI
	415.	415.	3.	2.	348186.	-.011	.032	2038644.	-.07	.186	2.	.272	5.855	SI
>	415.	0.	3.	2.	346478.	-.011	.032	2038644.	-.07	.186	2.	.272	5.884	SI
	455.	40.	3.	2.	-8049.	0.	.001	-2038644.	-.07	.186	2.	.272	253.3	SI
	720.	305.	3.	1.	-470682.	-.022	.085	-1034851.	-.05	.186	2.	.21	2.199	SI
	797.	382.	3.	1.	354296.	-.016	.064	1034851.	-.05	.186	2.	.21	2.921	SI
	825.	410.	3.	1.	-364830.	-.017	.066	-1034851.	-.05	.186	2.	.21	2.837	SI
	825.	410.	3.	1.	354296.	-.016	.064	1034851.	-.05	.186	2.	.21	2.921	SI

TAGLIO:

Progressi ve	Se	Vsd	VRd	VRcd	VRsd	Asw	s	ctgT	Ve	
> 0.	0.	3.	-3832.	7397.	47129.	36289.	1.01	15.	2.5	SI
40.	40.	3.	-4560.	7397.	47129.	36289.	1.01	15.	2.5	SI
375.	375.	3.	5666.	7397.	47129.	36289.	1.01	15.	2.5	SI
415.	415.	3.	4881.	8933.	47129.	36289.	1.01	15.	2.5	SI
> 415.	0.	3.	-4426.	8933.	47129.	36289.	1.01	15.	2.5	SI
455.	40.	3.	-5210.	7397.	47129.	36289.	1.01	15.	2.5	SI
785.	370.	3.	4085.	7397.	47129.	36289.	1.01	15.	2.5	SI
825.	410.	3.	3351.	7397.	47129.	36289.	1.01	15.	2.5	SI

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

TENSIONI DI ESERCIZIO E FESSURAZIONE - RARE:

Progressive ve	Se	Ar	Momento	σc	σf	As	hc, ef	Eps%	Sr, max	Wd	Ve	
> 0.	0.	3.	1.	59538.	-3.9	224.6	4.62	8.75	.0064	25.3	.016	SI
28.	28.	3.	1.	-46298.	-3.	174.6	4.62	8.75	.005	25.3	.013	SI
187.	187.	3.	1.	-312995.	-20.4	1180.5	4.62	8.75	.0337	25.3	.085	SI
415.	415.	3.	2.	263579.	-12.1	504.3	9.24	8.75	.0144	17.41	.025	SI
> 415.	0.	3.	2.	262479.	-12.	502.2	9.24	8.75	.0143	17.41	.025	SI
680.	265.	3.	1.	-279436.	-18.2	1053.9	4.62	8.75	.0301	25.3	.076	SI
825.	410.	3.	1.	42352.	-2.8	159.7	4.62	8.75	.0046	25.3	.012	SI

TENSIONI DI ESERCIZIO E FESSURAZIONE - FREQUENTI:

Progressive ve	Se	Ar	Momento	σc	σf	As	hc, ef	Eps%	Sr, max	Wd	Ve	
> 0.	0.	3.	1.	41872.	-2.7	157.9	4.62	8.75	.0045	25.3	.011	SI
28.	28.	3.	1.	-32035.	-2.1	120.8	4.62	8.75	.0035	25.3	.009	SI
187.	187.	3.	1.	-264807.	-17.2	998.8	4.62	8.75	.0285	25.3	.072	SI
> 415.	415.	3.	2.	206962.	-9.5	396.	9.24	8.75	.0113	17.41	.02	SI
415.	0.	3.	2.	205309.	-9.4	392.8	9.24	8.75	.0112	17.41	.02	SI
680.	265.	3.	1.	-230098.	-15.	867.8	4.62	8.75	.0248	25.3	.063	SI
825.	410.	3.	1.	26201.	-1.7	98.8	4.62	8.75	.0028	25.3	.007	SI

TENSIONI DI ESERCIZIO E FESSURAZIONE - QUASI PERMANENTI:

Progressive ve	Se	Ar	Momento	σ_c	σ_f	As	hc, ef	Eps%	Sr, max	Wd	Ve	
> 0.	0.	3.	1.	37455.	-2.4	141.3	4.62	8.75	.004	25.3	.01	SI
28.	28.	3.	1.	-28469.	-1.9	107.4	4.62	8.75	.0031	25.3	.008	SI
187.	187.	3.	1.	-252760.	-16.4	953.3	4.62	8.75	.0272	25.3	.069	SI
415.	415.	3.	2.	192808.	-8.8	368.9	9.24	8.75	.0105	17.41	.018	SI
> 415.	0.	3.	2.	191017.	-8.7	365.5	9.24	8.75	.0104	17.41	.018	SI
680.	265.	3.	1.	-217763.	-14.2	821.3	4.62	8.75	.0235	25.3	.059	SI
825.	410.	3.	1.	22163.	-1.4	83.6	4.62	8.75	.0024	25.3	.006	SI

ARMATURE LONGITUDINALI (%=100*Af/Acl s - Acl s=area intera sezione)

Nro	Totale	%	Super.	%	Barre	Infer.	%	Barre
1	9.24	.406	4.62	.203	3d14	4.62	.203	3d14
2	18.47	.812	9.24	.406	3d14 +3d14	9.24	.406	3d14 +3d14

VERIFICA TRAVATA IN CEMENTO ARMATO

Nome travata : 6 - Travata T004 (fondazione)
 Metodo di verifica : stati limite (NTC18). ->
 Duttilita' : non prevista (struttura non dissipativa).
 Unita' di misura : cm; daN/cm; daN/cm; daN/cm2; deForm. %.
 Unita' particolari : fessure [Wk]:mm - ferri:mm e cm2 - sezioni:cm e derivate.
 Copri ferri (assi) : longitudinali= 3.5 ; staffe= 2.5

MATERIALI

CLS : Rck =300. ; fck=249. ; fctk= 17.9; fctm= 25.6; Ec= 314472. ;
gc =1.5 ; fcd=141.1; fbd= 26.9; fctd= 11.9; Ecud= .2% (limi t.el asti co)
ACCI AIO : B450C; ftk=5175. ; fyk=4500. ; Es=2100000. ;
gs =1.15; fyd=3913. ; ftd(k*fyd)=4500. ; fud=4439.8; Eud=.19% (limi t.el asti co)

TENSIONI E FESSURE MASSIME IN ESERCIZIO

GRUPPO : ordi nari o.

CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112. ; fbd(eserci zi o)= 26.9

ACCI AIO : σ_f (rara)=3600. ; Coeff.Omogenei zzazi one= 15

FESSURE : Wdmax(fre.)= .4 ; Wdmax(q.p.)= .3 [4.1.2.2.4.5];
kt=.4 [EN 1992-1 7.3.4].

CASI DI CARICO DA MODELLO 3D

SLU		
Nome	Descr i zione	Sest
1.	SLU	1.
2.	SLU VENTOX	2.
3.	SLU VENTOY	2.
6.	SLU con SI SMAX PRI NC16	
7.	SLU con SI SMAY PRI NC16	
10.	SLU FON con SI SMAX P16	
11.	SLU FON con SI SMAY P16	

RARE			FREQUENTI			QUASI PERMANENTI		
Nome	Descr i zione	Sest	Nome	Descr i zione	Sest	Nome	Descr i zione	Sest
18.	Rara	1.	21.	Frequente	1.	24.	Quasi Perm	1.
19.	Rara VentoX	2.	22.	Frequente VentoX	2.			
20.	Rara VentoY	2.	23.	Frequente VentoY	2.			

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SEZIONI UTILIZZATE

3) Rettangolare: 35X65; A=2275. ; Jg=800990. ; E=314471.6

DESCRIZIONE CAMPATE

Cam.	Descr i z.	S. ini	Sez.	S. fin	Incl.	L. assi	L. net.	lambda	K	r. Ar.	lam. max
1	A250	3	3	3	0	415.	322.	6.385	1.3	1.123	25.458
2	A258	3	3	3	0	410.	317.	6.308	1.3	1.148	26.024

VERIFICHE ALLO STATO LIMITE ULTIMO

FLESSIONE:

Progressive	SE	Ar	Msd	Epscl	Epsac	Mrd	Epscl	Epsac	Cam	x/d	Mr/Ms	VE	
> 0.	0.	3.	1.	-1650880.	! -.057	.172!	-1787168.	-.062	.186	2.	.251!	1.083!	SI
0.	0.	3.	1.	1963593.	! -.067!	.166	2204890.	-.076	.186	2.	.289	1.123	SI
262.	262.	3.	1.	137045.	-.004	.012	2204890.	-.076	.186	2.	.289	16.09!	SI
350.	350.	3.	2.	1030813.	-.023	.044	4352666.	! -.106	.186	2.	.364!	4.223	SI
415.	415.	3.	2.	-1183892.	-.027	.062	-3544374.	! -.084	.186	2.	.31	2.994	SI
415.	415.	3.	2.	1454030.	-.033	.062	4352666.	! -.106	.186	2.	.364	2.994	SI
> 415.	0.	3.	2.	-1184991.	-.027	.062	-3544374.	! -.084	.186	2.	.31	2.991	SI
415.	0.	3.	2.	1432354.	-.033	.061	4352666.	! -.106	.186	2.	.364!	3.039	SI
566.	151.	3.	1.	180692.	-.006	.015	2204890.	-.076	.186	2.	.289	12.2	! SI
797.	382.	3.	1.	1920830.	! -.065!	.162	2204890.	-.076	.186	2.	.289	1.148	SI
825.	410.	3.	1.	-1668141.	! -.058	.174!	-1787168.	-.062	.186	2.	.251!	1.071!	SI
825.	410.	3.	1.	1920830.	! -.065	.162	2204890.	! -.076	.186	2.	.289	1.148	SI

TAGLIO:

Progressive	Se	Vsd	VRd	VRcd	VRsd	Asw	s	ctgT	Ve	
> 0.	0.	3.	-8485.	7397.	47129.	36289.	1.01	15.	2.5	SI
0.	0.	3.	4240.	7397.	47129.	36289.	1.01	15.	2.5	SI
43.	43.	3.	-9132.	7397.	47129.	36289.	1.01	15.	2.5	SI
366.	366.	3.	11742.	8531.	47129.	36289.	1.01	15.	2.5	SI
415.	415.	3.	-6830.	10748.	47129.	36289.	1.01	15.	2.5	SI
415.	415.	3.	11113.	10748.	47129.	36289.	1.01	15.	2.5	SI
> 415.	0.	3.	-10687.	10748.	47129.	36289.	1.01	15.	2.5	SI
415.	0.	3.	7457.	10748.	47129.	36289.	1.01	15.	2.5	SI
464.	49.	3.	-11316.	8531.	47129.	36289.	1.01	15.	2.5	SI
782.	367.	3.	8866.	7397.	47129.	36289.	1.01	15.	2.5	SI
825.	410.	3.	-4373.	7397.	47129.	36289.	1.01	15.	2.5	SI
825.	410.	3.	8225.	7397.	47129.	36289.	1.01	15.	2.5	SI

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

TENSIONI DI ESERCIZIO E FESSURAZIONE - RARE:

Progressive	Se	Ar	Momento	σ_c	σ_f	As	hc, ef	Eps%	Sr, max	Wd	Ve
> 0.	0.	3.	1.	248325. !	-11.3 !	438.8	10.05	8.75	.0125	17.47	.022 SI
28.	28.	3.	1.	163977. !	-7.5	289.8	10.05	8.75	.0083	17.47	.014 SI
174.	174.	3.	1.	-206463. !	-9.8	451. !	8.04	8.75	.0129	19.54	.025! SI
415.	415.	3.	2.	245091. !	-7.8	219.3	20.11	8.75	.0063	13.32	.008 SI

> 415.	0.	3.	2.	236273.!	-7.5!	211.5!	20.11!	8.75!	.006!	13.32!	.008!	SI
653.	238.	3.	1.	-172919.!	-8.2!	377.7!	8.04!	8.75!	.0108!	19.54!	.021!	SI
825.	410.	3.	1.	217144.!	-9.9!	383.7!	10.05!	8.75!	.011!	17.47!	.019!	SI

TENSIONI DI ESERCIZIO E FESSURAZIONE - FREQUENTI:

Progressive	Se	Ar	Momento	σ_c	σ_f	As	hc, ef	Eps%	Sr, max	Wd	Ve	
> 0.	0.	3.	1.	174750.!	-8.!	308.8!	10.05!	8.75!	.0088!	17.47!	.015!	SI
28.	28.	3.	1.	106962.!	-4.9!	189.!	10.05!	8.75!	.0054!	17.47!	.009!	SI
218.	218.	3.	1.	-167849.!	-7.9!	366.7!	8.04!	8.75!	.0105!	19.54!	.02!	SI
415.	415.	3.	2.	157074.!	-5.!	140.6!	20.11!	8.75!	.004!	13.32!	.005!	SI
> 415.	0.	3.	2.	146200.!	-4.7!	130.8!	20.11!	8.75!	.0037!	13.32!	.005!	SI
653.	238.	3.	1.	-125485.!	-5.9!	274.1!	8.04!	8.75!	.0078!	19.54!	.015!	SI
825.	410.	3.	1.	144504.!	-6.6!	255.3!	10.05!	8.75!	.0073!	17.47!	.013!	SI

TENSIONI DI ESERCIZIO E FESSURAZIONE - QUASI PERMANENTI:

Progressive	Se	Ar	Momento	σ_c	σ_f	As	hc, ef	Eps%	Sr, max	Wd	Ve	
> 0.	0.	3.	1.	156356.!	-7.1!	276.3!	10.05!	8.75!	.0079!	17.47!	.014!	SI
28.	28.	3.	1.	92709.!	-4.2!	163.8!	10.05!	8.75!	.0047!	17.47!	.008!	SI
218.	218.	3.	1.	-159165.!	-7.5!	347.7!	8.04!	8.75!	.0099!	19.54!	.019!	SI
415.	415.	3.	2.	135069.!	-4.3!	120.9!	20.11!	8.75!	.0035!	13.32!	.005!	SI
> 415.	0.	3.	2.	123682.!	-3.9!	110.7!	20.11!	8.75!	.0032!	13.32!	.004!	SI
653.	238.	3.	1.	-113626.!	-5.4!	248.2!	8.04!	8.75!	.0071!	19.54!	.014!	SI
825.	410.	3.	1.	126344.!	-5.8!	223.3!	10.05!	8.75!	.0064!	17.47!	.011!	SI

ARMATURE LONGITUDINALI (%=100*Af/Acl s - Acl s=area intera sezione)

Nro	Totale	%	Super.	%	Barre	Infer.	%	Barre
1	18.1!	.795!	8.04!	.354!	4d16	10.05!	.442!	5d16
2	36.19!	1.591!	16.08!	.707!	4d16 +4d16	20.11!	.884!	5d16 +5d16

VERIFICA TRAVATA IN CEMENTO ARMATO

Nome travata : 3 - Travata T005 (fondazione)
 Metodo di verifica : stati limite (NTC18). ->
 Duttilita' : non prevista (struttura non dissipativa).
 Unità di misura : cm; daN; daN/cm; daNcm; daN/cm2; deform. %.
 Unità particolari : fessure [Wk]:mm - ferri:mm e cm2 - sezioni:cm e derivate.
 Copri ferri (assi) : longitudinali= 3.5 ; staffe= 2.5

MATERIALI

CLS : Rck =300. ; fck=249. ; fctk= 17.9; fctm= 25.6; Ec= 314472. ;
gc =1.5 ; fcd=141.1; fbd= 26.9; fctd= 11.9; Ecd= .2% (limite elastico)
ACCIAIO : B450C; ftk=5175. ; fyk=4500. ; Es=2100000. ;
gs =1.15; fyd=3913. ; ftd(k*fyd)=4500. ; fud=4439.8; Eud=.19% (limite elastico)

TENSIONI E FESSURE MASSIME IN ESERCIZIO

GRUPPO : ordinario.
CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112. ; fbd(esercizio)= 26.9
ACCIAIO : σ_f (rara)=3600. ; Coeff. Omogeneizzazione= 15
FESSURE : Wdmax(fre.)=.4 ; Wdmax(q.p.)=.3 [4.1.2.2.4.5];
kt=.4 [EN 1992-1 7.3.4].

CASI DI CARICO DA MODELLO 3D

SLU					
Nome	Descrizione	Sest	Nome	Descrizione	Sest
1.	SLU	1.			
2.	SLU VENTOX	2.			
3.	SLU VENTOY	2.			
6.	SLU con SSMAX PRINC16				
7.	SLU con SSMAY PRINC16				
10.	SLU FON con SSMAX P16				
11.	SLU FON con SSMAY P16				
RARE			FREQUENTI		
Nome	Descrizione	Sest	Nome	Descrizione	Sest
18.	Rara	1.	21.	Frequente	1.
19.	Rara VentoX	2.	22.	Frequente VentoX	2.
20.	Rara VentoY	2.	23.	Frequente VentoY	2.
<-					
			QUASI PERMANENTI		
Nome	Descrizione	Sest	Nome	Descrizione	Sest
24.	Quasi Perm	1.			

SEZIONI UTILIZZATE

3) Rettangolare: 35X65; A=2275. ; Jg=800990. ; E=314471.6

DESCRIZIONE CAMPATE

Cam.	Descriz.	S. ini	Sez.	S. fin	Incl.	L. assi	L. net.	lambda	K	r. Ar.	lam. max
1	A287	3	3	3	0	510.	462.	7.846	1.3	2.527	73.721
2	A293	3	3	3	0	370.	300.	5.692	1.5	2.438	77.107
3	A311	3	3	3	0	510.	462.	7.846	1.3	2.544	74.226

VERIFICHE ALLO STATO LIMITE ULTIMO

FLESSIONE:

Progressive ve	SE	Ar	Msd	Epscl	Epsac	Mrd	Epscl	Epsac	Cam	x/d	Mr/Ms	VE
> 0.	0.	3.	-248902.	-.012	.045	-1034851.	-.05	.186	2.	.21	4.158	SI
0.	0.	3.	166594.	-.008	.03	1034851.	-.05	.186	2.	.21	6.212	SI
192.	192.	3.	-634677.	-.03	.114	-1034851.	-.05	.186	2.	.21	1.631	SI
445.	445.	3.	600387.	-.019	.048	2336862.	-.077	.186	2.	.292	3.892	SI
482.	482.	3.	924880.	-.029	.073	2336862.	-.077	.186	2.	.292	2.527	SI
510.	510.	3.	-44807.	-.001	.004	-2044549.	-.068	.186	2.	.266	45.63	SI
510.	510.	3.	924880.	-.029	.073	2336862.	-.077	.186	2.	.292	2.527	SI
> 510.	0.	3.	-46390.	-.001	.004	-2044549.	-.068	.186	2.	.266	44.07	SI
510.	0.	3.	954123.	-.03	.076	2336862.	-.077	.186	2.	.292	2.449	SI
573.	63.	3.	-164344.	-.007	.029	-1037389.	-.048	.186	2.	.205	6.312	SI
573.	63.	3.	680404.	-.029	.094	1339232.	-.059	.186	2.	.24	1.968	SI
775.	265.	3.	-188162.	-.008	.034	-1037389.	-.048	.186	2.	.205	5.513	SI
852.	342.	3.	958622.	-.03	.076	2336862.	-.077	.186	2.	.292	2.438	SI
880.	370.	3.	-71159.	-.002	.006	-2044549.	-.068	.186	2.	.266	28.73	SI
880.	370.	3.	958622.	-.03	.076	2336862.	-.077	.186	2.	.292	2.438	SI
> 880.	0.	3.	-469.	0.	0.	-2044549.	-.068	.186	2.	.266	4357.	SI
880.	0.	3.	918589.	-.029	.073	2336862.	-.077	.186	2.	.292	2.544	SI
1156.	276.	3.	-549318.	-.026	.099	-1034851.	-.05	.186	2.	.21	1.884	SI
1390.	510.	3.	-17235.	-.001	.003	-1034851.	-.05	.186	2.	.21	60.04	SI
1390.	510.	3.	226192.	-.01	.041	1034851.	-.05	.186	2.	.21	4.575	SI

TAGLIO:

Progressive ve	Se	Ar	Vsd	VRd	VRcd	VRsd	Asw	s	ctgT	Ve
> 0.	0.	3.	-5083.	7397.	47129.	36289.	1.01	15.	2.5	SI
40.	40.	3.	-5145.	7397.	47129.	36289.	1.01	15.	2.5	SI
496.	496.	3.	8773.	7397.	47129.	36289.	1.01	15.	2.5	SI
510.	510.	3.	8752.	7397.	47129.	36289.	1.01	15.	2.5	SI
> 510.	0.	3.	-8941.	7397.	47129.	36289.	1.01	15.	2.5	SI
575.	65.	3.	-9034.	7397.	47129.	36289.	1.01	15.	2.5	SI
815.	305.	3.	9032.	7397.	47129.	36289.	1.01	15.	2.5	SI
880.	370.	3.	8944.	7397.	47129.	36289.	1.01	15.	2.5	SI
> 880.	0.	3.	-9520.	7397.	47129.	36289.	1.01	15.	2.5	SI
894.	14.	3.	-9540.	7397.	47129.	36289.	1.01	15.	2.5	SI
1350.	470.	3.	5481.	7397.	47129.	36289.	1.01	15.	2.5	SI
1390.	510.	3.	5411.	7397.	47129.	36289.	1.01	15.	2.5	SI

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

TENSIONI DI ESERCIZIO E FESSURAZIONE - RARE:

Progressive ve	Se	Ar	Momento	σc	σf	As	hc,ef	Eps%	Sr, max	Wd	Ve
> 0.	0.	3.	-21298.	-1.4	80.3	4.62	8.75	.0023	25.3	.006	SI
12.	12.	3.	-66558.	-4.3	251.	4.62	8.75	.0072	25.3	.018	SI
192.	192.	3.	-460366.	-29.9	1736.3	4.62	8.75	.0496	25.3	.126	SI
510.	510.	3.	623992.	-27.3	1040.7	10.65	8.75	.0323	16.55	.053	SI
> 510.	0.	3.	637581.	-27.8	1063.4	10.65	8.75	.0334	16.55	.055	SI
695.	185.	3.	-136536.	-8.6	514.	4.62	8.75	.0147	25.3	.037	SI
880.	370.	3.	613974.	-26.8	1024.	10.65	8.75	.0315	16.55	.052	SI
> 880.	0.	3.	649393.	-28.4	1083.1	10.65	8.75	.0343	16.55	.057	SI
1156.	276.	3.	-391795.	-25.5	1477.7	4.62	8.75	.0422	25.3	.107	SI
1390.	510.	3.	162555.	-10.6	613.1	4.62	8.75	.0175	25.3	.044	SI

TENSIONI DI ESERCIZIO E FESSURAZIONE - FREQUENTI:

Progressive ve	Se	Ar	Momento	σc	σf	As	hc,ef	Eps%	Sr, max	Wd	Ve
> 0.	0.	3.	-6811.	-1.4	25.7	4.62	8.75	.0007	25.3	.002	SI
28.	28.	3.	-94640.	-6.2	356.9	4.62	8.75	.0102	25.3	.026	SI
192.	192.	3.	-395887.	-25.7	1493.1	4.62	8.75	.0427	25.3	.108	SI
510.	510.	3.	513259.	-22.4	856.	10.65	8.75	.0245	16.55	.04	SI
> 510.	0.	3.	517348.	-22.6	862.9	10.65	8.75	.0247	16.55	.041	SI
695.	185.	3.	-117940.	-7.4	444.	4.62	8.75	.0127	25.3	.032	SI
880.	370.	3.	502807.	-22.	838.6	10.65	8.75	.024	16.55	.04	SI
> 880.	0.	3.	541359.	-23.6	902.9	10.65	8.75	.0258	16.55	.043	SI
1156.	276.	3.	-348523.	-22.7	1314.5	4.62	8.75	.0376	25.3	.095	SI
1390.	510.	3.	140225.	-9.1	528.9	4.62	8.75	.0151	25.3	.038	SI

TENSIONI DI ESERCIZIO E FESSURAZIONE - QUASI PERMANENTI:

Progressive ve	Se	Ar	Momento	σc	σf	As	hc,ef	Eps%	Sr, max	Wd	Ve
> 0.	0.	3.	-3189.	-1.2	12.	4.62	8.75	.0003	25.3	.001	SI
28.	28.	3.	-87852.	-5.7	331.3	4.62	8.75	.0095	25.3	.024	SI
192.	192.	3.	-379767.	-24.7	1432.3	4.62	8.75	.0409	25.3	.104	SI

510.	510.	3.	2.	485576.!	-21.2	809.9	10.65	8.75	.0231	16.55	.038	SI
> 510.	0.	3.	2.	487290.!	-21.3	812.7	10.65	8.75	.0232	16.55	.038	SI
695.	185.	3.	3.	-113291.!	-7.1	426.5	4.62	8.75	.0122	25.3	.031	SI
880.	370.	3.	4.	475015.	-20.7	792.3	10.65	8.75	.0226	16.55	.037	SI
> 880.	0.	3.	4.	514350.!	-22.5	857.9	10.65	8.75	.0245	16.55	.041	SI
1156.	276.	3.	1.	-337705.!	-22.	1273.7	4.62	8.75	.0364	25.3	.092	SI
1390.	510.	3.	1.	134642.	-8.8	507.8	4.62	8.75	.0145	25.3	.037	SI

ARMATURE LONGITUDINALI (%=100*Af/Acl's - Acl's=area intera sezione)

Nro	Totale	%	Super.	%	Barre	Infer.	%	Barre
1	9.24	.406	4.62	.203	3d14	4.62	.203	3d14
2	19.89	.874	9.24	.406	3d14 +3d14	10.65	.468	3d14 +3d16
3	10.65	.468	4.62	.203	3d14	6.03	.265	3d16
4	19.89	.874	9.24	.406	3d14 +3d14	10.65	.468	3d16 +3d14

VERIFICA TRAVATA IN CEMENTO ARMATO

Nome travata : 4 - Travata T006 (fondazione)
 Metodo di verifica : stati limite (NTC18). ->
 Duttilita' : non prevista (struttura non dissipativa).
 Unità di misura : cm; daN; daN/cm; daNcm; daN/cm2; deform. %.
 Unità particolari : fessure [Wk]:mm - ferri:mm e cm2 - sezioni:cm e derivate.
 Copri ferri (assi) : longitudinali= 3.5 ; staffe= 2.5

MATERIALI

CLS : Rck =300. ; fck=249. ; fctk= 17.9; fctm= 25.6; Ec= 314472. ;
 gc =1.5 ; fcd=141.1; fbd= 26.9; fctd= 11.9; Ecud=.2% (limite elastico)
 ACCIAIO : B450C; ftk=5175. ; fyk=4500. ; Es=2100000. ;
 gs =1.15; fyd=3913. ; ftd(k*fyd)=4500. ; fud=4439.8; Eud=.19% (limite elastico)

TENSIONI E FESSURE MASSIME IN ESERCIZIO

GRUPPO : ordinario.
 CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112. ; fbd(esercizio)= 26.9
 ACCIAIO : σ_f (rara)=3600. ; Coeff. Omogeneizzazione= 15
 FESSURE : Wdmax(fre.)=.4 ; Wdmax(q.p.)=.3 [4.1.2.2.4.5];
 kt=.4 [EN 1992-1 7.3.4].

CASI DI CARICO DA MODELLO 3D

SLU			RARE			FREQUENTI			QUASI PERMANENTI		
Nome	Descrizione	Sest	Nome	Descrizione	Sest	Nome	Descrizione	Sest	Nome	Descrizione	Sest
1.	SLU	1.	18.	Rara	1.	21.	Frequente	1.	24.	Quasi Perm	1.
2.	SLU VENTOX	2.	19.	Rara VentoX	2.	22.	Frequente VentoX	2.			
3.	SLU VENTOY	2.	20.	Rara VentoY	2.	23.	Frequente VentoY	2.			
6.	SLU con SISMAX PRINC16										
7.	SLU con SISMAX PRINC16										
10.	SLU FON con SISMAX P16										
11.	SLU FON con SISMAX P16										

SEZIONI UTILIZZATE

3) Rettangolare: 35X65; A=2275. ; Jg=800990. ; E=314471.6

DESCRIZIONE CAMPATE

Cam.	Descriz.	Sini	Sez.	Sfin	Incl.	L.assi	L.net.	Iambda	K	r.Ar.	Iam.max
1	A322	3	3	3	0	285.	285.	4.385	1.	5.	112.221

VERIFICHE ALLO STATO LIMITE ULTIMO

FLESSIONE:

Progressive	SE	Ar	Msd	Epscl	Epsac	Mrd	Epscl	Epsac	Cam	x/d	Mr/Ms	VE			
> 14.	14.	3.	1.	168502.!	-.008!	.03	!	1034851.!	-.05	.186	2.	.21	!	6.141	SI
46.	46.	3.	1.	-12146.	-.001	.002		-1034851.!	-.05	.186	2.	.21		85.2	SI
181.	181.	3.	1.	-127576.!	-.006	.023		-1034851.!	-.05	.186	2.	.21		8.112	SI

TAGLIO:

Progressive|Se| Vsd | VRd | VRcd | VRsd Asw s ctgT|Ve|

>	0.	0.	3.	-1203.	7397.	47129.	36289.	1.01	15.	2.5	SI
>	65.	65.	3.	-2112.	7397.	47129.	36289.	1.01	15.	2.5	SI
>	239.	239.	3.	1642.	7397.	47129.	36289.	1.01	15.	2.5	SI
>	285.	285.	3.	-126.	7397.	47129.	36289.	1.01	15.	2.5	SI
>	285.	285.	3.	839.	7397.	47129.	36289.	1.01	15.	2.5	SI

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

TENSIONI DI ESERCIZIO E FESSURAZIONE - RARE:

Progressive	ve	Se	Ar	Momento	σ_c	σ_f	As	hc, ef	Eps%	Sr, max	Wd	Ve	
>	14.	14.	3.	1.	105055. !	-6. 8!	396. 2!	4. 62	8. 75	. 0113	25. 3	. 029!	SI
	181.	181.	3.	1.	-75376. !	-4. 9	284. 3	4. 62	8. 75	. 0081	25. 3	. 021	SI

TENSIONI DI ESERCIZIO E FESSURAZIONE - FREQUENTI:

Progressive	ve	Se	Ar	Momento	σ_c	σ_f	As	hc, ef	Eps%	Sr, max	Wd	Ve	
>	14.	14.	3.	1.	97943. !	-6. 4!	369. 4!	4. 62	8. 75	. 0106	25. 3	. 027!	SI
	181.	181.	3.	1.	-52594. !	-3. 4	198. 4	4. 62	8. 75	. 0057	25. 3	. 014	SI

TENSIONI DI ESERCIZIO E FESSURAZIONE - QUASI PERMANENTI:

Progressive	Se	Ar	Momento	σ_c	σ_f	As	hc, ef	Eps%	Sr, max	Wd	Ve
> 14.	14.	3. 1.	96165. !	-6. 3!	362. 7!	4. 62	8. 75	. 0104	25. 3	. 026!	SI
181.	181.	3. 1.	-46898. !	-3. 4	176. 9	4. 62	8. 75	. 0051	25. 3	. 013	SI

ARMATURE LONGITUDINALI (%=100*Af/Acl s - Acl s=area intera sezione)

Nro	Totale	%	Super.	%	Barre	Infer.	%	Barre
1	9. 24	. 406	4. 62	. 203	3d14	4. 62	. 203	3d14

VERIFICA TRAVATA IN CEMENTO ARMATO

Nome travata : 8 - Travata T007 (fondazione)
 Metodo di verifica : stati limite (NTC18). ->
 Duttilita' : non prevista (struttura non dissipativa).
 Unita' di misura : cm; daN; daN/cm; daNcm; daN/cm2; deform. %.
 Unita' particolari : fessure [Wk]; mm - ferri: mm e cm2 - sezioni: cm e derivate.
 Copri ferri (assi) : longitudinali= 3.5 ; staffe= 2.5

MATERIALI

CLS : Rck =300. ; fck=249. ; fctk= 17.9; fctm= 25.6; Ec= 314472. ;
gc =1.5 ; fcd=141.1; fbd= 26.9; fctd= 11.9; Ecu= .2% (limite elastico)
ACCIAIO : B450C; ftk=5175. ; fyk=4500. ; Es=2100000. ;
gs =1.15; fyd=3913. ; ftd(k*fyd)=4500. ; fud=4439.8; Eud=.19% (limite elastico)

TENSIONI E FESSURE MASSIME IN ESERCIZIO

GRUPPO : ordinario.
CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112. ; fbd(esercizio)= 26.9
ACCIAIO : σ_f (rara)=3600. ; Coeff. Omogeneizzazione= 15
FESSURE : Wdmax(fre.)=.4 ; Wdmax(q.p.)=.3 [4.1.2.2.4.5];
kt=.4 [EN 1992-1 7.3.4].

CASI DI CARICO DA MODELLO 3D

Nome	Descrizione	Sest
1.	SLU	1.
2.	SLU VENTOX	2.
3.	SLU VENTOY	2.
6.	SLU con SISMAX PRINC16	
7.	SLU con SISMAX PRINC16	
10.	SLU FON con SISMAX P16	
11.	SLU FON con SISMAX P16	

RARE			FREQUENTI			QUASI PERMANENTI		
Nome	Descrizione	Sest	Nome	Descrizione	Sest	Nome	Descrizione	Sest
18.	Rara	1.	21.	Frequente	1.	24.	Quasi Perm	1.
19.	Rara VentoX	2.	22.	Frequente VentoX	2.			
20.	Rara VentoY	2.	23.	Frequente VentoY	2.			

<-

SEZIONI UTILIZZATE

3) Rettangolare: 35X65; A=2275. ; Jg=800990. ; E=314471.6

DESCRIZIONE CAMPATE

Cam.	Descriz.	S. ini	Sez.	S. fin	Incl.	L. assi	L. net.	lambda	K	r. Ar.	lam. max
1	A156	3	3	3	0	338.	290.	5.2	1.3	2.478	72.314
2	A168	3	3	3	0	430.	360.	6.615	1.5	2.155	72.562
3	A190	3	3	3	0	284.	214.	4.369	1.5	4.002	118.138
4	A171	3	3	3	0	338.	290.	5.2	1.5	3.169	106.683
5	A193	3	3	3	0	285.	260.	4.385	1.3	5.	145.887

VERIFICHE ALLO STATO LIMITE ULTIMO

FLESSIONE:

Progressive	ve	SE	Ar	Msd	Epscl	Epsac	Mrd	Epscl	Epsac	Cam	x/d	Mr/Ms	VE	
>	0.	0.	3.	1.	-298503.	-.014	.054	-1034851.	-.05	.186	2.	.21	3.467	SI
	0.	0.	3.	1.	216507.	-.01	.039	1034851.	-.05	.186	2.	.21	4.78	SI
	148.	148.	3.	1.	-382856.	-.018	.069	-1034851.	-.05	.186	2.	.21	2.703	SI
	148.	148.	3.	1.	56965.	-.003	.01	1034851.	-.05	.186	2.	.21	18.17	SI
	275.	275.	3.	1.	573714.	-.027	.103	1034851.	-.05	.186	2.	.21	1.804	SI
	289.	289.	3.	2.	673675.	-.022	.061	2038644.	-.07	.186	2.	.272	3.026	SI
	310.	310.	3.	2.	822557.	-.027	.075	2038644.	-.07	.186	2.	.272	2.478	SI
	338.	338.	3.	2.	-240377.	-.008	.022	-2038644.	-.07	.186	2.	.272	8.481	SI
	338.	338.	3.	2.	822557.	-.027	.075	2038644.	-.07	.186	2.	.272	2.478	SI
>	338.	0.	3.	2.	-352763.	-.011	.032	-2038644.	-.07	.186	2.	.272	5.779	SI
	338.	0.	3.	2.	945863.	-.031	.086	2038644.	-.07	.186	2.	.272	2.155	SI
	446.	108.	3.	1.	-375303.	-.017	.067	-1034851.	-.05	.186	2.	.21	2.757	SI
	532.	194.	3.	1.	15466.	-.001	.003	1034851.	-.05	.186	2.	.21	66.91	SI
	703.	365.	3.	3.	671126.	-.02	.045	2756076.	-.087	.186	2.	.317	4.107	SI
	768.	430.	3.	3.	-457686.	-.014	.041	-2051873.	-.065	.186	2.	.258	4.483	SI
	768.	430.	3.	3.	943587.	-.028	.063	2756076.	-.087	.186	2.	.317	2.921	SI
>	768.	0.	3.	3.	-181780.	-.005	.016	-2051873.	-.065	.186	2.	.258	11.29	SI
	768.	0.	3.	3.	688659.	-.02	.046	2756076.	-.087	.186	2.	.317	4.002	SI
	831.	63.	3.	4.	-178251.	-.008	.032	-1040365.	-.046	.186	2.	.197	5.837	SI
	831.	63.	3.	4.	463889.	-.018	.049	1764755.	-.071	.186	2.	.275	3.804	SI
	910.	142.	3.	4.	63956.	-.002	.007	1764755.	-.071	.186	2.	.275	27.59	SI
	1052.	284.	3.	5.	-266813.	-.008	.024	-2051873.	-.065	.186	2.	.258	7.69	SI
	1052.	284.	3.	5.	591513.	-.017	.04	2756076.	-.087	.186	2.	.317	4.659	SI
>	1052.	0.	3.	5.	-485043.	-.015	.044	-2051873.	-.065	.186	2.	.258	4.23	SI
	1052.	0.	3.	5.	869740.	-.026	.059	2756076.	-.087	.186	2.	.317	3.169	SI
	1159.	107.	3.	1.	-427189.	-.02	.077	-1034851.	-.05	.186	2.	.21	2.422	SI
	1242.	190.	3.	1.	20442.	-.001	.004	1034851.	-.05	.186	2.	.21	50.62	SI
	1362.	310.	3.	6.	-145347.	-.006	.026	-1041841.	-.044	.186	2.	.192	7.168	SI
	1390.	338.	3.	2.	-79699.	-.003	.007	-2038644.	-.07	.186	2.	.272	25.58	SI
	1390.	338.	3.	2.	284668.	-.009	.026	2038644.	-.07	.186	2.	.272	7.161	SI
>	1390.	0.	3.	2.	-104112.	-.003	.009	-2038644.	-.07	.186	2.	.272	19.58	SI
	1390.	0.	3.	2.	346542.	-.011	.032	2038644.	-.07	.186	2.	.272	5.883	SI
	1532.	142.	3.	1.	-288963.	-.013	.052	-1034851.	-.05	.186	2.	.21	3.581	SI
	1647.	257.	3.	1.	301642.	-.014	.054	1034851.	-.05	.186	2.	.21	3.431	SI
	1675.	285.	3.	1.	-265372.	-.012	.048	-1034851.	-.05	.186	2.	.21	3.9	SI
	1675.	285.	3.	1.	301642.	-.014	.054	1034851.	-.05	.186	2.	.21	3.431	SI

TAGLIO:

Progressi ve	Se	Vsd	VRd	VRcd	VRsd	Asw	s	ctgT	Ve	
> 0.	0.	3.	-5058.	7397.	47129.	36289.	1.01	15.	2.5	SI
0.	0.	3.	2332.	7397.	47129.	36289.	1.01	15.	2.5	SI
40.	40.	3.	-5478.	7397.	47129.	36289.	1.01	15.	2.5	SI
303.	303.	3.	7526.	7397.	47129.	36289.	1.01	15.	2.5	SI
338.	338.	3.	7084.	7397.	47129.	36289.	1.01	15.	2.5	SI
> 338.	0.	3.	-6593.	7397.	47129.	36289.	1.01	15.	2.5	SI
387.	49.	3.	-7294.	7397.	47129.	36289.	1.01	15.	2.5	SI
703.	365.	3.	7872.	7397.	47129.	36289.	1.01	15.	2.5	SI
768.	430.	3.	-999.	7397.	47129.	36289.	1.01	15.	2.5	SI
768.	430.	3.	7062.	7397.	47129.	36289.	1.01	15.	2.5	SI
> 768.	0.	3.	-6184.	7397.	47129.	36289.	1.01	15.	2.5	SI
768.	0.	3.	322.	7397.	47129.	36289.	1.01	15.	2.5	SI
803.	35.	3.	-6648.	7397.	47129.	36289.	1.01	15.	2.5	SI
1003.	235.	3.	5712.	7397.	47129.	36289.	1.01	15.	2.5	SI
1052.	284.	3.	-714.	7397.	47129.	36289.	1.01	15.	2.5	SI
1052.	284.	3.	5053.	7397.	47129.	36289.	1.01	15.	2.5	SI
>1052.	0.	3.	-7155.	7397.	47129.	36289.	1.01	15.	2.5	SI
1052.	0.	3.	923.	7397.	47129.	36289.	1.01	15.	2.5	SI
1087.	35.	3.	-7583.	7397.	47129.	36289.	1.01	15.	2.5	SI
1350.	298.	3.	4760.	7397.	47129.	36289.	1.01	15.	2.5	SI
1390.	338.	3.	4028.	7397.	47129.	36289.	1.01	15.	2.5	SI
>1390.	0.	3.	-3729.	7397.	47129.	36289.	1.01	15.	2.5	SI
1430.	40.	3.	-4453.	7397.	47129.	36289.	1.01	15.	2.5	SI
1635.	245.	3.	5365.	7397.	47129.	36289.	1.01	15.	2.5	SI
1675.	285.	3.	-2680.	7397.	47129.	36289.	1.01	15.	2.5	SI
1675.	285.	3.	4975.	7397.	47129.	36289.	1.01	15.	2.5	SI

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

TENSIONI DI ESERCIZIO E FESSURAZIONE - RARE:

Progressive	Se	Ar	Momento	σ_c	σ_f	As	hc,ef	Eps%	Sr, max	Wd	Ve	
> 0.	0.	3.	1.	-66360.	-4.3	250.3	4.62	8.75	.0072	25.3	.018	SI

28.	28.	3.	1.	-117843.	-7.7	444.5	4.62	8.75	.0127	25.3	.032	SI
148.	148.	3.	1.	-232004.	-15.1	875.	4.62	8.75	.025	25.3	.063	SI
338.	338.	3.	2.	419382.	-19.2	802.4	9.24	8.75	.0229	17.41	.04	SI
> 338.	0.	3.	2.	428657.	-19.6	820.1	9.24	8.75	.0234	17.41	.041	SI
574.	236.	3.	1.	-216054.	-14.	814.9	4.62	8.75	.0233	25.3	.059	SI
768.	430.	3.	3.	353251.	-14.6	499.	12.66	8.75	.0143	15.43	.022	SI
> 768.	0.	3.	3.	347471.	-14.3	490.8	12.66	8.75	.014	15.43	.022	SI
910.	142.	3.	4.	-47253.	-2.8	177.5	4.62	8.75	.0051	25.3	.013	SI
1052.	284.	3.	5.	236125.	-9.7	333.5	12.66	8.75	.0095	15.43	.015	SI
>1052.	0.	3.	5.	293605.	-12.1	414.7	12.66	8.75	.0118	15.43	.018	SI
1200.	148.	3.	1.	-186623.	-12.1	703.9	4.62	8.75	.0201	25.3	.051	SI
1390.	338.	3.	2.	168379.	-7.7	322.2	9.24	8.75	.0092	17.41	.016	SI
>1390.	0.	3.	2.	201423.	-9.2	385.4	9.24	8.75	.011	17.41	.019	SI
1571.	181.	3.	1.	-135844.	-8.8	512.4	4.62	8.75	.0146	25.3	.037	SI
1675.	285.	3.	1.	26662.	-1.7	100.6	4.62	8.75	.0029	25.3	.007	SI

TENSIONI DI ESERCIZIO E FESSURAZIONE - FREQUENTI:

Progressive	Se	Ar	Momento	σc	σf	As	hc, ef	Eps%	Sr, max	Wd	Ve	
> 0.	0.	3.	1.	-46071.	-3.	173.8	4.62	8.75	.005	25.3	.013	SI
28.	28.	3.	1.	-90561.	-5.9	341.6	4.62	8.75	.0098	25.3	.025	SI
148.	148.	3.	1.	-196573.	-12.8	741.4	4.62	8.75	.0212	25.3	.054	SI
338.	338.	3.	2.	326724.	-15.	625.1	9.24	8.75	.0179	17.41	.031	SI
> 338.	0.	3.	2.	329844.	-15.1	631.1	9.24	8.75	.018	17.41	.031	SI
574.	236.	3.	1.	-180657.	-11.7	681.4	4.62	8.75	.0195	25.3	.049	SI
768.	430.	3.	3.	265010.	-10.9	374.3	12.66	8.75	.0107	15.43	.017	SI
> 768.	0.	3.	3.	272246.	-11.2	384.5	12.66	8.75	.011	15.43	.017	SI
910.	142.	3.	4.	-40433.	-2.4	151.9	4.62	8.75	.0043	25.3	.011	SI
1052.	284.	3.	5.	177105.	-7.3	250.2	12.66	8.75	.0071	15.43	.011	SI
>1052.	0.	3.	5.	212600.	-8.8	300.3	12.66	8.75	.0086	15.43	.013	SI
1242.	190.	3.	1.	-160901.	-10.5	606.9	4.62	8.75	.0173	25.3	.044	SI
1390.	338.	3.	2.	134929.	-6.2	258.2	9.24	8.75	.0074	17.41	.013	SI
>1390.	0.	3.	2.	167303.	-7.7	320.1	9.24	8.75	.0091	17.41	.016	SI
1571.	181.	3.	1.	-105345.	-6.8	397.3	4.62	8.75	.0114	25.3	.029	SI
1675.	285.	3.	1.	19841.	-1.3	74.8	4.62	8.75	.0021	25.3	.005	SI

TENSIONI DI ESERCIZIO E FESSURAZIONE - QUASI PERMANENTI:

Progressive	Se	Ar	Momento	σc	σf	As	hc, ef	Eps%	Sr, max	Wd	Ve	
> 0.	0.	3.	1.	-40998.	-2.7	154.6	4.62	8.75	.0044	25.3	.011	SI
28.	28.	3.	1.	-83741.	-5.4	315.8	4.62	8.75	.009	25.3	.023	SI
148.	148.	3.	1.	-187715.	-12.2	708.	4.62	8.75	.0202	25.3	.051	SI
338.	338.	3.	2.	303560.	-13.9	580.8	9.24	8.75	.0166	17.41	.029	SI
> 338.	0.	3.	2.	305141.	-14.	583.8	9.24	8.75	.0167	17.41	.029	SI
574.	236.	3.	1.	-171807.	-11.2	648.	4.62	8.75	.0185	25.3	.047	SI
768.	430.	3.	3.	242950.	-10.	343.2	12.66	8.75	.0098	15.43	.015	SI
> 768.	0.	3.	3.	253439.	-10.5	358.	12.66	8.75	.0102	15.43	.016	SI
910.	142.	3.	4.	-38728.	-2.3	145.4	4.62	8.75	.0042	25.3	.011	SI
1052.	284.	3.	5.	162350.	-6.7	229.3	12.66	8.75	.0066	15.43	.01	SI
>1052.	0.	3.	5.	192349.	-7.9	271.7	12.66	8.75	.0078	15.43	.012	SI
1242.	190.	3.	1.	-154693.	-10.1	583.4	4.62	8.75	.0167	25.3	.042	SI
1390.	338.	3.	2.	126566.	-5.8	242.2	9.24	8.75	.0069	17.41	.012	SI
>1390.	0.	3.	2.	158773.	-7.3	303.8	9.24	8.75	.0087	17.41	.015	SI
1532.	142.	3.	1.	-98260.	-6.4	370.6	4.62	8.75	.0106	25.3	.027	SI
1675.	285.	3.	1.	18135.	-1.2	68.4	4.62	8.75	.002	25.3	.005	SI

ARMATURE LONGITUDINALI (%=100*Af/Acl s - Acl s=area intera sezione)

Nro	Totale	%	Super.	%	Barre	Infer.	%	Barre
1	9.24	.406	4.62	.203	3d14	4.62	.203	3d14
2	18.47	.812	9.24	.406	3d14 +3d14	9.24	.406	3d14 +3d14
3	21.9	.963	9.24	.406	3d14 +3d14	12.66	.557	3d14 +4d16
4	12.66	.557	4.62	.203	3d14	8.04	.354	4d16
5	21.9	.963	9.24	.406	3d14 +3d14	12.66	.557	4d16 +3d14
6	13.85	.609	4.62	.203	3d14	9.24	.406	3d14 +3d14

14. VERIFICA TRAVI CONTINUE - COPERTURA

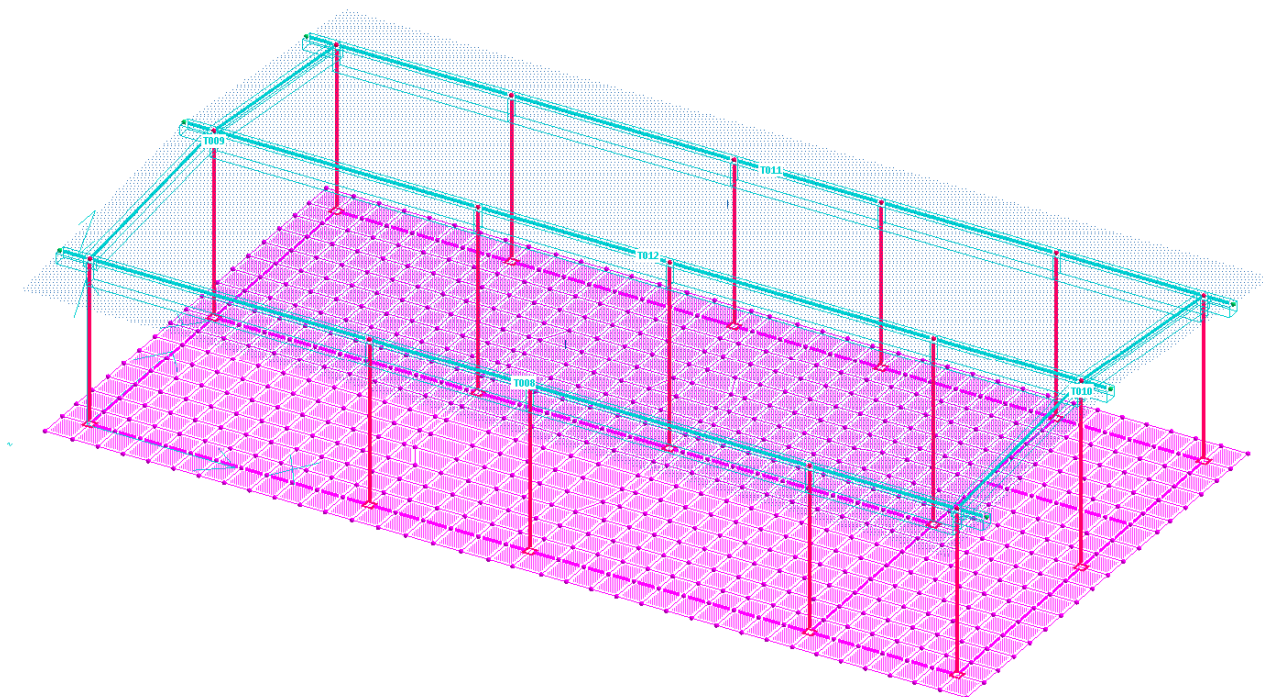


IMMAGINE MODELLO DI CALCOLO - NOMENCLATURA TRAVI DI COPERTURA

VERIFICA TRAVATA IN CEMENTO ARMATO

Nome travata : 10 - Travata T008 (trave)
 Metodo di verifica : Stati Limite (NTC18). ->
 Duttilità : non prevista (struttura non dissipativa).
 Unità di misura : cm; daN; daN/cm; daNcm; daN/cm2; deform. %.
 Unità particolari : fessure [Wk]:mm - ferri:mm e cm2 - sezioni:cm e derivate.
 Copri ferri (assi) : longitudinali= 3.5 ; staffe= 2.5

MATERIALI

CLS : Rck =300. ; fck=249. ; fctk= 17.9; fctm= 25.6; Ec= 314472. ;
 gc =1.5 ; fcd=141.1; fbd= 26.9; fctd= 11.9; Ecd=. 2% (limite elastico)
 ACCIAIO : B450C; ftk=5175. ; fyk=4500. ; Es=2100000. ;
 gs =1.15; fyd=3913. ; ftd(k*fyd)=4500. ; fud=4439.8; Eud=. 19% (limite elastico)

TENSIONI E FESSURE MASSIME IN ESERCIZIO

GRUPPO : ordinario.
 CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112. ; fbd(esercizio)= 26.9
 ACCIAIO : σ_f (rara)=3600. ; Coeff. Omogeneizzazione= 15
 FESSURE : Wdmax(fre.)=. 4 ; Wdmax(q.p.)=. 3 [4. 1. 2. 2. 4. 5];
 kt=. 4 [EN 1992-1 7.3.4].

CASI DI CARICO DA MODELLO 3D

Nome	Descrizione	Sest
1.	SLU	1.
2.	SLU VENTOX	2.
3.	SLU VENTOY	2.
6.	SLU con SISMAX PRINC16	
7.	SLU con SISMAX PRINC16	

RARE

FREQUENTI

QUASI PERMANENTI

Nome	Descrizione	Sest	Nome	Descrizione	Sest	Nome	Descrizione	Sest
18.	Rara	1.	21.	Frequente	1.	24.	Quasi Perm	1.
19.	Rara VentoX	2.	22.	Frequente VentoX	2.			
20.	Rara VentoY	2.	23.	Frequente VentoY	2.			

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SEZIONI UTILIZZATE

- 3) Rettangolo are: 25X20; A=500.; Jg=16667.; E=314471.6
5) Rettangolo are: 25X45; A=1125.; Jg=189844.; E=314471.6

DESCRIZIONE CAMPATE

Cam.	Descriz.	S. ini	Sez.	S. fin	Incl.	L. assi	L. net.	lambda	K	r. Ar.	lam. max
1	A32	3	3	3	0	58.	46.	2.9	.4	5.	31.184
2	A16	5	5	5	0	540.	492.	12.	1.5	1.386	35.068
3	A17	5	5	5	0	310.	240.	6.889	1.5	5.	140.984
4	A18	5	5	5	0	540.	492.	12.	1.5	1.603	40.566
5	A19	5	5	5	0	285.	260.	6.333	1.5	3.367	91.04
6	A33	3	3	3	0	57.	44.	2.85	.4	5.	31.184

VERIFICHE ALLO STATO LIMITE ULTIMO

FLESSIONE:

Progressive	SE	Ar	Msd	Epscl	Epsac	Mrd	Epscl	Epsac	Cam	x/d	Mr/Ms	VE	
> 7.	7.	3.	1.	-5063.	-.003	.005	-169495.	-.106	.186	2.	.363	33.48	SI
26.	26.	3.	1.	-21099.	-.012	.023	-169495.	-.106	.186	2.	.363	8.033	SI
38.	38.	3.	2.	-38448.	-.017	.019	-366526.	-.2	.186	3.	.518	9.533	SI
58.	58.	3.	3.	-38448.	-.001	-.012	-769824.	-.105	-.486	4.	.361	20.02	SI
> 58.	0.	5.	4.	-394476.	-.036	.063	-1149053.	-.115	.186	2.	.383	2.913	SI
58.	0.	5.	4.	52170.	-.005	.015	624108.	-.066	.186	2.	.262	11.96	SI
294.	236.	5.	6.	631755.	-.063	.134	875684.	-.089	.186	2.	.324	1.386	SI
518.	460.	5.	8.	103458.	-.01	.032	598810.	-.059	.186	2.	.24	5.788	SI
531.	473.	5.	9.	-630434.	-.05	.1	-1165524.	-.097	.186	2.	.343	1.849	SI
531.	473.	5.	9.	59054.	-.005	.011	1037608.	-.086	.186	2.	.316	17.57	SI
544.	486.	5.	9.	14092.	-.001	.003	1037608.	-.086	.186	2.	.316	73.63	SI
598.	540.	5.	10.	-759563.	-.072	.123	-1142730.	-.114	.186	2.	.38	1.504	SI
> 598.	0.	5.	10.	-452263.	-.042	.073	-1142730.	-.114	.186	2.	.38	2.527	SI
598.	0.	5.	10.	180781.	-.019	.073	461467.	-.05	.186	2.	.21	2.553	SI
633.	35.	5.	11.	-452263.	-.053	.142	-592499.	-.071	.186	2.	.275	1.31	SI
753.	155.	5.	11.	-39818.	-.004	.012	-592499.	-.071	.186	2.	.275	14.88	SI
854.	256.	5.	12.	187143.	-.015	.033	1037608.	-.086	.186	2.	.316	5.544	SI
908.	310.	5.	12.	-457389.	-.036	.073	-1165524.	-.097	.186	2.	.343	2.548	SI
908.	310.	5.	12.	183118.	-.014	.033	1037608.	-.086	.186	2.	.316	5.666	SI
> 908.	0.	5.	12.	-640783.	-.051	.102	-1165524.	-.097	.186	2.	.343	1.819	SI
962.	54.	5.	12.	32677.	-.003	.006	1037608.	-.086	.186	2.	.316	31.75	SI
988.	80.	5.	8.	-407336.	-.036	.065	-1149369.	-.11	.186	2.	.371	2.822	SI
988.	80.	5.	8.	118444.	-.011	.037	598810.	-.059	.186	2.	.24	5.056	SI
1077.	169.	5.	6.	-13264.	-.001	.004	-596933.	-.063	.186	2.	.253	45.	SI
1167.	259.	5.	6.	546129.	-.054	.116	875684.	-.089	.186	2.	.324	1.603	SI
1448.	540.	5.	13.	-622706.	-.048	.099	-1169215.	-.094	.186	2.	.336	1.878	SI
>1448.	0.	5.	13.	-565685.	-.044	.09	-1169215.	-.094	.186	2.	.336	2.067	SI
1492.	44.	5.	7.	-477541.	-.054	.15	-594195.	-.068	.186	2.	.267	1.244	SI
1548.	100.	5.	7.	36832.	-.004	.011	594195.	-.068	.186	2.	.267	16.13	SI
1689.	241.	5.	5.	177625.	-.017	.055	598016.	-.061	.186	2.	.246	3.367	SI
1720.	272.	5.	4.	174979.	-.018	.052	624108.	-.066	.186	2.	.262	3.567	SI
1733.	285.	5.	4.	-213879.	-.019	.034	-1149053.	-.115	.186	2.	.383	5.372	SI
1733.	285.	5.	4.	166144.	-.017	.049	624108.	-.066	.186	2.	.262	3.756	SI
>1733.	0.	3.	3.	-35152.	-.001	-.011	-769824.	-.105	-.486	4.	.361	21.9	SI
1746.	12.	3.	2.	-35152.	-.015	.017	-366526.	-.2	.186	3.	.518	10.43	SI
1766.	32.	3.	1.	-18711.	-.011	.02	-169495.	-.106	.186	2.	.363	9.059	SI
1783.	50.	3.	1.	-4507.	-.003	.005	-169495.	-.106	.186	2.	.363	37.6	SI

TAGLIO:

Progressive	Se	Vsd	VRd	VRcd	VRsd	Asw	s	ctgT	Ve
> 0.	0.	3.	-28.	2038.	10956.	10807.	1.01	10.	1.85 SI
0.	0.	3.	7.	2038.	10956.	10807.	1.01	10.	1.85 SI
58.	58.	3.	-1653.	2622.	10956.	10807.	1.01	10.	1.85 SI
> 58.	0.	5.	9098.	3996.	23388.	23509.	1.01	15.	2.4 SI
250.	192.	5.	2067.	5141.	23388.	23509.	1.01	15.	2.4 SI
598.	540.	5.	-10179.	4491.	23388.	23509.	1.01	15.	2.4 SI
> 598.	0.	5.	-100.	4108.	23388.	23509.	1.01	15.	2.4 SI
598.	0.	5.	6176.	4108.	23388.	23509.	1.01	15.	2.4 SI
908.	310.	5.	-5269.	4108.	23388.	23509.	1.01	15.	2.4 SI
> 908.	0.	5.	9324.	5658.	23388.	23509.	1.01	15.	2.4 SI
1448.	540.	5.	-9412.	3996.	23388.	23509.	1.01	15.	2.4 SI
>1448.	0.	5.	6948.	4491.	23388.	23509.	1.01	15.	2.4 SI
1733.	285.	5.	-3029.	3996.	23388.	23509.	1.01	15.	2.4 SI
>1733.	0.	3.	1581.	2622.	10956.	10807.	1.01	10.	1.85 SI
1790.	57.	3.	-20.	2038.	10956.	10807.	1.01	10.	1.85 SI
1790.	57.	3.	13.	2038.	10956.	10807.	1.01	10.	1.85 SI

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

TENSIONI DI ESERCIZIO E FESSURAZIONE - RARE:

Progressive	Se	Ar	Momento	σ_c	σ_f	As	hc, ef	Eps%	Sr, max	Wd	Ve
> 7.	7.	3. 1.	-848. !	- . 7	19. 3	3. 08	4. 77	. 0006	18. 6	. 001	SI
7.	7.	3. 1.	-848. !	- . 7	19. 3	3. 08	4. 77	. 0006	18. 6	. 001	SI
20.	20.	3. 1.	-5657. !	-4. 5	128. 5	3. 08	4. 77	. 0037	18. 6	. 007	SI
20.	20.	3. 1.	-5657. !	-4. 5	128. 5	3. 08	4. 77	. 0037	18. 6	. 007	SI
26.	26.	3. 1.	-9074. !	-7. 2	206. 1	3. 08	4. 77	. 0059	18. 6	. 011	SI
46.	46.	3. 2.	-28001. !	-16. 9	287. 1	7. 1	4. 09	. 0082	12. 86	. 011	SI
58.	58.	3. 3.	-28001. !	-1. 3	105. 1	7. 1	5. 82	. 003	14. 43	. 004	SI
> 58.	0.	5. 4.	-253559. !	-32. !	849. 3	7. 1	8. 75	. 0243	17. 07	. 041	SI
160.	102.	5. 5.	214270. !	-29. 6	1398. 3	4. 02	8. 75	. 04	45. 49	. 182	SI
294.	236.	5. 6.	461336. !	-61. 2	2046. 4	6. 03	8. 75	. 0765	19. 04	. 146	SI
598.	540.	5. 10	-542222. !	-67. 7	1832. 8	8. 04	8. 75	. 0708	16. 58	. 117	SI
> 598.	0.	5. 10	-198519. !	-24. 8	671. !	8. 04	8. 75	. 0192	16. 58	. 032	SI
633.	35.	5. 11	-198519. !	-31. 4	1304. !	4. 02	8. 75	. 0373	44. 19	. 165	SI
753.	155.	5. 11	28300. !	-4. 8	240. 3	3. 08	8. 75	. 0069	46. 1	. 032	SI
908.	310.	5. 12	-200237. !	-21. 9	668. 2	8. 04	8. 75	. 0191	16. 58	. 032	SI
> 908.	0.	5. 12	-452681. !	-49. 6	1510. 7	8. 04	8. 75	. 0554	16. 58	. 092	SI
1167.	259.	5. 6.	398465. !	-52. 9	1767. 5	6. 03	8. 75	. 0632	19. 04	. 12	SI
1448.	540.	5. 13	-454605. !	-48. 4	1513. 7	8. 04	8. 75	. 0556	16. 58	. 092	SI
>1448.	0.	5. 13	-413670. !	-44. 1	1377. 4	8. 04	8. 75	. 0491	16. 58	. 081	SI
1492.	44.	5. 7.	-266721. !	-40. 8	1748. 5	4. 02	8. 75	. 0535	44. 52	. 238	SI
1633.	185.	5. 7.	54975. !	-8. 4	360. 4	4. 02	8. 75	. 0103	44. 52	. 046	SI
1733.	285.	5. 4.	-51662. !	-6. 5	173. 1	7. 1	8. 75	. 0049	17. 07	. 008	SI
>1733.	0.	3. 3.	-25598. !	-1. 2	96. 1	7. 1	5. 82	. 0027	14. 43	. 004	SI
1746.	12.	3. 2.	-25598. !	-15. 5	262. 4	7. 1	4. 09	. 0075	12. 86	. 01	SI
1783.	50.	3. 1.	-632. !	- . 5	14. 3	3. 08	4. 77	. 0004	18. 6	. 001	SI

TENSIONI DI ESERCIZIO E FESSURAZIONE - FREQUENTI :

Progressive	Se	Ar	Momento	σ_c	σ_f	As	hc, ef	Eps%	Sr, max	Wd	Ve
> 7.	7.	3. 1.	-688. !	- . 5	15. 6	3. 08	4. 77	. 0004	18. 6	. 001	SI
7.	7.	3. 1.	-688. !	- . 5	15. 6	3. 08	4. 77	. 0004	18. 6	. 001	SI
20.	20.	3. 1.	-4593. !	-3. 7	104. 3	3. 08	4. 77	. 003	18. 6	. 006	SI
20.	20.	3. 1.	-4593. !	-3. 7	104. 3	3. 08	4. 77	. 003	18. 6	. 006	SI
26.	26.	3. 1.	-7369. !	-5. 9	167. 4	3. 08	4. 77	. 0048	18. 6	. 009	SI
46.	46.	3. 2.	-22741. !	-13. 7	233. 1	7. 1	4. 09	. 0067	12. 86	. 009	SI
58.	58.	3. 3.	-22741. !	-1. !	85. 3	7. 1	5. 82	. 0024	14. 43	. 004	SI
> 58.	0.	5. 4.	-196127. !	-24. 7	657. !	7. 1	8. 75	. 0188	17. 07	. 032	SI
160.	102.	5. 5.	171430. !	-23. 7	1118. 7	4. 02	8. 75	. 032	45. 49	. 145	SI
294.	236.	5. 6.	378496. !	-50. 2	1678. 9	6. 03	8. 75	. 059	19. 04	. 112	SI
598.	540.	5. 10	-435220. !	-54. 3	1471. 1	8. 04	8. 75	. 0535	16. 58	. 089	SI
> 598.	0.	5. 10	-146758. !	-18. 3	496. 1	8. 04	8. 75	. 0142	16. 58	. 023	SI
633.	35.	5. 11	-146758. !	-23. 2	964. !	4. 02	8. 75	. 0275	44. 19	. 122	SI
753.	155.	5. 11	22814. !	-3. 9	193. 7	3. 08	8. 75	. 0055	46. 1	. 026	SI
908.	310.	5. 12	-148146. !	-16. 2	494. 4	8. 04	8. 75	. 0141	16. 58	. 023	SI
> 908.	0.	5. 12	-361885. !	-39. 6	1207. 7	8. 04	8. 75	. 041	16. 58	. 068	SI
1167.	259.	5. 6.	323693. !	-43. !	1435. 8	6. 03	8. 75	. 0474	19. 04	. 09	SI
1448.	540.	5. 13	-369947. !	-39. 4	1231. 8	8. 04	8. 75	. 0422	16. 58	. 07	SI
>1448.	0.	5. 13	-340681. !	-36. 3	1134. 4	8. 04	8. 75	. 0375	16. 58	. 062	SI
1492.	44.	5. 7.	-219435. !	-33. 5	1438. 5	4. 02	8. 75	. 0411	44. 52	. 183	SI
1633.	185.	5. 7.	40703. !	-6. 2	266. 8	4. 02	8. 75	. 0076	44. 52	. 034	SI
1733.	285.	5. 4.	-31173. !	-3. 9	104. 4	7. 1	8. 75	. 003	17. 07	. 005	SI
>1733.	0.	3. 3.	-20773. !	- . 9	78. !	7. 1	5. 82	. 0022	14. 43	. 003	SI
1746.	12.	3. 2.	-20773. !	-12. 6	213. !	7. 1	4. 09	. 0061	12. 86	. 008	SI
1783.	50.	3. 1.	-510. !	- . 4	11. 6	3. 08	4. 77	. 0003	18. 6	. 001	SI

TENSIONI DI ESERCIZIO E FESSURAZIONE - QUASI PERMANENTI :

Progressive	Se	Ar	Momento	σ_c	σ_f	As	hc, ef	Eps%	Sr, max	Wd	Ve
> 7.	7.	3. 1.	-648. !	- . 5	14. 7	3. 08	4. 77	. 0004	18. 6	. 001	SI
7.	7.	3. 1.	-648. !	- . 5	14. 7	3. 08	4. 77	. 0004	18. 6	. 001	SI
20.	20.	3. 1.	-4328. !	-3. 4	98. 3	3. 08	4. 77	. 0028	18. 6	. 005	SI
20.	20.	3. 1.	-4328. !	-3. 4	98. 3	3. 08	4. 77	. 0028	18. 6	. 005	SI
26.	26.	3. 1.	-6943. !	-5. 5	157. 7	3. 08	4. 77	. 0045	18. 6	. 008	SI
46.	46.	3. 2.	-21426. !	-13. !	219. 7	7. 1	4. 09	. 0063	12. 86	. 008	SI
58.	58.	3. 3.	-21426. !	-1. !	80. 4	7. 1	5. 82	. 0023	14. 43	. 003	SI
> 58.	0.	5. 4.	-181769. !	-22. 9	608. 9	7. 1	8. 75	. 0174	17. 07	. 03	SI
160.	102.	5. 5.	160720. !	-22. 2	1048. 8	4. 02	8. 75	. 03	45. 49	. 136	SI
294.	236.	5. 6.	357786. !	-47. 5	1587. 1	6. 03	8. 75	. 0546	19. 04	. 104	SI
598.	540.	5. 10	-408469. !	-51. !	1380. 7	8. 04	8. 75	. 0492	16. 58	. 082	SI
> 598.	0.	5. 10	-133818. !	-16. 7	452. 3	8. 04	8. 75	. 0129	16. 58	. 021	SI
633.	35.	5. 11	-133818. !	-21. 2	879. !	4. 02	8. 75	. 0251	44. 19	. 111	SI
753.	155.	5. 11	21442. !	-3. 6	182. 1	3. 08	8. 75	. 0052	46. 1	. 024	SI
908.	310.	5. 12	-135123. !	-14. 8	450. 9	8. 04	8. 75	. 0129	16. 58	. 021	SI
> 908.	0.	5. 12	-339186. !	-37. 1	1132. !	8. 04	8. 75	. 0374	16. 58	. 062	SI
1167.	259.	5. 6.	305000. !	-40. 5	1352. 9	6. 03	8. 75	. 0435	19. 04	. 083	SI
1448.	540.	5. 13	-348782. !	-37. 1	1161. 4	8. 04	8. 75	. 0388	16. 58	. 064	SI
>1448.	0.	5. 13	-322433. !	-34. 3	1073. 6	8. 04	8. 75	. 0346	16. 58	. 057	SI
1492.	44.	5. 7.	-207613. !	-31. 7	1361. !	4. 02	8. 75	. 0389	44. 52	. 173	SI
1633.	185.	5. 7.	37135. !	-5. 7	243. 4	4. 02	8. 75	. 007	44. 52	. 031	SI
1733.	285.	5. 4.	-26050. !	-3. 3	87. 3	7. 1	8. 75	. 0025	17. 07	. 004	SI
>1733.	0.	3. 3.	-19566. !	- . 9	73. 4	7. 1	5. 82	. 0021	14. 43	. 003	SI

1746.	12.	3.	2.	-19566.	-11.8!	200.6!	7.1	4.09	.0057	12.86	.007!	SI
1783.	50.	3.	1.	-480.	-.	10.9	3.08	4.77	.0003	18.6	.001	SI

ARMATURE LONGITUDINALI (%=100*Af/Acl s - Acl s=area intera sezione)

Nro	Totale	%	Super.	%	Barre	Infer.	%	Barre
1	6.16	1.232	3.08	.616	2d14	3.08	.616	2d14
2	10.18	2.036	7.1	1.42	2d16 +2d14	3.08	.616	2d14
3	14.2	2.84	7.1	1.42	2d16 +2d14	7.1	1.42	2d16 +2d14
4	14.2	1.262	10.18	.905	2d16 +2d14 +2d14	4.02	.357	2d16
5	11.12	.989	7.1	.631	2d16 +2d14	4.02	.357	2d16
6	10.05	.894	4.02	.357	2d16	6.03	.536	1d16 +2d16
7	8.04	.715	4.02	.357	2d16	4.02	.357	2d16
8	12.06	1.072	8.04	.715	2d16 +2d16	4.02	.357	2d16
9	15.14	1.346	8.04	.715	2d16 +2d16	7.1	.631	2d16 +2d14
10	11.12	.989	8.04	.715	2d16 +2d16	3.08	.274	2d14
11	7.1	.631	4.02	.357	2d16	3.08	.274	2d14
12	15.14	1.346	8.04	.715	2d16 +2d16	7.1	.631	2d14 +2d16
13	16.08	1.43	8.04	.715	2d16 +2d16	8.04	.715	2d16 +2d16

VERIFICA TRAVATA IN CEMENTO ARMATO

Nome travata : 9 - Travata T009 (trave)
 Metodo di verifica : stati limite (NTC18). ->
 Duttilita' : non prevista (struttura non dissipativa).
 Unita' di misura : cm; daN; daN/cm; daN/cm2; daN/cm2; deform. %.
 Unita' particolari : fessure [Wk]:mm - ferri:mm e cm2 - sezioni:cm e derivate.
 Copri ferri (assi) : longitudinali= 3.5 ; staffe= 2.5

MATERIALI

CLS : Rck =300. ; fck=249. ; fctk= 17.9; fctm= 25.6; Ec= 314472. ;
 gc =1.5 ; fcd=141.1; fbd= 26.9; fctd= 11.9; Ecu= .2% (limite elastico)
 ACCIAIO : B450C; ftk=5175. ; fyk=4500. ; Es=2100000. ;
 gs =1.15; fyd=3913. ; ftd(k*fyd)=4500. ; fud=4439.8; Eud=.19% (limite elastico)

TENSIONI E FESSURE MASSIME IN ESERCIZIO

GRUPPO : ordinario.
 CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112. ; fbd(esercizio)= 26.9
 ACCIAIO : σ_f (rara)=3600.; Coeff.Omogeneizzazione= 15
 FESSURE : Wdmax(fre.)=.4 ; Wdmax(q.p.)=.3 [4.1.2.2.4.5];
 kt=.4 [EN 1992-1 7.3.4].

CASI DI CARICO DA MODELLO 3D

SLU			RARE			FREQUENTI			QUASI PERMANENTI		
Nome	Descrizione	Sest	Nome	Descrizione	Sest	Nome	Descrizione	Sest	Nome	Descrizione	Sest
1.	SLU	1.	18.	Rara	1.	21.	Frequente	1.	24.	Quasi Perm	1.
2.	SLU VENTOX	2.	19.	Rara VentoX	2.	22.	Frequente VentoX	2.			
3.	SLU VENTOY	2.	20.	Rara VentoY	2.	23.	Frequente VentoY	2.			
6.	SLU con SSMAX PRINC16										
7.	SLU con SSMAX PRINC16										

SEZIONI UTILIZZATE

3) Rettangolare: 25X20; A=500.; Jg=16667.; E=314471.6

DESCRIZIONE CAMPATE

Cam.	Descriz.	S.ini	Sez.	S.fin	Incl.	L.assi	L.net.	lambda	K	r.Ar.	lam.max
1	A54	3	3	3	-5	392.	322.	19.6	1.3	1.289	26.134
2	A55	3	3	3	6	387.	317.	19.35	1.3	1.287	26.097

VERIFICHE ALLO STATO LIMITE ULTIMO

FLESSIONE:

Progressive	SE	Ar	Msd	Epscl	Epsac	Mrd	Epscl	Epsac	Cam	x/d	Mr/Ms	VE
> 0.	0.	3.1.	-118391.	-.072	.13	-169259.	-.106	.186	2.	.363	1.43	SI
0.	0.	3.1.	130941.	-.08	.144	168824.	-.106	.186	2.	.363	1.289	SI
7.	7.	3.1.	130941.	-.08	.144	168647.	-.106	.186	2.	.363	1.288	SI
168.	168.	3.1.	-16402.	-.01	.018	-168533.	-.109	.186	2.	.368	10.28	SI

385.	385.	3.	1.	-128827.	-.083!	.142	-167879.	-.112	.186	2.	.375!	1.303	SI
392.	392.	3.	1.	-128827.	-.078	.141	-169498.	-.106	.186	2.	.363!	1.316	SI
392.	392.	3.	1.	114539.	-.069	.125	169508.	-.106	.186	2.	.363	1.48	SI
> 392.	0.	3.	1.	-128588.	-.078	.141	-169205.	-.106	.186	2.	.362	1.316	SI
392.	0.	3.	1.	117273.	-.071	.128	169781.	-.106	.186	2.	.363!	1.448	SI
399.	7.	3.	1.	-128588.	-.078	.141	-169217.	-.106	.186	2.	.362!	1.316	SI
613.	221.	3.	1.	-17056.	-.01	.018	-169362.	-.106	.186	2.	.362	9.93	SI
772.	380.	3.	1.	131669.	-.08	.144	169522.	-.106	.186	2.	.363	1.287	SI
779.	387.	3.	1.	-119746.	-.072	.131	-169474.	-.106	.186	2.	.363	1.415	SI
779.	387.	3.	1.	131669.	-.08	.144!	169517.	-.106	.186	2.	.363	1.287!	SI

TAGLIO:

Progressive	Se	Vsd	VRd	VRcd	VRsd	Asw	s	ctgT	Ve
> 0.	0.	3.	-493.	2622.	10956.	10807.	1.01	10.	1.85 SI
0.	0.	3.	895.	2622.	10956.	10807.	1.01	10.	1.85 SI
392.	392.	3.	-920.	2622.	10956.	10807.	1.01	10.	1.85 SI
392.	392.	3.	376.	2622.	10956.	10807.	1.01	10.	1.85 SI
> 392.	0.	3.	-445.	2622.	10956.	10807.	1.01	10.	1.85 SI
392.	0.	3.	973.	2622.	10956.	10807.	1.01	10.	1.85 SI
779.	387.	3.	-865.	2622.	10956.	10807.	1.01	10.	1.85 SI
779.	387.	3.	461.	2622.	10956.	10807.	1.01	10.	1.85 SI

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

TENSIONI DI ESERCIZIO E FESSURAZIONE - RARE:

Progressive	Se	Ar	Momento	σc	σf	As	hc,ef	Eps%	Sr,max	Wd	Ve
> 0.	0.	3.	-6278.	-5.	142.7	3.08	4.77	.0041	18.59	.008	SI
140.	140.	3.	12181.	-10.1	283.2	3.08	4.79	.0081	19.97	.016	SI
385.	385.	3.	-20723.	-17.3!	472.8!	3.08	4.72	.0135	18.4	.025	SI
392.	392.	3.	-20723.	-16.5	470.7	3.08	4.77	.0134	18.6	.025!	SI
> 392.	0.	3.	-19617.	-15.7!	446.4!	3.08	4.77	.0128	18.62	.024!	SI
641.	249.	3.	11639.	-9.3	264.2	3.08	4.77	.0075	18.6	.014	SI
779.	387.	3.	-6994.	-5.6	158.9	3.08	4.77	.0045	18.6	.008	SI

TENSIONI DI ESERCIZIO E FESSURAZIONE - FREQUENTI:

Progressive	Se	Ar	Momento	σc	σf	As	hc,ef	Eps%	Sr,max	Wd	Ve
> 0.	0.	3.	-3375.	-2.7	76.7	3.08	4.77	.0022	18.59	.004	SI
168.	168.	3.	10344.	-8.6	241.4	3.08	4.8	.0069	20.17	.014	SI
385.	385.	3.	-15946.	-13.3!	363.8!	3.08	4.72	.0104	18.4	.019	SI
392.	392.	3.	-15946.	-12.7	362.2	3.08	4.77	.0103	18.6	.019!	SI
> 392.	0.	3.	-14867.	-11.9!	338.3!	3.08	4.77	.0097	18.62	.018!	SI
613.	221.	3.	9922.	-7.9	225.2	3.08	4.77	.0064	18.59	.012	SI
779.	387.	3.	-3970.	-3.2	90.2	3.08	4.77	.0026	18.6	.005	SI

TENSIONI DI ESERCIZIO E FESSURAZIONE - QUASI PERMANENTI:

Progressive	Se	Ar	Momento	σc	σf	As	hc,ef	Eps%	Sr,max	Wd	Ve
> 0.	0.	3.	-2649.	-2.1	60.2	3.08	4.77	.0017	18.59	.003	SI
168.	168.	3.	9972.	-8.3	232.7	3.08	4.8	.0066	20.17	.013	SI
385.	385.	3.	-14751.	-12.3!	336.6!	3.08	4.72	.0096	18.4	.018	SI
392.	392.	3.	-14751.	-11.8!	335.1!	3.08	4.77	.0096	18.6	.018!	SI
> 392.	0.	3.	-13680.	-10.9!	311.3!	3.08	4.77	.0089	18.62	.017!	SI
586.	194.	3.	9588.	-7.6	217.6	3.08	4.77	.0062	18.59	.012	SI
779.	387.	3.	-3214.	-2.6	73.	3.08	4.77	.0021	18.6	.004	SI

ARMATURE LONGITUDINALI (%=100*Af/Acl s - Acl s=area intera sezione)

Nro	Totale	%	Super.	%	Barre	Infer.	%	Barre
1	6.16	1.232	3.08	.616	2d14	3.08	.616	2d14

VERIFICA TRAVATA IN CEMENTO ARMATO

Nome travata : 11 - Travata T010 (trave)
 Metodo di verifica : stati limite (NTC18). ->
 Duttilita' : non prevista (struttura non dissipativa).
 Unita' di misura : cm; daN; daN/cm; daN/cm2; deform. %.
 Unita' particolari : fessure [Wk]:mm - ferri:mm e cm2 - sezioni:cm e derivate.
 Copri ferri (assi) : longitudinali= 3.5 ; staffe= 2.5

MATERIALI

CLS : Rck =300. ; fck=249. ; fctk= 17.9; fctm= 25.6; Ec= 314472. ;
gc =1.5 ; fcd=141.1; fbd= 26.9; fctd= 11.9; Ecud=.2% (limite lastico)
ACCIAIO : B450C; ftk=5175. ; fyk=4500. ; Es=2100000. ;
gs =1.15; fyd=3913. ; ftd(k*fyd)=4500. ; fud=4439.8; Eud=.19% (limite lastico)

TENSIONI E FESSURE MASSIME IN ESERCIZIO

GRUPPO : ordinario.

CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112. ; fbd(esercizio)= 26.9

ACCIAIO : σ_f (rara)=3600. ; Coeff. Omogeneizzazione= 15

FESSURE : Wdmax(fre.)= .4 ; Wdmax(q.p.)= .3 [4. 1. 2. 2. 4. 5];
kt=.4 [EN 1992-1 7.3.4].

CASI DI CARICO DA MODELLO 3D

SLU		
Nome	Descrizione	Sest
1.	SLU	1.
2.	SLU VENTOX	2.
3.	SLU VENTOY	2.
6.	SLU con SISMAX PRINC16	
7.	SLU con SISMAX PRINC16	

RARE			FREQUENTI			QUASI PERMANENTI		
Nome	Descrizione	Sest	Nome	Descrizione	Sest	Nome	Descrizione	Sest
18.	Rara	1.	21.	Frequente	1.	24.	Quasi Perm	1.
19.	Rara VentoX	2.	22.	Frequente VentoX	2.			
20.	Rara VentoY	2.	23.	Frequente VentoY	2.			

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SEZIONI UTILIZZATE

3) Rettangolare: 25X20; A=500.; Jg=16667.; E=314471.6

DESCRIZIONE CAMPATE

Cam.	Descriz.	S. ini	Sez.	S. fin	Incl.	L. assi	L. net.	lambda	K	r. Ar.	lam. max
1	A57	3	3	3	-5	392.	322.	19.6	1.3	1.259	25.513
2	A56	3	3	3	6	387.	317.	19.35	1.3	1.263	25.591

VERIFICHE ALLO STATO LIMITE ULTIMO

FLESSIONE:

Progressive	ve	Se	Ar	Msd	Epscl	Epsac	Mrd	Epscl	Epsac	Cam	x/d	Mr/Ms	VE
>	0.	0.	3.	1.	-125814.	-.077	.138	-169259.	-.106	.186	2.	.363	1.345 SI
	0.	0.	3.	1.	134127.	-.082	.147	168824.	-.106	.186	2.	.363	1.259 SI
	7.	7.	3.	1.	134127.	-.082	.148	168647.	-.106	.186	2.	.363	1.257 SI
	168.	168.	3.	1.	-18386.	-.011	.02	-168533.	-.109	.186	2.	.368	9.166 SI
	385.	385.	3.	1.	-131340.	-.085	.145	-167879.	-.112	.186	2.	.375	1.278 SI
	392.	392.	3.	1.	-131340.	-.08	.144	-169498.	-.106	.186	2.	.363	1.291 SI
	392.	392.	3.	1.	122596.	-.074	.134	169508.	-.106	.186	2.	.363	1.383 SI
>	392.	0.	3.	1.	-130908.	-.08	.144	-169205.	-.106	.186	2.	.362	1.293 SI
	392.	0.	3.	1.	124466.	-.075	.136	169781.	-.106	.186	2.	.363	1.364 SI
	399.	7.	3.	1.	-130908.	-.08	.144	-169217.	-.106	.186	2.	.362	1.293 SI
	586.	194.	3.	1.	18556.	-.011	.02	169649.	-.106	.186	2.	.363	9.143 SI
	772.	380.	3.	1.	134274.	-.082	.147	169522.	-.106	.186	2.	.363	1.263 SI
	779.	387.	3.	1.	-126665.	-.077	.139	-169474.	-.106	.186	2.	.363	1.338 SI
	779.	387.	3.	1.	134274.	-.082	.147	169517.	-.106	.186	2.	.363	1.262 SI

TAGLIO:

Progressive	ve	Se	Vsd	VRd	VRcd	VRsd	Asw	s	ctgT	Ve
>	0.	0.	3.	-508.	2622.	10956.	10807.	1.01	10.	1.85 SI
	0.	0.	3.	936.	2622.	10956.	10807.	1.01	10.	1.85 SI
	392.	392.	3.	-935.	2622.	10956.	10807.	1.01	10.	1.85 SI
	392.	392.	3.	417.	2622.	10956.	10807.	1.01	10.	1.85 SI
>	392.	0.	3.	-483.	2622.	10956.	10807.	1.01	10.	1.85 SI
	392.	0.	3.	986.	2622.	10956.	10807.	1.01	10.	1.85 SI
	779.	387.	3.	-902.	2622.	10956.	10807.	1.01	10.	1.85 SI
	779.	387.	3.	474.	2622.	10956.	10807.	1.01	10.	1.85 SI

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

TENSIONI DI ESERCIZIO E FESSURAZIONE - RARE:

Progressive	ve	Se	Ar	Momento	σ_c	σ_f	As	hc,ef	Eps%	Sr, max	Wd	Ve
>	0.	0.	3.	1.	-8778.	-7.	199.6	3.08	4.77	.0057	18.59	.011 SI
	168.	168.	3.	1.	11245.	-9.4	262.5	3.08	4.8	.0075	20.17	.015 SI
	385.	385.	3.	1.	-18814.	-15.7	429.3	3.08	4.72	.0123	18.4	.023 SI
	392.	392.	3.	1.	-18814.	-15.	427.3	3.08	4.77	.0122	18.6	.023 SI
>	392.	0.	3.	1.	-17798.	-14.2	405.	3.08	4.77	.0116	18.62	.022 SI
	613.	221.	3.	1.	10670.	-8.5	242.1	3.08	4.77	.0069	18.59	.013 SI
	779.	387.	3.	1.	-9612.	-7.7	218.3	3.08	4.77	.0062	18.6	.012 SI

TENSIONI DI ESERCIZIO E FESSURAZIONE - FREQUENTI:

Progressive	ve	Se	Ar	Momento	σ_c	σ_f	As	hc,ef	Eps%	Sr, max	Wd	Ve
>	0.	0.	3.	1.	-5793.	-4.6	131.7	3.08	4.77	.0038	18.59	.007 SI
	196.	196.	3.	1.	9895.	-8.3	231.9	3.08	4.8	.0066	20.38	.014 SI

385.	385.	3.	1.	-13953.	-11.7!	318.4!	3.08	4.72	.0091	18.4	.017	SI
392.	392.	3.	1.	-13953.	-11.1!	316.9!	3.08	4.77	.0091	18.6	.017!	SI
> 392.	0.	3.	1.	-13116.	-10.5!	298.5!	3.08	4.77	.0085	18.62	.016!	SI
586.	194.	3.	1.	9455.	-7.5	214.5	3.08	4.77	.0061	18.59	.011	SI
779.	387.	3.	1.	-6415.	-5.1	145.7	3.08	4.77	.0042	18.6	.008	SI

TENSIONI DI ESERCIZIO E FESSURAZIONE - QUASI PERMANENTI:

Progressive	Se	Ar	Momento	σ_c	σ_f	As	hc, ef	Eps%	Sr, max	Wd	Ve	
> 0.	0.	3.	1.	-5046.	-4.	114.7	3.08	4.77	.0033	18.59	.006	SI
> 196.	196.	3.	1.	9693.	-8.1	227.1	3.08	4.8	.0065	20.38	.013	SI
385.	385.	3.	1.	-12737.	-10.6!	290.6!	3.08	4.72	.0083	18.4	.015	SI
392.	392.	3.	1.	-12737.	-10.2!	289.3!	3.08	4.77	.0083	18.6	.015!	SI
> 392.	0.	3.	1.	-11945.	-9.5!	271.8!	3.08	4.77	.0078	18.62	.014!	SI
586.	194.	3.	1.	9254.	-7.4	210.	3.08	4.77	.006	18.59	.011	SI
779.	387.	3.	1.	-5616.	-4.5	127.6	3.08	4.77	.0036	18.6	.007	SI

ARMATURE LONGITUDINALI (%=100*Af/Acl s - Acl s=area intera sezione)

Nro	Totale	%	Super.	%	Barre	Infer.	%	Barre
1	6.16	1.232	3.08	.616	2d14	3.08	.616	2d14

VERIFICA TRAVATA IN CEMENTO ARMATO

Nome travata : 12 - Travata T011 (trave)
 Metodo di verifica : stati limite (NTC18). ->
 Duttilita' : non prevista (struttura non dissipativa).
 Unità di misura : cm; daN; daN/cm; daNcm; daN/cm2; deform. %.
 Unità particolari : fessure [Wk]:mm - ferri:mm e cm2 - sezioni:cm e derivate.
 Copri ferri (assi) : longitudinali= 3.5 ; staffe= 2.5

MATERIALI

CLS : Rck =300. ; fck=249. ; fctk= 17.9; fctm= 25.6; Ec= 314472. ;
gc =1.5 ; fcd=141.1; fbd= 26.9; fctd= 11.9; Ecd=.2% (limite elastico)
ACCIAIO : B450C; ftk=5175. ; fyk=4500. ; Es=2100000. ;
gs =1.15; fyd=3913. ; ftd(k*fyd)=4500. ; fud=4439.8; Eud=.19% (limite elastico)

TENSIONI E FESSURE MASSIME IN ESERCIZIO

GRUPPO : ordinario.
CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112. ; fbd(esercizio)= 26.9
ACCIAIO : σ_f (rara)=3600. ; Coeff.Omogeneizzazione= 15
FESSURE : Wdmax(fre.)=.4 ; Wdmax(q.p.)=.3 [4.1.2.2.4.5];
kt=.4 [EN 1992-1 7.3.4].

CASI DI CARICO DA MODELLO 3D

Nome	Descrizione	Sest
1.	SLU	1.
2.	SLU VENTOX	2.
3.	SLU VENTOY	2.
6.	SLU con SSMAX PRINC16	
7.	SLU con SSMAY PRINC16	

RARE			FREQUENTI			QUASI PERMANENTI		
Nome	Descrizione	Sest	Nome	Descrizione	Sest	Nome	Descrizione	Sest
18.	Rara	1.	21.	Frequente	1.	24.	Quasi Perm	1.
19.	Rara VentoX	2.	22.	Frequente VentoX	2.			
20.	Rara VentoY	2.	23.	Frequente VentoY	2.			

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SEZIONI UTILIZZATE

3) Rettangolare: 25X20; A=500. ; Jg=16667. ; E=314471.6
5) Rettangolare: 25X45; A=1125. ; Jg=189844. ; E=314471.6

DESCRIZIONE CAMPATE

Cam.	Descriz.	S. ini	Sez.	S. fin	Incl.	L. assi	L. net.	lambda	K	r. Ar.	lam. max
1	A30	3	3	3	0	58.	46.	2.9	.4	5.	31.184
2	A20	5	5	5	0	338.	290.	7.511	1.5	1.948	57.861
3	A21	5	5	5	0	430.	360.	9.556	1.5	1.476	41.628
4	A60	5	5	5	0	284.	214.	6.311	1.5	3.882	109.466
5	A22	5	5	5	0	338.	290.	7.511	1.5	1.998	59.365
6	A23	5	5	5	0	285.	260.	6.333	1.5	2.272	67.492
7	A31	3	3	3	0	57.	44.	2.85	.4	5.	31.184

VERIFICHE ALLO STATO LIMITE ULTIMO

FLESSIONE:

Progressi ve	SE	Ar	Msd	Epscl	Epsac	Mrd	Epscl	Epsac	Cam	x/d	Mr/Ms	VE
> 7.	7.	3. 1.	-4695.	-. 003	. 005	-169495.	-. 106	. 186	2.	. 363	36. 1	SI
26.	26.	3. 1.	-20215.	-. 012	. 022	-169495.	-. 106	. 186	2.	. 363	8. 385	SI
38.	38.	3. 2.	-37161.	-. 017	. 021	-322837.	-. 177	. 186	2.	. 487	8. 687	SI
58.	58.	3. 3.	-37161.	-. 002	-. 015	-629124.	-. 106	-. 486	4.	. 362	16. 93	SI
> 58.	0.	5. 4.	-238028.	-. 023	. 043	-1018622.	-. 111	. 186	2.	. 372	4. 279	SI
58.	0.	5. 4.	163611.	-. 019	. 062	490483.	-. 06	. 186	2.	. 242	2. 998	SI
77.	19.	5. 5.	180324.	-. 02	. 073	460658.	-. 053	. 186	2.	. 221	2. 555	SI
156.	98.	5. 6.	-3888.	0.	. 002	-458307.	-. 06	. 186	2.	. 242	117. 9	SI
196.	138.	5. 6.	235299.	-. 03	. 095	458307.	-. 06	. 186	2.	. 242	1. 948	SI
342.	284.	5. 7.	-413930.	-. 047	. 167	-460658.	-. 053	. 186	2.	. 221	1. 113	SI
361.	303.	5. 8.	143569.	-. 012	. 03	902633.	-. 081	. 186	2.	. 302	6. 287	SI
396.	338.	5. 8.	-413930.	-. 035	. 074	-1031430.	-. 092	. 186	2.	. 331	2. 492	SI
396.	338.	5. 8.	77246.	-. 006	. 016	902633.	-. 081	. 186	2.	. 302	11. 69	SI
> 396.	0.	5. 8.	-483909.	-. 041	. 087	-1031430.	-. 092	. 186	2.	. 331	2. 131	SI
396.	0.	5. 8.	67947.	-. 006	. 014	902633.	-. 081	. 186	2.	. 302	13. 28	SI
463.	67.	5. 9.	-408947.	-. 039	. 074	-1016722.	-. 104	. 186	2.	. 359	2. 486	SI
463.	67.	5. 9.	194688.	-. 021	. 079	461106.	-. 051	. 186	2.	. 216	2. 368	SI
611.	215.	5. 10	311046.	-. 038	. 126	459208.	-. 057	. 186	2.	. 235	1. 476	SI
772.	376.	5. 11	-449895.	-. 047	. 14	-597072.	-. 063	. 186	2.	. 252	1. 327	SI
791.	395.	5. 12	165779.	-. 014	. 034	904779.	-. 078	. 186	2.	. 295	5. 458	SI
826.	430.	5. 12	-449895.	-. 037	. 072	-1161319.	-. 101	. 186	2.	. 351	2. 581	SI
826.	430.	5. 12	84307.	-. 007	. 017	904779.	-. 078	. 186	2.	. 295	10. 73	SI
> 826.	0.	5. 12	-361812.	-. 029	. 058	-1161319.	-. 101	. 186	2.	. 351	3. 21	SI
826.	0.	5. 12	208987.	-. 017	. 043	904779.	-. 078	. 186	2.	. 295	4. 329	SI
880.	54.	5. 11	-361812.	-. 037	. 113	-597072.	-. 063	. 186	2.	. 252	1. 65	SI
893.	67.	5. 10	199286.	-. 024	. 081	459208.	-. 057	. 186	2.	. 235	2. 304	SI
947.	121.	5. 10	-78688.	-. 009	. 025	-592499.	-. 071	. 186	2.	. 275	7. 53	SI
1091.	265.	5. 13	232506.	-. 02	. 048	902633.	-. 081	. 186	2.	. 302	3. 882	SI
1110.	284.	5. 13	-357999.	-. 03	. 064	-1031430.	-. 092	. 186	2.	. 331	2. 881	SI
1110.	284.	5. 13	232506.	-. 02	. 048	902633.	-. 081	. 186	2.	. 302	3. 882	SI
>1110.	0.	5. 13	-334036.	-. 028	. 06	-1031430.	-. 092	. 186	2.	. 331	3. 088	SI
1110.	0.	5. 13	114300.	-. 01	. 023	902633.	-. 081	. 186	2.	. 302	7. 897	SI
1164.	54.	5. 7.	-334036.	-. 038	. 135	-460658.	-. 053	. 186	2.	. 221	1. 379	SI
1164.	54.	5. 7.	202146.	-. 02	. 042	888976.	-. 094	. 186	2.	. 336	4. 398	SI
1230.	120.	5. 6.	229339.	-. 029	. 093	458307.	-. 06	. 186	2.	. 242	1. 998	SI
1417.	307.	5. 14	14233.	-. 001	. 003	900160.	-. 083	. 186	2.	. 309	63. 25	SI
1448.	338.	5. 14	-272917.	-. 024	. 056	-900160.	-. 083	. 186	2.	. 309	3. 298	SI
>1448.	0.	5. 14	-263176.	-. 023	. 054	-900160.	-. 083	. 186	2.	. 309	3. 42	SI
1479.	31.	5. 14	4767.	0.	. 001	900160.	-. 083	. 186	2.	. 309	188. 8	SI
1590.	142.	5. 6.	-65.	0.	0.	-458307.	-. 06	. 186	2.	. 242	7001.	SI
1633.	185.	5. 6.	201724.	-. 025	. 082	458307.	-. 06	. 186	2.	. 242	2. 272	SI
1689.	241.	5. 5.	197826.	-. 022	. 08	460658.	-. 053	. 186	2.	. 221	2. 329	SI
1733.	285.	5. 4.	-215103.	-. 021	. 039	-1018622.	-. 111	. 186	2.	. 372	4. 736	SI
1733.	285.	5. 4.	160331.	-. 019	. 061	490483.	-. 06	. 186	2.	. 242	3. 059	SI
>1733.	0.	3. 3.	-35137.	-. 002	-. 014	-629124.	-. 106	-. 486	4.	. 362	17. 91	SI
1746.	12.	3. 2.	-35137.	-. 016	. 02	-322837.	-. 177	. 186	2.	. 487	9. 188	SI
1766.	32.	3. 1.	-18745.	-. 011	. 02	-169495.	-. 106	. 186	2.	. 363	9. 042	SI
1783.	50.	3. 1.	-4552.	-. 003	. 005	-169495.	-. 106	. 186	2.	. 363	37. 24	SI

TAGLIO:

Progressi ve	Se	Vsd	VRd	VRcd	VRsd	Asw	s	ctgT	Ve
> 0.	0.	3.	-14.	2038.	10956.	10807.	1. 01	10.	1. 85
0.	0.	3.	18.	2038.	10956.	10807.	1. 01	10.	1. 85
58.	58.	3.	-1619.	2622.	10956.	10807.	1. 01	10.	1. 85
> 58.	0.	5.	5446.	3996.	23388.	23509.	1. 01	15.	2. 4
396.	338.	5.	-6246.	4108.	23388.	23509.	1. 01	15.	2. 4
> 396.	0.	5.	8365.	4108.	23388.	23509.	1. 01	15.	2. 4
826.	430.	5.	-6827.	4108.	23388.	23509.	1. 01	15.	2. 4
> 826.	0.	5.	-368.	4108.	23388.	23509.	1. 01	15.	2. 4
826.	0.	5.	5787.	4108.	23388.	23509.	1. 01	15.	2. 4
1110.	284.	5.	-4931.	4108.	23388.	23509.	1. 01	15.	2. 4
>1110.	0.	5.	6554.	4108.	23388.	23509.	1. 01	15.	2. 4
1448.	338.	5.	-5911.	3996.	23388.	23509.	1. 01	15.	2. 4
>1448.	0.	5.	5705.	3996.	23388.	23509.	1. 01	15.	2. 4
1492.	44.	5.	4512.	4108.	23388.	23509.	1. 01	15.	2. 4
1733.	285.	5.	-4189.	3996.	23388.	23509.	1. 01	15.	2. 4
>1733.	0.	3.	1575.	2622.	10956.	10807.	1. 01	10.	1. 85
1790.	57.	3.	-16.	2038.	10956.	10807.	1. 01	10.	1. 85
1790.	57.	3.	15.	2038.	10956.	10807.	1. 01	10.	1. 85

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

TENSIONI DI ESERCIZIO E FESSURAZIONE - RARE:

Progressi ve	Se	Ar	Momento	σc	σf	As	hc, ef	Eps%	Sr, max	Wd	Ve
> 7.	7.	3. 1.	-721.	-. 6	16. 4	3. 08	4. 77	. 0005	18. 6	. 001	SI
7.	7.	3. 1.	-721.	-. 6	16. 4	3. 08	4. 77	. 0005	18. 6	. 001	SI
20.	20.	3. 1.	-5292.	-4. 2	120. 2	3. 08	4. 77	. 0034	18. 6	. 006	SI
20.	20.	3. 1.	-5292.	-4. 2	120. 2	3. 08	4. 77	. 0034	18. 6	. 006	SI
46.	46.	3. 2.	-27067.	-17. 1	317. 6	6. 16	4. 21	. 0091	13. 59	. 012	SI

58.	58.	3.	3.	-27067.!	-1.9	121.5	6.16	5.63	.0035	14.96	.005	SI
> 58.	0.	5.	4.	-69644.!	-9.5	262.9	6.16	8.75	.0075	17.98	.014	SI
196.	138.	5.	6.	171766.!	-30.!	1460.6!	3.08	8.75	.0417	45.79	.191!	SI
396.	338.	5.	8.	-207238.!	-24.3	781.5	7.1	8.75	.0223	17.07	.038	SI
> 396.	0.	5.	8.	-264530.!	-31.	997.5	7.1	8.75	.0292	17.07	.05	SI
611.	215.	5.	10	227211.!	-38.4!	1929.5!	3.08	8.75	.0551	46.1	.254!	SI
826.	430.	5.	12	-233348.!	-26.3	780.7	8.04	8.75	.0223	16.58	.037	SI
> 826.	0.	5.	12	-120895.!	-13.6!	404.5	8.04	8.75	.0116	16.58	.019	SI
989.	163.	5.	10	62872.!	-10.6	533.9!	3.08	8.75	.0153	46.1	.07	SI
1110.	284.	5.	13	-106015.!	-12.4	399.8	7.1	8.75	.0114	17.07	.019	SI
>1110.	0.	5.	13	-134519.!	-15.8	507.3	7.1	8.75	.0145	17.07	.025	SI
1270.	160.	5.	6.	143396.!	-25.!	1219.4!	3.08	8.75	.0348	45.79	.16	SI
1448.	338.	5.	14	-197626.!	-24.3	854.8	6.16	8.75	.0244	17.98	.044	SI
>1448.	0.	5.	14	-192913.!	-23.7!	834.4	6.16	8.75	.0238	17.98	.043	SI
1590.	142.	5.	6.	123586.!	-21.6	1050.9!	3.08	8.75	.03	45.79	.137!	SI
1733.	285.	5.	4.	-57538.!	-7.8	217.2	6.16	8.75	.0062	17.98	.011	SI
>1733.	0.	3.	3.	-25591.!	-1.8	114.9	6.16	5.63	.0033	14.96	.005	SI
1746.	12.	3.	2.	-25591.!	-16.1!	300.3!	6.16	4.21	.0086	13.59	.012!	SI
1783.	50.	3.	1.	-655.!	-5	14.9	3.08	4.77	.0004	18.6	.001	SI

TENSIONI DI ESERCIZIO E FESSURAZIONE - FREQUENTI :

Progressive	Se	Ar	Momento	σc	σf	As	hc, ef	Eps%	Sr, max	Wd	Ve	
> 7.	7.	3.	1.	-586.!	-5	13.3	3.08	4.77	.0004	18.6	.001	SI
7.	7.	3.	1.	-586.!	-5	13.3	3.08	4.77	.0004	18.6	.001	SI
20.	20.	3.	1.	-4299.	-3.4	97.6	3.08	4.77	.0028	18.6	.005	SI
20.	20.	3.	1.	-4299.	-3.4	97.6	3.08	4.77	.0028	18.6	.005	SI
46.	46.	3.	2.	-21987.	-13.9!	258.!	6.16	4.21	.0074	13.59	.01	SI
58.	58.	3.	3.	-21987.!	-1.5	98.7	6.16	5.63	.0028	14.96	.004	SI
> 58.	0.	5.	4.	-46020.	-6.3	173.7	6.16	8.75	.005	17.98	.009	SI
196.	138.	5.	6.	140543.!	-24.6!	1195.1!	3.08	8.75	.0341	45.79	.156!	SI
396.	338.	5.	8.	-161827.	-19.	610.2	7.1	8.75	.0174	17.07	.03	SI
> 396.	0.	5.	8.	-203218.!	-23.8	766.3	7.1	8.75	.0219	17.07	.037	SI
611.	215.	5.	10	186711.!	-31.5!	1585.6!	3.08	8.75	.0453	46.1	.209!	SI
826.	430.	5.	12	-177704.	-20.	594.5	8.04	8.75	.017	16.58	.028	SI
> 826.	0.	5.	12	-85310.!	-9.6!	285.4	8.04	8.75	.0082	16.58	.014	SI
989.	163.	5.	10	48591.!	-8.2	412.6!	3.08	8.75	.0118	46.1	.054!	SI
1110.	284.	5.	13	-72938.	-8.6	275.	7.1	8.75	.0079	17.07	.013	SI
>1110.	0.	5.	13	-100813.	-11.8	380.2	7.1	8.75	.0109	17.07	.019	SI
1270.	160.	5.	6.	111834.!	-19.5!	951.!	3.08	8.75	.0272	45.79	.124!	SI
1448.	338.	5.	14	-158772.!	-19.5!	686.7	6.16	8.75	.0196	17.98	.035	SI
>1448.	0.	5.	14	-158543.!	-19.5!	685.7	6.16	8.75	.0196	17.98	.035	SI
1590.	142.	5.	6.	98689.!	-17.2	839.2!	3.08	8.75	.024	45.79	.11	SI
1733.	285.	5.	4.	-36822.!	-5	139.	6.16	8.75	.004	17.98	.007	SI
>1733.	0.	3.	3.	-20785.!	-1.4	93.3	6.16	5.63	.0027	14.96	.004	SI
1746.	12.	3.	2.	-20785.	-13.1!	243.9!	6.16	4.21	.007	13.59	.009!	SI
1783.	50.	3.	1.	-531.!	-4	12.1	3.08	4.77	.0003	18.6	.001	SI

TENSIONI DI ESERCIZIO E FESSURAZIONE - QUASI PERMANENTI :

Progressive	Se	Ar	Momento	σc	σf	As	hc, ef	Eps%	Sr, max	Wd	Ve	
> 7.	7.	3.	1.	-552.!	-4	12.5	3.08	4.77	.0004	18.6	.001	SI
7.	7.	3.	1.	-552.!	-4	12.5	3.08	4.77	.0004	18.6	.001	SI
20.	20.	3.	1.	-4051.!	-3.2	92.	3.08	4.77	.0026	18.6	.005	SI
20.	20.	3.	1.	-4051.!	-3.2	92.	3.08	4.77	.0026	18.6	.005	SI
46.	46.	3.	2.	-20717.!	-13.1!	243.1!	6.16	4.21	.0069	13.59	.009!	SI
58.	58.	3.	3.	-20717.!	-1.4	93.	6.16	5.63	.0027	14.96	.004	SI
> 58.	0.	5.	4.	-40114.!	-5.5	151.4	6.16	8.75	.0043	17.98	.008	SI
196.	138.	5.	6.	132738.!	-23.2!	1128.7!	3.08	8.75	.0322	45.79	.148!	SI
396.	338.	5.	8.	-150475.!	-17.6	567.4	7.1	8.75	.0162	17.07	.028	SI
> 396.	0.	5.	8.	-187889.!	-22.	708.5	7.1	8.75	.0202	17.07	.035	SI
611.	215.	5.	10	176587.!	-29.8!	1499.6!	3.08	8.75	.0428	46.1	.198!	SI
826.	430.	5.	12	-163793.!	-18.5	548.	8.04	8.75	.0157	16.58	.026	SI
> 826.	0.	5.	12	-76414.!	-8.6!	255.7	8.04	8.75	.0073	16.58	.012	SI
989.	163.	5.	10	45020.!	-7.6	382.3!	3.08	8.75	.0109	46.1	.05	SI
1110.	284.	5.	13	-64669.!	-7.6	243.9	7.1	8.75	.007	17.07	.012	SI
>1110.	0.	5.	13	-92386.!	-10.8	348.4	7.1	8.75	.01	17.07	.017	SI
1270.	160.	5.	6.	103944.!	-18.2	883.9!	3.08	8.75	.0253	45.79	.116!	SI
1448.	338.	5.	14	-149058.!	-18.3!	644.7	6.16	8.75	.0184	17.98	.033	SI
>1448.	0.	5.	14	-149950.!	-18.4!	648.6	6.16	8.75	.0185	17.98	.033	SI
1590.	142.	5.	6.	92465.!	-16.2	786.3!	3.08	8.75	.0225	45.79	.103!	SI
1733.	285.	5.	4.	-31642.!	-4.3	119.5	6.16	8.75	.0034	17.98	.006	SI
>1733.	0.	3.	3.	-19584.!	-1.4	87.9	6.16	5.63	.0025	14.96	.004	SI
1746.	12.	3.	2.	-19584.!	-12.3!	229.8!	6.16	4.21	.0066	13.59	.009!	SI
1783.	50.	3.	1.	-501.!	-4	11.4	3.08	4.77	.0003	18.6	.001	SI

ARMATURE LONGITUDINALI (%=100*Af/Acl s - Acl s=area intera sezione)

Nro	Totale	%	Super.	%	Barre	Infer.	%	Barre
1	6.16	1.232	3.08	.616	2d14	3.08	.616	2d14
2	9.24	1.847	6.16	1.232	2d14 +2d14	3.08	.616	2d14
3	12.32	2.463	6.16	1.232	2d14 +2d14	6.16	1.232	2d14 +2d14
4	12.32	1.095	9.24	.821	2d14 +2d14 +2d14	3.08	.274	2d14
5	9.24	.821	6.16	.547	2d14 +2d14	3.08	.274	2d14

6	6.16	.547	3.08	.274	2d14	3.08	.274	2d14
7	9.24	.821	3.08	.274	2d14	6.16	.547	2d14 +2d14
8	13.26	1.178	7.1	.631	2d14 +2d16	6.16	.547	2d14 +2d14
9	10.18	.905	7.1	.631	2d14 +2d16	3.08	.274	2d14
10	7.1	.631	4.02	.357	2d16	3.08	.274	2d14
11	10.18	.905	4.02	.357	2d16	6.16	.547	2d14 +2d14
12	14.2	1.262	8.04	.715	2d16 +2d16	6.16	.547	2d14 +2d14
13	13.26	1.178	7.1	.631	2d16 +2d14	6.16	.547	2d14 +2d14
14	12.32	1.095	6.16	.547	2d14 +2d14	6.16	.547	2d14 +2d14

VERIFICA TRAVATA IN CEMENTO ARMATO

Nome travata : 1 - Travata T012 (trave)
Metodo di verifica : stati limite (NTC18). ->
Duttilita' : non prevista (struttura non dissipativa).
Unita' di misura : cm; daN; daN/cm; daN/cm2; deForm. %.
Unita' particolari : fessure [Wk]:mm - ferri:mm e cm2 - sezioni:cm e derivate.
Copri ferri (assi) : longitudinali= 3.5 ; staffe= 2.5

MATERIALI

CLS : Rck =300. ; fck=249. ; fctk= 17.9; fctm= 25.6; Ec= 314472. ;
gc =1.5 ; fcd=141.1; fbd= 26.9; fctd= 11.9; Ecd=.2% (limite elastico)
ACCIAIO : B450C; ftk=5175. ; fyk=4500. ; Es=2100000. ;
gs =1.15; fyd=3913. ; ftd(k*fyd)=4500. ; Fud=4439.8; Eud=.19% (limite elastico)

TENSIONI E FESSURE MASSIME IN ESERCIZIO

GRUPPO : ordinario.
CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112. ; fbd(esercizio)= 26.9
ACCIAIO : σ_f (rara)=3600. ; Coeff. Omogeneizzazione= 15
FESSURE : Wdmax(fre.)=.4 ; Wdmax(q.p.)=.3 [4.1.2.2.4.5];
kt=.4 [EN 1992-1 7.3.4].

CASI DI CARICO DA MODELLO 3D

SLU		
Nome	Descrizione	Sest
1.	SLU	1.
2.	SLU VENTOX	2.
3.	SLU VENTOY	2.
6.	SLU con S1SMAX PRINC16	
7.	SLU con S1SMAY PRINC16	

RARE			FREQUENTI			QUASI PERMANENTI		
Nome	Descrizione	Sest	Nome	Descrizione	Sest	Nome	Descrizione	Sest
18.	Rara	1.	21.	Frequente	1.	24.	Quasi Perm	1.
19.	Rara VentoX	2.	22.	Frequente VentoX	2.			
20.	Rara VentoY	2.	23.	Frequente VentoY	2.			

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SEZIONI UTILIZZATE

- 3) Rettangolare: 25X20; A=500. ; Jg=16667. ; E=314471.6
5) Rettangolare: 25X45; A=1125. ; Jg=189844. ; E=314471.6

DESCRIZIONE CAMPATE

Cam.	Descriz.	S. ini	Sez.	S. fin	Incl.	L. assi	L. net.	lambda	K	r. Ar.	lam. max
1	A28	3	3	3	0	58.	46.	2.9	.4	1.97	13.695
2	A24	5	5	5	0	510.	462.	11.333	1.5	1.356	34.313
3	A25	5	5	5	0	370.	300.	8.222	1.5	3.503	94.72
4	A26	5	5	5	0	510.	462.	11.333	1.5	1.526	38.608
5	A27	5	5	5	0	285.	260.	6.333	1.5	4.325	116.961
6	A29	3	3	3	0	57.	44.	2.85	.4	5.	34.765

VERIFICHE ALLO STATO LIMITE ULTIMO

FLESSIONE:

Progressive	SE	Ar	Msd	Epscl	Epsac	Mrd	Epscl	Epsac	Cam	x/d	Mr/Ms	VE	
> 7.	7.	3.	1.	-57519.	!.029	.049	-217815.	!.121	.186	2.	.393	3.787	SI
26.	26.	3.	1.	-139344.	!.074	.118	-217815.	!.121	.186	2.	.393	1.563	SI
38.	38.	3.	2.	-203690.	!.088	.09	-401199.	!.2	.18	3.	.526	1.97	SI
58.	58.	3.	3.	-203690.	!.008	-.062	-818441.	!.12	-.52	4.	.392	4.018	SI
> 58.	0.	5.	4.	-465470.	!.042	.065	-1304122.	!.129	.186	2.	.409	2.802	SI
89.	31.	5.	5.	52838.	!.005	.016	598810.	!.059	.186	2.	.24	11.33	SI
302.	244.	5.	6.	645649.	!.064	.137	875684.	!.089	.186	2.	.324	1.356	SI
441.	383.	5.	7.	272811.	!.023	.057	886973.	!.077	.186	2.	.292	3.251	SI
501.	443.	5.	5.	16900.	!.002	.005	598810.	!.059	.186	2.	.24	35.43	SI

514.	456.	5.	5.	-742140.	- .068!	.12	-1149369.	- .11	.186	2.	.371	1.549	SI
568.	510.	5.	8.	-742140.	- .058	.118	-1169215.	- .094	.186	2.	.336	1.575	SI
> 568.	0.	5.	8.	-471232.	- .036	.075	-1169215.	- .094	.186	2.	.336	2.481	SI
568.	0.	5.	8.	39979.	- .003	.006	1169215.	- .094	.186	2.	.336	29.25	SI
603.	35.	5.	5.	-471232.	- .042!	.076	-1149369.	- .11	.186	2.	.371!	2.439	SI
603.	35.	5.	5.	112550.	- .011	.035	598810.	- .059	.186	2.	.24	5.32	SI
732.	164.	5.	9.	-5906.	- .001	.002	-594195.	- .068	.186	2.	.267	100.6!	SI
774.	206.	5.	9.	169634.	- .019	.053	594195.	- .068	.186	2.	.267	3.503	SI
858.	290.	5.	9.	-328892.	- .037	.103!	-594195.	- .068	.186	2.	.267	1.807!	SI
938.	370.	5.	8.	-468058.	- .036	.074	-1169215.	- .094	.186	2.	.336	2.498	SI
938.	370.	5.	8.	50477.	- .004	.008	1169215.	- .094	.186	2.	.336	23.16	SI
> 938.	0.	5.	8.	-647891.	- .05	.103	-1169215.	- .094	.186	2.	.336	1.805	SI
973.	35.	5.	5.	-647891.	- .058	.104	-1149369.	- .11	.186	2.	.371!	1.774	SI
1005.	67.	5.	5.	35140.	- .003	.011	598810.	- .059	.186	2.	.24	17.04	SI
1065.	127.	5.	7.	274043.	- .023	.057	886973.	- .077	.186	2.	.292	3.237	SI
1204.	266.	5.	6.	573826.	- .057	.122!	875684.	- .089	.186	2.	.324	1.526!	SI
1390.	452.	5.	5.	1724.	0.	.001	598810.	- .059	.186	2.	.24	347.4!	SI
1417.	479.	5.	5.	-677469.	- .061!	.109	-1149369.	- .11	.186	2.	.371	1.697	SI
1448.	510.	5.	8.	-677469.	- .053	.108	-1169215.	- .094	.186	2.	.336	1.726	SI
>1448.	0.	5.	8.	-646501.	- .05	.103!	-1169215.	- .094	.186	2.	.336	1.809!	SI
1548.	100.	5.	5.	21374.	- .002	.007	598810.	- .059	.186	2.	.24	28.02	SI
1633.	185.	5.	9.	-2781.	0.	.001	-594195.	- .068	.186	2.	.267	213.7!	SI
1676.	228.	5.	9.	137377.	- .015	.043	594195.	- .068	.186	2.	.267	4.325	SI
1720.	272.	5.	4.	121183.	- .012	.035	633452.	- .066	.186	2.	.261	5.227	SI
1733.	285.	5.	4.	-98283.	- .008	.014	-1304122.	- .129	.186	2.	.409!	13.27	SI
1733.	285.	5.	4.	104021.	- .01	.03	633452.	- .066	.186	2.	.261	6.09	SI
>1733.	0.	3.	3.	-39866.	- .002	-.012	-818441.	- .12	-.52	4.	.392	20.53	SI
1733.	0.	3.	3.	15544.	- .002	.005	633452.	- .066	.186	2.	.261!	40.75!	SI
1746.	12.	3.	2.	-39866.	- .016!	.017	-401199.	- .2	.18	3.	.526!	10.06	SI
1746.	12.	3.	2.	17115.	- .008	.015	217264.	- .102	.186	2.	.355	12.69	SI
1766.	32.	3.	1.	-24274.	- .012	.02	-217815.	- .121	.186	2.	.393	8.973!	SI

TAGLIO:

Progressive	Se	Vsd	VRd	VRcd	VRsd	Asw	s	ctgT	Ve	
> 0.	0.	3.	-3487.	2038.	10956.	10807.	1.01	10.	1.85	SI
58.	58.	3.	-5456.	2866.	10956.	10807.	1.01	10.	1.85	SI
> 58.	0.	5.	9956.	4491.	23388.	23509.	1.01	15.	2.4	SI
568.	510.	5.	-11171.	5658.	23388.	23509.	1.01	15.	2.4	SI
> 568.	0.	5.	8662.	3996.	23388.	23509.	1.01	15.	2.4	SI
622.	54.	5.	6230.	4491.	23388.	23509.	1.01	15.	2.4	SI
938.	370.	5.	-7008.	3996.	23388.	23509.	1.01	15.	2.4	SI
> 938.	0.	5.	10428.	5658.	23388.	23509.	1.01	15.	2.4	SI
1448.	510.	5.	-10644.	4491.	23388.	23509.	1.01	15.	2.4	SI
>1448.	0.	5.	8399.	5658.	23388.	23509.	1.01	15.	2.4	SI
1733.	285.	5.	-3492.	3996.	23388.	23509.	1.01	15.	2.4	SI
>1733.	0.	3.	2054.	2038.	10956.	10807.	1.01	10.	1.85	SI
1770.	37.	3.	-429.	2866.	10956.	10807.	1.01	10.	1.85	SI
1790.	57.	3.	-910.	2038.	10956.	10807.	1.01	10.	1.85	SI
1790.	57.	3.	358.	2038.	10956.	10807.	1.01	10.	1.85	SI

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

TENSIONI DI ESERCIZIO E FESSURAZIONE - RARE:

Progressive	Se	Ar	Momento	σc	σf	As	hc, ef	Eps%	Sr, max	Wd	Ve	
> 7.	7.	3.	1.	-19770.	-13.8	348.7	4.02	4.61	.01	17.99	.018	SI
20.	20.	3.	1.	-57313.	-40.1	1010.8	4.02	4.61	.0309	17.99	.056	SI
20.	20.	3.	1.	-57313.	-40.1	1010.8	4.02	4.61	.0309	17.99	.056	SI
26.	26.	3.	1.	-75296.	-52.7	1328.	4.02	4.61	.046	17.99	.083!	SI
46.	46.	3.	2.	-148481.	-83.3!	1352.4!	8.04	4.02	.0551	12.58	.069	SI
58.	58.	3.	3.	-148481.	-8.2	506.5	8.04	5.6	.0145	13.91	.02	SI
> 58.	0.	5.	4.	-325474.	-39.5	956.2	8.04	8.75	.029	16.58	.048	SI
302.	244.	5.	6.	470975.	-62.5	2089.1!	6.03	8.75	.0786	19.04	.15	SI
533.	475.	5.	5.	-539890.	-65.2!	1818.5	8.04	8.75	.0701	16.58	.116	SI
568.	510.	5.	8.	-539890.	-57.5	1797.7	8.04	8.75	.0691	16.58	.115	SI
> 568.	0.	5.	8.	-276979.	-29.5	922.3	8.04	8.75	.0274	16.58	.045	SI
603.	35.	5.	5.	-276979.	-33.5!	932.9!	8.04	8.75	.0279	16.58	.046	SI
774.	206.	5.	9.	117583.	-18.	770.8	4.02	8.75	.022	44.52	.098!	SI
938.	370.	5.	8.	-270222.	-28.8	899.8	8.04	8.75	.0263	16.58	.044	SI
> 938.	0.	5.	8.	-470925.	-50.1	1568.1	8.04	8.75	.0582	16.58	.096	SI
1204.	266.	5.	6.	418531.	-55.5	1856.5!	6.03	8.75	.0675	19.04	.129!	SI
1436.	498.	5.	5.	-494368.	-59.7!	1665.1	8.04	8.75	.0628	16.58	.104	SI
1448.	510.	5.	8.	-494368.	-52.6!	1646.1	8.04	8.75	.0619	16.58	.103	SI
>1448.	0.	5.	8.	-471519.	-50.2!	1570.1!	8.04	8.75	.0583	16.58	.097!	SI
1633.	185.	5.	9.	94623.	-14.5	620.3	4.02	8.75	.0177	44.52	.079	SI
1733.	285.	5.	4.	-13968.	-1.7	41.	8.04	8.75	.0012	16.58	.002	SI
>1733.	0.	3.	3.	-17847.	-1.	60.9	8.04	5.6	.0017	13.91	.002	SI
1746.	12.	3.	2.	-17847.	-10.	162.6!	8.04	4.02	.0046	12.58	.006!	SI
1783.	50.	3.	1.	2201.	-1.5	38.8	4.02	4.61	.0011	17.99	.002	SI

TENSIONI DI ESERCIZIO E FESSURAZIONE - FREQUENTI:

Progressive	Se	Ar	Momento	σc	σf	As	hc,ef	Eps%	Sr, max	Wd	Ve
-------------	----	----	---------	----	----	----	-------	------	---------	----	----

>	7.	7.	3.	1.	-16105.	-11.3	284.	4.02	4.61	.0081	17.99	.015	SI
	20.	20.	3.	1.	-46671.	-32.7	823.1	4.02	4.61	.0235	17.99	.042	SI
	20.	20.	3.	1.	-46671.	-32.7	823.1	4.02	4.61	.0235	17.99	.042	SI
	26.	26.	3.	1.	-61307.	-42.9	1081.3	4.02	4.61	.0343	17.99	.062	SI
	46.	46.	3.	2.	-120843.	-67.8	1100.7	8.04	4.02	.0431	12.58	.054	SI
	58.	58.	3.	3.	-120843.	-6.6	412.2	8.04	5.6	.0118	13.91	.016	SI
>	58.	0.	5.	4.	-257765.	-31.3	757.3	8.04	8.75	.0216	16.58	.036	SI
	302.	244.	5.	6.	384885.	-51.1	1707.3	6.03	8.75	.0604	19.04	.115	SI
	533.	475.	5.	5.	-434064.	-52.4	1462.	8.04	8.75	.0531	16.58	.088	SI
	568.	510.	5.	8.	-434064.	-46.2	1445.3	8.04	8.75	.0523	16.58	.087	SI
>	568.	0.	5.	8.	-212717.	-22.7	708.3	8.04	8.75	.0202	16.58	.034	SI
	603.	35.	5.	5.	-212717.	-25.7	716.5	8.04	8.75	.0205	16.58	.034	SI
	774.	206.	5.	9.	93672.	-14.3	614.1	4.02	8.75	.0175	44.52	.078	SI
	938.	370.	5.	8.	-206179.	-22.	686.5	8.04	8.75	.0196	16.58	.033	SI
>	938.	0.	5.	8.	-378695.	-40.3	1261.	8.04	8.75	.0435	16.58	.072	SI
	1204.	266.	5.	6.	340071.	-45.1	1508.5	6.03	8.75	.0509	19.04	.097	SI
	1436.	498.	5.	5.	-401770.	-48.5	1353.2	8.04	8.75	.0479	16.58	.079	SI
	1448.	510.	5.	8.	-401770.	-42.8	1337.8	8.04	8.75	.0472	16.58	.078	SI
>	1448.	0.	5.	8.	-387120.	-41.2	1289.	8.04	8.75	.0449	16.58	.074	SI
	1633.	185.	5.	9.	75173.	-11.5	492.8	4.02	8.75	.0141	44.52	.063	SI
	1733.	285.	5.	4.	-3889.	-5	11.4	8.04	8.75	.0003	16.58	.001	SI
>	1733.	0.	3.	3.	-12885.	-7	44.	8.04	5.6	.0013	13.91	.002	SI
	1746.	12.	3.	2.	-12885.	-7.2	117.4	8.04	4.02	.0034	12.58	.004	SI
	1783.	50.	3.	1.	1528.	-1.1	27.	4.02	4.61	.0008	17.99	.001	SI

TENSIONI DI ESERCIZIO E FESSURAZIONE - QUASI PERMANENTI :

Progressive	Se	Ar	Momento	σc	σf	As	hc, ef	Eps%	Sr, max	Wd	Ve	
> 7.	7.	3.	1.	-15188.	-10.6	267.9	4.02	4.61	.0077	17.99	.014	SI
20.	20.	3.	1.	-44010.	-30.8	776.2	4.02	4.61	.0222	17.99	.04	SI
20.	20.	3.	1.	-44010.	-30.8	776.2	4.02	4.61	.0222	17.99	.04	SI
26.	26.	3.	1.	-57809.	-40.5	1019.6	4.02	4.61	.0313	17.99	.056	SI
46.	46.	3.	2.	-113933.	-63.9	1037.7	8.04	4.02	.0401	12.58	.05	SI
58.	58.	3.	3.	-113933.	-6.3	388.7	8.04	5.6	.0111	13.91	.015	SI
> 58.	0.	5.	4.	-240837.	-29.2	707.5	8.04	8.75	.0202	16.58	.034	SI
302.	244.	5.	6.	363362.	-48.2	1611.8	6.03	8.75	.0558	19.04	.106	SI
533.	475.	5.	5.	-407608.	-49.2	1372.9	8.04	8.75	.0489	16.58	.081	SI
568.	510.	5.	8.	-407608.	-43.4	1357.3	8.04	8.75	.0481	16.58	.08	SI
> 568.	0.	5.	8.	-196651.	-20.9	654.8	8.04	8.75	.0187	16.58	.031	SI
603.	35.	5.	5.	-196651.	-23.8	662.4	8.04	8.75	.0189	16.58	.031	SI
774.	206.	5.	9.	87695.	-13.4	574.9	4.02	8.75	.0164	44.52	.073	SI
938.	370.	5.	8.	-190168.	-20.3	633.2	8.04	8.75	.0181	16.58	.03	SI
> 938.	0.	5.	8.	-355638.	-37.9	1184.2	8.04	8.75	.0399	16.58	.066	SI
1204.	266.	5.	6.	320455.	-42.5	1421.5	6.03	8.75	.0468	19.04	.089	SI
1436.	498.	5.	5.	-378621.	-45.7	1275.3	8.04	8.75	.0442	16.58	.073	SI
1448.	510.	5.	8.	-378621.	-40.3	1260.7	8.04	8.75	.0435	16.58	.072	SI
>1448.	0.	5.	8.	-366020.	-39.	1218.8	8.04	8.75	.0415	16.58	.069	SI
1633.	185.	5.	9.	70311.	-10.8	460.9	4.02	8.75	.0132	44.52	.059	SI
1733.	285.	5.	4.	-1370.	-2	4.	8.04	8.75	.0001	16.58	0.	SI
>1733.	0.	3.	3.	-11645.	-6	39.7	8.04	5.6	.0011	13.91	.002	SI
1746.	12.	3.	2.	-11645.	-6.5	106.1	8.04	4.02	.003	12.58	.004	SI
1783.	50.	3.	1.	1360.	-1	24.	4.02	4.61	.0007	17.99	.001	SI

ARMATURE LONGITUDINALI (%=100*Af/Acl s - Acl s=area intera sezione)

Nro	Totale	%	Super.	%	Barre	Infer.	%	Barre
1	8.04	1.608	4.02	.804	2d16	4.02	.804	2d16
2	12.06	2.413	8.04	1.608	2d16 +2d16	4.02	.804	2d16
3	16.08	3.217	8.04	1.608	2d16 +2d16	8.04	1.608	2d16 +2d16
4	16.08	1.43	12.06	1.072	2d16 +2d16 +2d16	4.02	.357	2d16
5	12.06	1.072	8.04	.715	2d16 +2d16	4.02	.357	2d16
6	10.05	.894	4.02	.357	2d16	6.03	.536	1d16 +2d16
7	14.07	1.251	8.04	.715	2d16 +2d16	6.03	.536	1d16 +2d16
8	16.08	1.43	8.04	.715	2d16 +2d16	8.04	.715	2d16 +2d16
9	8.04	.715	4.02	.357	2d16	4.02	.357	2d16

15. VERIFICA PILASTRI

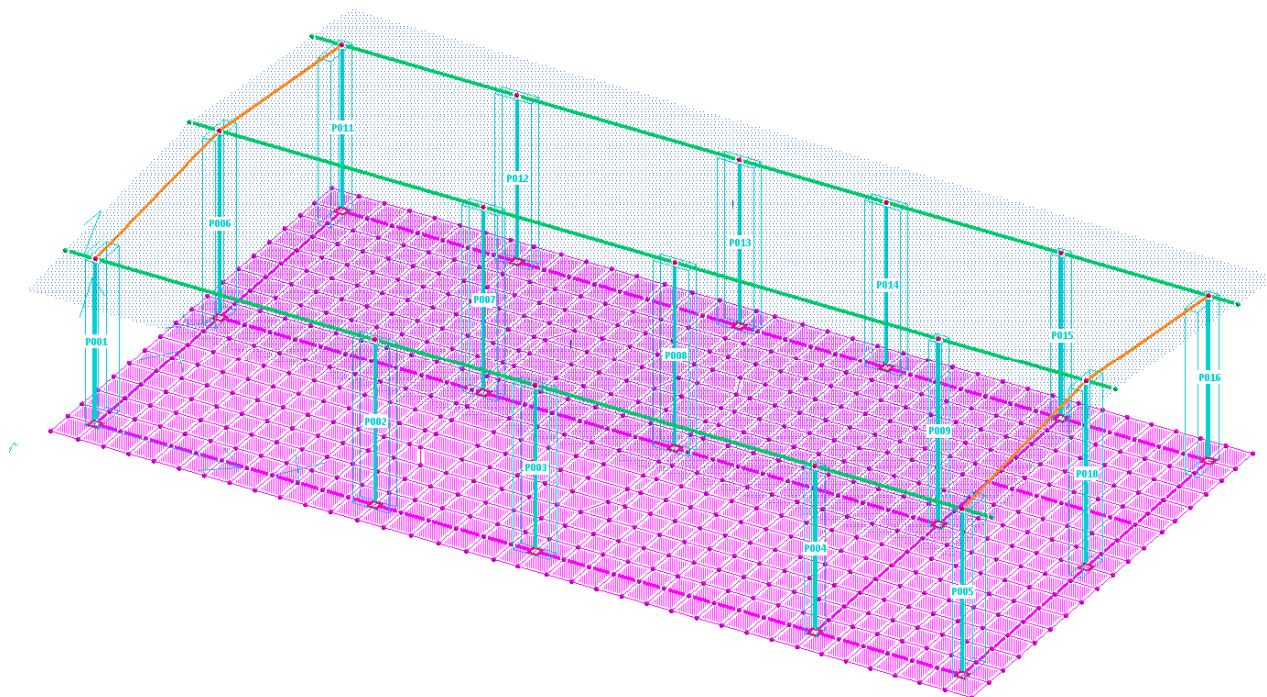


IMMAGINE MODELLO DI CALCOLO – NOMENCLATURA PILASTRI

VERIFICA PILASTRO IN CEMENTO ARMATO

Nome pilastro : P001 (ID=25)
 Aste : 8
 Metodo di verifica : stati limite - NTC18 ($q=1.5$; $\mu_{phi}=4.06$) ->
 Duttilità : non prevista (struttura non dissipativa).
 Unità di misura : cm; daN; daN/cm; daN/cm²; daN/cm²; deform. %; 1/r ‰ (permille)
 Unità particolari : fessure [Wk]:mm - ferri:mm e cm² - sezioni:cm e derivate.
 Copri ferri (assi) : longitudinali= 4.5 ; staffe= 3
 Imperfezioni : $M_{minimo} = N * e_0$; $M_{aggiunto} = N * e_i$
 Instabilità : snellezza limite [EC2 5.8.3.1]

MATERIALI

CLS : C25/30; $R_{ck}=300$; $f_{ck}=249$; $f_{ctk}=17.91$; $f_{ctm}=25.58$; $E_{cm}=314472$;
 $g_c=1.5$; $f_{cd}=141.1$; $f_{bd}=26.86$; $f_{ctd}=11.94$; $E_c=0.2\%$; $E_{cu}=0.35\%$
 ACCIAIO: B450C; $f_{tk}=5175$; $f_{yk}=4500$; $E_s=2100000$;
 $g_s=1.15$; $f_{yd}=3913$; $f_{td}=4500$; $f_{ud}=4439.8$; $E_{yd}=0.1863\%$; $E_{ud}=6.75\%$

TENSIONI MASSIME IN ESERCIZIO

GRUPPO : ordinario.
 CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112; f_{bd} (esercizio)=26.86
 ACCIAIO: σ_f (rara)=3600; Coeff. Omogeneizzazione=15

CASI DI CARICO

Nome	Descrizione	Tipo	Ses
1	SLU	SLU (statico)	1
2	SLU VENTOX	SLU (statico)	2
3	SLU VENTOY	SLU (statico)	2
6	SLU con SISMAX PRINC	SLU (sismico)	16
7	SLU con SISMAX PRINC	SLU (sismico)	16
18	Rara	RARA	1
19	Rara VentoX	RARA	2
20	Rara VentoY	RARA	2

21	Frequente	FREQUENTE	1
22	Frequente VentoX	FREQUENTE	2
23	Frequente VentoY	FREQUENTE	2
24	Quasi Perm	QUASI PERMAN.	1

<-

SEZIONI UTILIZZATE

1) Rettangolare: base=70; alt.=25; Acl s=1750; i y=20.21; i z=7.22

DESCRIZIONE ASTE E ARMATURA LONGITUDINALE

As	Se	e0z	e0y	eiz	eiy	Lassi	Lnet	Lcr. I	Lcr. S	Af	% arm	
1	1	2.	2.	1.07	1.07	320.	275.	0.	0.	31.42	1.795	10φ20

VERIFICHE ALLO STATO LIMITE ULTIMO

PRESSO-FLESSIONE (incluse le imperfezioni):

Asta	Caso	NEd	MEyd	MEzd	E cl s	σc	E acc	σf	VE
> 1	7- 7	-7439.	2135680.	1.	213793.	1.04	-.122	-119.6	.165 3465.9 SI
1	7- 7	-6738.	1002858.	1.	-67024.	1.	-.049	-60.9	.067 1401.6 SI
1	6-10	-6981.	-49925.	1.18	-433868.	1.02	-.06	-72.4	.078 1636.3 SI

SNELLEZZA LIMITE Y [EC2 5.8.3.1]:

Asta	Caso	NEd	MEyd inf	MEyd sup	IO	A	B	C	nu	L im	Lambd	VE
1	3- 2	-13081.4	267187.8	23517.1	320.	.7	1.41	1.61	.053	138.5	15.84	SI

SNELLEZZA LIMITE Z [EC2 5.8.3.1]:

Asta	Caso	NEd	MEzd inf	MEzd sup	IO	A	B	C	nu	L im	Lambd	VE
1	7-14	-8364.7	-91633.2	-116769.	320.	.7	1.41	.915	.034	98.35	44.34	SI

TAGLIO Y:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	6-10	-2222.6	9549.9	9549.9	32485.8	1.01	19.	2.5	SI
1 C	6-10	-2222.6	9549.9	9549.9	32396.6	1.01	19.	2.5	SI
1 S	6-10	-2222.6	9549.9	9549.9	32307.4	1.01	19.	2.5	SI

TAGLIO Z:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	7- 7	7019.6	30513.	30513.	36933.	1.01	19.	2.5	SI
1 C	7- 7	7019.6	30513.	30513.	36831.2	1.01	19.	2.5	SI
1 S	7- 7	7019.6	30513.	30513.	36729.4	1.01	19.	2.5	SI

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

Rare:

Asta	Caso	NEd	MEyd	MEzd	σc	σf	VE
1 I	20- 1	-9598.2	359680.3	41610.4	-27.5	316.	SI
1 C	20- 1	-8897.1	184828.2	-110693.7	-30.4	340.7	SI
1 S	19- 2	-8282.2	13007.7	-278370.2	-50.6	893.	SI

Frequenti:

Asta	Caso	NEd	MEyd	MEzd	σc	σf	VE
1 I	23- 1	-8170.8	266351.8	28031.6	-19.9	199.8	SI
1 C	23- 1	-7469.7	139685.4	-92556.4	-24.6	269.8	SI
1 S	22- 2	-6785.8	13625.2	-216218.8	-39.5	685.2	SI

Quasi permanenti:

Asta	Caso	NEd	MEyd	MEzd	σc	σf	VE
1 I	24- 1	-7813.9	243019.7	24636.9	-17.9	171.4	SI
1 C	24- 1	-7112.8	128399.7	-88022.	-23.1	252.1	SI
1 S	24- 1	-6411.7	13779.6	-200681.	-36.8	633.3	SI

VERIFICA PILASTRO IN CEMENTO ARMATO

Nome pilastro : P002 (ID=19)
Aste : 10
Metodo di verifica : stati limite - NTC18 (q=1.5 ; muphi=4.06) ->
Duttilita' : non prevista (struttura non dissipativa).
Unita' di misura : cm; daN; daN/cm; daNcm; daN/cm2; deform. %; 1/r à° (per mille)
Unita' particolari : fessure [Wk]:mm - ferri:mm e cm2 - sezioni:cm e derivate.
Copri ferri (assi) : longitudinali= 4.5 ; staffe= 3
Imperfezioni : M minimo = N * e0 ; M aggiunto = N * ei
Instabilita' : snellezza limite [EC2 5.8.3.1]

MATERIALI

CLS : C25/30; Rck=300; fck=249; fctk=17.91; fctm=25.58; Ecm=314472;
gc=1.5; fcd=141.1; fbd=26.86; fctd=11.94; Ec2=0.2%; Ecu=0.35%
ACCIAIO: B450C; ftk=5175; fyk=4500; Es=2100000;

gs=1.15; fyd=3913; ftd=4500; fud=4439.8; Eyd=0.1863%; Eud=6.75%

TENSIONI MASSIME IN ESERCIZIO

GRUPPO : ordinario.

CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112; fbd(esercizio)=26.86

ACCIAIO: σ_f (rara)=3600; Coeff. Omogeneizzazione=15

CASI DI CARICO

Nome	Descrizione	Tipo	Ses
1	SLU	SLU (statico)	1
2	SLU VENTOX	SLU (statico)	2
3	SLU VENTOY	SLU (statico)	2
6	SLU con SISMAX PRINC	SLU (sismico)	16
7	SLU con SISMAX PRINC	SLU (sismico)	16
18	Rara	RARA	1
19	Rara VentoX	RARA	2
20	Rara VentoY	RARA	2
21	Frequente	FREQUENTE	1
22	Frequente VentoX	FREQUENTE	2
23	Frequente VentoY	FREQUENTE	2
24	Quasi Perm	QUASI PERMAN.	1

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SEZIONI UTILIZZATE

1) Rettangolare: base=25; alt.=70; Acls=1750; iy=7.22; iz=20.21

DESCRIZIONE ASTE E ARMATURA LONGITUDINALE

As	Se	e0z	e0y	ei z	ei y	Lassi	Lnet	Lcr. I	Lcr. S	Af	% arm	
1	1	2.	2.	1.07	1.07	320.	275.	0.	0.	20.61	1.178	4φ16+4φ20

VERIFICHE ALLO STATO LIMITE ULTIMO

PRESSO-FLESSIONE (incluse le imperfezioni):

Asta	Caso	NEd	MEyd	MEzd	E cls	σ_c	E acc	σ_f	VE		
> 1	6- 5	-9399.	168243.	1.06	-1086691.	1.01	-.083	-92.9	.113	2375.6	SI
1	7- 7	-11138.	193275.	1.	248546.	1.	-.041	-52.	.04	835.9	SI
1	6- 7	-8034.	24638.	17.	1068692.	1.01	-.055	-67.	.093	1958.1	SI

SNELLEZZA LIMITE Y [EC2 5.8.3.1]:

Asta	Caso	NEd	MEyd inf	MEyd sup	IO	A	B	C	nu	L lim	Lambd	VE
1	2- 2	-19232.1	148213.2	-5573.3	320.	.7	1.29	1.74	.078	112.1	44.34	SI

SNELLEZZA LIMITE Z [EC2 5.8.3.1]:

Asta	Caso	NEd	MEzd inf	MEzd sup	IO	A	B	C	nu	L lim	Lambd	VE
1	7- 3	-11422.4	192298.8	217786.9	320.	.7	1.29	.817	.046	68.38	15.84	SI

TAGLIO Y:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	6- 7	6697.8	30513.	30513.	37222.9	1.01	19.	2.5	SI
1 C	6- 7	6697.8	30513.	30513.	37121.1	1.01	19.	2.5	SI
1 S	6- 7	6697.8	30513.	30513.	37019.3	1.01	19.	2.5	SI

TAGLIO Z:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	7- 7	1273.2	9549.9	9549.9	32925.6	1.01	19.	2.5	SI
1 C	7- 7	1273.2	9549.9	9549.9	32836.4	1.01	19.	2.5	SI
1 S	7- 7	1273.2	9549.9	9549.9	32747.1	1.01	19.	2.5	SI

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

Rare:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	19- 1	-13806.6	103804.2	-106941.6	-26.	138.8	SI
1 C	19- 2	-13407.9	51378.4	248808.7	-24.9	144.	SI
1 S	19- 1	-12404.4	-3506.1	536107.2	-35.5	563.6	SI

Frequenti:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	22- 1	-11707.2	94157.4	-29228.	-19.8	87.8	SI
1 C	22- 2	-11066.6	45663.	195695.	-20.5	115.6	SI
1 S	22- 1	-10305.	-3323.2	406927.6	-27.1	393.3	SI

Quasi permanenti:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	24- 1	-11182.4	91745.7	-9799.5	-18.2	76.6	SI
1 C	24- 1	-10481.3	44234.1	182416.6	-19.4	108.6	SI
1 S	24- 1	-9780.2	-3277.5	374632.7	-25.	351.	SI

VERIFICA PILASTRO IN CEMENTO ARMATO

Nome pilastro : P003 (ID=20)
Aste : 11
Metodo di verifica : stati limite - NTC18 (q=1.5 ; muphi=4.06) ->
Duttilita' : non prevista (struttura non dissipativa).
Unita' di misura : cm; daN; daN/cm; daNcm; daN/cm2; deform. %; 1/r à€°(permille)
Unita' particolari : fessure [Wk]:mm - ferri:mm e cm2 - sezioni:cm e derivate.
Copri ferri (assi) : longitudinali= 4.5 ; staffe= 3
Imperfezioni : M minimo = N * e0 ; M aggiunto = N * ei
Instabilita' : snellezza limite [EC2 5.8.3.1]

MATERIALI

CLS : C25/30; Rck=300; fck=249; fctk=17.91; fctm=25.58; Ecm=314472;
gc=1.5; fcd=141.1; fbd=26.86; fctd=11.94; Ec2=0.2%; Ecu=0.35%
ACCIAIO: B450C; ftk=5175; fyk=4500; Es=2100000;
gs=1.15; fyd=3913; ftd=4500; fud=4439.8; Eyd=0.1863%; Eud=6.75%

TENSIONI MASSIME IN ESERCIZIO

GRUPPO : ordinario.
CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112; fbd(esercizio)=26.86
ACCIAIO: σ_f (rara)=3600; Coeff. Omogeneizzazione=15

CASI DI CARICO

Nome	Descrizione	Tipo	Ses
1	SLU	SLU (statico)	1
2	SLU VENTOX	SLU (statico)	2
3	SLU VENTOY	SLU (statico)	2
6	SLU con SISMAL PRINC	SLU (sismico)	16
7	SLU con SISMAY PRINC	SLU (sismico)	16
18	Rara	RARA	1
19	Rara VentoX	RARA	2
20	Rara VentoY	RARA	2
21	Frequente	FREQUENTE	1
22	Frequente VentoX	FREQUENTE	2
23	Frequente VentoY	FREQUENTE	2
24	Quasi Perm	QUASI PERMAN.	1

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SEZIONI UTILIZZATE

1) Rettangolare: base=25; alt.=70; Acls=1750; iy=7.22; iz=20.21

DESCRIZIONE ASTE E ARMATURA LONGITUDINALE

As	Se	e0z	e0y	ei z	ei y	Lassi	Lnet	Lcr. I	Lcr. S	Af	% arm	
1	1	2.	2.	1.07	1.07	320.	275.	0.	0.	20.61	1.178	4φ16+4φ20

VERIFICHE ALLO STATO LIMITE ULTIMO

PRESSO-FLESSIONE (incluse le imperfezioni):

Asta	Caso	NEd	MEyd	MEzd	E cls	σ_c	E acc	σ_f	VE		
> 1	6- 5	-12865.	212536.	1.07	-1127219.	1.01	-.093	-100.9	.117	2446.5	SI
1	7- 2	-11231.	199670.	1.	-254988.	1.	-.042	-53.5	.042	874.4	SI
1	6-12	-7152.	21934.	148.	-930347.	1.01	-.048	-59.2	.081	1694.9	SI

SNELLEZZA LIMITE Y [EC2 5.8.3.1]:

Asta	Caso	NEd	MEyd inf	MEyd sup	IO	A	B	C	nu	Llim	Lambd	VE
1	2-1	-18463.3	153644.3	-5472.	320.	.7	1.29	1.74	.075	114.3	44.34	SI

SNELLEZZA LIMITE Z [EC2 5.8.3.1]:

Asta	Caso	NEd	MEzd inf	MEzd sup	IO	A	B	C	nu	Llim	Lambd	VE
1	7-5	-11394.9	-198059.	-200388.	320.	.7	1.29	.712	.046	59.63	15.84	SI

TAGLIO Y:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	6-10	-6035.4	30513.	30513.	37129.4	1.01	19.	2.5	SI
1 C	6-10	-6035.4	30513.	30513.	37027.6	1.01	19.	2.5	SI
1 S	6-10	-6035.4	30513.	30513.	36925.8	1.01	19.	2.5	SI

TAGLIO Z:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	7-2	1286.3	9549.9	9549.9	32937.3	1.01	19.	2.5	SI
1 C	7-2	1286.3	9549.9	9549.9	32848.1	1.01	19.	2.5	SI
1 S	7-2	1286.3	9549.9	9549.9	32758.9	1.01	19.	2.5	SI

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

Rare:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	19- 1	-13535.4	110714.6	-156591.3	-30.5	219.7	SI
1 C	19- 1	-12834.3	53406.4	-235439.	-24.4	145.	SI
1 S	19- 2	-11784.6	-3441.9	-423527.6	-28.2	368.6	SI

Frequenti:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	22- 1	-11275.1	98342.8	-75733.1	-23.3	153.4	SI
1 C	23- 1	-10539.4	48820.5	-180366.7	-20.1	116.8	SI
1 S	22- 2	-9803.2	-3249.8	-314204.4	-21.	236.7	SI

Quasi permanenti:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	24- 1	-10710.1	95249.9	-55518.6	-21.5	138.3	SI
1 C	24- 1	-10009.	46024.	-171196.1	-19.	110.	SI
1 S	24- 1	-9307.9	-3201.8	-286873.6	-19.3	204.5	SI

VERIFICA PILASTRO IN CEMENTO ARMATO

Nome pilastro : P004 (ID=18)
Aste : 5
Metodo di verifica : stati limite - NTC18 (q=1.5 ; muphi=4.06) ->
Duttilita' : non prevista (struttura non dissipativa).
Unita' di misura : cm; daN; daN/cm; daN/cm2; deform. %; 1/r à€°(permille)
Unita' particolari : fessure [Wk]:mm - ferri:mm e cm2 - sezioni:cm e derivate.
Copri ferri (assi) : longitudinali= 4.5 ; staffe= 3
Imperfezioni : M minimo = N * e0 ; M aggiunto = N * ei
Instabilita' : snellezza limite [EC2 5.8.3.1]

MATERIALI

CLS : C25/30; Rck=300; fck=249; fctk=17.91; fctm=25.58; Ecm=314472;
gc=1.5; fcd=141.1; fbd=26.86; fctd=11.94; Ec2=0.2%; Ecu=0.35%
ACCIAIO: B450C; ftk=5175; fyk=4500; Es=2100000;
gs=1.15; fyd=3913; ftd=4500; fud=4439.8; Eyd=0.1863%; Eud=6.75%

TENSIONI MASSIME IN ESERCIZIO

GRUPPO : ordinario.
CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112; fbd(esercizio)=26.86
ACCIAIO: σ_f (rara)=3600; Coeff. Omogeneizzazione=15

CASI DI CARICO

Nome	Descrizione	Tipo	Ses
1	SLU	SLU (statico)	1
2	SLU VENTOX	SLU (statico)	2
3	SLU VENTOY	SLU (statico)	2
6	SLU con SISMAX PRINC	SLU (sismico)	16
7	SLU con SISMAX PRINC	SLU (sismico)	16
18	Rara	RARA	1
19	Rara VentoX	RARA	2
20	Rara VentoY	RARA	2
21	Frequente	FREQUENTE	1
22	Frequente VentoX	FREQUENTE	2
23	Frequente VentoY	FREQUENTE	2
24	Quasi Perm	QUASI PERMAN.	1

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SEZIONI UTILIZZATE

1) Rettangolare: base=25; alt.=25; Acl s=625; iy=7.22; iz=7.22

DESCRIZIONE ASTE E ARMATURA LONGITUDINALE

As	Se e0z	e0y	ei z	ei y	Lassi Lnet	Lcr. I	Lcr. S	Af	% arm
1	1 2.	2.	1.07	1.07	320.	275.	0.	0.	8.04 1.287 4φ16

VERIFICHE ALLO STATO LIMITE ULTIMO

PRESSO-FLESSIONE (incluse le imperfezioni):

Asta	Caso	NEd	MEyd	MEzd	E cl s	σ_c	E acc	σ_f	VE
> 1	7- 2	-9871.	187912.	1.06	-95290.	1.12	-124.	-120.8	.109 2283.1 SI
1	7- 2	-9620.	78316.	1.	14831.	1.	-036	-46.	.011 232.2 SI
1	6- 5	-9588.	-29402.	4.63	174646.	1.06	-085	-94.5	.075 1571. SI

SNELLEZZA LIMITE Y [EC2 5.8.3.1]:

Asta	Caso	NEd	MEyd inf	MEyd sup	IO	A	B	C	nu	L I m	Lambd	VE
1	3- 2	-17824.6	22766.1	-748.6	320.	.7	1.31	1.73	.202	70.64	44.34	SI

SNELLEZZA LIMITE Z [EC2 5.8.3.1]:

Asta	Caso	NEd	MEzd inf	MEzd sup	IO	A	B	C	nu	L lim	Lambd	VE
1	7- 7	-9923.1	9333.4	16758.	320.	.7	1.31	1.14	.113	62.45	44.34	SI

TAGLIO Y:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	6- 5	931.5	9549.9	9549.9	12504.8	1.01	19.	2.5	SI
1 C	6- 5	931.5	9549.9	9549.9	12472.9	1.01	19.	2.5	SI
1 S	6- 5	931.5	9549.9	9549.9	12441.1	1.01	19.	2.5	SI

TAGLIO Z:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	7- 2	618.3	9549.9	9549.9	12477.	1.01	19.	2.5	SI
1 C	7- 2	618.3	9549.9	9549.9	12445.2	1.01	19.	2.5	SI
1 S	7- 2	618.3	9549.9	9549.9	12413.3	1.01	19.	2.5	SI

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

Rare:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	19- 1	-13018.4	24217.7	-29832.4	-34.6	-101.6	SI
1 C	20- 1	-12743.5	14236.2	16259.4	-26.9	-167.1	SI
1 S	19- 1	-12517.7	-1387.7	62603.5	-37.3	-56.9	SI

Frequenti:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	22- 1	-10822.5	20876.6	-17043.1	-26.6	-105.6	SI
1 C	23- 1	-10567.2	10462.5	13462.6	-21.8	-142.7	SI
1 S	22- 1	-10321.7	-1080.1	44018.7	-28.2	-73.8	SI

Quasi permanenti:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	24- 1	-10273.5	20041.3	-13845.8	-24.6	-106.6	SI
1 C	24- 1	-10023.1	9519.	12763.4	-20.6	-136.6	SI
1 S	24- 1	-9772.7	-1003.2	39372.6	-25.9	-76.9	SI

VERIFICA PILASTRO IN CEMENTO ARMATO

Nome pilastro : P005 (ID=26)
Aste : 6
Metodo di verifica : stati limite - NTC18 (q=1.5 ; muphi=4.06) ->
Duttilita' : non prevista (struttura non dissipativa).
Unita' di misura : cm; daN; daN/cm; daNcm; daN/cm2; deform. %; 1/r à€°(per mille)
Unita' particolari : fessure [Wk]:mm - ferri:mm e cm2 - sezioni:cm e derivate.
Copri ferri (assi) : longitudinali= 4.5 ; staffe= 3
Imperfezioni : M minimo = N * e0 ; M aggiunto = N * ei
Instabilita' : snellezza limite [EC2 5.8.3.1]

MATERIALI

CLS : C25/30; Rck=300; fck=249; fctk=17.91; fctm=25.58; Ecm=314472;
gc=1.5; fcd=141.1; fbd=26.86; fctd=11.94; Ec2=0.2%; Ecu=0.35%
ACCIAIO: B450C; ftk=5175; fyk=4500; Es=2100000;
gs=1.15; fyd=3913; ftd=4500; fud=4439.8; Eyd=0.1863%; Eud=6.75%

TENSIONI MASSIME IN ESERCIZIO

GRUPPO : ordinario.

CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112; fbd(esercizio)=26.86

ACCIAIO: σ_f (rara)=3600; Coeff. Omogeneizzazione=15

CASI DI CARICO

Nome	Descrizione	Tipo	Ses
1	SLU	SLU (statico)	1
2	SLU VENTOX	SLU (statico)	2
3	SLU VENTOY	SLU (statico)	2
6	SLU con SISMAX PRINC	SLU (sismico)	16
7	SLU con SISMAX PRINC	SLU (sismico)	16
18	Rara	RARA	1
19	Rara VentoX	RARA	2
20	Rara VentoY	RARA	2
21	Frequente	FREQUENTE	1
22	Frequente VentoX	FREQUENTE	2
23	Frequente VentoY	FREQUENTE	2
24	Quasi Perm	QUASI PERMAN.	1

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SEZIONI UTILIZZATE

1) Rettangolare: base=70; alt.=25; Acl s=1750; i y=20.21; i z=7.22

DESCRIZIONE ASTE E ARMATURA LONGITUDINALE

Asta	Se	e0z	e0y	ei z	ei y	Lassi	Lnet	Lcr. I	Lcr. S	Af	% arm
1	1	2.	2.	1.07	1.07	320.	275.	0.	0.	31.42	1.795 10φ20

VERIFICHE ALLO STATO LIMITE ULTIMO

PRESSO-FLESSIONE (incluse le imperfezioni):

Asta	Caso	NEd	MEyd	MEzd	E cl s	σc	E acc	σf	VE
> 1	7- 2	-4380.	2165552.	1.	-197217.	1.02	-118.4	.17	3566.1
1	7- 2	-3679.	1021843.	1.	-11597.	1.	-51.1	.067	1396.6
1	6- 5	-3667.	-42640.	1.1	217100.	1.02	-39.4	.039	822.

SNELLEZZA LIMITE Y [EC2 5.8.3.1]:

Asta	Caso	NEd	MEyd inf	MEyd sup	IO	A	B	C	nu	L lim	Lambd	VE
1	3- 2	-7518.2	149395.	26777.5	320.	.7	1.41	1.52	.03	172.4	15.84	SI

SNELLEZZA LIMITE Z [EC2 5.8.3.1]:

Asta	Caso	NEd	MEzd inf	MEzd sup	IO	A	B	C	nu	L lim	Lambd	VE
1	2- 2	-7432.	13156.6	6863.2	320.	.7	1.41	1.18	.03	134.3	44.34	SI

TAGLIO Y:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	6- 5	1423.7	9549.9	9549.9	32064.1	1.01	19.	2.5	SI
1 C	6- 5	1423.7	9549.9	9549.9	31974.9	1.01	19.	2.5	SI
1 S	6- 5	1423.7	9549.9	9549.9	31885.7	1.01	19.	2.5	SI

TAGLIO Z:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	7- 2	7107.9	30513.	30513.	36488.8	1.01	19.	2.5	SI
1 C	7- 2	7107.9	30513.	30513.	36387.	1.01	19.	2.5	SI
1 S	7- 2	7107.9	30513.	30513.	36285.2	1.01	19.	2.5	SI

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

Rare:

Asta	Caso	NEd	MEyd	MEzd	σc	σf	VE
1 I	20- 1	-5549.6	284053.7	-13038.4	-18.	264.5	SI
1 C	20- 1	-4848.5	148360.7	5565.3	-9.4	84.7	SI
1 S	19- 1	-4204.9	15445.5	35729.6	-7.3	39.4	SI

Frequenti:

Asta	Caso	NEd	MEyd	MEzd	σc	σf	VE
1 I	23- 1	-4827.4	193546.8	-5457.2	-11.8	144.3	SI
1 C	23- 1	-4126.3	104497.2	4979.2	-6.9	46.4	SI
1 S	22- 1	-3436.7	16003.1	17727.8	-4.2	5.	SI

Quasi permanenti:

Asta	Caso	NEd	MEyd	MEzd	σc	σf	VE
1 I	24- 1	-4646.8	170920.1	-3561.9	-10.2	115.2	SI
1 C	24- 1	-3945.7	93531.3	4832.7	-6.2	37.4	SI
1 S	24- 1	-3244.6	16142.5	13227.3	-3.5	-2	SI

VERIFICA PILASTRO IN CEMENTO ARMATO

Nome pilastro : P006 (ID=13)
Aste : 1
Metodo di verifica : stati limite - NTC18 (q=1.5 ; muphi=4.06) ->
Duttilita' : non prevista (struttura non dissipativa).
Unita' di misura : cm; daN; daN/cm; daNcm; daN/cm2; deform. %; 1/r à€°(permille)
Unita' particolari : fessure [Wk]:mm - ferri:mm e cm2 - sezioni:cm e derivate.
Copri ferri (assi) : longitudinali= 4.5 ; staffe= 3
Imperfezioni : M minimo = N * e0 ; M aggiunto = N * ei
Instabilita' : snellezza limite [EC2 5.8.3.1]

MATERIALI

CLS : C25/30; Rck=300; fck=249; fctk=17.91; fctm=25.58; Ecm=314472;
gc=1.5; fcd=141.1; fbd=26.86; fctd=11.94; Ec2=0.2%; Ecu=0.35%
ACCIAIO: B450C; ftk=5175; fyk=4500; Es=2100000;
gs=1.15; fyd=3913; ftd=4500; fud=4439.8; Eyd=0.1863%; Eud=6.75%

TENSIONI MASSIME IN ESERCIZIO

GRUPPO : ordinario.

CLS : σc (rara)=149.4; σc (quasi permanente)=112; fbd(esercizio)=26.86

ACCIAIO: σ_f (rara)=3600; Coeff. Omogeneizzazione=15

CASI DI CARICO

Nome	Descrizione	Tipo	Ses
1	SLU	SLU (statico)	1
2	SLU VENTOX	SLU (statico)	2
3	SLU VENTOY	SLU (statico)	2
6	SLU con SISMAX PRINC	SLU (sismico)	16
7	SLU con SISMAX PRINC	SLU (sismico)	16
18	Rara	RARA	1
19	Rara VentoX	RARA	2
20	Rara VentoY	RARA	2
21	Frequente	FREQUENTE	1
22	Frequente VentoX	FREQUENTE	2
23	Frequente VentoY	FREQUENTE	2
24	Quasi Perm	QUASI PERMAN.	1

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SEZIONI UTILIZZATE

1) Rettangolare: base=70; alt.=25; Acl s=1750; i y=20.21; i z=7.22

DESCRIZIONE ASTE E ARMATURA LONGITUDINALE

As	Se	e0z	e0y	ei z	ei y	Lassi	Lnet	Lcr. I	Lcr. S	Af	% arm	
1	1	2.	2.	1.2	1.2	360.	315.	0.	0.	31.42	1.795	10φ20

VERIFICHE ALLO STATO LIMITE ULTIMO

PRESSO-FLESSIONE (incluse le imperfezioni):

Asta	Caso	NEd	MEyd	MEzd	E cl s	σ_c	E acc	σ_f	VE
> 1	7- 7	-8283.	2407801.	1.	74337.	1.15	-109	-111.7	.165 3465.4 SI
1	7-10	-6821.	-1061482.	1.	-70598.	1.	-052	-64.	.071 1494.2 SI
1	6-10	-7264.	-118305.	1.08	-317197.	1.03	-048	-59.2	.057 1195. SI

SNELLEZZA LIMITE Y [EC2 5.8.3.1]:

Asta	Caso	NEd	MEyd inf	MEyd sup	l0	A	B	C	nu	L lim	Lambd	VE
1	1- 1	-14029.7	-3047.6	-1496.7	360.	.7	1.41	1.21	.057	100.3	17.82	SI

SNELLEZZA LIMITE Z [EC2 5.8.3.1]:

Asta	Caso	NEd	MEzd inf	MEzd sup	l0	A	B	C	nu	L lim	Lambd	VE
1	7-10	-7608.8	-48636.1	-92559.1	360.	.7	1.41	1.18	.031	132.3	49.88	SI

TAGLIO Y:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	6-10	-1353.7	9549.9	9549.9	32543.8	1.01	19.	2.5	SI
1 C	6-10	-1353.7	9549.9	9549.9	32443.6	1.01	19.	2.5	SI
1 S	6-10	-1353.7	9549.9	9549.9	32343.4	1.01	19.	2.5	SI

TAGLIO Z:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	7- 7	7433.3	30513.	30513.	37055.5	1.01	19.	2.5	SI
1 C	7- 7	7433.3	30513.	30513.	36941.1	1.01	19.	2.5	SI
1 S	7- 7	7433.3	30513.	30513.	36826.8	1.01	19.	2.5	SI

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

Rare:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	20- 2	-10529.6	-106463.3	18447.5	-10.7	-2.5	SI
1 C	20- 2	-9742.1	-46283.	-86825.6	-18.2	112.1	SI
1 S	19- 2	-9010.4	-2260.1	-206772.6	-37.3	567.1	SI

Frequenti:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	23- 2	-8462.7	-21725.9	9994.	-5.7	-37.3	SI
1 C	23- 2	-7675.2	-9901.	-72607.1	-13.8	83.8	SI
1 S	22- 2	-6898.9	-1307.5	-158142.9	-28.5	433.1	SI

Quasi permanenti:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	24- 1	-7946.	-541.6	7880.6	-4.5	-45.9	SI
1 C	24- 1	-7158.5	-805.4	-69052.5	-12.6	77.1	SI
1 S	24- 1	-6371.	-1069.3	-145985.5	-26.3	399.7	SI

VERIFICA PILASTRO IN CEMENTO ARMATO

Nome pilastro : P007 (ID=16)
Aste : 12

Metodo di verifica : stati limite - NTC18 (q=1.5 ; muphi=4.06) ->
 Duttilita' : non prevista (struttura non dissipativa).
 Unità di misura : cm; daN; daN/cm; daN/cm²; daN/cm²; deform. %; 1/r °(permille)
 Unità particolari : fessure [Wk]:mm - ferri:mm e cm² - sezioni:cm e derivate.
 Copriferri (assi) : longitudinali= 4.5 ; staffe= 3
 Imperfezioni : M minimo = N * e0 ; M aggiunto = N * ei
 Instabilità : snellezza limite [EC2 5.8.3.1]

MATERIALI

CLS : C25/30; Rck=300; fck=249; fctk=17.91; fctm=25.58; Ecm=314472;
 gc=1.5; fcd=141.1; fbd=26.86; fctd=11.94; Ec2=0.2%; Ecu=0.35%
 ACCIAIO: B450C; ftk=5175; fyk=4500; Es=2100000;
 gs=1.15; fyd=3913; ftd=4500; fud=4439.8; Eyd=0.1863%; Eud=6.75%

TENSIONI MASSIME IN ESERCIZIO

GRUPPO : ordinario.
 CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112; fbd(esercizio)=26.86
 ACCIAIO: σ_f (rara)=3600; Coeff. Omogeneizzazione=15

CASI DI CARICO

Nome	Descrizione	Tipo	Ses
1	SLU	SLU (statico)	1
2	SLU VENTOX	SLU (statico)	2
3	SLU VENTOY	SLU (statico)	2
6	SLU con SISMAX PRINC	SLU (sismico)	16
7	SLU con SISMAX PRINC	SLU (sismico)	16
18	Rara	RARA	1
19	Rara VentoX	RARA	2
20	Rara VentoY	RARA	2
21	Frequente	FREQUENTE	1
22	Frequente VentoX	FREQUENTE	2
23	Frequente VentoY	FREQUENTE	2
24	Quasi Perm	QUASI PERMAN.	1

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SEZIONI UTILIZZATE

1) Rettangolare: base=25; alt.=70; Acls=1750; iy=7.22; iz=20.21

DESCRIZIONE ASTE E ARMATURA LONGITUDINALE

As	Se	e0z	e0y	ei z	ei y	Lassi	Lnet	Lcr.I	Lcr.S	Af	% arm
1	1	2.	2.	1.2	1.2	360.	315.	0.	0.	20.61	1.178 4φ16+4φ20

VERIFICHE ALLO STATO LIMITE ULTIMO

PRESSO-FLESSIONE (incluse le imperfezioni):

Asta	Caso	NEd	MEyd	MEzd	E cls	σ_c	E acc	σ_f	VE
> 1	6- 7	-14795.	-114856.	-877979.	1.02	-73.6	.07	1478.8	SI
1	7- 7	-13997.	141834.	187594.	1.	-37.6	.018	380.5	SI
1	6- 7	-13220.	42305.	837088.	1.02	-58.7	.06	1255.9	SI

SNELLEZZA LIMITE Y [EC2 5.8.3.1]:

Asta	Caso	NEd	MEyd inf	MEyd sup	IO	A	B	C	nu	L lim	Lambd	VE
1	3- 1	-24778.6	18157.4	-272.8	360.	.7	1.29	1.72	.1	97.45	49.88	SI

SNELLEZZA LIMITE Z [EC2 5.8.3.1]:

Asta	Caso	NEd	MEzd inf	MEzd sup	IO	A	B	C	nu	L lim	Lambd	VE
1	7-12	-14915.4	208930.9	147133.2	360.	.7	1.29	.996	.06	72.93	17.82	SI

TAGLIO Y:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	6- 7	4670.7	30513.	30513.	38001.	1.01	19.	2.5	SI
1 C	6- 7	4670.7	30513.	30513.	37886.7	1.01	19.	2.5	SI
1 S	6- 7	4670.7	30513.	30513.	37772.3	1.01	19.	2.5	SI

TAGLIO Z:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	7-10	-819.9	9549.9	9549.9	33312.4	1.01	19.	2.5	SI
1 C	7-10	-819.9	9549.9	9549.9	33212.2	1.01	19.	2.5	SI
1 S	7-10	-819.9	9549.9	9549.9	33112.	1.01	19.	2.5	SI

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

Rare:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	19- 1	-18040.8	-1635.5	-100574.6	-13.	-79.3	SI
1 C	20- 2	-17251.6	-6858.4	172666.7	-16.	-30.7	SI
1 S	19- 1	-16465.8	125.	418293.5	-27.4	204.7	SI

Frequenti:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
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1 I	22- 1	-15473.9	-794.7	-31306.7	-8.9	-96.9	SI
1 C	23- 2	-14686.1	-1583.3	143912.	-13.	-32.3	SI
1 S	22- 1	-13898.9	69.3	313607.8	-20.7	116.1	SI

Quasi permanenti:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	24- 1	-14832.2	-584.5	-13989.7	-7.9	-101.3	SI
1 C	24- 1	-14044.7	-264.5	136723.3	-12.3	-32.8	SI
1 S	24- 1	-13257.2	55.4	287436.3	-19.1	95.4	SI

VERIFICA PILASTRO IN CEMENTO ARMATO

Nome pilastro : P008 (ID=17)
Aste : 13
Metodo di verifica : Stati limite - NTC18 (q=1.5 ; muphi=4.06) ->
Duttilita' : non prevista (struttura non dissipativa).
Unita' di misura : cm; daN; daN/cm; daNcm; daN/cm2; deform. %; 1/r à€°(permille)
Unita' particolari : fessure [Wk]:mm - ferri:mm e cm2 - sezioni:cm e derivate.
Copri ferri (assi) : longitudinali= 4.5 ; staffe= 3
Imperfezioni : M minimo = N * e0 ; M aggiunto = N * ei
Instabilita' : snellezza limite [EC2 5.8.3.1]

MATERIALI

CLS : C25/30; Rck=300; fck=249; fctk=17.91; fctm=25.58; Ecm=314472;
gc=1.5; fcd=141.1; fbd=26.86; fctd=11.94; Ec2=0.2%; Ecu=0.35%
ACCIAIO: B450C; ftk=5175; fyk=4500; Es=2100000;
gs=1.15; fyd=3913; ftd=4500; fud=4439.8; Eyd=0.1863%; Eud=6.75%

TENSIONI MASSIME IN ESERCIZIO

GRUPPO : ordinario.
CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112; fbd(esercizio)=26.86
ACCIAIO: σ_f (rara)=3600; Coeff. Omogeneizzazione=15

CASI DI CARICO

Nome	Descrizione	Tipo	Ses
1	SLU	SLU (statico)	1
2	SLU VENTOX	SLU (statico)	2
3	SLU VENTOY	SLU (statico)	2
6	SLU con SISMAX PRINC	SLU (sismico)	16
7	SLU con SISMAX PRINC	SLU (sismico)	16
18	Rara	RARA	1
19	Rara VentoX	RARA	2
20	Rara VentoY	RARA	2
21	Frequente	FREQUENTE	1
22	Frequente VentoX	FREQUENTE	2
23	Frequente VentoY	FREQUENTE	2
24	Quasi Perm	QUASI PERMAN.	1

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SEZIONI UTILIZZATE

1) Rettangolare: base=25; alt.=70; Acl=1750; iy=7.22; iz=20.21

DESCRIZIONE ASTE E ARMATURA LONGITUDINALE

As	Se	e0z	e0y	eiz	eiy	Lassi	Lnet	Lcr.I	Lcr.S	Af	% arm
1	1	2.	2.	1.2	1.2	360.	315.	0.	0.	20.61	1.178 4φ16+4φ20

VERIFICHE ALLO STATO LIMITE ULTIMO

PRESSO-FLESSIONE (incluse le imperfezioni):

Asta	Caso	NEd	MEyd	MEzd	E cl s	σ_c	E acc	σ_f	VE
> 1	6- 7	-14616.	-102199.	1.21	-875880.	1.02	-0.059	-71.4	.069 1443.4 SI
1	7- 2	-14060.	140907.	1.	-177880.	1.	-0.028	-36.8	.017 362.8 SI
1	6-10	-14039.	-44924.	144.	-752848.	1.02	-0.043	-54.5	.05 1046.6 SI

SNELLEZZA LIMITE Y [EC2 5.8.3.1]:

Asta	Caso	NEd	MEyd inf	MEyd sup	IO	A	B	C	nu	L lim	Lambd	VE
1	2- 1	-25062.2	-2.8	-145.	360.	.7	1.29	1.68	.101	94.95	49.88	SI

SNELLEZZA LIMITE Z [EC2 5.8.3.1]:

Asta	Caso	NEd	MEzd inf	MEzd sup	IO	A	B	C	nu	L lim	Lambd	VE
1	2- 1	-25062.2	-154267.	-336309.	360.	.7	1.29	1.24	.101	70.14	17.82	SI

TAGLIO Y:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	6-10	-4264.1	30513.	30513.	38119.8	1.01	19.	2.5	SI

1 C	6-10	-4264.1	30513.	30513.	38005.5	1.01	19.	2.5	SI
1 S	6-10	-4264.1	30513.	30513.	37891.1	1.01	19.	2.5	SI

TAGLIO Z:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	7- 4	788.5	9549.9	9549.9	33348.5	1.01	19.	2.5	SI
1 C	7- 4	788.5	9549.9	9549.9	33248.3	1.01	19.	2.5	SI
1 S	7- 4	788.5	9549.9	9549.9	33148.1	1.01	19.	2.5	SI

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

Rare:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	19- 1	-18124.6	-9.1	-104879.5	-13.	-79.4	SI
1 C	20- 2	-17388.7	-6531.8	-162647.1	-15.7	-37.2	SI
1 S	19- 2	-16646.7	-105.9	-339384.9	-22.7	93.6	SI

Frequenti:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	22- 1	-15716.6	200.6	-44680.8	-9.5	-92.5	SI
1 C	23- 1	-14938.2	1350.4	-135974.9	-12.8	-38.5	SI
1 S	22- 2	-14161.	-117.3	-251158.5	-17.3	40.1	SI

Quasi permanenti:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	24- 1	-15114.6	253.	-29631.2	-8.6	-95.7	SI
1 C	24- 1	-14327.1	66.4	-129366.5	-12.1	-38.8	SI
1 S	24- 1	-13539.6	-120.2	-229101.9	-16.	28.4	SI

VERIFICA PILASTRO IN CEMENTO ARMATO

Nome pilastro : P009 (ID=14)
 Aste : 3
 Metodo di verifica : Stati limite - NTC18 (q=1.5 ; μ_{phi} =4.06) ->
 Utilità : non prevista (struttura non dissipativa).
 Unità di misura : cm; daN/cm; daN/cm; daN/cm²; deform. %; 1/r \hat{a}° (permille)
 Unità particolari : fessure [Wk]:mm - ferri:mm e cm² - sezioni:cm e derivate.
 Copri ferri (assi) : longitudinali= 4.5 ; staffe= 3
 Imperfezioni : M minimo = N * e0 ; M aggiunto = N * ei
 Instabilità : snellezza limite [NTC18 4.1.2.3.9.2]

MATERIALI

CLS : C25/30; Rck=300; fck=249; fctk=17.91; fctm=25.58; Ecm=314472;
 gc=1.5; fcd=141.1; fbd=26.86; fctd=11.94; Ec2=0.2%; Ecu=0.35%
 ACCIAIO: B450C; ftk=5175; fyk=4500; Es=2100000;
 gs=1.15; fyd=3913; ftd=4500; fud=4439.8; Eyd=0.1863%; Eud=6.75%

TENSIONI MASSIME IN ESERCIZIO

GRUPPO : ordinario.

CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112; fbd(esercizio)=26.86

ACCIAIO: σ_f (rara)=3600; Coeff. Omogeneizzazione=15

CASI DI CARICO

Nome	Descrizione	Tipo	Ses
1	SLU	SLU (statico)	1
2	SLU VENTOX	SLU (statico)	2
3	SLU VENTOY	SLU (statico)	2
6	SLU con SISMAX PRINC	SLU (sismico)	16
7	SLU con SISMAX PRINC	SLU (sismico)	16
18	Rara	RARA	1
19	Rara VentoX	RARA	2
20	Rara VentoY	RARA	2
21	Frequente	FREQUENTE	1
22	Frequente VentoX	FREQUENTE	2
23	Frequente VentoY	FREQUENTE	2
24	Quasi Perm	QUASI PERMAN.	1

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SEZIONI UTILIZZATE

1) Rettangolare: base=25; alt.=25; Acl s=625; iy=7.22; iz=7.22

DESCRIZIONE ASTE E ARMATURA LONGITUDINALE

As	Se	e0z	e0y	ei z	ei y	Lassi	Lnet	Lcr. I	Lcr. S	Af	% arm
1	1	2.	2.	1.2	1.2	360.	315.	0.	0.	8.04	1.287/4φ16

VERIFICHE ALLO STATO LIMITE ULTIMO

PRESSO-FLESSIONE (incluse le imperfezioni):

Asta	Caso	NEd	MEyd	MEzd	E cls	σ_c	E acc	σ_f	VE		
> 1	7-15	-10012.	-152327.	1.09	37567.	1.47	-.078	-88.9	.061	1272.2	SI
1	7-2	-10244.	62576.	1.	13369.	1.	-.029	-38.5	.003	64.1	SI
1	6-7	-10609.	33949.	12.3	117263.	1.12	-.06	-72.2	.034	720.3	SI

SNELLEZZA LIMITE Y [NTC18 4.1.2.3.9.2]:

Asta	Caso	NEd	IO	nu	L im	Lambd	VE
1	2-1	-17709.1	360.	.201	55.79	49.88	SI

SNELLEZZA LIMITE Z [NTC18 4.1.2.3.9.2]:

Asta	Caso	NEd	IO	nu	L im	Lambd	VE
1	2-1	-17709.1	360.	.201	55.79	49.88	SI

TAGLIO Y:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	6-7	501.2	9549.9	9549.9	12642.6	1.01	19.	2.5	SI
1 C	6-7	501.2	9549.9	9549.9	12606.8	1.01	19.	2.5	SI
1 S	6-7	501.2	9549.9	9549.9	12571.	1.01	19.	2.5	SI

TAGLIO Z:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	7-2	431.4	9549.9	9549.9	12560.3	1.01	19.	2.5	SI
1 C	7-2	431.4	9549.9	9549.9	12524.5	1.01	19.	2.5	SI
1 S	7-2	431.4	9549.9	9549.9	12488.8	1.01	19.	2.5	SI

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

Rare:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	19-1	-13036.9	535.8	-8430.9	-20.5	-238.1	SI
1 C	20-1	-12683.7	2729.3	15963.7	-23.1	-201.5	SI
1 S	19-1	-12474.4	-199.9	40620.4	-29.7	-130.5	SI

Frequenti:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	22-2	-10794.6	-54.3	2715.8	-15.5	-211.2	SI
1 C	23-2	-10527.8	-589.8	13489.	-18.7	-171.6	SI
1 S	22-1	-10259.9	-117.1	27100.9	-22.5	-126.5	SI

Quasi permanenti:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	24-1	-10268.8	-45.8	2020.4	-14.6	-202.6	SI
1 C	24-1	-9987.5	-71.1	12870.7	-17.6	-164.	SI
1 S	24-1	-9706.3	-96.4	23721.	-20.6	-125.5	SI

VERIFICA PILASTRO IN CEMENTO ARMATO

Nome pilastro : P010 (ID=15)
Aste : 4
Metodo di verifica : stati limite - NTC18 (q=1.5 ; muphi=4.06) ->
Duttilita' : non prevista (struttura non dissipativa).
Unita' di misura : cm; daN; daN/cm; daN/cm2; deform. %; 1/r à€°(permille)
Unita' particolari : fessure [Wk]:mm - ferri:mm e cm2 - sezioni:cm e derivate.
Copri ferri (assi) : longitudinale= 4.5 ; staffe= 3
Imperfezioni : M minimo = N * e0 ; M aggiunto = N * ei
Instabilita' : snellezza limite [EC2 5.8.3.1]

MATERIALI

CLS : C25/30; Rck=300; fck=249; fctk=17.91; fctm=25.58; Ecm=314472;
gc=1.5; fcd=141.1; fbd=26.86; fctd=11.94; Ec2=0.2%; Ecu=0.35%
ACCIAIO: B450C; ftk=5175; fyk=4500; Es=2100000;
gs=1.15; fyd=3913; ftd=4500; fud=4439.8; Eyd=0.1863%; Eud=6.75%

TENSIONI MASSIME IN ESERCIZIO

GRUPPO : ordinario.

CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112; fbd(esercizio)=26.86
ACCIAIO: σ_f (rara)=3600; Coeff.Omogeneizzazione=15

CASI DI CARICO

Nome	Descrizione	Tipo	Ses
1	SLU	SLU (statico)	1
2	SLU VENTOX	SLU (statico)	2
3	SLU VENTOY	SLU (statico)	2

6	SLU con SISMAX PRINC	SLU (si smi co)	16
7	SLU con SI SMAY PRINC	SLU (si smi co)	16
18	Rara	RARA	1
19	Rara VentoX	RARA	2
20	Rara VentoY	RARA	2
21	Frequente	FREQUENTE	1
22	Frequente VentoX	FREQUENTE	2
23	Frequente VentoY	FREQUENTE	2
24	Quasi Perm	QUASI PERMAN.	1

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SEZIONI UTILIZZATE

1) Rettangolare: base=70; alt.=25; Acl s=1750; i y=20.21; i z=7.22

DESCRIZIONE ASTE E ARMATURA LONGITUDINALE

As	Se	e0z	e0y	ei z	ei y	Lassi	Lnet	Lcr. I	Lcr. S	Af	% arm	
1	1	2.	2.	1.2	1.2	360.	315.	0.	0.	31.42	1.795	10φ20

VERIFICHE ALLO STATO LIMITE ULTIMO

PRESSO-FLESSIONE (incluse le imperfezioni):

Asta	Caso	NEd	MEyd	MEzd	E cl s	σc	E acc	σf	VE
> 1	7-15	-5651.	-2472473.	1.	72956.	1.1	-112.8	.174	3645.2 SI
1	7-15	-4863.	-1092661.	1.	12274.	1.	-54.5	.07	1463.8 SI
1	6-12	-3734.	112813.	1.04	-139436.	1.03	-30.9	.027	559.2 SI

SNELLEZZA LIMITE Y [EC2 5.8.3.1]:

Asta	Caso	NEd	MEyd inf	MEyd sup	IO	A	B	C	nu	L lim	Lambd	VE
1	2- 1	-10343.5	-1025.7	-3662.3	360.	.7	1.41	1.42	.042	137.2	17.82	SI

SNELLEZZA LIMITE Z [EC2 5.8.3.1]:

Asta	Caso	NEd	MEzd inf	MEzd sup	IO	A	B	C	nu	L lim	Lambd	VE
1	2- 1	-10343.5	15714.1	24131.7	360.	.7	1.41	1.05	.042	101.4	49.88	SI

TAGLIO Y:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	6-12	-812.4	9549.9	9549.9	32094.6	1.01	19.	2.5	SI
1 C	6-12	-812.4	9549.9	9549.9	31994.4	1.01	19.	2.5	SI
1 S	6-12	-812.4	9549.9	9549.9	31894.2	1.01	19.	2.5	SI

TAGLIO Z:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	7-15	-7628.	30513.	30513.	36673.2	1.01	19.	2.5	SI
1 C	7-15	-7628.	30513.	30513.	36558.9	1.01	19.	2.5	SI
1 S	7-15	-7628.	30513.	30513.	36444.5	1.01	19.	2.5	SI

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

Rare:

Asta	Caso	NEd	MEyd	MEzd	σc	σf	VE
1 I	20- 2	-7720.6	-112410.5	25443.6	-10.9	37.1	SI
1 C	20- 2	-6933.1	-49537.3	14903.1	-6.6	-8.6	SI
1 S	19- 1	-6173.1	-2654.4	16561.7	-4.7	-23.6	SI

Frequenti:

Asta	Caso	NEd	MEyd	MEzd	σc	σf	VE
1 I	23- 2	-6225.1	-32025.2	23269.8	-6.6	-2.5	SI
1 C	23- 2	-5437.6	-15125.2	12396.2	-4.4	-17.1	SI
1 S	22- 1	-4655.6	-1423.3	3962.5	-2.6	-27.	SI

Quasi permanenti:

Asta	Caso	NEd	MEyd	MEzd	σc	σf	VE
1 I	24- 1	-5851.2	-11928.9	22726.4	-5.6	-10.5	SI
1 C	24- 1	-5063.7	-6522.2	11769.5	-3.8	-19.2	SI
1 S	24- 1	-4276.2	-1115.5	812.6	-2.1	-27.9	SI

VERIFICA PILASTRO IN CEMENTO ARMATO

Nome pilastro : P011 (ID=27)
Aste : 9
Metodo di verifica : stati limite - NTC18 (q=1.5 ; muphi=4.06) ->
Duttilita' : non prevista (struttura non dissipativa).
Unita' di misura : cm; daN; daN/cm; daNcm; daN/cm2; deform. %; 1/r â° (per mille)
Unita' particolari : fessure [Wk]:mm - ferri:mm e cm2 - sezioni:cm e derivate.
Copri ferri (assi) : longitudinali= 4.5 ; staffe= 3
Imperfezioni : M minimo = N * e0 ; M aggiunto = N * ei
Instabilita' : snellezza limite [EC2 5.8.3.1]

MATERIALI

CLS : C25/30; Rck=300; fck=249; fctk=17.91; fctm=25.58; Ecm=314472;
gc=1.5; fcd=141.1; fbd=26.86; fctd=11.94; Ec2=0.2%; Ecu=0.35%
ACCIAIO: B450C; ftk=5175; fyk=4500; Es=2100000;
gs=1.15; fyd=3913; ftd=4500; fud=4439.8; Eyd=0.1863%; Eud=6.75%

TENSIONI MASSIME IN ESERCIZIO

GRUPPO : ordinario.

CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112; fbd(esercizio)=26.86
ACCIAIO: σ_f (rara)=3600; Coeff. Omogeneizzazione=15

CASI DI CARICO

Nome	Descrizione	Tipo	Ses
1	SLU	SLU (statico)	1
2	SLU VENTOX	SLU (statico)	2
3	SLU VENTOY	SLU (statico)	2
6	SLU con SISMAL PRINC	SLU (sismico)	16
7	SLU con SISMAL PRINC	SLU (sismico)	16
18	Rara	RARA	1
19	Rara VentoX	RARA	2
20	Rara VentoY	RARA	2
21	Frequente	FREQUENTE	1
22	Frequente VentoX	FREQUENTE	2
23	Frequente VentoY	FREQUENTE	2
24	Quasi Perm	QUASI PERMAN.	1

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SEZIONI UTILIZZATE

1) Rettangolare: base=70; alt.=25; Acl s=1750; iy=20.21; iz=7.22

DESCRIZIONE ASTE E ARMATURA LONGITUDINALE

As	Se	e0z	e0y	eiz	eiy	Lassi	Lnet	Lcr. I	Lcr. S	Af	% arm
1	1	2.	2.	1.07	1.07	320.	275.	0.	0.	31.42	1.795 10φ20

VERIFICHE ALLO STATO LIMITE ULTIMO

PRESSO-FLESSIONE (incluse le imperfezioni):

Asta	Caso	NEd	MEyd	MEzd	E cl s	σ_c	E acc	σ_f	VE
> 1	7-12	-5750.	-2097230.	170676.	1.04	-112.	-113.9	.159	3340.8 SI
1	7-12	-5049.	-985794.	-13578.	1.	-04.	-50.2	.062	1303.8 SI
1	6-15	-5511.	25811.	-266916.	1.02	-036	-46.5	.045	955.5 SI

SNELLEZZA LIMITE Y [EC2 5.8.3.1]:

Asta	Caso	NEd	MEyd inf	MEyd sup	IO	A	B	C	nu	L lim	Lambd	VE
1	3-1	-9354.6	-231495.	-25438.9	320.	.7	1.41	1.59	.038	161.6	15.84	SI

SNELLEZZA LIMITE Z [EC2 5.8.3.1]:

Asta	Caso	NEd	MEzd inf	MEzd sup	IO	A	B	C	nu	L lim	Lambd	VE
1	2-1	-9175.2	-25119.2	-58002.2	320.	.7	1.41	1.27	.037	130.	44.34	SI

TAGLIO Y:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	6-15	-1532.6	9549.9	9549.9	32298.8	1.01	19.	2.5	SI
1 C	6-15	-1532.6	9549.9	9549.9	32209.6	1.01	19.	2.5	SI
1 S	6-15	-1532.6	9549.9	9549.9	32120.3	1.01	19.	2.5	SI

TAGLIO Z:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	7-12	-6897.5	30513.	30513.	36687.7	1.01	19.	2.5	SI
1 C	7-12	-6897.5	30513.	30513.	36585.9	1.01	19.	2.5	SI
1 S	7-12	-6897.5	30513.	30513.	36484.1	1.01	19.	2.5	SI

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

Rare:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	20- 2	-6901.7	-333248.7	3323.1	-19.	275.8	SI
1 C	20- 2	-6200.6	-172282.9	-29562.7	-14.8	132.7	SI
1 S	19- 2	-5619.1	-15637.3	-74581.7	-14.4	146.7	SI

Frequenti:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	23- 2	-5933.5	-243071.9	-3198.5	-14.1	178.	SI
1 C	23- 2	-5232.5	-128658.1	-25099.2	-11.5	92.6	SI
1 S	22- 2	-4555.3	-15108.2	-49426.4	-9.8	78.9	SI

Quasi permanenti:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	24- 1	-5691.5	-220527.7	-4828.9	-13.2	156.9	SI

1 C	24-	1	-4990.4	-117751.8	-23983.3	-10.7	82.9	SI
1 S	24-	1	-4289.3	-14976.	-43137.6	-8.6	62.5	SI

VERIFICA PILASTRO IN CEMENTO ARMATO

Nome pilastro : P012 (ID=21)
Aste : 2
Metodo di verifica : stati limite - NTC18 (q=1.5 ; muphi=4.06) ->
Duttilita' : non prevista (struttura non dissipativa).
Unita' di misura : cm; daN; daN/cm; daNcm; daN/cm2; deform. %; 1/r â€°(per mille)
Unita' particolari : fessure [Wk]:mm - ferri:mm e cm2 - sezioni:cm e derivate.
Copri ferri (assi) : longitudinali= 4.5 ; staffe= 3
Imperfezioni : M minimo = N * e0 ; M aggiunto = N * ei
Instabilita' : snellezza limite [EC2 5.8.3.1]

MATERIALI

CLS : C25/30; Rck=300; fck=249; fctk=17.91; fctm=25.58; Ecm=314472;
gc=1.5; fcd=141.1; fbd=26.86; fctd=11.94; Ec2=0.2%; Ecu=0.35%
ACCIAIO: B450C; ftk=5175; fyk=4500; Es=2100000;
gs=1.15; fyd=3913; ftd=4500; fud=4439.8; Eyd=0.1863%; Eud=6.75%

TENSIONI MASSIME IN ESERCIZIO

GRUPPO : ordinario.
CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112; fbd(esercizio)=26.86
ACCIAIO: σ_f (rara)=3600; Coeff. Omogeneizzazione=15

CASI DI CARICO

Nome	Descrizione	Tipo	Ses
1	SLU	SLU (statico)	1
2	SLU VENTOX	SLU (statico)	2
3	SLU VENTOY	SLU (statico)	2
6	SLU con SISMAX PRINC	SLU (sismico)	16
7	SLU con SISMAX PRINC	SLU (sismico)	16
18	Rara	RARA	1
19	Rara VentoX	RARA	2
20	Rara VentoY	RARA	2
21	Frequente	FREQUENTE	1
22	Frequente VentoX	FREQUENTE	2
23	Frequente VentoY	FREQUENTE	2
24	Quasi Perm	QUASI PERMAN.	1

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SEZIONI UTILIZZATE

1) Rettangolare: base=25; alt.=70; Acl s=1750; iy=7.22; iz=20.21

DESCRIZIONE ASTE E ARMATURA LONGITUDINALE

As	Se	e0z	e0y	ei z	ei y	Lassi	Lnet	Lcr. I	Lcr. S	Af	% arm	
1	1	2.	2.	1.07	1.07	320.	275.	0.	0.	20.61	1.178	4φ16+4φ20

VERIFICHE ALLO STATO LIMITE ULTIMO

PRESSO-FLESSIONE (incluse le imperfezioni):

Asta	Caso	NEd	MEyd	MEzd	E cl s	σ_c	E acc	σ_f	VE		
> 1	6-15	-10334.	-173090.	1.07	1052247.	1.01	-.082	-92.1	.108	2270.9	SI
1	7-10	-9168.	-178236.	1.	-46866.	1.	-.028	-36.7	.029	603.3	SI
1	6-15	-8932.	27390.	4.63	-722386.	1.01	-.039	-49.4	.056	1174.6	SI

SNELLEZZA LIMITE Y [EC2 5.8.3.1]:

Asta	Caso	NEd	MEyd inf	MEyd sup	IO	A	B	C	nu	L lim	Lambd	VE
1	6-13	-10539.3	1289.8	1132.7	320.	.7	1.29	.822	.043	71.6	44.34	SI

SNELLEZZA LIMITE Z [EC2 5.8.3.1]:

Asta	Caso	NEd	MEzd inf	MEzd sup	IO	A	B	C	nu	L lim	Lambd	VE
1	7-10	-9868.8	-58870.5	-34924.	320.	.7	1.29	1.11	.04	99.65	15.84	SI

TAGLIO Y:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	6-15	-5473.	30513.	30513.	37353.2	1.01	19.	2.5	SI
1 C	6-15	-5473.	30513.	30513.	37251.4	1.01	19.	2.5	SI
1 S	6-15	-5473.	30513.	30513.	37149.6	1.01	19.	2.5	SI

TAGLIO Z:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	7-10	-1190.3	9549.9	9549.9	32674.8	1.01	19.	2.5	SI
1 C	7-10	-1190.3	9549.9	9549.9	32585.6	1.01	19.	2.5	SI

1 S | 7-10 | -1190.3 | 9549.9 | 9549.9 | 32496.4 | 1.01 | 19. | 2.5 | SI |

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

Rare:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	19- 2	-12761.5	-92261.3	82497.7	-22.3	101.6	SI
1 C	20- 2	-12015.3	-50259.	-31773.3	-12.9	-16.6	SI
1 S	19- 2	-11359.3	4291.7	-117431.8	-10.7	-18.5	SI

Frequenti:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	22- 1	-10750.6	-83118.3	-18296.1	-17.	62.8	SI
1 C	23- 2	-10047.5	-40829.4	-26846.5	-10.7	-15.2	SI
1 S	22- 2	-9355.4	3877.5	-61852.3	-7.5	-32.8	SI

Quasi permanenti:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	24- 1	-10256.6	-80717.8	-3272.2	-15.8	54.5	SI
1 C	24- 1	-9555.5	-38471.9	-25614.8	-10.1	-14.8	SI
1 S	24- 1	-8854.4	3773.9	-47957.4	-6.7	-36.4	SI

VERIFICA PILASTRO IN CEMENTO ARMATO

Nome pilastro : P013 (ID=22)
 Aste : 58
 Metodo di verifica : stati limite - NTC18 (q=1.5 ; muphi=4.06) ->
 Duttilita' : non prevista (struttura non dissipativa).
 Unità di misura : cm; daN; daN/cm; daN/cm2; deform. %; 1/r à€°(permille)
 Unità particolari : fessure [Wk]:mm - ferri:mm e cm2 - sezioni:cm e derivate.
 Copri ferri (assi) : longitudinali= 4.5 ; staffe= 3
 Imperfezioni : M minimo = N * e0 ; M aggiunto = N * ei
 Instabilità : snellezza limite [EC2 5.8.3.1]

MATERIALI

CLS : C25/30; Rck=300; fck=249; fctk=17.91; fctm=25.58; Ecm=314472;
 gc=1.5; fcd=141.1; fbd=26.86; fctd=11.94; Ec2=0.2%; Ecu=0.35%
 ACCIAIO: B450C; ftk=5175; fyk=4500; Es=2100000;
 gs=1.15; fyd=3913; ftd=4500; fud=4439.8; Eyd=0.1863%; Eud=6.75%

TENSIONI MASSIME IN ESERCIZIO

GRUPPO : ordinario.

CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112; fbd(esercizio)=26.86

ACCIAIO: σ_f (rara)=3600; Coeff. Omogeneizzazione=15

CASI DI CARICO

Nome	Descrizione	Tipo	Ses
1	SLU	SLU (statico)	1
2	SLU VENTOX	SLU (statico)	2
3	SLU VENTOY	SLU (statico)	2
6	SLU con SISMAL PRINC	SLU (sismico)	16
7	SLU con SISMAL PRINC	SLU (sismico)	16
18	Rara	RARA	1
19	Rara VentoX	RARA	2
20	Rara VentoY	RARA	2
21	Frequente	FREQUENTE	1
22	Frequente VentoX	FREQUENTE	2
23	Frequente VentoY	FREQUENTE	2
24	Quasi Perm	QUASI PERMAN.	1

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SEZIONI UTILIZZATE

1) Rettangolare: base=25; alt.=70; Acl s=1750; iy=7.22; iz=20.21

DESCRIZIONE ASTE E ARMATURA LONGITUDINALE

As	Se e0z	e0y	eiz	eiy	Lassi Lnet	Lcr. I	Lcr. S	Af	% arm			
1	1	2.	2.	1.07	1.07	320.	275.	0.	0.	20.61	1.178	4φ16+4φ20

VERIFICHE ALLO STATO LIMITE ULTIMO

PRESSO-FLESSIONE (incluse le imperfezioni):

Asta	Caso	NEd	MEyd	MEzd	E cl s	σ_c	E acc	σ_f	VE		
> 1	6- 4	-7944.	-180997.	1.05	-1071267.	1.01	-.085	-94.3	.117	2464.9	SI
1	7-12	-8819.	-188307.	1.	122399.	1.	-.034	-43.5	.036	758.	SI

1 | 6- 4 | -6542. | 20061. | 16. | 860464. | 1.01 | -.044 | -55.1 | .075 | 1569.1 | SI |

SNELLEZZA LIMITE Y [EC2 5.8.3.1]:

Asta	Caso	NEd	MEyd inf	MEyd sup	IO	A	B	C	nu	L lim	Lambd	VE
1	6- 2	-7862.8	493.9	571.4	320.	.7	1.29	.836	.032	84.3	44.34	SI

SNELLEZZA LIMITE Z [EC2 5.8.3.1]:

Asta	Caso	NEd	MEzd inf	MEzd sup	IO	A	B	C	nu	L lim	Lambd	VE
1	2- 2	-15272.1	122512.3	144219.5	320.	.7	1.29	.851	.062	61.56	15.84	SI

TAGLIO Y:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1	6- 4	5979.	30513.	30513.	37006.2	1.01	19.	2.5	SI
1	6- 4	5979.	30513.	30513.	36904.4	1.01	19.	2.5	SI
1	6- 4	5979.	30513.	30513.	36802.6	1.01	19.	2.5	SI

TAGLIO Z:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1	7-12	-1200.6	9549.9	9549.9	32630.4	1.01	19.	2.5	SI
1	7-12	-1200.6	9549.9	9549.9	32541.2	1.01	19.	2.5	SI
1	7-12	-1200.6	9549.9	9549.9	32452.	1.01	19.	2.5	SI

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

Rare:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1	19- 1	-11046.	-102765.	-86943.1	-25.	188.7	SI
1	20- 2	-10426.4	-56761.8	82775.	-15.7	45.2	SI
1	19- 1	-9643.8	2534.3	225813.2	-15.3	95.6	SI

Frequenti:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1	22- 1	-9388.6	-92236.6	-17686.7	-18.8	131.2	SI
1	23- 2	-8703.8	-46268.7	68720.3	-12.9	35.	SI
1	22- 1	-7986.4	2357.8	149791.3	-10.5	33.8	SI

Quasi permanenti:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1	24- 1	-8974.3	-89604.5	-372.7	-17.3	118.3	SI
1	24- 1	-8273.2	-43645.4	65206.6	-12.2	32.4	SI
1	24- 1	-7572.1	2313.7	130785.8	-9.4	21.2	SI

VERIFICA PILASTRO IN CEMENTO ARMATO

Nome pilastro : P014 (ID=23)
 Aste : 14
 Metodo di verifica : stati limite - NTC18 (q=1.5 ; muphi=4.06) ->
 Duttilita' : non prevista (struttura non dissipativa).
 Unità di misura : cm; daN/cm; daN/cm2; deform. %; 1/r à° (permille)
 Unità particolari : fessure [Wk]:mm - ferri:mm e cm2 - sezioni:cm e derivate.
 Copri ferri (assi) : longitudinali= 4.5 ; staffe= 3
 Imperfezioni : M minimo = N * e0 ; M aggiunto = N * ei
 Instabilità : snellezza limite [EC2 5.8.3.1]

MATERIALI

CLS : C25/30; Rck=300; fck=249; fctk=17.91; fctm=25.58; Ecm=314472;
 gc=1.5; fcd=141.1; fbd=26.86; fctd=11.94; Ec2=0.2%; Ecu=0.35%
 ACCIAIO: B450C; ftk=5175; fyk=4500; Es=2100000;
 gs=1.15; fyd=3913; ftd=4500; fud=4439.8; Eyd=0.1863%; Eud=6.75%

TENSIONI MASSIME IN ESERCIZIO

GRUPPO : ordinario.

CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112; fbd(esercizio)=26.86
 ACCIAIO: σ_f (rara)=3600; Coeff. Omogeneizzazione=15

CASI DI CARICO

Nome	Descrizione	Tipo	Ses
1	SLU	SLU (statico)	1
2	SLU VENTOX	SLU (statico)	2
3	SLU VENTOY	SLU (statico)	2
6	SLU con SISMAX PRINC	SLU (sismico)	16
7	SLU con SISMAX PRINC	SLU (sismico)	16
18	Rara	RARA	1
19	Rara VentoX	RARA	2
20	Rara VentoY	RARA	2
21	Frequente	FREQUENTE	1

22	Frequente VentoX	FREQUENTE	2
23	Frequente VentoY	FREQUENTE	2
24	Quasi Perm	QUASI PERMAN.	1

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SEZIONI UTILIZZATE

1) Rettangolare: base=25; alt.=70; Acl s=1750; i y=7.22; i z=20.21

DESCRIZIONE ASTE E ARMATURA LONGITUDINALE

As	Se	e0z	e0y	ei z	ei y	Lassi	Lnet	Lcr. I	Lcr. S	Af	% arm	
1	1	2.	2.	1.07	1.07	320.	275.	0.	0.	20.61	1.178	4φ16+4φ20

VERIFICHE ALLO STATO LIMITE ULTIMO

PRESSO-FLESSIONE (incluse le imperfezioni):

Asta	Caso	NEd	MEyd	MEzd	E cl s	σc	E acc	σf	VE		
> 1	6- 4	-9689.	-198946.	1.05	-1064679.	1.01	-.088	-96.6	.116	2426.7	SI
1	7-13	-8246.	-194595.	1.	-116191.	1.	-.034	-44.3	.039	811.2	SI
1	6-13	-4916.	15075.	117.	-720977.	1.01	-.036	-46.4	.064	1335.9	SI

SNELLEZZA LIMITE Y [EC2 5.8.3.1]:

Asta	Caso	NEd	MEyd inf	MEyd sup	IO	A	B	C	nu	L lim	Lambd	VE
1	6-5	-9261.8	2613.5	3424.4	320.	.7	1.29	.937	.038	87.07	44.34	SI

SNELLEZZA LIMITE Z [EC2 5.8.3.1]:

Asta	Caso	NEd	MEzd inf	MEzd sup	IO	A	B	C	nu	L lim	Lambd	VE
1	3-2	-13432.7	-56129.5	-83496.9	320.	.7	1.29	1.03	.054	79.32	15.84	SI

TAGLIO Y:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	6-13	-5329.3	30513.	30513.	36770.1	1.01	19.	2.5	SI
1 C	6-13	-5329.3	30513.	30513.	36668.3	1.01	19.	2.5	SI
1 S	6-13	-5329.3	30513.	30513.	36566.5	1.01	19.	2.5	SI

TAGLIO Z:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	7-13	-1241.5	9549.9	9549.9	32557.6	1.01	19.	2.5	SI
1 C	7-13	-1241.5	9549.9	9549.9	32468.4	1.01	19.	2.5	SI
1 S	7-13	-1241.5	9549.9	9549.9	32379.2	1.01	19.	2.5	SI

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

Rare:

Asta	Caso	NEd	MEyd	MEzd	σc	σf	VE
1 I	19-1	-9997.9	-94253.6	-123508.6	-25.7	222.3	SI
1 C	20-2	-9171.3	-52346.9	-51260.9	-13.1	28.5	SI
1 S	19-2	-8341.	2511.	-113068.4	-8.9	0.	SI

Frequenti:

Asta	Caso	NEd	MEyd	MEzd	σc	σf	VE
1 I	22-1	-8402.2	-83919.8	-49514.4	-19.2	152.8	SI
1 C	23-2	-7676.	-42058.8	-42254.2	-10.6	19.7	SI
1 S	22-2	-6949.	2392.3	-61805.1	-6.1	-16.7	SI

Quasi permanenti:

Asta	Caso	NEd	MEyd	MEzd	σc	σf	VE
1 I	24-1	-8003.2	-81336.3	-31015.8	-17.5	137.2	SI
1 C	24-1	-7302.1	-39486.8	-40002.5	-10.	17.5	SI
1 S	24-1	-6601.	2362.7	-48989.2	-5.4	-20.8	SI

VERIFICA PILASTRO IN CEMENTO ARMATO

Nome pilastro : P015 (ID=24)
 Aste : 15
 Metodo di verifica : stati limite - NTC18 (q=1.5 ; muphi=4.06) ->
 Duttilita' : non prevista (struttura non dissipativa).
 Unita' di misura : cm; daN; daN/cm; daN/cm2; deform. %; 1/r à°(permille)
 Unita' particolari : fessure [Wk]:mm - ferri:mm e cm2 - sezioni:cm e derivate.
 Copri ferri (assi) : longitudinali= 4.5 ; staffe= 3
 Imperfezioni : M minimo = N * e0 ; M aggiunto = N * ei
 Instabilita' : snellezza limite [NTC18 4.1.2.3.9.2]

MATERIALI

CLS : C25/30; Rck=300; fck=249; fctk=17.91; fctm=25.58; Ecm=314472;
 gc=1.5; fcd=141.1; fbd=26.86; fctd=11.94; Ec2=0.2%; Ecu=0.35%
 ACCIAIO: B450C; ftk=5175; fyk=4500; Es=2100000;
 gs=1.15; fyd=3913; ftd=4500; fud=4439.8; Eyd=0.1863%; Eud=6.75%

TENSIONI MASSIME IN ESERCIZIO

GRUPPO : ordinario.

CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112; f_{bd} (esercizio)=26.86

ACCIAIO: σ_f (rara)=3600; Coeff. Omogeneizzazione=15

CASI DI CARICO

Nome	Descrizione	Tipo	Ses
1	SLU	SLU (statico)	1
2	SLU VENTOX	SLU (statico)	2
3	SLU VENTOY	SLU (statico)	2
6	SLU con SISMAX PRINC	SLU (sismico)	16
7	SLU con SISMAX PRINC	SLU (sismico)	16
18	Rara	RARA	1
19	Rara VentoX	RARA	2
20	Rara VentoY	RARA	2
21	Frequente	FREQUENTE	1
22	Frequente VentoX	FREQUENTE	2
23	Frequente VentoY	FREQUENTE	2
24	Quasi Perm	QUASI PERMAN.	1

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SEZIONI UTILIZZATE

1) Rettangolare: base=25; alt.=25; A_{cl} s=625; i_y =7.22; i_z =7.22

DESCRIZIONE ASTE E ARMATURA LONGITUDINALE

As	Se	e0z	e0y	eiz	eiy	Lassi	Lnet	Lcr.I	Lcr.S	Af	% arm
1	1	2.	2.	1.07	1.07	320.	275.	0.	0.	8.04	1.287 4φ16

VERIFICHE ALLO STATO LIMITE ULTIMO

PRESSO-FLESSIONE (incluse le imperfezioni):

Asta	Caso	NEd	MEyd		MEzd		E cl s	σ_c	E acc	σ_f	VE
> 1	7-13	-7253.	-178633.	1. 05	-72892.	1. 12	-. 109	-111. 9	. 107	2248. 9	SI
1	7-13	-7003.	-75799.	1.	3105.	1.	-. 031	-39. 9	. 016	331. 9	SI
1	6-13	-6746.	-20686.	3. 73	-129051.	1. 06	-. 061	-72. 7	. 056	1177.	SI

SNELLEZZA LIMITE Y [NTC18 4.1.2.3.9.2]:

Asta	Caso	NEd	IO	nu	L lim	Lambd	VE
1	2-1	-13046.6	320.	.148	65.	44.34	SI

SNELLEZZA LIMITE Z [NTC18 4.1.2.3.9.2]:

Asta	Caso	NEd	IO	nu	L lim	Lambd	VE
1	2-1	-13046.6	320.	.148	65.	44.34	SI

TAGLIO Y:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	6-13	-754.6	9549.9	9549.9	12143.1	1.01	19.	2.5	SI
1 C	6-13	-754.6	9549.9	9549.9	12111.3	1.01	19.	2.5	SI
1 S	6-13	-754.6	9549.9	9549.9	12079.4	1.01	19.	2.5	SI

TAGLIO Z:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	7-15	-593.4	9549.9	9549.9	12111.5	1.01	19.	2.5	SI
1 C	7-15	-593.4	9549.9	9549.9	12079.6	1.01	19.	2.5	SI
1 S	7-15	-593.4	9549.9	9549.9	12047.8	1.01	19.	2.5	SI

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

Rare:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	19-2	-9490.	-18779.1	10671.3	-22.1	-104.1	SI
1 C	20-2	-9248.8	-12298.4	1596.1	-16.9	-146.2	SI
1 S	19-1	-9066.1	25.9	9932.4	-15.4	-154.3	SI

Frequenti:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	22-2	-7933.2	-16161.1	4979.4	-17.4	-97.5	SI
1 C	23-2	-7684.7	-8736.6	1336.2	-13.6	-125.9	SI
1 S	22-2	-7432.5	-137.5	-2382.	-10.9	-143.5	SI

Quasi permanenti:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	24-1	-7544.	-15506.6	3556.4	-16.2	-95.9	SI
1 C	24-1	-7293.7	-7846.1	1271.2	-12.8	-120.8	SI
1 S	24-1	-7043.3	-185.6	-1014.	-9.9	-139.6	SI

VERIFICA PILASTRO IN CEMENTO ARMATO

Nome pilastro : P016 (ID=28)
Aste : 7
Metodo di verifica : stati limite - NTC18 (q=1.5 ; muphi=4.06) ->
Duttilita' : non prevista (struttura non dissipativa).
Unita' di misura : cm; daN; daN/cm; daNcm; daN/cm2; deform. %; 1/r à°(permille)
Unita' particolari : fessure [Wk]:mm - ferri:mm e cm2 - sezioni:cm e derivate.
Copri ferri (assi) : longitudinali= 4.5 ; staffe= 3
Imperfezioni : M minimo = N * e0 ; M aggiunto = N * ei
Instabilita' : snellezza limite [EC2 5.8.3.1]

MATERIALI

CLS : C25/30; Rck=300; fck=249; fctk=17.91; fctm=25.58; Ecm=314472;
gc=1.5; fcd=141.1; fbd=26.86; fctd=11.94; Ec2=0.2%; Ecu=0.35%
ACCIAIO: B450C; ftk=5175; fyk=4500; Es=2100000;
gs=1.15; fyd=3913; ftd=4500; fud=4439.8; Eyd=0.1863%; Eud=6.75%

TENSIONI MASSIME IN ESERCIZIO

GRUPPO : ordinario.
CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112; fbd(esercizio)=26.86
ACCIAIO: σ_f (rara)=3600; Coeff. Omogeneizzazione=15

CASI DI CARICO

Nome	Descrizione	Tipo	Ses
1	SLU	SLU (statico)	1
2	SLU VENTOX	SLU (statico)	2
3	SLU VENTOY	SLU (statico)	2
6	SLU con SISMAX PRINC	SLU (sismico)	16
7	SLU con SISMAX PRINC	SLU (sismico)	16
18	Rara	RARA	1
19	Rara VentoX	RARA	2
20	Rara VentoY	RARA	2
21	Frequente	FREQUENTE	1
22	Frequente VentoX	FREQUENTE	2
23	Frequente VentoY	FREQUENTE	2
24	Quasi Perm	QUASI PERMAN.	1

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SEZIONI UTILIZZATE

1) Rettangolare: base=70; alt.=25; Acls=1750; iy=20.21; iz=7.22

DESCRIZIONE ASTE E ARMATURA LONGITUDINALE

As	Se	e0z	e0y	eiz	eiy	Lassi	Lnet	Lcr.I	Lcr.S	Af	% arm
1	1	2.	2.	1.07	1.07	320.	275.	0.	0.	31.42	1.795 10φ20

VERIFICHE ALLO STATO LIMITE ULTIMO

PRESSO-FLESSIONE (incluse le imperfezioni):

Asta	Caso	NEd	MEyd	MEzd	E cls	σ_c	E acc	σ_f	VE
> 1	7-13	-5043.	-2045454.	1.	-185661.	1.03	-112.	-114.1	.159 3329.4 SI
1	7-15	-3987.	-992192.	1.	7970.	1.	-.039	-49.2	.064 1334.7 SI
1	6- 4	-4374.	22455.	1.26	225920.	1.02	-.03	-39.7	.039 817.4 SI

SNELLEZZA LIMITE Y [EC2 5.8.3.1]:

Asta	Caso	NEd	MEyd inf	MEyd sup	IO	A	B	C	nu	L lim	Lambd	VE
1	3- 1	-8692.3	-80291.1	-28429.2	320.	.7	1.41	1.35	.035	141.9	15.84	SI

SNELLEZZA LIMITE Z [EC2 5.8.3.1]:

Asta	Caso	NEd	MEzd inf	MEzd sup	IO	A	B	C	nu	L lim	Lambd	VE
1	2- 2	-8600.3	22039.2	32390.9	320.	.7	1.41	1.02	.035	108.1	44.34	SI

TAGLIO Y:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	6- 4	1405.1	9549.9	9549.9	32154.1	1.01	19.	2.5	SI
1 C	6- 4	1405.1	9549.9	9549.9	32064.9	1.01	19.	2.5	SI
1 S	6- 4	1405.1	9549.9	9549.9	31975.7	1.01	19.	2.5	SI

TAGLIO Z:

Asta	Caso	VEd	VRd	VRsd	VRcd	Asw	s	ctgT	VE
1 I	7-15	-6923.6	30513.	30513.	36533.5	1.01	19.	2.5	SI
1 C	7-15	-6923.6	30513.	30513.	36431.7	1.01	19.	2.5	SI
1 S	7-15	-6923.6	30513.	30513.	36329.9	1.01	19.	2.5	SI

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

Rare:

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
------	------	-----	------	------	------------	------------	----

1 I	20- 2	-6406. 8	-234117. 7	-4762. 3	-14.	156. 5	SI
1 C	20- 2	-5705. 7	-123923. 6	18291. 8	-10. 1	62. 8	SI
1 S	19- 1	-5066.	-18060. 6	51065. 1	-10. 2	74. 5	SI

Frequenti :

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	23- 2	-5535. 9	-146961. 8	1699. 1	-8. 8	62.	SI
1 C	23- 2	-4834. 8	-81640. 6	15516. 8	-7. 3	31. 4	SI
1 S	22- 1	-4145. 9	-17185. 7	31278. 3	-6. 6	28. 1	SI

Quasi permanenti :

Asta	Caso	NEd	MEyd	MEzd	σ_c	σ_f	VE
1 I	24- 1	-5318. 1	-125172. 8	3314. 4	-7. 9	44. 4	SI
1 C	24- 1	-4617.	-71069. 9	14823.	-6. 6	24. 4	SI
1 S	24- 1	-3915. 9	-16967.	26331. 6	-5. 7	18. 2	SI

16. TRAVETTI SOLAIO

VERIFICA TRAVATA IN CEMENTO ARMATO

Nome travata : ARMATURA LASTRA + SBALZO (S1) (travetto)
 Metodo di verifica : Stati Limite (NTC18). ->
 Duttilità : non prevista (struttura non dissipativa).
 Unità di misura : cm; daN; daN/cm; daNcm; daN/cm2; deform. %.
 Unità particolari : fessure [Wk]:mm - ferri:mm e cm2 - sezioni:cm e derivate.
 Copri ferri (assi) : longitudinali= 3.5 ; staffe= 2.5

MATERIALI

CLS : Rck =300. ; fck=249. ; fctk= 17.9; fctm= 25.6; Ec= 314472. ;
 gc =1.5 ; fcd=141.1; fbd= 26.9; fctd= 11.9; Ecd=. 35%
 ACCIAIO : B450C; ftk=5175. ; fyk=4500. ; Es=2100000. ;
 gs =1.15; fyd=3913. ; ftd(k*fyd)=4500. ; fud=4439.8; Eud=6.75%

TENSIONI E FESSURE MASSIME IN ESERCIZIO

GRUPPO : ordinario.
 CLS : σ_c (rara)=149.4; σ_c (quasi permanente)=112. ; fbd(esercizio)= 26.9
 ACCIAIO : σ_f (rara)=3600. ; Coeff. Omogeneizzazione= 15
 FESSURE : Wdmax(fre.)=. 4 ; Wdmax(q.p.)=. 3 [4.1.2.2.4.5];
 kt=. 4 [EN 1992-1 7.3.4].

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CONDIZIONI DI CARICO

Nro	Descrizione	Tipo	Mol t. Caric	Coeff. SLU	per combi nazi oni	Rare	Freq.	Q. Per.
1	Perman. strutturali	senza permutazioni	1.	1.3	1.	1.	1.	1.
2	Perman. non strutt.	senza permutazioni	1.	1.5	1.	1.	1.	1.
3	Variabili	permutaz. campate	1.	1.5	1.	.5	.3	

CARICHI APPLICATI

Nro	Con	Camp.	Tipo	Sistema	carico 1	carico 2	dist. 1	dist. 2
1	1	1	Forza distribuita	Globale	-5.4	-	-	-
2	2	1	Forza distribuita	Globale	-1.2	-	-	-
3	3	1	Forza distribuita	Globale	-2.2	-	-	-
4	1	2	Forza distribuita	Globale	-6.	-	-	-
5	2	2	Forza distribuita	Globale	-1.2	-	-	-
6	3	2	Forza distribuita	Globale	-2.2	-	-	-

SEZIONI UTILIZZATE

2) Sezione a T : 120/44X20/5; A=1260. ; Jg=45054. ; E=314471.6

DESCRIZIONE CAMPATE

Cam.	Descriz.	S. ini	Sez.	S. fin	Incl.	L. assi	L. net.	lambda	K	r. Ar.	lam. max
1	C1	1	2	1	0	420.	395.	21.	1.3	1.424	39.608
2	C2	2	2	2	0	126.	113.	6.275	.4	1.519	27.647

VERIFICHE ALLO STATO LIMITE ULTIMO

FLESSIONE:

Progressive	SE	Ar	Msd	Epscl	Epsac	Mrd	Epscl	Epsac	Cam	x/d	Mr/Ms	VE	
> 0.	0.	2.	1.	0.	0.	-122944.	- .35	1.965	3.	.151	***	SI	
0.	0.	2.	1.	17227.	-.007	118341.	- .35	5.178	3.	.063	6.869	SI	
7.	7.	2.	2.	0.	0.	-187309.	- .35	1.38	3.	.202	***	SI	
32.	32.	2.	2.	83876.	-.034	127720.	- .35	3.774	3.	.085	1.523	SI	
60.	60.	2.	3.	130731.	-.023	414056.	- .35	2.156	3.	.14	3.167	SI	
196.	196.	2.	4.	230773.	-.045	328670.	- .35	3.232	3.	.098	1.424	SI	
360.	360.	2.	6.	-4647.	-.002	-189526.	- .35	1.73	3.	.168	40.78	SI	
420.	420.	2.	1.	-76102.	-.047	149	-122944.	- .35	1.965	3.	.151	1.616	SI
> 420.	0.	2.	1.	-82360.	-.051	162	-122944.	- .35	1.965	3.	.151	1.493	SI
427.	7.	2.	8.	-82360.	-.05	162	-125082.	- .35	1.621	3.	.178	1.519	SI
452.	32.	2.	1.	-65296.	-.039	13	-112957.	- .35	2.088	3.	.144	1.73	SI
538.	118.	2.	1.	-1669.	-.001	003	-112957.	- .35	2.088	3.	.144	67.68	SI

TAGLIO:

Progressi ve	Se	Vsd	VRd	Ve
> 0.	0.	2.	2365. !	3586. SI
87.	87.	2.	1309. !	4346. SI
420.	420.	2.	-2636. !	3586. SI

> 420. | 0. | 2. | 1458. ! 3586. ! SI |
546. | 126. | 2. | 0. ! 3586. | SI |

VERIFICHE ALLO STATO LIMITE DI ESERCIZIO

TENSIONI DI ESERCIZIO E FESSURAZIONE - RARE:

Progressive	Se	Ar	Momento	σ_c	σ_f	As	hc, ef	Eps%	Sr, max	Wd	Ve
7.	7.	2. 2.	12476.	-6. 9	543. 3	1. 57	5. 87	. 0155	22. 89	. 036	SI
12.	12.	2. 2.	20725.	-11. 4	902. 5	1. 57	5. 87	. 0258	22. 89	. 059	SI
20.	20.	2. 2.	32385.	-17. 8	1410. 2	1. 57	5. 87	. 0403	22. 89	. 092	SI
32.	32.	2. 2.	51025.	-28. 1	2221. 9	1. 57	5. 87	. 0635	22. 89	. 145	SI
196.	196.	2. 4.	166713. !	-43. 6	2277. 3	4. 52	5. 36	. 0798	17. 1	. 136	SI
420.	420.	2. 1.	-55014. !	-45. 6	2251. 2	1. 57	5. 38	. 0643	21.	. 135	SI
> 420.	0.	2. 1.	-60014. !	-49. 8	2455. 8	1. 57	5. 38	. 0702	21.	. 147	SI
427.	7.	2. 8.	-60014. !	-49. 3	2460. 8	1. 57	5. 4	. 0703	21. 04	. 148	SI
538.	118.	2. 1.	-259. !	- . 2	10. 8	1. 57	5. 44	. 0003	21. 21	. 001	SI

TENSIONI DI ESERCIZIO E FESSURAZIONE - FREQUENTI:

Progressive	Se	Ar	Momento	σ_c	σ_f	As	hc, ef	Eps%	Sr, max	Wd	Ve
7.	7.	2. 2.	10792.	-5. 9	469. 9	1. 57	5. 87	. 0134	22. 89	. 031	SI
12.	12.	2. 2.	17923.	-9. 9	780. 5	1. 57	5. 87	. 0223	22. 89	. 051	SI
20.	20.	2. 2.	28000.	-15. 4	1219. 3	1. 57	5. 87	. 0348	22. 89	. 08	SI
32.	32.	2. 2.	44098.	-24. 3	1920. 3	1. 57	5. 87	. 0549	22. 89	. 126	SI
196.	196.	2. 4.	142560. !	-37. 3	1947. 4	4. 52	5. 36	. 0641	17. 1	. 11	SI
420.	420.	2. 1.	-46609. !	-38. 6	1907. 3	1. 57	5. 38	. 0545	21.	. 114	SI
> 420.	0.	2. 1.	-52991. !	-43. 9	2168. 5	1. 57	5. 38	. 062	21.	. 13	SI
427.	7.	2. 8.	-52991. !	-43. 5	2172. 8	1. 57	5. 4	. 0621	21. 04	. 131	SI
538.	118.	2. 1.	-229. !	- . 2	9. 6	1. 57	5. 44	. 0003	21. 21	. 001	SI

TENSIONI DI ESERCIZIO E FESSURAZIONE - QUASI PERMANENTI:

Progressive	Se	Ar	Momento	σ_c	σ_f	As	hc, ef	Eps%	Sr, max	Wd	Ve
7.	7.	2. 2.	10118.	-5. 6	440. 6	1. 57	5. 87	. 0126	22. 89	. 029	SI
12.	12.	2. 2.	16803.	-9. 2	731. 7	1. 57	5. 87	. 0209	22. 89	. 048	SI
20.	20.	2. 2.	26247.	-14. 4	1142. 9	1. 57	5. 87	. 0327	22. 89	. 075	SI
32.	32.	2. 2.	41328.	-22. 7	1799. 7	1. 57	5. 87	. 0514	22. 89	. 118	SI
196.	196.	2. 4.	132899. !	-34. 8	1815. 4	4. 52	5. 36	. 0578	17. 1	. 099	SI
420.	420.	2. 1.	-43247. !	-35. 9	1769. 7	1. 57	5. 38	. 0506	21.	. 106	SI
> 420.	0.	2. 1.	-50182. !	-41. 6	2053. 5	1. 57	5. 38	. 0587	21.	. 123	SI
427.	7.	2. 8.	-50182. !	-41. 2	2057. 6	1. 57	5. 4	. 0588	21. 04	. 124	SI
538.	118.	2. 1.	-217. !	- . 2	9.	1. 57	5. 44	. 0003	21. 21	. 001	SI

ARMATURE LONGITUDINALI (%=100*Af/Acl s - Acl s=area intera sezione)

Nro	Totale	%	Super.	%	Barre	Infer.	%	Barre
1	3. 14	. 249	1. 57	. 125	2d10	1. 57	. 125	2d10
2	4. 32	. 343	2. 75	. 218	2d10 +6d5	1. 57	. 125	2d10
3	8. 84	. 702	2. 75	. 218	2d10 +6d5	6. 09	. 484	2d10 +4d12
4	5. 7	. 453	1. 18	. 093	6d5	4. 52	. 359	4d12
5	7. 27	. 577	2. 75	. 218	6d5 +2d10	4. 52	. 359	4d12
6	8. 84	. 702	2. 75	. 218	6d5 +2d10	6. 09	. 484	4d12 +2d10
7	4. 32	. 343	2. 75	. 218	6d5 +2d10	1. 57	. 125	2d10
8	4. 71	. 374	1. 57	. 125	2d10	3. 14	. 249	2d10 +2d10