



CITTA' DI SCAFATI
*Croce al Valor Militare e
Medaglia d'oro alla Resistenza*

CITTA' DI SCAFATI

(Provincia di Salerno)

Lavori di Adeguamento Sismico della Scuola Elementare e Materna Ferdinando II di
Borbone di Via Genova – CUP: G83H19000720001

CORPO C

PNRR: Missione 5-Componente 2 Investimento/Subinvestimento 2.1 "Rigenerazione Urbana"

STAZIONE APPALTANTE

Comune di Scafati (SA) – Via P. Melchiade - 84018

Settore VI – LL.PP. e Manutenzione

Descrizione

PROGETTO DEFINITIVO-ESECUTIVO

Fascicolo dei calcoli stato di progetto – Corpo ricostruito

Codice

C_RT_10



Scala

-

Il R.U.P.

Arch. Mirko Sasso


Scafati, 2 maggio 2023

Il RTP

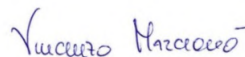
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alla Sezione degli Ingegneri (Sez. A)
- Settore civile e ambientale
ORDINE DEGLI INGEGNERI
DELLA PROVINCIA DI REGGIO CALABRIA



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ORDINE DEGLI INGEGNERI
DELLA PROVINCIA DI REGGIO CALABRIA



Fascicolo dei Calcoli

Origine e Caratteristiche dei Codici di Calcolo	
Codice di calcolo:	PRO_SAP PROfessional Structural Analysis Program
Versione:	PROFESSIONAL (build 2022-10-198)
Produttore-Distributore:	2S.I. Software e Servizi per l'Ingegneria s.r.l. Via Garibaldi, 90 44121 Ferrara FE (Italy) Tel. +39 0532 200091 www.2si.it

Descrizione	
Progetto	
Ubicazione	Comune di SCAFATI (SA) (Regione CAMPANIA)
	Località SCAFATI (SA)
	Longitudine 14.527, Latitudine 40.749
Progettista	

In merito al punto 10.2 delle Norme Tecniche per le Costruzioni (*Affidabilità dei codici utilizzati*), si fa riferimento al **Documento di Affidabilità** “Test di validazione del software di calcolo PRO_SAP e dei moduli aggiuntivi PRO_SAP Modulo Geotecnico, PRO_CAD nodi acciaio e PRO_MST” disponibile per il download sul sito: <https://www.2si.it/it/prodotti/affidabilita/>

INTESTAZIONE E CONTENUTI DELLA RELAZIONE

Progetto

Contenuti della relazione:

RELAZIONE DI CALCOLO STRUTTURALE

- *Origine e Caratteristiche dei Codici di Calcolo*
- *Affidabilità dei codici utilizzati*
- *Validazione dei codici*
- *Tipo di analisi svolta*
- *Modalità di presentazione dei risultati*
- *Informazioni generali sull'elaborazione*
- *Giudizio motivato di accettabilità dei risultati*

STAMPA DEI DATI DI INGRESSO

- *Normative prese a riferimento*
- *Criteri adottati per le misure di sicurezza*
- *Criteri seguiti nella schematizzazione della struttura, dei vincoli e delle sconessioni*
- *Interazione tra terreno e struttura*
- *Legami costitutivi adottati per la modellazione dei materiali e dei terreni*
- *Schematizzazione delle azioni, condizioni e combinazioni di carico*
- *Metodologie numeriche utilizzate per l'analisi strutturale*
- *Metodologie numeriche utilizzate per la progettazione e la verifica degli elementi strutturali*

STAMPA DEI RISULTATI

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RISULTATI NODALI

LEGENDA RISULTATI NODALI

Il controllo dei risultati delle analisi condotte, per quanto concerne i nodi strutturali, è possibile in relazione alle tabelle sottoriportate.

Una prima tabella riporta infatti per ogni nodo e per ogni combinazione (o caso di carico) gli spostamenti nodali.

Una seconda tabella riporta per ogni nodo a cui sia associato un vincolo rigido e/o elastico o una fondazione speciale e per ogni combinazione (o caso di carico) i valori delle azioni esercitate dalla struttura sui vincoli (reazioni vincolari cambiate di segno).

Una terza tabella, infine riassume per ogni nodo le sei combinazioni in cui si attingono i valori minimi e massimi della reazione Fz, della reazione Mx e della reazione My.

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
		mm	mm	mm			
1	1	-7.24e-03	1.62e-03	-0.01	0.0	-7.27e-06	0.0
1	2	-6.93e-03	1.71e-03	-0.01	0.0	-7.08e-06	1.08e-06
1	3	-0.01	2.10e-03	-0.01	0.0	-1.19e-05	0.0
1	4	-0.01	2.11e-03	-0.01	0.0	-1.19e-05	0.0
1	5	-0.01	2.32e-03	-0.01	0.0	-1.14e-05	1.70e-06
1	6	-0.01	2.33e-03	-0.01	0.0	-1.14e-05	1.71e-06
1	7	-0.01	1.44e-03	-9.23e-03	0.0	-1.14e-05	0.0
1	8	-0.01	1.44e-03	-9.27e-03	0.0	-1.14e-05	0.0
1	9	-0.01	1.66e-03	-0.01	0.0	-1.09e-05	0.0
1	10	-0.01	1.66e-03	-0.01	0.0	-1.09e-05	0.0
1	11	-0.01	2.11e-03	-0.01	0.0	-1.19e-05	0.0
1	12	-0.01	2.26e-03	-0.01	0.0	-1.15e-05	1.44e-06
1	13	-0.01	2.27e-03	-0.01	0.0	-1.15e-05	1.45e-06
1	14	-0.01	1.45e-03	-9.31e-03	0.0	-1.14e-05	0.0
1	15	-0.01	1.59e-03	-0.01	0.0	-1.10e-05	0.0
1	16	-0.01	1.60e-03	-0.01	0.0	-1.10e-05	0.0
1	17	-0.01	2.28e-03	-0.01	0.0	-1.19e-05	0.0
1	18	-0.01	2.29e-03	-0.01	0.0	-1.19e-05	0.0
1	19	-0.01	2.43e-03	-0.02	0.0	-1.15e-05	1.56e-06
1	20	-0.01	2.44e-03	-0.02	0.0	-1.15e-05	1.57e-06
1	21	-0.01	1.61e-03	-0.01	0.0	-1.13e-05	0.0
1	22	-0.01	1.62e-03	-0.01	0.0	-1.14e-05	0.0
1	23	-0.01	1.77e-03	-0.01	0.0	-1.10e-05	0.0
1	24	-0.01	1.78e-03	-0.01	0.0	-1.10e-05	0.0
1	25	-0.02	2.16e-03	-0.01	0.0	-1.59e-05	0.0
1	26	-0.02	2.16e-03	-0.01	0.0	-1.59e-05	0.0
1	27	-0.02	2.31e-03	-0.01	0.0	-1.56e-05	1.06e-06
1	28	-0.02	2.32e-03	-0.01	0.0	-1.56e-05	1.07e-06
1	29	-0.02	1.49e-03	-9.25e-03	0.0	-1.54e-05	0.0
1	30	-0.02	1.50e-03	-9.28e-03	0.0	-1.54e-05	0.0
1	31	-0.02	1.65e-03	-0.01	0.0	-1.51e-05	0.0
1	32	-0.02	1.65e-03	-0.01	0.0	-1.51e-05	0.0
1	33	0.21	9.10e-04	-0.02	0.0	4.00e-04	-3.74e-05
1	34	0.18	-3.47e-03	-0.01	0.0	3.42e-04	-2.96e-05
1	35	-0.19	6.65e-03	-7.14e-03	0.0	-3.56e-04	3.15e-05
1	36	-0.22	2.27e-03	-2.23e-03	0.0	-4.14e-04	3.94e-05
1	37	0.21	6.49e-04	-0.02	0.0	4.09e-04	-3.84e-05
1	38	0.17	-3.21e-03	-0.01	0.0	3.32e-04	-2.86e-05
1	39	-0.19	6.39e-03	-6.67e-03	0.0	-3.47e-04	3.06e-05
1	40	-0.23	2.53e-03	-2.70e-03	0.0	-4.24e-04	4.04e-05
1	41	0.24	9.34e-04	-0.02	0.0	4.53e-04	-4.39e-05
1	42	0.21	-3.45e-03	-0.01	0.0	3.95e-04	-3.60e-05
1	43	-0.22	6.62e-03	-7.08e-03	0.0	-4.09e-04	3.80e-05
1	44	-0.25	2.24e-03	-2.18e-03	0.0	-4.68e-04	4.59e-05
1	45	0.24	6.74e-04	-0.02	0.0	4.63e-04	-4.48e-05
1	46	0.20	-3.19e-03	-0.01	0.0	3.86e-04	-3.51e-05
1	47	-0.22	6.36e-03	-6.62e-03	0.0	-4.00e-04	3.71e-05
1	48	-0.26	2.50e-03	-2.64e-03	0.0	-4.77e-04	4.68e-05

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
1	49	0.11	8.03e-03	-0.02	0.0	2.04e-04	-2.25e-05
1	50	4.77e-04	-6.57e-03	-3.86e-03	0.0	8.36e-06	3.79e-06
1	51	-0.01	9.75e-03	-0.02	0.0	-2.25e-05	-1.79e-06
1	52	-0.12	-4.85e-03	-4.70e-04	0.0	-2.18e-04	2.45e-05
1	53	0.11	8.03e-03	-0.02	0.0	2.20e-04	-2.44e-05
1	54	9.03e-03	-6.56e-03	-3.88e-03	0.0	2.43e-05	1.85e-06
1	55	-0.02	9.74e-03	-0.02	0.0	-3.85e-05	0.0
1	56	-0.13	-4.86e-03	-4.53e-04	0.0	-2.34e-04	2.64e-05
1	57	0.12	7.16e-03	-0.02	0.0	2.34e-04	-2.57e-05
1	58	-0.02	-5.70e-03	-5.41e-03	0.0	-2.19e-05	6.96e-06
1	59	1.57e-03	8.88e-03	-0.02	0.0	7.69e-06	-4.96e-06
1	60	-0.14	-3.98e-03	-2.02e-03	0.0	-2.49e-04	2.77e-05
1	61	0.13	7.17e-03	-0.02	0.0	2.50e-04	-2.76e-05
1	62	-6.95e-03	-5.70e-03	-5.42e-03	0.0	-5.91e-06	5.02e-06
1	63	-6.98e-03	8.87e-03	-0.02	0.0	-8.26e-06	-3.02e-06
1	64	-0.14	-3.99e-03	-2.00e-03	0.0	-2.65e-04	2.96e-05
1	65	0.21	9.42e-04	-0.02	0.0	3.98e-04	-3.72e-05
1	66	0.18	-3.30e-03	-0.01	0.0	3.40e-04	-2.94e-05
1	67	-0.19	6.47e-03	-7.15e-03	0.0	-3.54e-04	3.14e-05
1	68	-0.22	2.23e-03	-2.26e-03	0.0	-4.12e-04	3.92e-05
1	69	0.21	6.92e-04	-0.02	0.0	4.07e-04	-3.81e-05
1	70	0.17	-3.05e-03	-0.01	0.0	3.31e-04	-2.85e-05
1	71	-0.19	6.22e-03	-6.68e-03	0.0	-3.45e-04	3.04e-05
1	72	-0.23	2.48e-03	-2.72e-03	0.0	-4.21e-04	4.01e-05
1	73	0.24	9.49e-04	-0.02	0.0	4.51e-04	-4.36e-05
1	74	0.21	-3.29e-03	-0.01	0.0	3.92e-04	-3.58e-05
1	75	-0.22	6.47e-03	-7.09e-03	0.0	-4.07e-04	3.78e-05
1	76	-0.25	2.23e-03	-2.20e-03	0.0	-4.65e-04	4.56e-05
1	77	0.24	6.99e-04	-0.02	0.0	4.59e-04	-4.45e-05
1	78	0.20	-3.04e-03	-0.01	0.0	3.84e-04	-3.49e-05
1	79	-0.21	6.22e-03	-6.63e-03	0.0	-3.98e-04	3.69e-05
1	80	-0.26	2.48e-03	-2.66e-03	0.0	-4.74e-04	4.65e-05
1	81	0.11	7.82e-03	-0.02	0.0	2.03e-04	-2.22e-05
1	82	7.30e-04	-6.31e-03	-3.88e-03	0.0	8.80e-06	3.65e-06
1	83	-0.01	9.48e-03	-0.02	0.0	-2.30e-05	-1.66e-06
1	84	-0.12	-4.65e-03	-4.94e-04	0.0	-2.17e-04	2.42e-05
1	85	0.11	7.82e-03	-0.02	0.0	2.18e-04	-2.42e-05
1	86	9.21e-03	-6.30e-03	-3.89e-03	0.0	2.46e-05	1.73e-06
1	87	-0.02	9.48e-03	-0.02	0.0	-3.88e-05	0.0
1	88	-0.13	-4.65e-03	-4.77e-04	0.0	-2.33e-04	2.61e-05
1	89	0.12	6.99e-03	-0.02	0.0	2.32e-04	-2.54e-05
1	90	-0.01	-5.47e-03	-5.42e-03	0.0	-2.09e-05	6.82e-06
1	91	1.03e-03	8.65e-03	-0.02	0.0	6.73e-06	-4.82e-06
1	92	-0.13	-3.81e-03	-2.04e-03	0.0	-2.46e-04	2.74e-05
1	93	0.13	6.99e-03	-0.02	0.0	2.48e-04	-2.73e-05
1	94	-6.49e-03	-5.47e-03	-5.44e-03	0.0	-5.08e-06	4.89e-06
1	95	-7.44e-03	8.65e-03	-0.02	0.0	-9.08e-06	-2.90e-06
1	96	-0.14	-3.81e-03	-2.03e-03	0.0	-2.62e-04	2.93e-05
1	97	0.16	1.09e-03	-0.02	0.0	3.08e-04	-2.87e-05
1	98	0.14	-2.21e-03	-0.01	0.0	2.63e-04	-2.26e-05
1	99	-0.15	5.39e-03	-7.86e-03	0.0	-2.77e-04	2.46e-05
1	100	-0.17	2.09e-03	-4.05e-03	0.0	-3.22e-04	3.07e-05
1	101	0.16	8.91e-04	-0.02	0.0	3.15e-04	-2.94e-05
1	102	0.13	-2.02e-03	-0.01	0.0	2.56e-04	-2.19e-05
1	103	-0.15	5.19e-03	-7.50e-03	0.0	-2.70e-04	2.39e-05
1	104	-0.18	2.29e-03	-4.41e-03	0.0	-3.29e-04	3.14e-05
1	105	0.18	1.09e-03	-0.02	0.0	3.49e-04	-3.37e-05
1	106	0.16	-2.21e-03	-0.01	0.0	3.04e-04	-2.76e-05
1	107	-0.17	5.38e-03	-7.81e-03	0.0	-3.18e-04	2.96e-05
1	108	-0.20	2.09e-03	-4.01e-03	0.0	-3.63e-04	3.57e-05
1	109	0.19	8.96e-04	-0.02	0.0	3.56e-04	-3.44e-05
1	110	0.15	-2.01e-03	-0.01	0.0	2.97e-04	-2.69e-05
1	111	-0.17	5.19e-03	-7.45e-03	0.0	-3.11e-04	2.89e-05
1	112	-0.20	2.28e-03	-4.37e-03	0.0	-3.70e-04	3.64e-05
1	113	0.08	6.44e-03	-0.02	0.0	1.56e-04	-1.71e-05
1	114	-9.84e-04	-4.55e-03	-5.31e-03	0.0	5.26e-06	3.06e-06
1	115	-0.01	7.73e-03	-0.02	0.0	-1.94e-05	-1.07e-06
1	116	-0.09	-3.26e-03	-2.68e-03	0.0	-1.70e-04	1.91e-05
1	117	0.09	6.44e-03	-0.02	0.0	1.68e-04	-1.86e-05
1	118	5.61e-03	-4.55e-03	-5.33e-03	0.0	1.76e-05	1.57e-06
1	119	-0.02	7.73e-03	-0.02	0.0	-3.17e-05	0.0
1	120	-0.10	-3.26e-03	-2.67e-03	0.0	-1.82e-04	2.06e-05
1	121	0.09	5.79e-03	-0.02	0.0	1.79e-04	-1.95e-05
1	122	-0.01	-3.90e-03	-6.52e-03	0.0	-1.78e-05	5.53e-06

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
1	123	-7.37e-04	7.08e-03	-0.01	0.0	3.67e-06	-3.53e-06
1	124	-0.11	-2.61e-03	-3.89e-03	0.0	-1.93e-04	2.15e-05
1	125	0.10	5.79e-03	-0.02	0.0	1.91e-04	-2.10e-05
1	126	-6.60e-03	-3.90e-03	-6.53e-03	0.0	-5.54e-06	4.03e-06
1	127	-7.33e-03	7.08e-03	-0.01	0.0	-8.63e-06	-2.03e-06
1	128	-0.11	-2.61e-03	-3.87e-03	0.0	-2.06e-04	2.30e-05
1	129	-8.20e-03	1.51e-03	-9.90e-03	0.0	-8.18e-06	0.0
1	130	-8.20e-03	1.52e-03	-9.93e-03	0.0	-8.18e-06	0.0
1	131	-7.67e-03	1.66e-03	-0.01	0.0	-7.86e-06	1.15e-06
1	132	-7.67e-03	1.66e-03	-0.01	0.0	-7.86e-06	1.16e-06
1	133	-8.20e-03	1.52e-03	-9.95e-03	0.0	-8.18e-06	0.0
1	134	-7.83e-03	1.62e-03	-0.01	0.0	-7.95e-06	0.0
1	135	-7.83e-03	1.62e-03	-0.01	0.0	-7.96e-06	0.0
1	136	-8.16e-03	1.63e-03	-0.01	0.0	-8.17e-06	0.0
1	137	-8.16e-03	1.63e-03	-0.01	0.0	-8.17e-06	0.0
1	138	-7.79e-03	1.73e-03	-0.01	0.0	-7.95e-06	1.06e-06
1	139	-7.79e-03	1.74e-03	-0.01	0.0	-7.95e-06	1.06e-06
1	140	-0.01	1.55e-03	-9.91e-03	0.0	-1.09e-05	0.0
1	141	-0.01	1.55e-03	-9.93e-03	0.0	-1.09e-05	0.0
1	142	-0.01	1.65e-03	-0.01	0.0	-1.07e-05	0.0
1	143	-0.01	1.66e-03	-0.01	0.0	-1.07e-05	0.0
1	144	-7.28e-03	1.50e-03	-9.90e-03	0.0	-7.27e-06	0.0
1	145	-6.91e-03	1.60e-03	-0.01	0.0	-7.05e-06	1.06e-06
1	146	-7.28e-03	1.50e-03	-9.91e-03	0.0	-7.27e-06	0.0
1	147	-6.96e-03	1.59e-03	-0.01	0.0	-7.08e-06	0.0
1	148	-6.96e-03	1.59e-03	-0.01	0.0	-7.08e-06	0.0
1	149	-8.20e-03	1.51e-03	-9.90e-03	0.0	-8.18e-06	0.0
1	150	-7.88e-03	1.60e-03	-0.01	0.0	-7.99e-06	0.0
1	151	-7.28e-03	1.50e-03	-9.90e-03	0.0	-7.27e-06	0.0
1	152	-6.96e-03	1.59e-03	-0.01	0.0	-7.08e-06	0.0
2	1	-0.01	-0.01	-0.04	-9.30e-06	-1.64e-05	1.22e-05
2	2	-0.01	-0.01	-0.04	-9.79e-06	-1.75e-05	1.29e-05
2	3	-0.02	-0.02	-0.05	-1.06e-05	-2.10e-05	1.86e-05
2	4	-0.02	-0.02	-0.05	-1.07e-05	-2.10e-05	1.86e-05
2	5	-0.02	-0.02	-0.06	-1.18e-05	-2.38e-05	2.05e-05
2	6	-0.02	-0.02	-0.06	-1.19e-05	-2.38e-05	2.05e-05
2	7	-0.01	-0.01	-0.03	-7.14e-06	-1.43e-05	1.58e-05
2	8	-0.01	-0.01	-0.03	-7.21e-06	-1.44e-05	1.58e-05
2	9	-0.01	-0.02	-0.04	-8.37e-06	-1.71e-05	1.77e-05
2	10	-0.01	-0.02	-0.04	-8.44e-06	-1.72e-05	1.77e-05
2	11	-0.02	-0.02	-0.05	-1.07e-05	-2.11e-05	1.86e-05
2	12	-0.02	-0.02	-0.05	-1.15e-05	-2.29e-05	1.99e-05
2	13	-0.02	-0.02	-0.05	-1.16e-05	-2.31e-05	1.99e-05
2	14	-0.01	-0.01	-0.03	-7.28e-06	-1.44e-05	1.59e-05
2	15	-0.01	-0.01	-0.04	-8.00e-06	-1.63e-05	1.71e-05
2	16	-0.01	-0.01	-0.04	-8.14e-06	-1.64e-05	1.72e-05
2	17	-0.02	-0.02	-0.06	-1.10e-05	-2.28e-05	1.85e-05
2	18	-0.02	-0.02	-0.06	-1.11e-05	-2.29e-05	1.85e-05
2	19	-0.02	-0.02	-0.06	-1.19e-05	-2.48e-05	1.98e-05
2	20	-0.02	-0.02	-0.06	-1.19e-05	-2.48e-05	1.98e-05
2	21	-0.01	-0.01	-0.04	-7.53e-06	-1.61e-05	1.57e-05
2	22	-0.01	-0.01	-0.04	-7.59e-06	-1.62e-05	1.57e-05
2	23	-0.02	-0.02	-0.05	-8.39e-06	-1.81e-05	1.70e-05
2	24	-0.02	-0.02	-0.05	-8.45e-06	-1.81e-05	1.70e-05
2	25	-0.02	-0.02	-0.05	-8.71e-06	-2.13e-05	2.25e-05
2	26	-0.02	-0.02	-0.05	-8.78e-06	-2.13e-05	2.25e-05
2	27	-0.02	-0.02	-0.05	-9.57e-06	-2.32e-05	2.38e-05
2	28	-0.02	-0.02	-0.05	-9.64e-06	-2.33e-05	2.38e-05
2	29	-0.01	-0.01	-0.03	-5.24e-06	-1.46e-05	1.97e-05
2	30	-0.01	-0.01	-0.03	-5.31e-06	-1.47e-05	1.97e-05
2	31	-0.01	-0.02	-0.04	-6.10e-06	-1.65e-05	2.10e-05
2	32	-0.01	-0.02	-0.04	-6.17e-06	-1.66e-05	2.10e-05
2	33	0.05	0.73	0.02	-2.27e-04	8.51e-05	-1.97e-04
2	34	0.08	0.53	0.03	-1.31e-04	1.08e-04	-1.54e-04
2	35	-0.10	-0.55	-0.10	1.12e-04	-1.40e-04	1.80e-04
2	36	-0.08	-0.75	-0.09	2.08e-04	-1.18e-04	2.23e-04
2	37	0.04	0.74	9.90e-03	-2.28e-04	7.00e-05	-2.04e-04
2	38	0.09	0.52	0.03	-1.30e-04	1.23e-04	-1.47e-04
2	39	-0.11	-0.54	-0.11	1.11e-04	-1.56e-04	1.73e-04
2	40	-0.07	-0.76	-0.09	2.09e-04	-1.03e-04	2.30e-04
2	41	0.04	0.84	5.38e-03	-2.66e-04	5.91e-05	-2.31e-04
2	42	0.06	0.64	0.01	-1.70e-04	8.19e-05	-1.87e-04
2	43	-0.09	-0.67	-0.09	1.51e-04	-1.14e-04	2.14e-04
2	44	-0.06	-0.87	-0.08	2.47e-04	-9.16e-05	2.57e-04

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
2	45	0.03	0.85	-1.78e-03	-2.67e-04	4.40e-05	-2.38e-04
2	46	0.07	0.63	0.02	-1.69e-04	9.70e-05	-1.81e-04
2	47	-0.09	-0.66	-0.10	1.50e-04	-1.30e-04	2.07e-04
2	48	-0.05	-0.88	-0.08	2.48e-04	-7.65e-05	2.64e-04
2	49	-0.03	0.51	-0.03	-2.19e-04	-2.05e-05	-1.16e-04
2	50	0.05	-0.16	-6.63e-03	9.84e-05	5.56e-05	2.93e-05
2	51	-0.08	0.13	-0.07	-1.17e-04	-8.82e-05	-3.31e-06
2	52	1.65e-03	-0.54	-0.04	2.00e-04	-1.20e-05	1.42e-04
2	53	-0.03	0.55	-0.04	-2.31e-04	-2.83e-05	-1.27e-04
2	54	0.04	-0.12	-0.01	8.68e-05	4.78e-05	1.92e-05
2	55	-0.07	0.10	-0.07	-1.06e-04	-8.03e-05	6.84e-06
2	56	7.07e-03	-0.58	-0.04	2.12e-04	-4.23e-06	1.53e-04
2	57	-0.06	0.55	-0.06	-2.23e-04	-7.08e-05	-1.37e-04
2	58	0.08	-0.19	0.02	1.03e-04	1.06e-04	5.04e-05
2	59	-0.11	0.17	-0.09	-1.22e-04	-1.38e-04	-2.43e-05
2	60	0.03	-0.58	-0.02	2.04e-04	3.82e-05	1.63e-04
2	61	-0.06	0.59	-0.06	-2.35e-04	-7.86e-05	-1.48e-04
2	62	0.07	-0.16	0.01	9.10e-05	9.81e-05	4.02e-05
2	63	-0.10	0.13	-0.09	-1.10e-04	-1.31e-04	-1.42e-05
2	64	0.04	-0.61	-0.02	2.16e-04	4.60e-05	1.74e-04
2	65	0.05	0.72	0.02	-2.26e-04	8.48e-05	-1.90e-04
2	66	0.08	0.52	0.03	-1.31e-04	1.07e-04	-1.55e-04
2	67	-0.10	-0.55	-0.10	1.12e-04	-1.40e-04	1.81e-04
2	68	-0.08	-0.75	-0.09	2.07e-04	-1.17e-04	2.16e-04
2	69	0.04	0.73	9.77e-03	-2.27e-04	6.97e-05	-1.97e-04
2	70	0.08	0.51	0.03	-1.30e-04	1.23e-04	-1.48e-04
2	71	-0.11	-0.54	-0.11	1.11e-04	-1.55e-04	1.74e-04
2	72	-0.07	-0.76	-0.09	2.08e-04	-1.02e-04	2.23e-04
2	73	0.03	0.84	5.34e-03	-2.65e-04	5.89e-05	-2.25e-04
2	74	0.06	0.64	0.01	-1.70e-04	8.16e-05	-1.90e-04
2	75	-0.08	-0.67	-0.09	1.51e-04	-1.14e-04	2.16e-04
2	76	-0.06	-0.87	-0.08	2.46e-04	-9.14e-05	2.51e-04
2	77	0.03	0.85	-1.87e-03	-2.66e-04	4.38e-05	-2.32e-04
2	78	0.07	0.63	0.02	-1.69e-04	9.66e-05	-1.83e-04
2	79	-0.09	-0.65	-0.10	1.49e-04	-1.29e-04	2.09e-04
2	80	-0.05	-0.88	-0.08	2.47e-04	-7.63e-05	2.58e-04
2	81	-0.03	0.51	-0.03	-2.19e-04	-2.04e-05	-1.01e-04
2	82	0.05	-0.16	-7.04e-03	9.81e-05	5.53e-05	1.56e-05
2	83	-0.07	0.13	-0.07	-1.17e-04	-8.78e-05	1.04e-05
2	84	1.17e-03	-0.54	-0.04	1.99e-04	-1.22e-05	1.27e-04
2	85	-0.03	0.55	-0.04	-2.30e-04	-2.81e-05	-1.11e-04
2	86	0.04	-0.12	-0.01	8.65e-05	4.75e-05	5.19e-06
2	87	-0.07	0.09	-0.07	-1.06e-04	-8.00e-05	2.08e-05
2	88	6.53e-03	-0.57	-0.04	2.11e-04	-4.39e-06	1.37e-04
2	89	-0.06	0.55	-0.06	-2.23e-04	-7.06e-05	-1.24e-04
2	90	0.08	-0.19	0.02	1.02e-04	1.05e-04	3.92e-05
2	91	-0.10	0.16	-0.09	-1.21e-04	-1.38e-04	-1.32e-05
2	92	0.03	-0.57	-0.02	2.04e-04	3.80e-05	1.50e-04
2	93	-0.06	0.58	-0.06	-2.34e-04	-7.84e-05	-1.35e-04
2	94	0.07	-0.16	0.01	9.07e-05	9.77e-05	2.88e-05
2	95	-0.10	0.13	-0.09	-1.10e-04	-1.30e-04	-2.75e-06
2	96	0.04	-0.61	-0.02	2.15e-04	4.58e-05	1.61e-04
2	97	0.04	0.56	4.57e-03	-1.78e-04	6.23e-05	-1.45e-04
2	98	0.06	0.40	0.01	-1.04e-04	8.00e-05	-1.17e-04
2	99	-0.08	-0.43	-0.09	8.49e-05	-1.12e-04	1.43e-04
2	100	-0.07	-0.59	-0.08	1.59e-04	-9.49e-05	1.71e-04
2	101	0.03	0.57	-1.03e-03	-1.79e-04	5.06e-05	-1.50e-04
2	102	0.06	0.40	0.02	-1.03e-04	9.17e-05	-1.12e-04
2	103	-0.09	-0.42	-0.09	8.39e-05	-1.24e-04	1.38e-04
2	104	-0.06	-0.59	-0.08	1.60e-04	-8.31e-05	1.76e-04
2	105	0.02	0.65	-4.48e-03	-2.08e-04	4.22e-05	-1.72e-04
2	106	0.04	0.49	1.95e-03	-1.34e-04	5.98e-05	-1.45e-04
2	107	-0.07	-0.52	-0.08	1.15e-04	-9.23e-05	1.71e-04
2	108	-0.05	-0.68	-0.07	1.89e-04	-7.47e-05	1.98e-04
2	109	0.02	0.66	-0.01	-2.09e-04	3.05e-05	-1.77e-04
2	110	0.05	0.49	7.55e-03	-1.33e-04	7.15e-05	-1.39e-04
2	111	-0.08	-0.51	-0.09	1.14e-04	-1.04e-04	1.65e-04
2	112	-0.04	-0.68	-0.07	1.90e-04	-6.30e-05	2.03e-04
2	113	-0.02	0.39	-0.04	-1.72e-04	-1.95e-05	-7.57e-05
2	114	0.03	-0.12	-0.01	7.42e-05	3.94e-05	1.52e-05
2	115	-0.06	0.10	-0.06	-9.32e-05	-7.19e-05	1.08e-05
2	116	-2.09e-03	-0.42	-0.04	1.53e-04	-1.31e-05	1.02e-04
2	117	-0.03	0.42	-0.04	-1.81e-04	-2.55e-05	-8.38e-05
2	118	0.03	-0.10	-0.02	6.51e-05	3.33e-05	7.11e-06

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
2	119	-0.06	0.07	-0.06	-8.42e-05	-6.58e-05	1.89e-05
2	120	2.08e-03	-0.45	-0.04	1.62e-04	-7.03e-06	1.10e-04
2	121	-0.05	0.42	-0.05	-1.75e-04	-5.85e-05	-9.40e-05
2	122	0.06	-0.15	4.57e-03	7.74e-05	7.84e-05	3.35e-05
2	123	-0.08	0.12	-0.08	-9.65e-05	-1.11e-04	-7.51e-06
2	124	0.02	-0.45	-0.02	1.56e-04	2.60e-05	1.20e-04
2	125	-0.05	0.45	-0.06	-1.84e-04	-6.45e-05	-1.02e-04
2	126	0.05	-0.12	1.86e-03	6.84e-05	7.24e-05	2.54e-05
2	127	-0.08	0.10	-0.08	-8.75e-05	-1.05e-04	0.0
2	128	0.03	-0.47	-0.02	1.65e-04	3.20e-05	1.28e-04
2	129	-0.01	-0.01	-0.04	-8.62e-06	-1.52e-05	1.31e-05
2	130	-0.01	-0.01	-0.04	-8.66e-06	-1.53e-05	1.31e-05
2	131	-0.01	-0.01	-0.04	-9.44e-06	-1.71e-05	1.44e-05
2	132	-0.01	-0.01	-0.04	-9.48e-06	-1.71e-05	1.44e-05
2	133	-0.01	-0.01	-0.04	-8.71e-06	-1.53e-05	1.31e-05
2	134	-0.01	-0.01	-0.04	-9.19e-06	-1.65e-05	1.40e-05
2	135	-0.01	-0.01	-0.04	-9.28e-06	-1.66e-05	1.40e-05
2	136	-0.01	-0.01	-0.04	-8.88e-06	-1.64e-05	1.31e-05
2	137	-0.01	-0.01	-0.04	-8.92e-06	-1.65e-05	1.31e-05
2	138	-0.01	-0.01	-0.04	-9.45e-06	-1.77e-05	1.39e-05
2	139	-0.01	-0.01	-0.04	-9.49e-06	-1.78e-05	1.39e-05
2	140	-0.01	-0.01	-0.04	-7.35e-06	-1.54e-05	1.57e-05
2	141	-0.01	-0.01	-0.04	-7.40e-06	-1.54e-05	1.57e-05
2	142	-0.01	-0.01	-0.04	-7.93e-06	-1.67e-05	1.66e-05
2	143	-0.01	-0.01	-0.04	-7.97e-06	-1.67e-05	1.66e-05
2	144	-0.01	-0.01	-0.04	-9.04e-06	-1.52e-05	1.23e-05
2	145	-0.01	-0.01	-0.04	-9.62e-06	-1.64e-05	1.31e-05
2	146	-0.01	-0.01	-0.04	-9.06e-06	-1.52e-05	1.23e-05
...							
226	152	-0.02	3.87e-03	-0.02	0.0	-1.50e-05	0.0
Nodo		Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
		-11.21	-5.49	-0.47	-5.29e-04	-1.05e-03	-1.04e-03
		10.97	5.49	0.25	5.33e-04	1.06e-03	1.07e-03

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
		kN	kN	kN	kN m	kN m	kN m
3	1	-7.24	-3.65	-264.60	58.82	-7.18	-1.50
3	2	-8.91	-4.28	-290.34	64.81	-8.81	-1.85
3	3	-10.11	-5.11	-326.50	73.28	-10.03	-2.10
3	4	-10.12	-5.12	-329.13	73.83	-10.04	-2.10
3	5	-14.28	-6.67	-390.87	88.26	-14.10	-2.98
3	6	-14.29	-6.68	-393.50	88.81	-14.11	-2.98
3	7	-6.36	-3.42	-223.03	50.00	-6.36	-1.32
3	8	-6.38	-3.42	-225.65	50.55	-6.37	-1.33
3	9	-10.53	-4.98	-287.39	64.99	-10.43	-2.20
3	10	-10.54	-4.98	-290.02	65.54	-10.44	-2.20
3	11	-10.14	-5.12	-331.76	74.37	-10.05	-2.11
3	12	-13.03	-6.21	-371.56	83.77	-12.88	-2.71
3	13	-13.05	-6.21	-376.81	84.86	-12.90	-2.72
3	14	-6.39	-3.42	-228.28	51.10	-6.38	-1.33
3	15	-9.28	-4.51	-268.08	60.49	-9.21	-1.93
3	16	-9.30	-4.52	-273.34	61.59	-9.23	-1.94
3	17	-10.28	-5.17	-364.95	81.32	-10.20	-2.13
3	18	-10.30	-5.17	-367.58	81.87	-10.21	-2.13
3	19	-13.20	-6.26	-410.01	91.82	-13.05	-2.74
3	20	-13.21	-6.26	-412.64	92.36	-13.06	-2.74
3	21	-6.54	-3.47	-261.48	58.05	-6.53	-1.35
3	22	-6.55	-3.48	-264.10	58.60	-6.54	-1.35
3	23	-9.45	-4.57	-306.53	68.54	-9.37	-1.96
3	24	-9.46	-4.57	-309.16	69.09	-9.39	-1.96
3	25	-10.16	-5.25	-326.45	73.49	-10.12	-2.11
3	26	-10.17	-5.25	-329.08	74.04	-10.13	-2.11
3	27	-13.08	-6.34	-371.51	83.98	-12.97	-2.72
3	28	-13.09	-6.34	-374.14	84.53	-12.98	-2.72
3	29	-6.41	-3.55	-222.98	50.22	-6.44	-1.33
3	30	-6.42	-3.55	-225.60	50.77	-6.46	-1.33
3	31	-9.33	-4.64	-268.03	60.71	-9.29	-1.94
3	32	-9.34	-4.65	-270.66	61.26	-9.30	-1.94
3	33	-3.84	41.30	-177.99	-46.63	2.96	-4.08
3	34	-5.45	37.57	-187.78	-30.81	0.78	-3.66
3	35	-12.14	-46.05	-341.64	149.70	-18.16	-9.95e-03
3	36	-13.75	-49.79	-351.42	165.52	-20.35	0.41

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
3	37	-3.52	42.77	-176.62	-48.32	3.30	-4.19
3	38	-5.77	36.10	-189.15	-29.12	0.43	-3.55
3	39	-11.82	-44.59	-340.27	148.01	-17.82	-0.12
3	40	-14.07	-51.25	-352.80	167.21	-20.69	0.52
3	41	-2.43	45.27	-179.54	-57.85	4.90	-4.55
3	42	-4.04	41.54	-189.33	-42.03	2.72	-4.13
3	43	-13.55	-50.02	-340.09	160.92	-20.10	0.46
3	44	-15.16	-53.76	-349.87	176.74	-22.29	0.88
3	45	-2.11	46.73	-178.17	-59.54	5.24	-4.66
3	46	-4.36	40.07	-190.70	-40.34	2.37	-4.02
3	47	-13.23	-48.56	-338.72	159.23	-19.76	0.35
3	48	-15.48	-55.22	-351.25	178.43	-22.63	0.99
3	49	-4.86	15.09	-223.85	3.62	-1.89	-3.14
3	50	-10.24	2.63	-256.47	56.37	-9.16	-1.74
3	51	-7.35	-11.12	-272.94	62.52	-8.22	-1.92
3	52	-12.73	-23.57	-305.57	115.27	-15.50	-0.52
3	53	-4.44	16.28	-224.32	0.26	-1.30	-3.28
3	54	-9.82	3.82	-256.94	53.00	-8.58	-1.89
3	55	-7.78	-12.31	-272.48	65.89	-8.80	-1.78
3	56	-13.15	-24.76	-305.10	118.64	-16.08	-0.38
3	57	-3.81	19.96	-219.28	-2.00	-0.75	-3.51
3	58	-11.30	-2.24	-261.05	61.99	-10.30	-1.38
3	59	-6.30	-6.24	-268.37	56.90	-7.08	-2.29
3	60	-13.79	-28.45	-310.14	120.89	-16.64	-0.16
3	61	-3.38	21.15	-219.74	-5.37	-0.16	-3.65
3	62	-10.87	-1.05	-261.51	58.63	-9.72	-1.52
3	63	-6.72	-7.44	-267.91	60.27	-7.67	-2.14
3	64	-14.21	-29.64	-309.67	124.26	-17.22	-0.02
3	65	-4.00	40.60	-178.03	-45.98	2.78	-4.06
3	66	-5.58	37.36	-187.79	-30.47	0.66	-3.66
3	67	-12.02	-45.84	-341.62	149.36	-18.05	-9.86e-03
3	68	-13.59	-49.08	-351.39	164.87	-20.17	0.39
3	69	-3.69	42.06	-176.65	-47.60	3.12	-4.17
3	70	-5.89	35.89	-189.17	-28.85	0.32	-3.55
3	71	-11.70	-44.38	-340.25	147.74	-17.71	-0.12
3	72	-13.91	-50.55	-352.76	166.49	-20.51	0.51
3	73	-2.58	44.50	-179.58	-57.13	4.72	-4.53
3	74	-4.15	41.26	-189.34	-41.62	2.60	-4.13
3	75	-13.44	-49.74	-340.07	160.52	-19.98	0.46
3	76	-15.02	-52.98	-349.84	176.02	-22.11	0.87
3	77	-2.26	45.96	-178.20	-58.75	5.06	-4.64
3	78	-4.47	39.80	-190.72	-40.00	2.26	-4.02
3	79	-13.13	-48.28	-338.70	158.89	-19.65	0.35
3	80	-15.33	-54.45	-351.21	177.64	-22.44	0.98
3	81	-4.97	14.13	-223.89	4.31	-2.03	-3.12
3	82	-10.22	3.32	-256.45	55.98	-9.11	-1.77
3	83	-7.37	-11.80	-272.97	62.91	-8.28	-1.90
3	84	-12.63	-22.61	-305.52	114.59	-15.36	-0.55
3	85	-4.54	15.30	-224.36	0.96	-1.45	-3.26
3	86	-9.79	4.49	-256.91	52.64	-8.53	-1.91
3	87	-7.80	-12.97	-272.50	66.25	-8.86	-1.76
3	88	-13.05	-23.78	-305.06	117.93	-15.94	-0.41
3	89	-3.92	19.00	-219.31	-1.10	-0.91	-3.49
3	90	-11.27	-1.55	-261.03	61.39	-10.23	-1.40
3	91	-6.33	-6.93	-268.39	57.50	-7.16	-2.27
3	92	-13.67	-27.49	-310.11	119.99	-16.48	-0.18
3	93	-3.49	20.17	-219.77	-4.45	-0.33	-3.63
3	94	-10.84	-0.38	-261.49	58.05	-9.65	-1.54
3	95	-6.75	-8.10	-267.92	60.84	-7.74	-2.13
3	96	-14.10	-28.66	-309.64	123.34	-17.06	-0.04
3	97	-5.06	30.64	-197.31	-22.53	0.23	-3.57
3	98	-6.29	28.11	-204.91	-10.47	-1.42	-3.25
3	99	-11.30	-36.59	-324.51	129.37	-15.97	-0.42
3	100	-12.53	-39.12	-332.10	141.43	-17.62	-0.10
3	101	-4.82	31.77	-196.25	-23.80	0.49	-3.65
3	102	-6.53	26.97	-205.98	-9.21	-1.68	-3.17
3	103	-11.06	-35.45	-323.44	128.10	-15.71	-0.50
3	104	-12.77	-40.26	-333.17	142.69	-17.88	-0.01
3	105	-3.96	33.67	-198.52	-31.21	1.74	-3.93
3	106	-5.18	31.14	-206.11	-19.15	0.09	-3.62
3	107	-12.41	-39.63	-323.30	138.04	-17.47	-0.05
3	108	-13.64	-42.16	-330.90	150.10	-19.13	0.27
3	109	-3.71	34.81	-197.45	-32.47	2.00	-4.02
3	110	-5.43	30.01	-207.18	-17.89	-0.17	-3.53

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
3	111	-12.17	-38.49	-322.24	136.78	-17.21	-0.14
3	112	-13.88	-43.29	-331.97	151.36	-19.39	0.35
3	113	-5.82	10.06	-232.97	16.56	-3.51	-2.83
3	114	-9.90	1.63	-258.29	56.76	-9.02	-1.78
3	115	-7.69	-10.11	-271.13	62.13	-8.37	-1.89
3	116	-11.78	-18.54	-296.44	102.33	-13.88	-0.84
3	117	-5.49	10.97	-233.33	13.96	-3.06	-2.94
3	118	-9.57	2.54	-258.65	54.16	-8.57	-1.89
3	119	-8.02	-11.02	-270.77	64.73	-8.82	-1.78
3	120	-12.11	-19.45	-296.08	104.93	-14.33	-0.73
3	121	-5.00	13.85	-229.41	12.35	-2.64	-3.12
3	122	-10.72	-2.16	-261.85	60.97	-9.89	-1.50
3	123	-6.88	-6.32	-267.57	57.92	-7.50	-2.17
3	124	-12.59	-22.33	-300.01	106.54	-14.75	-0.55
3	125	-4.67	14.76	-229.77	9.75	-2.19	-3.23
3	126	-10.39	-1.25	-262.21	58.37	-9.44	-1.61
3	127	-7.21	-7.23	-267.21	60.52	-7.95	-2.06
3	128	-12.92	-23.24	-299.64	109.14	-15.20	-0.44
3	129	-7.14	-3.65	-238.95	53.50	-7.09	-1.49
3	130	-7.15	-3.65	-240.70	53.86	-7.09	-1.49
3	131	-9.92	-4.69	-281.86	63.49	-9.80	-2.07
3	132	-9.93	-4.69	-283.61	63.86	-9.80	-2.07
3	133	-7.16	-3.65	-242.45	54.23	-7.10	-1.49
3	134	-9.09	-4.38	-268.99	60.49	-8.98	-1.89
3	135	-9.10	-4.38	-272.49	61.22	-9.00	-1.90
3	136	-7.26	-3.68	-264.58	58.86	-7.20	-1.50
3	137	-7.26	-3.68	-266.34	59.23	-7.21	-1.50
3	138	-9.20	-4.41	-294.62	65.86	-9.10	-1.91
3	139	-9.21	-4.41	-296.37	66.22	-9.10	-1.91
3	140	-7.17	-3.74	-238.92	53.64	-7.14	-1.49
3	141	-7.18	-3.74	-240.67	54.01	-7.15	-1.49
3	142	-9.12	-4.46	-268.95	60.64	-9.04	-1.90
3	143	-9.13	-4.47	-270.71	61.00	-9.05	-1.90
3	144	-7.13	-3.62	-238.96	53.45	-7.07	-1.48
3	145	-9.08	-4.35	-269.00	60.44	-8.96	-1.89
3	146	-7.13	-3.62	-239.66	53.60	-7.07	-1.48
3	147	-8.80	-4.24	-264.71	59.45	-8.69	-1.83
3	148	-8.80	-4.24	-265.41	59.59	-8.70	-1.83
3	149	-7.14	-3.65	-238.95	53.50	-7.09	-1.49
3	150	-8.81	-4.27	-264.70	59.49	-8.71	-1.84
3	151	-7.13	-3.62	-238.96	53.45	-7.07	-1.48
3	152	-8.80	-4.24	-264.71	59.45	-8.69	-1.83
5	1	-3.69	0.54	-159.54	0.74	26.53	0.19
5	2	-4.20	0.59	-165.60	0.76	27.03	0.20
5	3	-5.06	0.65	-195.81	0.96	31.66	0.24
5	4	-5.07	0.66	-196.65	0.96	31.81	0.24
5	5	-6.33	0.78	-210.94	0.99	32.90	0.29
5	6	-6.34	0.78	-211.77	0.99	33.05	0.29
5	7	-3.44	0.46	-135.34	0.65	21.78	0.17
5	8	-3.45	0.47	-136.17	0.65	21.93	0.18
5	9	-4.71	0.59	-150.47	0.68	23.03	0.22
5	10	-4.72	0.60	-151.30	0.68	23.18	0.22
5	11	-5.08	0.66	-197.48	0.96	31.96	0.25
5	12	-5.94	0.74	-206.40	0.98	32.53	0.28
5	13	-5.97	0.75	-208.07	0.98	32.83	0.28
5	14	-3.47	0.48	-137.01	0.65	22.08	0.18
5	15	-4.33	0.55	-145.93	0.67	22.65	0.21
5	16	-4.36	0.56	-147.60	0.67	22.95	0.21
5	17	-5.42	0.71	-219.34	1.08	35.98	0.25
5	18	-5.44	0.71	-220.17	1.08	36.13	0.25
5	19	-6.31	0.79	-229.93	1.10	36.85	0.29
5	20	-6.33	0.80	-230.76	1.10	37.00	0.29
5	21	-3.81	0.52	-158.87	0.77	26.10	0.18
5	22	-3.82	0.53	-159.70	0.77	26.25	0.19
5	23	-4.70	0.61	-169.46	0.79	26.97	0.22
5	24	-4.71	0.61	-170.29	0.79	27.12	0.22
5	25	-5.41	0.62	-195.98	1.01	31.06	0.25
5	26	-5.42	0.62	-196.82	1.01	31.21	0.25
5	27	-6.30	0.71	-206.57	1.03	31.93	0.28
5	28	-6.31	0.71	-207.40	1.03	32.08	0.28
5	29	-3.79	0.43	-135.51	0.70	21.18	0.18
5	30	-3.81	0.44	-136.34	0.70	21.33	0.18
5	31	-4.68	0.52	-146.10	0.72	22.05	0.21
5	32	-4.70	0.53	-146.93	0.72	22.21	0.21

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
5	33	27.20	14.37	48.45	-22.69	87.13	-0.36
5	34	14.91	12.33	77.13	-18.42	62.86	-0.51
5	35	-22.82	-11.22	-376.96	19.77	-14.56	0.90
5	36	-35.11	-13.25	-348.27	24.04	-38.84	0.75
5	37	27.78	14.70	42.20	-23.14	88.52	-0.30
5	38	14.32	12.00	83.38	-17.97	61.47	-0.56
5	39	-22.24	-10.88	-383.21	19.32	-13.18	0.96
5	40	-35.70	-13.59	-342.02	24.48	-40.22	0.70
5	41	33.72	16.18	48.93	-25.84	100.94	-0.62
5	42	21.43	14.15	77.61	-21.57	76.67	-0.77
5	43	-29.35	-13.03	-377.44	22.92	-28.37	1.17
5	44	-41.64	-15.07	-348.75	27.19	-52.65	1.02
5	45	34.31	16.52	42.67	-26.28	102.33	-0.57
5	46	20.85	13.81	83.86	-21.12	75.28	-0.83
5	47	-28.76	-12.70	-383.69	22.47	-26.99	1.22
5	48	-42.22	-15.40	-342.50	27.63	-54.03	0.96
5	49	24.03	7.78	-133.91	-12.80	79.86	0.25
5	50	-16.93	1.01	-38.30	1.41	-1.05	-0.24
5	51	9.02	0.11	-261.53	-0.06	49.35	0.63
5	52	-31.94	-6.67	-165.92	14.15	-31.56	0.14
5	53	25.99	8.33	-133.77	-13.75	84.00	0.17
5	54	-14.98	1.55	-38.15	0.47	3.09	-0.32
5	55	7.07	-0.43	-261.67	0.88	45.21	0.71
5	56	-33.90	-7.21	-166.06	15.10	-35.71	0.22
5	57	25.98	8.91	-154.75	-14.29	84.48	0.45
5	58	-18.89	-0.12	-17.46	2.91	-5.67	-0.43
5	59	10.98	1.23	-282.37	-1.56	53.97	0.82
5	60	-33.89	-7.79	-145.08	15.64	-36.18	-0.05
5	61	27.94	9.45	-154.60	-15.24	88.62	0.37
5	62	-16.93	0.43	-17.32	1.96	-1.53	-0.51
5	63	9.02	0.69	-282.51	-0.61	49.83	0.90
5	64	-35.85	-8.33	-145.22	16.59	-40.32	0.03
5	65	26.19	14.25	48.39	-22.54	85.28	-0.36
5	66	14.08	12.27	77.06	-18.34	61.21	-0.50
5	67	-22.00	-11.16	-376.88	19.69	-12.92	0.89
5	68	-34.11	-13.14	-348.22	23.89	-36.98	0.75
5	69	26.73	14.58	42.14	-22.98	86.59	-0.30
5	70	13.55	11.94	83.30	-17.90	59.90	-0.56
5	71	-21.46	-10.83	-383.13	19.25	-11.60	0.95
5	72	-34.64	-13.47	-341.97	24.33	-38.30	0.69
5	73	32.59	16.06	48.86	-25.68	98.99	-0.62
5	74	20.48	14.08	77.53	-21.48	74.92	-0.76
5	75	-28.39	-12.96	-377.36	22.83	-26.63	1.16
5	76	-40.50	-14.94	-348.69	27.03	-50.69	1.02
5	77	33.12	16.39	42.62	-26.11	100.31	-0.56
5	78	19.94	13.75	83.78	-21.04	73.61	-0.82
5	79	-27.85	-12.63	-383.60	22.39	-25.31	1.22
5	80	-41.03	-15.27	-342.44	27.46	-52.01	0.96
5	81	23.46	7.67	-133.90	-12.66	78.99	0.24
5	82	-16.91	1.07	-38.34	1.34	-1.23	-0.22
5	83	9.00	0.05	-261.48	9.13e-03	49.53	0.62
5	84	-31.37	-6.55	-165.93	14.01	-30.69	0.15
5	85	25.38	8.21	-133.76	-13.60	83.10	0.16
5	86	-15.00	1.61	-38.20	0.40	2.88	-0.30
5	87	7.08	-0.50	-261.63	0.95	45.42	0.70
5	88	-33.29	-7.09	-166.07	14.95	-34.81	0.23
5	89	25.24	8.76	-154.72	-14.12	83.37	0.44
5	90	-18.69	-0.03	-17.52	2.80	-5.62	-0.42
5	91	10.78	1.14	-282.31	-1.45	53.91	0.82
5	92	-33.15	-7.65	-145.10	15.47	-35.08	-0.05
5	93	27.16	9.31	-154.58	-15.06	87.49	0.36
5	94	-16.78	0.51	-17.38	1.86	-1.50	-0.50
5	95	8.86	0.60	-282.45	-0.51	49.80	0.90
5	96	-35.07	-8.19	-145.24	16.41	-39.19	0.03
5	97	19.51	11.21	4.27	-17.38	71.72	-0.24
5	98	10.09	9.67	26.56	-14.11	53.01	-0.34
5	99	-18.00	-8.55	-326.38	15.46	-4.71	0.74
5	100	-27.42	-10.09	-304.10	18.73	-23.43	0.63
5	101	19.92	11.46	-0.59	-17.72	72.75	-0.19
5	102	9.67	9.41	31.42	-13.77	51.98	-0.39
5	103	-17.58	-8.30	-331.24	15.12	-3.69	0.78
5	104	-27.84	-10.35	-299.24	19.07	-24.45	0.58
5	105	24.48	12.61	4.64	-19.82	82.39	-0.44
5	106	15.06	11.07	26.93	-16.55	63.67	-0.55

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
5	107	-22.97	-9.96	-326.75	17.90	-15.38	0.94
5	108	-32.39	-11.50	-304.46	21.17	-34.09	0.84
5	109	24.90	12.87	-0.22	-20.16	83.41	-0.40
5	110	14.65	10.82	31.78	-16.21	62.65	-0.60
5	111	-22.56	-9.70	-331.61	17.56	-14.35	0.99
5	112	-32.81	-11.75	-299.61	21.51	-35.12	0.79
5	113	17.37	6.09	-137.46	-9.70	66.81	0.23
5	114	-14.03	0.96	-63.17	1.19	4.42	-0.13
5	115	6.12	0.16	-236.66	0.16	43.88	0.52
5	116	-25.28	-4.97	-162.36	11.04	-18.51	0.16
5	117	18.86	6.51	-137.35	-10.43	70.01	0.17
5	118	-12.54	1.38	-63.06	0.46	7.62	-0.19
5	119	4.62	-0.26	-236.77	0.89	40.68	0.58
5	120	-26.77	-5.39	-162.47	11.78	-21.71	0.23
5	121	18.76	6.94	-153.65	-10.83	70.22	0.39
5	122	-15.42	0.10	-46.98	2.33	1.01	-0.28
5	123	7.50	1.01	-252.85	-0.98	47.29	0.68
5	124	-26.67	-5.83	-146.17	12.18	-21.92	8.05e-03
5	125	20.25	7.36	-153.54	-11.56	73.42	0.32
5	126	-13.92	0.52	-46.87	1.59	4.21	-0.35
5	127	6.01	0.59	-252.96	-0.25	44.09	0.74
5	128	-28.16	-6.25	-146.28	12.91	-25.12	0.07
5	129	-3.53	0.50	-143.90	0.67	23.52	0.18
5	130	-3.54	0.50	-144.45	0.67	23.62	0.18
5	131	-4.37	0.58	-153.99	0.69	24.35	0.21
5	132	-4.38	0.59	-154.54	0.69	24.45	0.21
5	133	-3.55	0.51	-145.01	0.67	23.72	0.18
5	134	-4.12	0.56	-150.96	0.69	24.10	0.20
5	135	-4.14	0.57	-152.07	0.69	24.30	0.20
5	136	-3.77	0.54	-159.58	0.75	26.40	0.19
5	137	-3.78	0.54	-160.14	0.76	26.50	0.19
5	138	-4.37	0.60	-166.64	0.77	26.98	0.21
5	139	-4.37	0.60	-167.20	0.77	27.08	0.21
5	140	-3.76	0.48	-144.01	0.71	23.12	0.18
5	141	-3.77	0.48	-144.57	0.71	23.22	0.18
5	142	-4.35	0.54	-151.07	0.72	23.70	0.20
5	143	-4.36	0.54	-151.63	0.72	23.80	0.20
5	144	-3.45	0.51	-143.86	0.66	23.65	0.18
5	145	-4.04	0.57	-150.92	0.68	24.23	0.20
5	146	-3.45	0.51	-144.08	0.66	23.69	0.18
...							
225	152	-3.20	2.17	-42.04	0.0	-0.92	-3.20e-04
Nodo		Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
		-55.09	-55.22	-423.72	-128.30	-109.55	-8.80
		48.48	46.73	90.36	178.43	175.50	9.80

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
		kN	kN	kN	kN m	kN m	kN m
3	20	-13.21	-6.26	-412.64	92.36	-13.06	-2.74
	37	-3.52	42.77	-176.62	-48.32	3.30	-4.19
	45	-2.11	46.73	-178.17	-59.54	5.24	-4.66
	48	-15.48	-55.22	-351.25	178.43	-22.63	0.99
	48	-15.48	-55.22	-351.25	178.43	-22.63	0.99
	45	-2.11	46.73	-178.17	-59.54	5.24	-4.66
5	47	-28.76	-12.70	-383.69	22.47	-26.99	1.22
	46	20.85	13.81	83.86	-21.12	75.28	-0.83
	45	34.31	16.52	42.67	-26.28	102.33	-0.57
	48	-42.22	-15.40	-342.50	27.63	-54.03	0.96
	48	-42.22	-15.40	-342.50	27.63	-54.03	0.96
	45	34.31	16.52	42.67	-26.28	102.33	-0.57
7	20	-3.42	2.03	-423.72	-83.80	-3.93	0.76
	51	-1.86	-20.76	-178.11	-45.26	-3.14	0.19
	45	22.86	28.69	-300.81	-128.30	37.12	-8.80
	48	-27.35	-26.25	-230.19	23.35	-42.27	9.80
	48	-27.35	-26.25	-230.19	23.35	-42.27	9.80
	45	22.86	28.69	-300.81	-128.30	37.12	-8.80
9	55	7.12	-0.87	-373.10	-0.36	67.37	0.22
	54	-13.73	2.23	-12.70	-0.82	-1.41	0.23
	45	48.48	13.12	-131.72	-18.94	175.20	-1.61
	48	-55.09	-11.76	-254.09	17.76	-109.24	2.06
	44	-55.06	-11.36	-249.01	17.37	-109.55	1.91
	41	48.45	12.72	-136.80	-18.54	175.50	-1.46

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
41	39	-30.96	-11.29	-276.58	19.66	26.63	2.02
	38	14.89	18.11	44.74	-20.32	3.40	-0.57
	45	0.50	24.90	-28.66	-30.43	1.74	0.31
	48	-16.57	-18.08	-203.17	29.78	28.28	1.15
	37	4.59	22.26	-5.18	-26.77	0.25	0.23
	40	-20.66	-15.45	-226.66	26.12	29.78	1.23
42	39	-12.91	-2.42	-117.47	8.53	0.0	0.75
	38	12.23	11.14	9.80	-10.40	0.0	-0.51
	45	3.24	14.39	-21.96	-15.61	0.0	-0.84
	48	-3.91	-5.67	-85.71	13.75	0.0	1.09
	144	-0.22	4.40	-50.88	-0.98	0.0	0.12
	28	-0.82	7.80	-75.78	-1.98	0.0	0.22
55	39	-15.35	2.35	-86.41	5.68	0.0	0.67
	38	17.11	8.70	-5.89	-8.56	0.0	-0.51
	45	5.18	10.69	-24.19	-12.85	0.0	-0.82
	48	-3.42	0.37	-68.11	9.97	0.0	0.98
	144	0.94	5.54	-43.68	-1.47	0.0	0.08
	28	0.77	9.91	-64.70	-2.89	0.0	0.15
63	40	-9.16	2.62	-63.49	6.20	0.0	0.65
	37	10.30	9.33	-16.65	-9.69	0.0	-0.56
	45	6.45	9.60	-19.98	-10.74	0.0	-0.65
	48	-5.31	2.35	-60.17	7.24	0.0	0.74
	144	0.64	5.98	-37.96	-1.77	0.0	0.04
	28	0.26	10.73	-56.04	-3.44	0.0	0.08
71	20	-0.76	9.14	-54.06	-2.91	0.0	0.03
	37	11.55	8.84	-24.07	-8.24	0.0	-0.47
	45	6.98	8.93	-25.54	-9.00	0.0	-0.54
	48	-8.25	3.38	-46.26	5.20	0.0	0.58
	144	-0.53	6.15	-34.05	-1.91	0.0	0.02
	28	-1.48	11.03	-50.13	-3.70	0.0	0.03
79	20	-3.25	9.16	-50.75	-2.95	0.0	-0.01
	49	-9.54	8.47	-25.41	-6.22	0.0	-0.28
	45	6.43	8.40	-29.09	-7.49	0.0	-0.46
	48	-10.58	3.95	-38.65	3.64	0.0	0.45
	29	-2.69	9.92	-29.96	-3.46	0.0	-0.03
	6	-3.23	9.17	-48.49	-2.95	0.0	-0.01
80	53	3.08	5.52	-98.06	0.0	9.21	-0.38
	56	-8.97	-0.15	10.76	0.0	-10.96	0.33
	25	-5.64	3.58	-57.35	0.0	-1.89	-0.06
	2	-2.94	2.94	-46.62	0.0	-0.87	-0.02
	48	-14.72	5.16	-7.87	0.0	-21.21	0.58
	45	8.82	0.21	-79.42	0.0	19.47	-0.63
87	20	-5.24	8.94	-50.66	-2.76	0.0	-0.06
	51	-20.01	7.03	-19.59	-3.43	0.0	-0.13
	45	4.90	7.81	-34.58	-6.05	0.0	-0.44
	48	-11.32	4.25	-32.96	2.43	0.0	0.35
	25	-4.89	10.70	-44.17	-3.46	0.0	-0.09
	2	-3.56	6.04	-36.15	-1.81	0.0	-0.04
95	58	15.51	4.95	-61.43	-0.15	0.0	0.02
	59	-22.68	6.20	-8.58	-2.86	0.0	-0.20
	41	4.81	7.08	-41.22	-4.54	0.0	-0.48
	44	-11.98	4.07	-28.80	1.53	0.0	0.30
	26	-5.52	9.76	-46.06	-2.84	0.0	-0.18
	145	-3.61	5.58	-35.27	-1.51	0.0	-0.09
103	58	12.63	2.08	-101.32	0.63	0.0	-0.11
	59	-18.79	6.53	15.81	-2.42	0.0	-0.30
	53	-7.30	6.49	-10.16	-3.34	0.0	-0.51
	56	1.14	2.12	-75.35	1.54	0.0	0.11
	28	-5.19	7.48	-59.22	-1.75	0.0	-0.36
	144	-2.98	4.30	-41.00	-0.90	0.0	-0.20
111	58	25.85	-22.41	-297.64	3.72	-20.52	0.83
	59	-25.02	14.84	90.36	-3.28	-2.93	-0.95
	51	-18.42	17.28	75.00	-3.74	-2.37	-0.88
	50	19.25	-24.86	-282.27	4.18	-21.08	0.76
	50	19.25	-24.86	-282.27	4.18	-21.08	0.76
	51	-18.42	17.28	75.00	-3.74	-2.37	-0.88
117	58	-0.37	-14.35	-108.11	0.0	-0.73	0.22
	59	-5.58	9.86	22.42	0.0	-0.18	-0.07
	6	-4.42	-3.31	-61.04	0.0	-0.70	0.11
	144	-3.00	-1.93	-41.09	0.0	-0.50	0.08
	40	-4.93	-9.38	-14.91	0.0	-3.09	0.47
	37	-1.02	4.89	-70.78	0.0	2.18	-0.32
125	58	-5.06	-19.11	-88.85	0.0	-0.78	0.09
	59	-3.73	14.94	1.65	0.0	-0.69	-0.07

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
	28	-8.21	-2.40	-60.87	0.0	-1.71	0.06
144	48	-4.48	-1.71	-41.63	0.0	-0.84	0.03
	48	-6.09	-1.15	-29.06	0.0	-4.53	0.47
	45	-2.69	-3.02	-58.14	0.0	3.07	-0.45
133	58	-4.99	-22.04	-78.18	0.0	-0.63	-0.04
	59	-3.71	16.30	-13.33	0.0	-0.54	-0.09
	28	-8.42	-3.65	-64.08	0.0	-1.65	-0.08
	144	-4.55	-2.42	-43.40	0.0	-0.77	-0.05
	48	-6.32	-2.08	-34.52	0.0	-5.95	0.44
	45	-2.38	-3.66	-56.99	0.0	4.79	-0.57
141	20	-5.30	-5.21	-74.88	0.0	-0.25	-0.16
	59	-3.03	17.28	-26.17	0.0	-0.09	-0.13
	28	-7.21	-4.40	-69.86	0.0	-1.00	-0.16
	144	-3.88	-2.85	-46.85	0.0	-0.41	-0.09
	48	-5.95	-2.43	-40.67	0.0	-7.21	0.42
	45	-1.07	-4.21	-58.77	0.0	7.00	-0.64
142	53	4.45	5.46	-94.96	0.0	8.35	-0.23
	56	-8.55	-0.05	17.85	0.0	-9.62	0.18
	25	-3.90	3.59	-50.74	0.0	-1.38	-0.06
	2	-2.05	2.94	-41.13	0.0	-0.64	-0.03
	48	-14.22	3.76	-4.81	0.0	-18.52	0.30
	45	10.12	1.66	-72.31	0.0	17.25	-0.35
149	20	-3.41	-3.98	-82.43	0.0	0.59	-0.13
	51	-2.05	21.69	-37.72	0.0	-0.04	-0.08
	28	-5.15	-3.26	-76.94	0.0	-0.14	-0.14
	144	-2.77	-2.13	-51.18	0.0	0.06	-0.07
	48	-5.51	-1.39	-46.58	0.0	-8.53	0.44
	45	0.98	-3.55	-62.65	0.0	9.44	-0.61
157	20	-2.46	0.48	-197.53	22.80	2.29	0.38
	55	-1.52	40.37	-83.02	-0.72	-0.24	0.40
	55	-1.52	40.37	-83.02	-0.72	-0.24	0.40
	54	-1.58	-39.40	-177.95	30.72	3.55	0.14
	48	-9.03	2.62	-113.13	12.69	-20.84	2.73
	45	5.92	-1.65	-147.83	17.31	24.15	-2.19
163	20	-3.83	2.95	-78.90	0.0	0.29	0.14
	43	-8.02	17.05	-39.58	0.0	-9.99	0.54
	28	-5.56	3.15	-73.60	0.0	-0.44	0.16
	144	-2.98	1.82	-48.87	0.0	-0.10	0.08
	48	-9.11	3.78	-44.61	0.0	-11.59	0.61
	45	4.02	0.26	-59.84	0.0	12.10	-0.42
171	20	-5.01	3.36	-75.63	0.0	-0.40	0.14
	43	-8.21	18.74	-36.46	0.0	-11.63	0.46
	27	-6.86	3.56	-70.24	0.0	-1.19	0.14
	146	-3.67	2.05	-47.17	0.0	-0.50	0.08
	48	-9.14	4.71	-41.53	0.0	-13.42	0.52
	45	2.49	-0.09	-58.75	0.0	13.00	-0.34
179	20	-5.79	2.36	-74.06	0.0	-0.96	0.09
	43	-8.93	18.89	-33.45	0.0	-13.25	0.48
	25	-8.09	2.25	-63.79	0.0	-2.14	0.07
	145	-3.80	1.73	-49.59	0.0	-0.54	0.06
	48	-9.84	4.82	-38.53	0.0	-15.22	0.55
	45	2.15	-1.45	-59.71	0.0	14.06	-0.43
187	20	-5.95	1.10	-75.12	0.0	-1.25	0.03
	43	-9.50	17.47	-31.51	0.0	-14.85	0.49
	25	-8.05	1.20	-64.82	0.0	-2.30	3.51e-03
	145	-3.92	0.89	-50.22	0.0	-0.74	0.02
	48	-10.44	4.60	-36.13	0.0	-17.04	0.58
	45	2.53	-2.88	-63.42	0.0	15.50	-0.54
188	53	10.84	25.55	-269.36	35.33	21.32	1.68
	56	-16.12	-4.03	56.57	-5.63	-24.26	-2.63
	52	-15.13	-4.07	56.52	-5.67	-22.63	-2.49
	49	9.85	25.60	-269.30	35.37	19.68	1.55
	48	-27.84	10.53	-7.14	-0.75	-46.89	-5.16
	45	22.57	11.00	-205.65	30.45	43.95	4.22
195	20	-5.33	0.65	-78.52	0.0	-1.27	-4.53e-03
	48	-11.45	4.50	-31.43	0.0	-19.01	0.58
	27	-6.89	0.98	-72.43	0.0	-1.96	-0.02
	146	-3.71	0.39	-49.36	0.0	-0.92	-8.86e-03
	48	-11.45	4.50	-31.43	0.0	-19.01	0.58
	45	4.35	-3.46	-72.47	0.0	17.43	-0.58
203	20	-7.11	3.40	-181.79	21.29	-2.59	-0.14
	43	-18.52	19.53	-58.76	1.00	-38.20	1.58
	55	-5.65	24.68	-82.66	-0.25	-4.86	-0.16
	54	-3.65	-20.38	-157.37	28.29	1.64	7.69e-03

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
	48	-20.90	8.63	-71.24	7.39	-44.10	2.01
	45	11.59	-4.33	-168.79	20.65	40.88	-2.16
209	41	6.37	-1.90	-62.71	0.0	15.34	-0.53
	44	-12.29	4.91	-18.82	0.0	-16.85	0.62
	25	-5.78	2.03	-53.34	0.0	-1.81	0.07
	145	-2.95	1.53	-41.08	0.0	-0.75	0.04
	48	-12.47	4.98	-19.31	0.0	-17.17	0.63
	45	6.55	-1.98	-62.23	0.0	15.65	-0.54
217	53	1.33	5.32	-69.31	0.0	7.66	-0.25
	56	-7.68	-1.65	-13.03	0.0	-9.41	0.29
	25	-6.17	2.47	-53.93	0.0	-1.98	0.03
	2	-3.16	2.03	-44.18	0.0	-0.87	0.02
	48	-12.19	5.37	-15.42	0.0	-18.44	0.52
	45	5.84	-1.70	-66.92	0.0	16.69	-0.47
225	53	1.71	4.94	-82.76	0.0	8.32	-0.32
	56	-8.11	-0.60	-1.32	0.0	-10.15	0.32
	25	-6.16	2.91	-55.15	0.0	-2.01	-0.01
	2	-3.19	2.40	-45.00	0.0	-0.91	4.75e-04
	48	-12.97	5.45	-11.48	0.0	-19.76	0.57
	45	6.57	-1.11	-72.61	0.0	17.92	-0.57

RISULTATI ELEMENTI TIPO TRAVE

LEGENDA RISULTATI ELEMENTI TIPO TRAVE

Il controllo dei risultati delle analisi condotte, per quanto concerne gli elementi tipo trave, è possibile in relazione alle tabelle sotto riportate.

Gli elementi vengono suddivisi in relazione alle proprietà in elementi:

- tipo **pilastro**
- tipo **trave in elevazione**
- tipo **trave in fondazione**

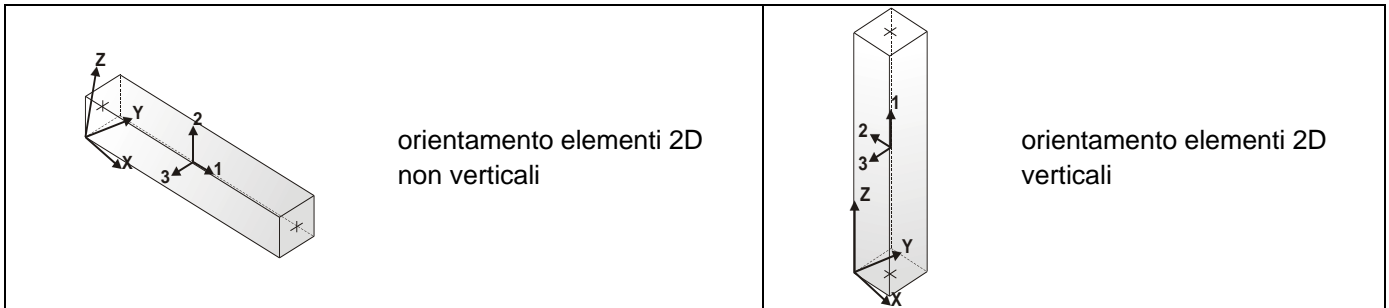
Per ogni elemento e per ogni combinazione (o caso di carico) vengono riportati i risultati più significativi.

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

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

Per gli elementi tipo *trave in elevazione* sono riportati, oltre al numero dell'elemento, i medesimi risultati visti per i pilastri.

Per gli elementi tipo *trave in fondazione* (trave f.) sono riportati, oltre al numero dell'elemento, i medesimi risultati visti per i pilastri e la massima pressione sul terreno.



Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		kN m	kN m	m	kN	cm	kN	kN	kN	kN m	kN m	kN m
1	1	1.46	-5.80	1.36e-06	0.0	0.0	-95.57	3.48	-16.05	-0.59	-5.80	1.46
		-0.58	-14.86	-3.37e-05	0.0	24.3	-94.29	3.48	-16.05	-0.59	-10.33	0.44
						48.6	-93.02	3.48	-16.05	-0.59	-14.86	-0.58
1	2	1.50	-7.13	1.41e-06	0.0	0.0	-103.89	3.82	-19.54	-0.72	-7.13	1.50
		-0.72	-18.18	-4.16e-05	0.0	24.3	-102.61	3.82	-19.54	-0.72	-12.65	0.39
						48.6	-101.34	3.82	-19.54	-0.72	-18.18	-0.72
1	3	1.73	-7.98	1.51e-06	0.0	0.0	-121.20	4.42	-22.39	-0.81	-7.98	1.73
		-0.84	-20.60	-4.60e-05	0.0	24.3	-119.54	4.42	-22.39	-0.81	-14.29	0.44
						48.6	-117.88	4.42	-22.39	-0.81	-20.60	-0.84
1	4	1.75	-8.00	1.54e-06	0.0	0.0	-122.06	4.45	-22.42	-0.81	-8.00	1.75
		-0.84	-20.63	-4.60e-05	0.0	24.3	-120.40	4.45	-22.42	-0.81	-14.31	0.46
						48.6	-118.75	4.45	-22.42	-0.81	-20.63	-0.84
1	5	1.83	-11.32	1.64e-06	0.0	0.0	-141.99	5.27	-31.11	-1.13	-11.32	1.83
		-1.18	-28.88	-6.56e-05	0.0	24.3	-140.34	5.27	-31.11	-1.13	-20.10	0.32
						48.6	-138.68	5.27	-31.11	-1.13	-28.88	-1.18
1	6	1.85	-11.33	1.67e-06	0.0	0.0	-142.86	5.30	-31.14	-1.13	-11.33	1.85
		-1.18	-28.91	-6.57e-05	0.0	24.3	-141.20	5.30	-31.14	-1.13	-20.12	0.33
						48.6	-139.54	5.30	-31.14	-1.13	-28.91	-1.18
1	7	1.18	-4.96	0.0	0.0	0.0	-78.81	2.92	-14.39	-0.53	-4.96	1.18
		-0.49	-13.05	-2.81e-05	0.0	24.3	-77.53	2.92	-14.39	-0.53	-9.01	0.35
						48.6	-76.26	2.92	-14.39	-0.53	-13.05	-0.49
1	8	1.20	-4.97	0.0	0.0	0.0	-79.67	2.95	-14.43	-0.53	-4.97	1.20
		-0.49	-13.08	-2.81e-05	0.0	24.3	-78.40	2.95	-14.43	-0.53	-9.03	0.36
						48.6	-77.12	2.95	-14.43	-0.53	-13.08	-0.49
1	9	1.28	-8.29	1.08e-06	0.0	0.0	-99.61	3.77	-23.11	-0.85	-8.29	1.28
		-0.83	-21.33	-4.77e-05	0.0	24.3	-98.33	3.77	-23.11	-0.85	-14.81	0.22
						48.6	-97.06	3.77	-23.11	-0.85	-21.33	-0.83
1	10	1.30	-8.31	1.10e-06	0.0	0.0	-100.47	3.80	-23.15	-0.85	-8.31	1.30
		-0.83	-21.37	-4.78e-05	0.0	24.3	-99.19	3.80	-23.15	-0.85	-14.84	0.24
						48.6	-97.92	3.80	-23.15	-0.85	-21.37	-0.83
1	11	1.77	-8.01	1.56e-06	0.0	0.0	-122.92	4.48	-22.45	-0.81	-8.01	1.77
		-0.83	-20.66	-4.61e-05	0.0	24.3	-121.27	4.48	-22.45	-0.81	-14.33	0.47
						48.6	-119.61	4.48	-22.45	-0.81	-20.66	-0.83
1	12	1.80	-10.32	1.60e-06	0.0	0.0	-135.75	5.02	-28.49	-1.03	-10.32	1.80
		-1.08	-26.40	-5.97e-05	0.0	24.3	-134.10	5.02	-28.49	-1.03	-18.36	0.36
						48.6	-132.44	5.02	-28.49	-1.03	-26.40	-1.08
1	13	1.84	-10.34	1.65e-06	0.0	0.0	-137.48	5.08	-28.55	-1.04	-10.34	1.84
		-1.08	-26.46	-5.99e-05	0.0	24.3	-135.82	5.08	-28.55	-1.04	-18.40	0.38
						48.6	-134.17	5.08	-28.55	-1.04	-26.46	-1.08
1	14	1.22	-4.99	0.0	0.0	0.0	-80.54	2.98	-14.46	-0.53	-4.99	1.22
		-0.49	-13.11	-2.82e-05	0.0	24.3	-79.26	2.98	-14.46	-0.53	-9.05	0.37
						48.6	-77.99	2.98	-14.46	-0.53	-13.11	-0.49
1	15	1.25	-7.29	1.04e-06	0.0	0.0	-93.37	3.52	-20.50	-0.75	-7.29	1.25
		-0.73	-18.85	-4.18e-05	0.0	24.3	-92.09	3.52	-20.50	-0.75	-13.07	0.26
						48.6	-90.82	3.52	-20.50	-0.75	-18.85	-0.73
1	16	1.29	-7.32	1.09e-06	0.0	0.0	-95.09	3.58	-20.56	-0.75	-7.32	1.29
		-0.73	-18.91	-4.20e-05	0.0	24.3	-93.82	3.58	-20.56	-0.75	-13.12	0.28
						48.6	-92.54	3.58	-20.56	-0.75	-18.91	-0.73
1	17	2.03	-8.17	1.90e-06	0.0	0.0	-134.10	4.88	-22.83	-0.84	-8.17	2.03
		-0.82	-21.05	-4.72e-05	0.0	24.3	-132.44	4.88	-22.83	-0.84	-14.61	0.60
						48.6	-130.79	4.88	-22.83	-0.84	-21.05	-0.82
1	18	2.05	-8.19	1.93e-06	0.0	0.0	-134.96	4.91	-22.86	-0.85	-8.19	2.05
		-0.82	-21.08	-4.73e-05	0.0	24.3	-133.31	4.91	-22.86	-0.85	-14.64	0.61
						48.6	-131.65	4.91	-22.86	-0.85	-21.08	-0.82
1	19	2.10	-10.51	1.99e-06	0.0	0.0	-148.66	5.47	-28.93	-1.07	-10.51	2.10
		-1.07	-26.85	-6.10e-05	0.0	24.3	-147.00	5.47	-28.93	-1.07	-18.68	0.52
						48.6	-145.34	5.47	-28.93	-1.07	-26.85	-1.07
1	20	2.12	-10.52	2.02e-06	0.0	0.0	-149.52	5.51	-28.96	-1.07	-10.52	2.12
		-1.06	-26.88	-6.11e-05	0.0	24.3	-147.86	5.51	-28.96	-1.07	-18.70	0.53
						48.6	-146.21	5.51	-28.96	-1.07	-26.88	-1.06
1	21	1.48	-5.15	1.34e-06	0.0	0.0	-91.71	3.38	-14.84	-0.56	-5.15	1.48
		-0.48	-13.51	-2.93e-05	0.0	24.3	-90.44	3.38	-14.84	-0.56	-9.33	0.50
						48.6	-89.16	3.38	-14.84	-0.56	-13.51	-0.48
1	22	1.50	-5.17	1.36e-06	0.0	0.0	-92.58	3.41	-14.87	-0.56	-5.17	1.50
		-0.47	-13.54	-2.94e-05	0.0	24.3	-91.30	3.41	-14.87	-0.56	-9.35	0.51
						48.6	-90.03	3.41	-14.87	-0.56	-13.54	-0.47
1	23	1.55	-7.49	1.43e-06	0.0	0.0	-106.27	3.97	-20.94	-0.78	-7.49	1.55
		-0.72	-19.30	-4.31e-05	0.0	24.3	-105.00	3.97	-20.94	-0.78	-13.40	0.42
						48.6	-103.72	3.97	-20.94	-0.78	-19.30	-0.72
1	24	1.57	-7.50	1.45e-06	0.0	0.0	-107.13	4.01	-20.97	-0.79	-7.50	1.57
		-0.72	-19.34	-4.32e-05	0.0	24.3	-105.86	4.01	-20.97	-0.79	-13.42	0.43

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
1	25	1.74	-7.92	1.47e-06	0.0	48.6	-104.58	4.01	-20.97	-0.79	-19.34	-0.72
		-0.82	-20.70	-4.50e-05	0.0	0.0	-121.19	4.45	-22.72	-0.82	-7.92	1.74
						24.3	-119.53	4.45	-22.72	-0.82	-14.31	0.46
						48.6	-117.87	4.45	-22.72	-0.82	-20.70	-0.82
1	26	1.76	-7.93	1.49e-06	0.0	0.0	-122.05	4.48	-22.75	-0.83	-7.93	1.76
		-0.81	-20.73	-4.51e-05	0.0	24.3	-120.40	4.48	-22.75	-0.83	-14.33	0.47
						48.6	-118.74	4.48	-22.75	-0.83	-20.73	-0.81
1	27	1.81	-10.25	1.56e-06	0.0	0.0	-135.75	5.05	-28.82	-1.05	-10.25	1.81
		-1.06	-26.50	-5.88e-05	0.0	24.3	-134.09	5.05	-28.82	-1.05	-18.38	0.38
						48.6	-132.43	5.05	-28.82	-1.05	-26.50	-1.06
1	28	1.83	-10.27	1.58e-06	0.0	0.0	-136.61	5.08	-28.85	-1.05	-10.27	1.83
		-1.05	-26.53	-5.89e-05	0.0	24.3	-134.95	5.08	-28.85	-1.05	-18.40	0.39
						48.6	-133.30	5.08	-28.85	-1.05	-26.53	-1.05
1	29	1.19	-4.90	0.0	0.0	0.0	-78.80	2.95	-14.73	-0.54	-4.90	1.19
		-0.47	-13.15	-2.71e-05	0.0	24.3	-77.53	2.95	-14.73	-0.54	-9.02	0.36
						48.6	-76.25	2.95	-14.73	-0.54	-13.15	-0.47
1	30	1.21	-4.91	0.0	0.0	0.0	-79.67	2.98	-14.76	-0.54	-4.91	1.21
		-0.47	-13.18	-2.72e-05	0.0	24.3	-78.39	2.98	-14.76	-0.54	-9.05	0.37
						48.6	-77.12	2.98	-14.76	-0.54	-13.18	-0.47
1	31	1.26	-7.23	0.0	0.0	0.0	-93.36	3.55	-20.83	-0.76	-7.23	1.26
		-0.71	-18.95	-4.09e-05	0.0	24.3	-92.08	3.55	-20.83	-0.76	-13.09	0.28
						48.6	-90.81	3.55	-20.83	-0.76	-18.95	-0.71
1	32	1.28	-7.25	1.02e-06	0.0	0.0	-94.22	3.58	-20.86	-0.77	-7.25	1.28
		-0.71	-18.98	-4.10e-05	0.0	24.3	-92.95	3.58	-20.86	-0.77	-13.11	0.29
						48.6	-91.67	3.58	-20.86	-0.77	-18.98	-0.71
1	33	0.19	-6.05	0.0	0.0	0.0	-107.69	3.51	-18.10	-4.46	-6.05	0.19
		-3.68	-16.77	1.05e-04	0.0	24.3	-106.42	3.51	-18.10	-4.46	-11.41	-1.74
						48.6	-105.14	3.51	-18.10	-4.46	-16.77	-3.68
1	34	5.40	-4.75	1.09e-05	0.0	0.0	-128.70	0.11	-17.65	-3.59	-4.75	5.40
		-0.08	-15.33	9.37e-05	0.0	24.3	-127.42	0.11	-17.65	-3.59	-10.04	2.66
						48.6	-126.15	0.11	-17.65	-3.59	-15.33	-0.08
1	35	-1.38	-9.25	-8.56e-06	0.0	0.0	-61.87	6.91	-20.84	2.19	-9.25	-2.81
		-2.81	-20.42	-1.75e-04	0.0	24.3	-60.59	6.91	-20.84	2.19	-14.83	-2.10
						48.6	-59.32	6.91	-20.84	2.19	-20.42	-1.38
1	36	2.40	-7.95	2.15e-06	0.0	0.0	-82.87	3.51	-20.40	3.07	-7.95	2.40
		2.22	-18.97	-1.86e-04	0.0	24.3	-81.60	3.51	-20.40	3.07	-13.46	2.31
						48.6	-80.32	3.51	-20.40	3.07	-18.97	2.22
1	37	0.73	-6.45	1.10e-06	0.0	0.0	-109.19	3.29	-18.08	-4.72	-6.45	0.73
		-3.29	-17.14	1.08e-04	0.0	24.3	-107.92	3.29	-18.08	-4.72	-11.80	-1.28
						48.6	-106.64	3.29	-18.08	-4.72	-17.14	-3.29
1	38	4.86	-4.36	9.91e-06	0.0	0.0	-127.20	0.34	-17.67	-3.34	-4.36	4.86
		-0.46	-14.95	9.07e-05	0.0	24.3	-125.92	0.34	-17.67	-3.34	-9.66	2.20
						48.6	-124.65	0.34	-17.67	-3.34	-14.95	-0.46
1	39	-1.00	-9.65	-7.61e-06	0.0	0.0	-63.37	6.69	-20.82	1.94	-9.65	-2.27
		-2.27	-20.79	-1.72e-04	0.0	24.3	-62.09	6.69	-20.82	1.94	-15.22	-1.63
						48.6	-60.82	6.69	-20.82	1.94	-20.79	-1.00
1	40	1.87	-7.56	1.20e-06	0.0	0.0	-81.37	3.74	-20.41	3.32	-7.56	1.87
		1.83	-18.60	-1.89e-04	0.0	24.3	-80.10	3.74	-20.41	3.32	-13.08	1.85
						48.6	-78.82	3.74	-20.41	3.32	-18.60	1.83
1	41	1.28	-9.82	1.15e-06	0.0	0.0	-109.63	3.47	-18.03	-5.48	-9.82	1.28
		-4.52	-20.58	1.13e-04	0.0	24.3	-108.36	3.47	-18.03	-5.48	-15.20	-1.62
						48.6	-107.08	3.47	-18.03	-5.48	-20.58	-4.52
1	42	6.49	-8.53	1.19e-05	0.0	0.0	-130.64	0.07	-17.59	-4.60	-8.53	6.49
		-0.92	-19.14	1.02e-04	0.0	24.3	-129.36	0.07	-17.59	-4.60	-13.83	2.79
						48.6	-128.09	0.07	-17.59	-4.60	-19.14	-0.92
1	43	-0.55	-5.48	-9.56e-06	0.0	0.0	-59.93	6.96	-20.91	3.20	-5.48	-3.90
		-3.90	-16.60	-1.83e-04	0.0	24.3	-58.65	6.96	-20.91	3.20	-11.04	-2.22
						48.6	-57.38	6.96	-20.91	3.20	-16.60	-0.55
1	44	3.06	-4.18	1.15e-06	0.0	0.0	-80.93	3.55	-20.46	4.08	-4.18	1.31
		1.31	-15.16	-1.94e-04	0.0	24.3	-79.66	3.55	-20.46	4.08	-9.67	2.18
						48.6	-78.38	3.55	-20.46	4.08	-15.16	1.31
1	45	1.82	-10.22	2.11e-06	0.0	0.0	-111.14	3.24	-18.02	-5.73	-10.22	1.82
		-4.13	-20.95	1.16e-04	0.0	24.3	-109.86	3.24	-18.02	-5.73	-15.59	-1.16
						48.6	-108.59	3.24	-18.02	-5.73	-20.95	-4.13
1	46	5.95	-8.13	1.09e-05	0.0	0.0	-129.14	0.30	-17.60	-4.35	-8.13	5.95
		-1.30	-18.77	9.87e-05	0.0	24.3	-127.86	0.30	-17.60	-4.35	-13.45	2.33
						48.6	-126.59	0.30	-17.60	-4.35	-18.77	-1.30
1	47	-0.16	-5.88	-8.61e-06	0.0	0.0	-61.43	6.73	-20.89	2.95	-5.88	-3.36
		-3.36	-16.98	-1.80e-04	0.0	24.3	-60.15	6.73	-20.89	2.95	-11.43	-1.76
						48.6	-58.88	6.73	-20.89	2.95	-16.98	-0.16
1	48	2.67	-3.79	0.0	0.0	0.0	-79.43	3.78	-20.48	4.33	-3.79	0.77
		0.77	-14.79	-1.97e-04	0.0	24.3	-78.16	3.78	-20.48	4.33	-9.29	1.72
						48.6	-76.88	3.78	-20.48	4.33	-14.79	0.77
1	49	-6.94	-8.69	-1.54e-05	0.0	0.0	-67.15	8.68	-19.58	-3.16	-8.69	-6.94

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		-7.08	-19.73	2.13e-05	0.0	24.3	-65.88	8.68	-19.58	-3.16	-14.21	-7.01
						48.6	-64.60	8.68	-19.58	-3.16	-19.73	-7.08
1	50	10.43	-4.36	2.03e-05	0.0	0.0	-137.16	-2.67	-18.10	-0.23	-4.36	10.43
		4.93	-14.92	-1.72e-05	0.0	24.3	-135.89	-2.67	-18.10	-0.23	-9.64	7.68
						48.6	-134.61	-2.67	-18.10	-0.23	-14.92	4.93
1	51	-6.39	-9.65	-1.80e-05	0.0	0.0	-53.40	9.70	-20.40	-1.16	-9.65	-7.84
		-7.84	-20.82	-6.42e-05	0.0	24.3	-52.13	9.70	-20.40	-1.16	-15.23	-7.11
						48.6	-50.85	9.70	-20.40	-1.16	-20.82	-6.39
1	52	9.53	-5.32	1.77e-05	0.0	0.0	-123.41	-1.65	-18.92	1.76	-5.32	9.53
		5.61	-16.02	-1.01e-04	0.0	24.3	-122.14	-1.65	-18.92	1.76	-10.67	7.57
						48.6	-120.86	-1.65	-18.92	1.76	-16.02	5.61
1	53	-6.61	-9.82	-1.51e-05	0.0	0.0	-67.73	8.66	-19.56	-3.46	-9.82	-6.61
		-7.33	-20.87	2.36e-05	0.0	24.3	-66.46	8.66	-19.56	-3.46	-15.34	-6.97
						48.6	-65.18	8.66	-19.56	-3.46	-20.87	-7.33
1	54	10.76	-5.49	2.06e-05	0.0	0.0	-137.74	-2.69	-18.08	-0.54	-5.49	10.76
		4.68	-16.07	-1.48e-05	0.0	24.3	-136.47	-2.69	-18.08	-0.54	-10.78	7.72
						48.6	-135.19	-2.69	-18.08	-0.54	-16.07	4.68
1	55	-6.14	-8.52	-1.83e-05	0.0	0.0	-52.82	9.71	-20.42	-0.86	-8.52	-8.16
		-8.16	-19.68	-6.66e-05	0.0	24.3	-51.55	9.71	-20.42	-0.86	-14.10	-7.15
						48.6	-50.27	9.71	-20.42	-0.86	-19.68	-6.14
1	56	9.20	-4.19	1.74e-05	0.0	0.0	-122.83	-1.64	-18.94	2.07	-4.19	9.20
		5.87	-14.87	-1.04e-04	0.0	24.3	-121.56	-1.64	-18.94	2.07	-9.53	7.54
						48.6	-120.28	-1.64	-18.94	2.07	-14.87	5.87
1	57	-5.14	-10.01	-1.22e-05	0.0	0.0	-72.15	7.92	-19.52	-4.00	-10.01	-5.14
		-5.79	-20.97	3.05e-05	0.0	24.3	-70.88	7.92	-19.52	-4.00	-15.49	-5.47
						48.6	-69.60	7.92	-19.52	-4.00	-20.97	-5.79
1	58	8.64	-3.04	1.71e-05	0.0	0.0	-132.16	-1.91	-18.15	0.60	-3.04	8.64
		3.64	-13.68	-2.75e-05	0.0	24.3	-130.89	-1.91	-18.15	0.60	-8.36	6.14
						48.6	-129.61	-1.91	-18.15	0.60	-13.68	3.64
1	59	-5.10	-10.97	-1.48e-05	0.0	0.0	-58.40	8.94	-20.35	-2.00	-10.97	-6.04
		-6.04	-22.07	-5.39e-05	0.0	24.3	-57.13	8.94	-20.35	-2.00	-16.52	-5.57
						48.6	-55.85	8.94	-20.35	-2.00	-22.07	-5.10
1	60	7.74	-4.00	1.45e-05	0.0	0.0	-118.41	-0.89	-18.97	2.60	-4.00	7.74
		4.33	-14.77	-1.11e-04	0.0	24.3	-117.14	-0.89	-18.97	2.60	-9.39	6.03
						48.6	-115.86	-0.89	-18.97	2.60	-14.77	4.33
1	61	-4.82	-11.14	-1.19e-05	0.0	0.0	-72.73	7.90	-19.50	-4.30	-11.14	-4.82
		-6.04	-22.11	3.29e-05	0.0	24.3	-71.46	7.90	-19.50	-4.30	-16.63	-5.43
						48.6	-70.18	7.90	-19.50	-4.30	-22.11	-6.04
1	62	8.96	-4.17	1.74e-05	0.0	0.0	-132.74	-1.92	-18.13	0.30	-4.17	8.96
		3.39	-14.82	-2.51e-05	0.0	24.3	-131.47	-1.92	-18.13	0.30	-9.50	6.18
						48.6	-130.19	-1.92	-18.13	0.30	-14.82	3.39
1	63	-4.85	-9.84	-1.51e-05	0.0	0.0	-57.82	8.95	-20.37	-1.69	-9.84	-6.37
		-6.37	-20.92	-5.63e-05	0.0	24.3	-56.55	8.95	-20.37	-1.69	-15.38	-5.61
						48.6	-55.27	8.95	-20.37	-1.69	-20.92	-4.85
1	64	7.41	-2.87	1.42e-05	0.0	0.0	-117.83	-0.88	-18.99	2.90	-2.87	7.41
		4.58	-13.63	-1.14e-04	0.0	24.3	-116.56	-0.88	-18.99	2.90	-8.25	5.99
						48.6	-115.28	-0.88	-18.99	2.90	-13.63	4.58
1	65	0.19	-6.18	0.0	0.0	0.0	-107.69	3.60	-18.14	-4.44	-6.18	0.19
		-3.60	-16.94	1.04e-04	0.0	24.3	-106.42	3.60	-18.14	-4.44	-11.56	-1.71
						48.6	-105.14	3.60	-18.14	-4.44	-16.94	-3.60
1	66	5.38	-4.90	1.08e-05	0.0	0.0	-128.68	0.24	-17.79	-3.57	-4.90	5.38
		-0.03	-15.53	9.33e-05	0.0	24.3	-127.40	0.24	-17.79	-3.57	-10.21	2.68
						48.6	-126.13	0.24	-17.79	-3.57	-15.53	-0.03
1	67	-1.44	-9.11	-8.51e-06	0.0	0.0	-61.89	6.78	-20.71	2.17	-9.11	-2.79
		-2.79	-20.22	-1.75e-04	0.0	24.3	-60.61	6.78	-20.71	2.17	-14.66	-2.11
						48.6	-59.34	6.78	-20.71	2.17	-20.22	-1.44
1	68	2.41	-7.83	2.18e-06	0.0	0.0	-82.87	3.43	-20.35	3.04	-7.83	2.41
		2.14	-18.81	-1.86e-04	0.0	24.3	-81.60	3.43	-20.35	3.04	-13.32	2.27
						48.6	-80.32	3.43	-20.35	3.04	-18.81	2.14
1	69	0.73	-6.57	1.08e-06	0.0	0.0	-109.19	3.37	-18.14	-4.69	-6.57	0.73
		-3.22	-17.31	1.07e-04	0.0	24.3	-107.91	3.37	-18.14	-4.69	-11.94	-1.25
						48.6	-106.64	3.37	-18.14	-4.69	-17.31	-3.22
1	70	4.85	-4.51	9.87e-06	0.0	0.0	-127.18	0.47	-17.79	-3.32	-4.51	4.85
		-0.41	-15.15	9.03e-05	0.0	24.3	-125.90	0.47	-17.79	-3.32	-9.83	2.22
						48.6	-124.63	0.47	-17.79	-3.32	-15.15	-0.41
1	71	-1.05	-9.50	-7.56e-06	0.0	0.0	-63.39	6.56	-20.70	1.92	-9.50	-2.25
		-2.25	-20.59	-1.72e-04	0.0	24.3	-62.11	6.56	-20.70	1.92	-15.05	-1.65
						48.6	-60.84	6.56	-20.70	1.92	-20.59	-1.05
1	72	1.87	-7.43	1.23e-06	0.0	0.0	-81.38	3.66	-20.36	3.29	-7.43	1.87
		1.76	-18.43	-1.89e-04	0.0	24.3	-80.10	3.66	-20.36	3.29	-12.93	1.81
						48.6	-78.83	3.66	-20.36	3.29	-18.43	1.76
1	73	1.28	-9.70	1.15e-06	0.0	0.0	-109.64	3.55	-18.07	-5.46	-9.70	1.28
		-4.48	-20.36	1.12e-04	0.0	24.3	-108.36	3.55	-18.07	-5.46	-15.03	-1.60
						48.6	-107.09	3.55	-18.07	-5.46	-20.36	-4.48

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
						48.6	-118.70	0.97	-18.11	-2.93	-16.04	-0.18
1	99	-1.28	-8.64	-6.36e-06	0.0	0.0	-69.32	6.06	-20.38	1.54	-8.64	-1.88
		-1.88	-19.70	-1.45e-04	0.0	24.3	-68.04	6.06	-20.38	1.54	-14.17	-1.58
						48.6	-66.77	6.06	-20.38	1.54	-19.70	-1.28
1	100	2.16	-7.65	1.95e-06	0.0	0.0	-85.63	3.45	-20.11	2.21	-7.65	2.16
...												
116	152	-0.47	-5.77	-1.93e-05	0.0	48.6	-80.16	2.81	-5.91	-0.27	-5.77	-0.47
Pilas.		M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	N	V 2	V 3	T			
		-174.03	-72.06	-4.61e-03	0.0		-423.72	-70.76	-34.31	-7.72		
		163.14	70.25	4.60e-03	0.0		99.08	72.26	38.46	7.88		

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		kN m	kN m	m	kN	cm	kN	kN	kN	kN m	kN m	kN m
6	1	0.62	0.07	-4.43e-06	-12.43	0.0	9.65	8.24	-0.53	0.14	0.07	-0.77
		-0.77	-0.15	3.39e-06	0.0	25.3	9.65	2.03	-0.53	0.14	-0.04	0.53
						50.6	9.65	-4.19	-0.53	0.14	-0.15	0.26
6	2	0.67	0.08	-4.48e-06	-13.95	0.0	10.15	8.99	-0.54	0.15	0.08	-0.80
		-0.80	-0.15	3.33e-06	0.0	25.3	10.15	2.01	-0.54	0.15	-0.03	0.60
						50.6	10.15	-4.97	-0.54	0.15	-0.15	0.22
6	3	0.75	0.10	-4.94e-06	-17.92	0.0	12.48	10.87	-0.74	0.15	0.10	-0.92
		-0.92	-0.23	5.15e-06	0.0	25.3	12.48	1.91	-0.74	0.15	-0.06	0.70
						50.6	12.48	-7.05	-0.74	0.15	-0.23	0.05
6	4	0.75	0.10	-4.99e-06	-17.92	0.0	12.51	10.91	-0.74	0.15	0.10	-0.93
		-0.93	-0.23	5.14e-06	0.0	25.3	12.51	1.95	-0.74	0.15	-0.06	0.70
						50.6	12.51	-7.01	-0.74	0.15	-0.23	0.06
6	5	0.89	0.12	-5.07e-06	-21.73	0.0	13.75	12.73	-0.76	0.16	0.12	-0.99
		-0.99	-0.21	5.00e-06	0.0	25.3	13.75	1.86	-0.76	0.16	-0.04	0.86
						50.6	13.75	-9.00	-0.76	0.16	-0.21	-0.05
6	6	0.90	0.12	-5.11e-06	-21.73	0.0	13.78	12.76	-0.76	0.17	0.12	-1.00
		-1.00	-0.21	5.00e-06	0.0	25.3	13.78	1.90	-0.76	0.17	-0.04	0.86
						50.6	13.78	-8.97	-0.76	0.17	-0.21	-0.04
6	7	0.49	0.08	-3.28e-06	-10.67	0.0	7.65	6.75	-0.60	0.08	0.08	-0.59
		-0.59	-0.20	4.77e-06	0.0	25.3	7.65	1.41	-0.60	0.08	-0.06	0.44
						50.6	7.65	-3.92	-0.60	0.08	-0.20	0.13
6	8	0.50	0.08	-3.32e-06	-10.67	0.0	7.68	6.78	-0.60	0.08	0.08	-0.59
		-0.59	-0.20	4.77e-06	0.0	25.3	7.68	1.45	-0.60	0.08	-0.06	0.45
						50.6	7.68	-3.89	-0.60	0.08	-0.20	0.14
6	9	0.63	0.11	-3.41e-06	-14.48	0.0	8.92	8.60	-0.62	0.10	0.11	-0.66
		-0.66	-0.18	4.62e-06	0.0	25.3	8.92	1.36	-0.62	0.10	-0.04	0.60
						50.6	8.92	-5.88	-0.62	0.10	-0.18	0.03
6	10	0.63	0.11	-3.45e-06	-14.48	0.0	8.95	8.64	-0.62	0.10	0.11	-0.67
		-0.67	-0.18	4.62e-06	0.0	25.3	8.95	1.40	-0.62	0.10	-0.04	0.60
						50.6	8.95	-5.84	-0.62	0.10	-0.18	0.04
6	11	0.76	0.10	-5.03e-06	-17.92	0.0	12.54	10.94	-0.74	0.15	0.10	-0.93
		-0.93	-0.23	5.15e-06	0.0	25.3	12.54	1.98	-0.74	0.15	-0.06	0.70
						50.6	12.54	-6.98	-0.74	0.15	-0.23	0.07
6	12	0.85	0.12	-5.03e-06	-20.59	0.0	13.37	12.17	-0.76	0.16	0.12	-0.97
		-0.97	-0.21	5.04e-06	0.0	25.3	13.37	1.88	-0.76	0.16	-0.05	0.81
						50.6	13.37	-8.42	-0.76	0.16	-0.21	-0.02
6	13	0.86	0.12	-5.12e-06	-20.59	0.0	13.43	12.24	-0.76	0.16	0.12	-0.98
		-0.98	-0.22	5.05e-06	0.0	25.3	13.43	1.95	-0.76	0.16	-0.05	0.81
						50.6	13.43	-8.35	-0.76	0.16	-0.22	3.77e-03
6	14	0.50	0.08	-3.37e-06	-10.67	0.0	7.71	6.82	-0.61	0.09	0.08	-0.60
		-0.60	-0.20	4.78e-06	0.0	25.3	7.71	1.48	-0.61	0.09	-0.06	0.45
						50.6	7.71	-3.85	-0.61	0.09	-0.20	0.15
6	15	0.59	0.10	-3.37e-06	-13.34	0.0	8.54	8.05	-0.62	0.09	0.10	-0.64
		-0.64	-0.19	4.67e-06	0.0	25.3	8.54	1.38	-0.62	0.09	-0.04	0.55
						50.6	8.54	-5.29	-0.62	0.09	-0.19	0.06
6	16	0.60	0.10	-3.46e-06	-13.34	0.0	8.60	8.12	-0.62	0.10	0.10	-0.65
		-0.65	-0.19	4.67e-06	0.0	25.3	8.60	1.45	-0.62	0.10	-0.04	0.56
						50.6	8.60	-5.22	-0.62	0.10	-0.19	0.08
6	17	0.86	0.11	-6.20e-06	-17.92	0.0	13.52	11.75	-0.79	0.19	0.11	-1.09
		-1.09	-0.23	5.26e-06	0.0	25.3	13.52	2.80	-0.79	0.19	-0.06	0.76
						50.6	13.52	-6.16	-0.79	0.19	-0.23	0.33
6	18	0.87	0.11	-6.25e-06	-17.92	0.0	13.56	11.79	-0.80	0.19	0.11	-1.09
		-1.09	-0.23	5.26e-06	0.0	25.3	13.56	2.83	-0.80	0.19	-0.06	0.76
						50.6	13.56	-6.13	-0.80	0.19	-0.23	0.34
6	19	0.96	0.12	-6.29e-06	-20.59	0.0	14.42	13.05	-0.81	0.20	0.12	-1.14
		-1.14	-0.22	5.16e-06	0.0	25.3	14.42	2.76	-0.81	0.20	-0.05	0.87
						50.6	14.42	-7.53	-0.81	0.20	-0.22	0.26
6	20	0.96	0.12	-6.34e-06	-20.59	0.0	14.45	13.09	-0.81	0.20	0.12	-1.14
		-1.14	-0.22	5.16e-06	0.0	25.3	14.45	2.79	-0.81	0.20	-0.05	0.87

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
6	70	-2.66	0.63	-5.35e-06	-13.95	0.0	108.39	-11.97	-1.67	2.18	0.63	-2.66
		-12.22	0.30	5.10e-05	0.0	25.3	108.39	-18.95	-1.67	2.18	0.46	-6.56
						50.6	108.39	-25.92	-1.67	2.18	0.30	-12.22
6	71	12.29	-0.47	-4.01e-06	-13.95	0.0	-89.48	28.76	0.66	-1.94	-0.47	1.29
		1.29	-0.58	-4.44e-05	0.0	25.3	-89.48	21.79	0.66	-1.94	-0.53	7.68
						50.6	-89.48	14.81	0.66	-1.94	-0.58	12.29
6	72	7.27	-0.27	-4.49e-06	-13.95	0.0	-46.92	20.67	1.80	-2.60	-0.88	0.32
		0.32	-0.88	-6.40e-05	0.0	25.3	-46.92	13.69	1.80	-2.60	-0.57	4.68
						50.6	-46.92	6.71	1.80	-2.60	-0.27	7.27
6	73	-1.46	1.03	-2.19e-06	-13.95	0.0	56.44	-2.20	-2.81	3.08	1.03	-1.46
		-6.13	-0.03	7.85e-05	0.0	25.3	56.44	-9.18	-2.81	3.08	0.50	-2.91
						50.6	56.44	-16.16	-2.81	3.08	-0.03	-6.13
6	74	-2.20	0.58	-5.05e-06	-13.95	0.0	80.81	-5.79	-1.65	2.46	0.58	-2.20
		-8.63	0.27	6.02e-05	0.0	25.3	80.81	-12.77	-1.65	2.46	0.43	-4.53
						50.6	80.81	-19.74	-1.65	2.46	0.27	-8.63
6	75	8.70	-0.42	-3.57e-06	-13.95	0.0	-61.89	22.58	0.63	-2.22	-0.42	0.83
		0.83	-0.55	-5.37e-05	0.0	25.3	-61.89	15.61	0.63	-2.22	-0.49	5.65
						50.6	-61.89	8.63	0.63	-2.22	-0.55	8.70
6	76	6.20	-0.25	-5.30e-06	-13.95	0.0	-37.52	18.99	1.80	-2.84	-0.87	0.10
		0.10	-0.87	-7.20e-05	0.0	25.3	-37.52	12.02	1.80	-2.84	-0.56	4.03
						50.6	-37.52	5.04	1.80	-2.84	-0.25	6.20
6	77	-1.35	1.01	-2.63e-06	-13.95	0.0	47.34	0.05	-2.80	3.10	1.01	-1.35
		-4.87	-0.03	7.91e-05	0.0	25.3	47.34	-6.92	-2.80	3.10	0.49	-2.23
						50.6	47.34	-13.90	-2.80	3.10	-0.03	-4.87
6	78	-2.32	0.60	-4.60e-06	-13.95	0.0	89.90	-8.04	-1.66	2.43	0.60	-2.32
		-9.89	0.28	5.96e-05	0.0	25.3	89.90	-15.02	-1.66	2.43	0.44	-5.22
						50.6	89.90	-22.00	-1.66	2.43	0.28	-9.89
6	79	9.96	-0.44	-4.08e-06	-13.95	0.0	-70.99	24.84	0.64	-2.20	-0.44	0.95
		0.95	-0.56	-5.31e-05	0.0	25.3	-70.99	17.86	0.64	-2.20	-0.50	6.34
						50.6	-70.99	10.88	0.64	-2.20	-0.56	9.96
6	80	4.94	-0.25	-4.79e-06	-13.95	0.0	-28.43	16.74	1.79	-2.86	-0.85	-0.02
		-0.02	-0.85	-7.26e-05	0.0	25.3	-28.43	9.76	1.79	-2.86	-0.55	3.34
						50.6	-28.43	2.79	1.79	-2.86	-0.25	4.94
6	81	1.67	1.05	0.0	-13.95	0.0	-7.86	9.48	-2.97	1.87	1.05	0.10
		0.10	-0.56	5.11e-05	0.0	25.3	-7.86	2.51	-2.97	1.87	0.25	1.57
						50.6	-7.86	-4.47	-2.97	1.87	-0.56	1.28
6	82	-2.36	0.45	-8.64e-06	-13.95	0.0	73.37	-2.48	0.91	-0.19	-0.44	-2.36
		-7.06	-0.44	-1.01e-05	0.0	25.3	73.37	-9.46	0.91	-0.19	4.47e-03	-3.83
						50.6	73.37	-16.43	0.91	-0.19	0.45	-7.06
6	83	7.13	0.60	1.36e-06	-13.95	0.0	-54.45	19.27	-1.93	0.43	0.60	0.99
		0.99	-0.73	1.66e-05	0.0	25.3	-54.45	12.30	-1.93	0.43	-0.07	4.94
						50.6	-54.45	5.32	-1.93	0.43	-0.73	7.13
6	84	-0.45	0.28	-8.20e-06	-13.95	0.0	26.77	7.31	1.96	-1.63	-0.90	-1.47
		-1.47	-0.90	-4.45e-05	0.0	25.3	26.77	0.33	1.96	-1.63	-0.31	-0.46
						50.6	26.77	-6.64	1.96	-1.63	0.28	-1.21
6	85	2.20	1.04	1.15e-06	-13.95	0.0	-13.41	10.66	-2.96	1.94	1.04	0.20
		0.20	-0.57	5.36e-05	0.0	25.3	-13.41	3.68	-2.96	1.94	0.24	1.97
						50.6	-13.41	-3.29	-2.96	1.94	-0.57	1.98
6	86	-2.26	0.45	-8.41e-06	-13.95	0.0	67.82	-1.30	0.92	-0.12	-0.45	-2.26
		-6.36	-0.45	-7.46e-06	0.0	25.3	67.82	-8.28	0.92	-0.12	-3.44e-03	-3.43
						50.6	67.82	-15.26	0.92	-0.12	0.45	-6.36
6	87	6.43	0.61	-1.32e-06	-13.95	0.0	-48.90	18.10	-1.93	0.35	0.61	0.89
		0.89	-0.73	1.40e-05	0.0	25.3	-48.90	11.12	-1.93	0.35	-0.06	4.54
						50.6	-48.90	4.14	-1.93	0.35	-0.73	6.43
6	88	-0.85	0.29	-8.43e-06	-13.95	0.0	32.32	6.13	1.95	-1.70	-0.89	-1.57
		-1.91	-0.89	-4.71e-05	0.0	25.3	32.32	-0.84	1.95	-1.70	-0.30	-0.86
						50.6	32.32	-7.82	1.95	-1.70	0.29	-1.91
6	89	5.48	0.99	-2.00e-06	-13.95	0.0	-38.17	17.00	-2.93	1.94	0.99	0.48
		0.48	-0.57	5.31e-05	0.0	25.3	-38.17	10.02	-2.93	1.94	0.21	3.86
						50.6	-38.17	3.04	-2.93	1.94	-0.57	5.48
6	90	-2.75	0.46	-7.14e-06	-13.95	0.0	103.68	-9.99	0.88	-0.27	-0.38	-2.75
		-11.26	-0.38	-1.21e-05	0.0	25.3	103.68	-16.97	0.88	-0.27	0.04	-6.12
						50.6	103.68	-23.95	0.88	-0.27	0.46	-11.26
6	91	11.33	0.53	-2.81e-06	-13.95	0.0	-84.76	26.79	-1.89	0.51	0.53	1.38
		1.38	-0.74	1.86e-05	0.0	25.3	-84.76	19.81	-1.89	0.51	-0.11	7.24
						50.6	-84.76	12.83	-1.89	0.51	-0.74	11.33
6	92	-1.85	0.29	-6.70e-06	-13.95	0.0	57.08	-0.20	1.92	-1.70	-0.83	-1.85
		-5.41	-0.83	-4.66e-05	0.0	25.3	57.08	-7.18	1.92	-1.70	-0.27	-2.75
						50.6	57.08	-14.16	1.92	-1.70	0.29	-5.41
6	93	6.18	0.98	-2.00e-06	-13.95	0.0	-43.72	18.17	-2.93	2.02	0.98	0.59
		0.59	-0.58	5.57e-05	0.0	25.3	-43.72	11.20	-2.93	2.02	0.20	4.27
						50.6	-43.72	4.22	-2.93	2.02	-0.58	6.18
6	94	-2.65	0.46	-6.92e-06	-13.95	0.0	98.13	-8.81	0.88	-0.19	-0.39	-2.65
		-10.56	-0.39	-9.49e-06	0.0	25.3	98.13	-15.79	0.88	-0.19	0.04	-5.72

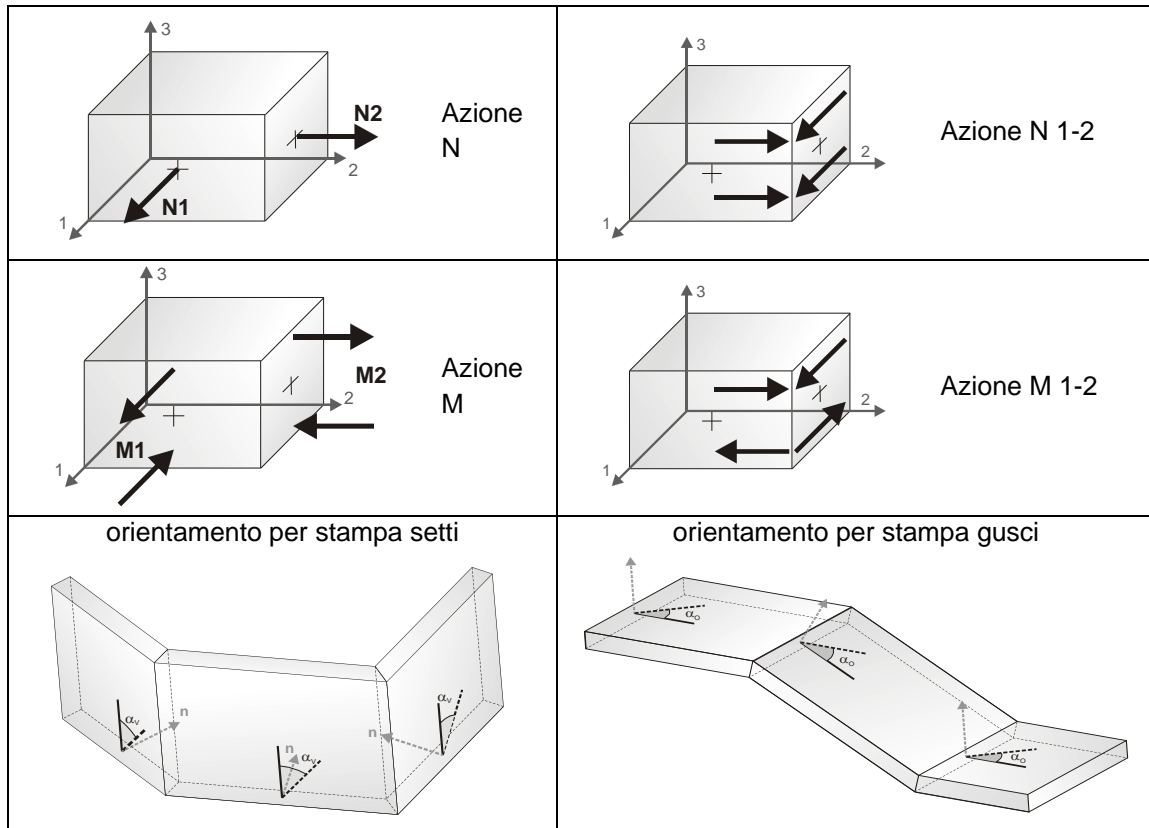
Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3	
6	95	10.62	0.54	-2.81e-06	-13.95	0.0	50.6	98.13	-22.77	0.88	-0.19	0.46	-10.56
		1.28	-0.74	1.60e-05	0.0	25.3	-79.22	25.61	-1.89	0.43	0.54	1.28	
						50.6	-79.22	11.65	-1.89	0.43	-0.74	10.62	
6	96	-1.96	0.30	-6.93e-06	-13.95	0.0	62.63	-1.38	1.91	-1.78	-0.82	-1.96	
		-6.11	-0.82	-4.92e-05	0.0	25.3	62.63	-8.36	1.91	-1.78	-0.26	-3.15	
						50.6	62.63	-15.33	1.91	-1.78	0.30	-6.11	
6	97	-1.56	0.85	-3.09e-06	-13.95	0.0	60.37	-2.90	-2.33	2.22	0.85	-1.56	
		-6.57	-0.04	5.52e-05	0.0	25.3	60.37	-9.87	-2.33	2.22	0.41	-3.18	
						50.6	60.37	-16.85	-2.33	2.22	-0.04	-6.57	
6	98	-2.13	0.49	-5.32e-06	-13.95	0.0	79.32	-5.69	-1.41	1.74	0.49	-2.13	
		-8.52	0.20	4.08e-05	0.0	25.3	79.32	-12.66	-1.41	1.74	0.35	-4.44	
						50.6	79.32	-19.64	-1.41	1.74	0.20	-8.52	
6	99	8.59	-0.34	-3.37e-06	-13.95	0.0	-60.41	22.48	0.40	-1.50	-0.34	0.76	
		0.76	-0.48	-3.43e-05	0.0	25.3	-60.41	15.50	0.40	-1.50	-0.41	5.56	
						50.6	-60.41	8.53	0.40	-1.50	-0.48	8.59	
6	100	6.64	-0.24	-4.62e-06	-13.95	0.0	-41.46	19.69	1.32	-1.98	-0.69	0.19	
...													
113	152	2.17	0.02	0.0	0.0	24.2	2.10	2.91	0.55	-0.70	0.09	3.28	
Trave		M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3		N	V 2	V 3	T			
		-155.58	-4.11	-6.71e-03	-234.23		-153.89	-139.01	-7.41	-15.28			
		133.46	5.87	6.64e-03	0.0		172.69	154.64	13.08	13.14			

RISULTATI ELEMENTI TIPO SHELL

LEGENDA RISULTATI ELEMENTI TIPO SHELL

Il controllo dei risultati delle analisi condotte, per quanto concerne gli elementi tipo shell, è possibile in relazione alle tabelle sottoriportate.

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



In particolare vengono riportati in ogni nodo di un elemento per ogni combinazione:

tensione di Von Mises	(valore riassuntivo del complessivo stato di sollecitazione)
N max	sforzo membranale principale massimo
N min	sforzo membranale principale minimo
M max	sforzo flessionale principale massimo
M min	sforzo flessionale principale minimo
N1 N2	sforzi membranali e flessionali in direzione locale 1 e 2
N1-2 M1	dell'elemento (lo sforzo 2-1 è uguale allo sforzo 1-2 per la
M2 M1-2	reciprocità delle tensioni tangenziali)

I suddetti risultati possono a scelta del progettista essere preceduti o sostituiti da valori di sollecitazione non più riferiti al sistema locale dell'elemento ma al sistema globale.

In questo caso gli elementi vengono raggruppati in gruppi (M_S: macro gusci o macro setti, raggruppati per materiale, spessore, e posizione fisica) per la valutazione dei valori mediati ai nodi appartenenti agli elementi dei gruppi stessi.

I valori di sollecitazione sono, in questo caso, riferiti ad una terna specifica del gruppo ruotata di α_o attorno all'asse Z per i gusci e ruotata di α_v attorno alla normale (che per definizione è orizzontale) al piano del setto.

Per i setti, in particolare, se α_v è zero, l'asse '1-1' rappresenta la verticale e l'asse '2-2' l'orizzontale contenuta nel setto.

Le azioni sui setti possono essere espresse anche con formato macro, cioè riferite all'intero macroelemento.

In particolare vengono riportati per ogni quota Z dei nodi e per ogni combinazione i seguenti valori:

N memb.	Azione membranale complessiva agente sulla parete in direzione Z
V memb.	Azione complessiva di taglio agente nel piano del macroelemento
V orto	Azione complessiva di taglio agente in direzione perpendicolare al macroelemento
M memb.	Azione flessionale complessiva agente nel piano del macroelemento
M orto	Azione flessionale complessiva agente in direzione perpendicolare al macroelemento
T	Azione torsionale complessiva agente nel piano orizzontale

Macro	Tipo	Angolo 1-Z (gradi)
1	Setto	0.0

M	S	Cmb	Z	N memb.	V memb.	V orto	M memb.	M orto	T
			cm	kN	kN	kN	kN m	kN m	kN m
1	1		-130.00	-841.55	-5.91	-28.09	-272.88	10.59	0.26
1	1		-82.86	-840.34	-7.93	-28.09	-268.48	-4.36	0.89
1	1		-34.29	-803.62	-4.86	-0.32	-259.20	-3.75	0.93
1	1		-2.86e-04	-767.92	-1.46	15.11	-253.66	2.33	0.91
1	1		62.86	-708.38	5.53	19.84	-244.97	15.30	1.44
1	1		111.43	-633.70	15.25	14.59	-244.77	22.92	2.64
1	1		160.00	-478.29	40.63	-1.95	-211.54	23.02	3.60
1	2		-130.00	-884.77	-5.89	-24.56	-280.14	7.69	0.25
1	2		-82.86	-883.56	-7.97	-24.56	-275.35	-5.60	0.87
1	2		-34.29	-846.40	-4.86	3.19	-265.79	-3.27	0.94
1	2		-2.86e-04	-810.04	-1.37	18.60	-260.32	4.00	0.96
1	2		62.86	-748.49	5.80	23.20	-252.01	19.14	1.66
1	2		111.43	-671.05	15.80	17.09	-252.45	28.09	3.05
1	2		160.00	-506.26	41.72	-2.98	-218.90	27.92	4.10
1	3		-130.00	-1073.88	-10.43	-45.97	-348.00	18.75	0.41
1	3		-82.86	-1072.22	-13.29	-45.97	-341.40	-5.46	1.44
1	3		-34.29	-1024.86	-9.02	-4.36	-328.42	-6.51	1.53
1	3		-2.86e-04	-979.14	-4.32	20.10	-320.49	1.75	1.43
1	3		62.86	-904.04	4.58	28.36	-307.49	20.36	2.04
1	3		111.43	-810.04	16.08	20.98	-304.96	31.26	3.62
1	3		160.00	-614.82	45.70	-2.06	-262.29	31.75	4.91
1	4		-130.00	-1078.08	-10.40	-45.94	-347.62	18.73	0.41
1	4		-82.86	-1076.42	-13.26	-45.94	-340.97	-5.47	1.44
1	4		-34.29	-1029.02	-8.98	-4.33	-327.95	-6.50	1.53
1	4		-2.86e-04	-983.23	-4.26	20.13	-320.04	1.77	1.43
1	4		62.86	-907.91	4.69	28.38	-307.14	20.40	2.04
1	4		111.43	-813.60	16.30	21.00	-304.84	31.31	3.62
1	4		160.00	-617.47	46.18	-2.07	-262.44	31.79	4.92
1	5		-130.00	-1181.93	-10.36	-37.15	-366.17	11.51	0.39
1	5		-82.86	-1180.29	-13.40	-37.15	-358.58	-8.55	1.39
1	5		-34.29	-1131.82	-9.02	4.42	-344.91	-5.33	1.54
1	5		-2.86e-04	-1084.45	-4.10	28.83	-337.14	5.94	1.57
1	5		62.86	-1004.30	5.27	36.76	-325.09	29.95	2.59
1	5		111.43	-903.43	17.46	27.23	-324.16	44.18	4.64
1	5		160.00	-684.75	48.40	-4.64	-280.69	44.00	6.15
1	6		-130.00	-1186.13	-10.33	-37.12	-365.79	11.48	0.39
1	6		-82.86	-1184.49	-13.37	-37.12	-358.15	-8.56	1.39
1	6		-34.29	-1135.98	-8.97	4.45	-344.44	-5.32	1.54
1	6		-2.86e-04	-1088.54	-4.04	28.86	-336.69	5.96	1.57
1	6		62.86	-1008.17	5.38	36.79	-324.74	29.99	2.59
1	6		111.43	-906.99	17.68	27.25	-324.04	44.23	4.65
1	6		160.00	-687.39	48.89	-4.65	-280.84	44.05	6.16
1	7		-130.00	-722.73	-10.36	-48.11	-252.13	22.37	0.38
1	7		-82.86	-721.19	-12.64	-48.11	-246.86	-2.54	1.34
1	7		-34.29	-685.46	-9.06	-11.07	-236.66	-7.05	1.41
1	7		-2.86e-04	-651.47	-5.22	11.76	-230.13	-1.79	1.19

M	S	Cmb	Z	N memb.	V memb.	V orto	M memb.	M orto	T
1	7	62.86	-597.36	1.51	20.20	-219.14	11.56	1.37	
1	7	111.43	-530.12	9.48	15.09	-215.31	19.32	2.30	
1	7	160.00	-397.64	29.99	0.06	-183.68	20.30	3.13	
1	8	-130.00	-726.93	-10.33	-48.07	-251.75	22.35	0.38	
1	8	-82.86	-725.39	-12.60	-48.07	-246.43	-2.55	1.34	
1	8	-34.29	-689.62	-9.02	-11.04	-236.19	-7.04	1.41	
1	8	-2.86e-04	-655.56	-5.16	11.79	-229.68	-1.77	1.19	
1	8	62.86	-601.23	1.62	20.23	-218.79	11.59	1.37	
1	8	111.43	-533.68	9.70	15.11	-215.18	19.37	2.30	
1	8	160.00	-400.29	30.48	0.05	-183.82	20.35	3.13	
1	9	-130.00	-830.77	-10.29	-39.29	-270.29	15.13	0.36	
1	9	-82.86	-829.25	-12.74	-39.29	-264.04	-5.63	1.29	
1	9	-34.29	-792.42	-9.05	-2.29	-253.14	-5.86	1.42	
1	9	-2.86e-04	-756.77	-5.00	20.48	-246.78	2.39	1.33	
1	9	62.86	-697.63	2.19	28.60	-236.74	21.15	1.91	
1	9	111.43	-623.51	10.86	21.34	-234.51	32.24	3.32	
1	9	160.00	-467.56	32.70	-2.52	-202.08	32.56	4.37	
1	10	-130.00	-834.97	-10.26	-39.25	-269.91	15.10	0.36	
1	10	-82.86	-833.46	-12.71	-39.25	-263.61	-5.64	1.29	
1	10	-34.29	-796.58	-9.01	-2.26	-252.68	-5.85	1.42	
1	10	-2.86e-04	-760.87	-4.94	20.51	-246.33	2.41	1.34	
1	10	62.86	-701.50	2.31	28.63	-236.39	21.19	1.92	
1	10	111.43	-627.07	11.08	21.36	-234.39	32.29	3.33	
1	10	160.00	-470.21	33.18	-2.53	-202.22	32.60	4.37	
1	11	-130.00	-1082.28	-10.38	-45.90	-347.24	18.71	0.41	
1	11	-82.86	-1080.62	-13.23	-45.90	-340.54	-5.47	1.44	
1	11	-34.29	-1033.18	-8.94	-4.30	-327.49	-6.49	1.54	
1	11	-2.86e-04	-987.33	-4.20	20.16	-319.58	1.79	1.43	
1	11	62.86	-911.78	4.81	28.41	-306.80	20.43	2.05	
1	11	111.43	-817.16	16.51	21.02	-304.71	31.36	3.63	
1	11	160.00	-620.12	46.67	-2.08	-262.58	31.84	4.92	
1	12	-130.00	-1149.52	-10.38	-39.80	-360.72	13.68	0.40	
1	12	-82.86	-1147.87	-13.37	-39.80	-353.43	-7.63	1.40	
1	12	-34.29	-1099.73	-9.02	1.79	-339.96	-5.68	1.54	
1	12	-2.86e-04	-1052.86	-4.17	26.21	-332.14	4.68	1.53	
1	12	62.86	-974.22	5.06	34.24	-319.81	27.07	2.43	
1	12	111.43	-875.42	17.05	25.35	-318.40	40.30	4.34	
1	12	160.00	-663.77	47.59	-3.87	-275.17	40.32	5.78	
1	13	-130.00	-1157.91	-10.33	-39.73	-359.96	13.64	0.40	
1	13	-82.86	-1156.27	-13.30	-39.73	-352.57	-7.64	1.40	
1	13	-34.29	-1108.06	-8.93	1.85	-339.03	-5.66	1.54	
1	13	-2.86e-04	-1061.04	-4.05	26.27	-331.24	4.72	1.53	
1	13	62.86	-981.96	5.29	34.30	-319.12	27.15	2.43	
1	13	111.43	-882.53	17.48	25.39	-318.16	40.40	4.34	
1	13	160.00	-669.07	48.56	-3.89	-275.46	40.42	5.79	
1	14	-130.00	-731.12	-10.30	-48.04	-251.37	22.33	0.38	
1	14	-82.86	-729.59	-12.57	-48.04	-246.00	-2.55	1.34	
1	14	-34.29	-693.78	-8.97	-11.01	-235.73	-7.03	1.41	
1	14	-2.86e-04	-659.65	-5.10	11.82	-229.23	-1.75	1.19	
1	14	62.86	-605.10	1.74	20.26	-218.45	11.63	1.37	
1	14	111.43	-537.24	9.91	15.13	-215.06	19.42	2.30	
1	14	160.00	-402.94	30.96	0.04	-183.97	20.40	3.14	
1	15	-130.00	-798.36	-10.31	-41.94	-264.84	17.30	0.37	
1	15	-82.86	-796.83	-12.71	-41.94	-258.89	-4.71	1.31	
1	15	-34.29	-760.33	-9.06	-4.93	-248.20	-6.22	1.41	
1	15	-2.86e-04	-725.18	-5.07	17.86	-241.78	1.14	1.29	
1	15	62.86	-667.55	1.99	26.08	-231.46	18.27	1.75	
1	15	111.43	-595.49	10.45	19.46	-228.75	28.36	3.01	
1	15	160.00	-446.59	31.88	-1.75	-196.56	28.88	4.00	
1	16	-130.00	-806.76	-10.26	-41.87	-264.08	17.26	0.37	
1	16	-82.86	-805.24	-12.64	-41.87	-258.02	-4.72	1.31	
1	16	-34.29	-768.65	-8.97	-4.87	-247.27	-6.20	1.41	
1	16	-2.86e-04	-733.37	-4.95	17.92	-240.88	1.18	1.29	
1	16	62.86	-675.29	2.22	26.14	-230.77	18.35	1.76	
1	16	111.43	-602.61	10.88	19.50	-228.50	28.46	3.02	
1	16	160.00	-451.88	32.86	-1.77	-196.85	28.97	4.00	
1	17	-130.00	-1164.56	-9.66	-45.36	-371.81	18.38	0.41	
1	17	-82.86	-1162.95	-12.49	-45.36	-365.24	-5.56	1.42	
1	17	-34.29	-1114.61	-8.01	-3.82	-352.08	-6.34	1.52	
1	17	-2.86e-04	-1067.35	-2.95	20.63	-344.39	2.09	1.42	
1	17	62.86	-987.28	7.11	28.87	-332.67	21.03	2.07	
1	17	111.43	-886.44	20.86	21.31	-333.29	32.13	3.69	
1	17	160.00	-671.98	56.37	-2.18	-288.59	32.56	5.00	
1	18	-130.00	-1168.76	-9.63	-45.32	-371.43	18.35	0.41	

M	S	Cmb	Z	N memb.	V memb.	V orto	M memb.	M orto	T
1	18	-82.86	-1167.15	-12.46	-45.32	-364.81	-5.56	1.43	
1	18	-34.29	-1118.77	-7.96	-3.79	-351.61	-6.33	1.52	
1	18	-2.86e-04	-1071.44	-2.89	20.66	-343.94	2.11	1.42	
1	18	62.86	-991.15	7.23	28.89	-332.33	21.07	2.07	
1	18	111.43	-890.00	21.08	21.33	-333.17	32.18	3.69	
1	18	160.00	-674.63	56.85	-2.19	-288.73	32.61	5.00	
1	19	-130.00	-1240.19	-9.61	-39.19	-384.53	13.30	0.39	
1	19	-82.86	-1238.60	-12.56	-39.19	-377.26	-7.72	1.39	
1	19	-34.29	-1189.48	-8.00	2.33	-363.62	-5.52	1.53	
1	19	-2.86e-04	-1141.06	-2.80	26.74	-356.05	5.02	1.52	
1	19	62.86	-1057.47	7.60	34.75	-344.99	27.75	2.45	
1	19	111.43	-951.81	21.83	25.68	-346.73	41.17	4.41	
1	19	160.00	-720.92	58.26	-3.98	-301.47	41.14	5.86	
1	20	-130.00	-1244.39	-9.59	-39.15	-384.15	13.28	0.39	
1	20	-82.86	-1242.80	-12.53	-39.15	-376.83	-7.73	1.39	
1	20	-34.29	-1193.64	-7.96	2.36	-363.16	-5.51	1.53	
1	20	-2.86e-04	-1145.15	-2.74	26.77	-355.60	5.04	1.52	
1	20	62.86	-1061.34	7.71	34.78	-344.65	27.79	2.45	
1	20	111.43	-955.37	22.05	25.70	-346.61	41.22	4.41	
1	20	160.00	-723.57	58.75	-3.99	-301.61	41.18	5.87	
1	21	-130.00	-813.40	-9.59	-47.50	-275.94	22.00	0.38	
1	21	-82.86	-811.92	-11.83	-47.50	-270.70	-2.64	1.33	
1	21	-34.29	-775.20	-8.04	-10.53	-260.32	-6.88	1.39	
1	21	-2.86e-04	-739.67	-3.86	12.29	-254.03	-1.45	1.19	
1	21	62.86	-680.61	4.04	20.71	-244.33	12.23	1.39	
1	21	111.43	-606.52	14.26	15.42	-243.64	20.18	2.37	
1	21	160.00	-454.80	40.66	-0.06	-209.97	21.12	3.21	
1	22	-130.00	-817.60	-9.56	-47.46	-275.56	21.98	0.38	
1	22	-82.86	-816.12	-11.80	-47.46	-270.27	-2.64	1.33	
1	22	-34.29	-779.37	-8.00	-10.50	-259.85	-6.87	1.39	
1	22	-2.86e-04	-743.76	-3.80	12.32	-253.58	-1.43	1.19	
1	22	62.86	-684.48	4.15	20.74	-243.98	12.27	1.40	
1	22	111.43	-610.08	14.48	15.44	-243.52	20.23	2.37	
1	22	160.00	-457.44	41.15	-0.07	-210.12	21.16	3.22	
1	23	-130.00	-889.03	-9.54	-41.32	-288.65	16.92	0.36	
1	23	-82.86	-887.56	-11.90	-41.32	-282.72	-4.80	1.30	
1	23	-34.29	-850.08	-8.04	-4.38	-271.86	-6.05	1.40	
1	23	-2.86e-04	-813.38	-3.70	18.40	-265.69	1.48	1.29	
1	23	62.86	-750.80	4.52	26.59	-256.64	18.95	1.78	
1	23	111.43	-671.89	15.23	19.79	-257.08	29.22	3.09	
1	23	160.00	-503.74	42.55	-1.86	-222.85	29.69	4.08	
1	24	-130.00	-893.23	-9.51	-41.29	-288.27	16.90	0.36	
1	24	-82.86	-891.76	-11.87	-41.29	-282.29	-4.81	1.30	
1	24	-34.29	-854.24	-7.99	-4.35	-271.39	-6.04	1.40	
1	24	-2.86e-04	-817.48	-3.64	18.43	-265.24	1.50	1.29	
1	24	62.86	-754.67	4.64	26.62	-256.30	18.99	1.78	
1	24	111.43	-675.45	15.45	19.81	-256.96	29.27	3.09	
1	24	160.00	-506.39	43.04	-1.87	-223.00	29.74	4.08	
1	25	-130.00	-1073.93	-14.18	-63.80	-353.64	28.87	0.53	
1	25	-82.86	-1072.06	-17.33	-63.80	-345.97	-4.28	1.89	
1	25	-34.29	-1024.62	-12.36	-13.03	-331.67	-9.44	2.02	
1	25	-2.86e-04	-978.92	-6.89	18.80	-322.89	-1.30	1.76	
1	25	62.86	-903.89	2.87	30.68	-308.63	18.95	2.13	
1	25	111.43	-809.92	14.71	22.87	-305.42	30.76	3.59	
1	25	160.00	-614.84	44.82	-0.63	-262.14	31.97	4.84	
1	26	-130.00	-1078.13	-14.15	-63.77	-353.26	28.85	0.53	
1	26	-82.86	-1076.27	-17.30	-63.77	-345.54	-4.29	1.89	
1	26	-34.29	-1028.78	-12.32	-13.00	-331.20	-9.43	2.02	
1	26	-2.86e-04	-983.01	-6.83	18.83	-322.44	-1.28	1.76	
1	26	62.86	-907.76	2.98	30.70	-308.28	18.99	2.13	
1	26	111.43	-813.48	14.93	22.89	-305.29	30.81	3.59	
1	26	160.00	-617.49	45.30	-0.64	-262.28	32.02	4.85	
1	27	-130.00	-1149.56	-14.13	-57.63	-366.36	23.79	0.52	
1	27	-82.86	-1147.71	-17.41	-57.63	-357.99	-6.45	1.85	
1	27	-34.29	-1099.49	-12.35	-6.88	-343.21	-8.61	2.02	
1	27	-2.86e-04	-1052.63	-6.73	24.90	-334.55	1.63	1.86	
1	27	62.86	-974.07	3.35	36.56	-320.94	25.67	2.51	
1	27	111.43	-875.29	15.68	27.24	-318.86	39.80	4.31	
1	27	160.00	-663.79	46.71	-2.44	-275.02	40.54	5.71	
1	28	-130.00	-1153.76	-14.10	-57.59	-365.98	23.77	0.52	
1	28	-82.86	-1151.91	-17.37	-57.59	-357.56	-6.45	1.85	
1	28	-34.29	-1103.65	-12.31	-6.85	-342.74	-8.60	2.02	
1	28	-2.86e-04	-1056.72	-6.67	24.93	-334.10	1.65	1.86	
1	28	62.86	-977.94	3.46	36.59	-320.60	25.71	2.51	

M	S	Cmb	Z	N memb.	V memb.	V orto	M memb.	M orto	T
1	28	111.43	-878.85	15.90	27.26	-318.74	39.85	4.31	
1	28	160.00	-666.44	47.20	-2.45	-275.16	40.59	5.71	
1	29	-130.00	-722.77	-14.10	-65.94	-257.77	32.49	0.50	
1	29	-82.86	-721.03	-16.67	-65.94	-251.43	-1.36	1.79	
1	29	-34.29	-685.21	-12.40	-19.74	-239.91	-9.98	1.89	
1	29	-2.86e-04	-651.24	-7.79	10.45	-232.53	-4.84	1.52	
1	29	62.86	-597.22	-0.21	22.52	-220.28	10.15	1.45	
1	29	111.43	-530.00	8.11	16.98	-215.76	18.82	2.27	
1	29	160.00	-397.66	29.11	1.49	-183.53	20.53	3.06	
1	30	-130.00	-726.97	-14.08	-65.91	-257.39	32.47	0.50	
1	30	-82.86	-725.23	-16.64	-65.91	-251.00	-1.37	1.79	
1	30	-34.29	-689.37	-12.35	-19.71	-239.44	-9.97	1.89	
1	30	-2.86e-04	-655.33	-7.73	10.48	-232.08	-4.82	1.52	
1	30	62.86	-601.09	-0.09	22.55	-219.93	10.19	1.46	
1	30	111.43	-533.56	8.33	17.00	-215.64	18.87	2.27	
1	30	160.00	-400.31	29.60	1.48	-183.67	20.57	3.06	
1	31	-130.00	-798.40	-14.06	-59.77	-270.48	27.42	0.49	
1	31	-82.86	-796.68	-16.75	-59.77	-263.45	-3.53	1.76	
1	31	-34.29	-760.09	-12.39	-13.60	-251.45	-9.15	1.90	
1	31	-2.86e-04	-724.96	-7.63	16.56	-244.19	-1.91	1.62	
1	31	62.86	-667.40	0.27	28.40	-232.59	16.87	1.84	
1	31	111.43	-595.37	9.08	21.35	-229.21	27.86	2.99	
1	31	160.00	-446.61	31.00	-0.32	-196.41	29.10	3.93	
1	32	-130.00	-802.60	-14.03	-59.73	-270.10	27.39	0.49	
1	32	-82.86	-800.88	-16.72	-59.73	-263.02	-3.53	1.76	
1	32	-34.29	-764.25	-12.35	-13.56	-250.98	-9.14	1.90	
1	32	-2.86e-04	-729.05	-7.57	16.59	-243.74	-1.89	1.62	
1	32	62.86	-671.27	0.39	28.43	-232.25	16.91	1.84	
1	32	111.43	-598.93	9.30	21.37	-229.08	27.91	2.99	
1	32	160.00	-449.25	31.49	-0.32	-196.55	29.15	3.93	
1	33	-130.00	-1177.06	8.02	82.60	-596.27	-169.24	-10.63	
1	33	-82.86	-1175.81	5.91	82.60	-591.47	-182.66	-26.02	
1	33	-34.29	-1129.09	4.95	109.70	-591.94	-137.13	-49.53	
1	33	-2.86e-04	-1087.02	3.09	124.09	-592.13	-94.40	-64.22	
1	33	62.86	-1017.99	8.76	127.52	-566.93	-39.52	-72.87	
1	33	111.43	-936.71	10.62	110.18	-497.90	14.09	-69.06	
1	33	160.00	-724.18	-12.59	78.97	-422.43	43.59	-46.67	
1	34	-130.00	-1185.99	187.63	65.70	101.73	-145.05	-8.56	
1	34	-82.86	-1184.74	185.52	65.70	106.53	-158.47	-21.07	
1	34	-34.29	-1148.64	201.40	91.16	42.00	-120.15	-40.75	
1	34	-2.86e-04	-1104.21	209.94	105.00	-8.43	-83.29	-53.22	
1	34	62.86	-1031.34	229.37	107.21	-55.43	-35.39	-60.65	
1	34	111.43	-945.09	266.88	91.12	-125.52	9.45	-57.16	
1	34	160.00	-725.11	353.61	67.89	-150.33	34.74	-37.45	
1	35	-130.00	-462.65	-200.43	-115.64	-630.27	160.94	9.06	
1	35	-82.86	-461.41	-202.54	-115.64	-625.46	147.39	22.82	
1	35	-34.29	-424.50	-212.48	-85.49	-542.04	113.39	42.64	
1	35	-2.86e-04	-398.27	-214.50	-68.50	-480.34	90.83	55.16	
1	35	62.86	-354.64	-221.14	-61.49	-415.00	72.77	63.94	
1	35	111.43	-295.15	-241.65	-57.39	-341.61	45.57	63.16	
1	35	160.00	-211.20	-284.41	-73.69	-252.40	20.02	45.54	
1	36	-130.00	-471.59	-20.82	-132.54	67.73	185.14	11.13	
1	36	-82.86	-470.34	-22.93	-132.54	72.54	171.59	27.77	
1	36	-34.29	-444.05	-16.03	-104.04	91.90	130.37	51.42	
1	36	-2.86e-04	-415.46	-7.65	-87.59	103.35	101.95	66.15	
1	36	62.86	-367.99	-0.53	-81.80	96.49	76.90	76.15	
1	36	111.43	-303.53	14.61	-76.45	30.77	40.93	75.06	
1	36	160.00	-212.14	81.80	-84.78	19.69	11.17	54.76	
1	37	-130.00	-1163.86	21.14	84.64	-580.18	-173.03	-10.89	
1	37	-82.86	-1162.62	19.04	84.64	-575.37	-186.46	-26.64	
1	37	-34.29	-1116.84	19.08	112.22	-577.44	-140.03	-50.67	
1	37	-2.86e-04	-1075.53	17.75	126.74	-581.07	-96.63	-65.73	
1	37	62.86	-1006.66	25.32	130.74	-563.25	-40.82	-74.74	
1	37	111.43	-929.35	27.29	114.10	-488.94	15.11	-71.18	
1	37	160.00	-712.81	17.33	80.85	-432.50	45.21	-49.19	
1	38	-130.00	-1199.18	174.50	63.66	85.63	-141.26	-8.30	
1	38	-82.86	-1197.93	172.40	63.66	90.44	-154.67	-20.45	
1	38	-34.29	-1160.89	187.27	88.63	27.51	-117.25	-39.61	
1	38	-2.86e-04	-1115.69	195.28	102.35	-19.48	-81.05	-51.71	
1	38	62.86	-1042.67	212.80	103.99	-59.11	-34.10	-58.79	
1	38	111.43	-952.45	250.20	87.21	-134.48	8.42	-55.04	
1	38	160.00	-736.48	323.69	66.01	-140.26	33.12	-34.94	
1	39	-130.00	-449.46	-187.31	-113.60	-614.17	157.15	8.80	
1	39	-82.86	-448.22	-189.41	-113.60	-609.37	143.60	22.20	

M	S	Cmb	Z	N memb.	V memb.	V orto	M memb.	M orto	T
1	39		-34.29	-412.25	-198.35	-82.97	-527.54	110.49	41.50
1	39	-2.86e-04	-386.78	-199.84	-65.85	-469.29	88.60	53.65	
1	39		62.86	-343.31	-204.58	-58.27	-411.32	71.48	62.07
1	39		111.43	-287.79	-224.97	-53.47	-332.65	46.60	61.05
1	39		160.00	-199.83	-254.49	-71.81	-262.47	21.64	43.02
1	40		-130.00	-484.78	-33.95	-134.58	51.64	188.93	11.39
1	40	-82.86	-483.53	-36.05	-134.58	56.44	175.39	28.39	
1	40	-34.29	-456.30	-30.16	-106.56	77.41	133.26	52.56	
1	40	-2.86e-04	-426.95	-22.31	-90.24	92.30	104.18	67.67	
1	40		62.86	-379.32	-17.09	-85.02	92.82	78.20	78.02
1	40		111.43	-310.89	-2.06	-80.37	21.81	39.91	77.18
1	40		160.00	-223.50	51.88	-86.65	29.76	9.55	57.28
1	41		-130.00	-1162.49	18.85	96.42	-700.21	-190.06	-12.27
1	41	-82.86	-1161.24	16.75	96.42	-695.41	-203.49	-29.96	
1	41	-34.29	-1117.16	11.85	124.70	-689.66	-152.04	-56.75	
1	41	-2.86e-04	-1076.90	8.66	139.80	-685.55	-104.18	-73.44	
1	41		62.86	-1008.82	18.31	144.32	-657.46	-43.14	-83.53
1	41		111.43	-920.13	29.05	126.71	-590.82	18.71	-80.19
1	41		160.00	-716.30	61.26	89.98	-503.54	52.08	-55.87
1	42		-130.00	-1171.42	198.47	79.52	-2.21	-165.87	-10.20
1	42	-82.86	-1170.17	196.36	79.52	2.59	-179.29	-25.01	
1	42	-34.29	-1136.71	208.29	106.16	-55.71	-135.07	-47.98	
1	42	-2.86e-04	-1094.09	215.51	120.71	-101.85	-93.06	-62.44	
1	42		62.86	-1022.17	238.91	124.00	-145.97	-39.01	-71.32
1	42		111.43	-928.51	285.31	107.65	-218.44	14.06	-68.29
1	42		160.00	-717.23	427.46	78.90	-231.44	43.23	-46.65
1	43		-130.00	-477.22	-211.27	-129.46	-526.33	181.76	10.70
1	43	-82.86	-475.98	-213.38	-129.46	-521.52	168.22	26.76	
1	43	-34.29	-436.43	-219.37	-100.49	-444.33	128.30	49.87	
1	43	-2.86e-04	-408.39	-220.06	-84.21	-386.92	100.61	64.38	
...									
1	152		160.00	-468.16	34.60	-2.90	-201.37	27.38	4.04
M	S			N memb.	V memb.	V orto	M memb.	M orto	T
				-1244.39	-638.67	-148.40	-1453.68	-207.29	-85.40
				-199.83	707.88	147.54	929.95	209.74	88.68

Macro	Tipo	Angolo 1-Z (gradi)
2	Setto	0.0

M	S	Cmb	Z	N memb.	V memb.	V orto	M memb.	M orto	T
			cm	kN	kN	kN	kN m	kN m	kN m
2	1		-130.00	-383.63	-12.53	26.68	83.28	-12.59	-0.27
2	1	-82.86	-380.80	-14.23	26.68	80.60	1.08	-0.28	
2	1	-34.29	-358.65	-13.14	8.87	74.97	4.63	0.39	
2	1	-2.86e-04	-338.99	-12.37	-0.53	69.84	3.67	0.91	
2	1		62.86	-310.44	-12.24	-3.31	57.40	1.19	1.29
2	1		111.43	-277.78	-13.88	-2.30	43.83	0.37	0.39
2	1		160.00	-218.33	-11.17	-1.83	26.42	-0.68	-1.96
2	2		-130.00	-402.38	-13.56	26.63	90.04	-12.46	-0.27
2	2	-82.86	-399.51	-15.45	26.63	87.20	1.17	-0.22	
2	2	-34.29	-377.22	-14.43	8.84	81.18	4.69	0.50	
2	2	-2.86e-04	-357.43	-13.74	-0.55	75.64	3.71	1.04	
2	2		62.86	-328.59	-13.77	-3.34	62.12	1.19	1.41
2	2		111.43	-295.55	-15.49	-2.37	47.33	0.36	0.45
2	2		160.00	-234.60	-12.27	-1.91	28.29	-0.72	-2.04
2	3		-130.00	-482.62	-19.30	40.57	100.04	-19.56	-0.39
2	3	-82.86	-479.29	-21.43	40.57	95.56	1.19	-0.49	
2	3	-34.29	-451.22	-19.66	14.31	87.64	7.08	0.42	
2	3	-2.86e-04	-426.40	-18.27	-0.37	80.95	5.79	1.22	
2	3		62.86	-391.01	-17.55	-5.16	65.44	1.89	1.90
2	3		111.43	-350.53	-19.13	-3.61	48.72	0.49	0.83
2	3		160.00	-280.47	-15.29	-2.69	28.00	-1.02	-2.18
2	4		-130.00	-484.44	-19.29	40.56	100.62	-19.55	-0.39
2	4	-82.86	-481.09	-21.44	40.56	96.17	1.20	-0.49	
2	4	-34.29	-452.97	-19.66	14.31	88.24	7.08	0.43	
2	4	-2.86e-04	-428.10	-18.28	-0.37	81.53	5.79	1.22	
2	4		62.86	-392.61	-17.57	-5.16	65.94	1.89	1.90
2	4		111.43	-352.01	-19.17	-3.61	49.13	0.49	0.83
2	4		160.00	-281.52	-15.32	-2.69	28.29	-1.02	-2.20

M	S	Cmb	Z	N memb.	V memb.	V orto	M memb.	M orto	T
2	5		-130.00	-529.50	-21.90	40.44	116.96	-19.24	-0.38
2	5		-82.86	-526.08	-24.48	40.44	112.05	1.41	-0.35
2	5		-34.29	-497.65	-22.89	14.24	103.16	7.22	0.69
2	5		-2.86e-04	-472.50	-21.68	-0.43	95.44	5.88	1.53
2	5		62.86	-436.37	-21.37	-5.26	77.24	1.90	2.21
2	5		111.43	-394.97	-23.15	-3.79	57.48	0.47	0.98
2	5		160.00	-321.15	-18.05	-2.89	32.68	-1.14	-2.38
2	6		-130.00	-531.32	-21.89	40.43	117.55	-19.23	-0.38
2	6		-82.86	-527.88	-24.48	40.43	112.65	1.42	-0.35
2	6		-34.29	-499.40	-22.90	14.23	103.76	7.23	0.70
2	6		-2.86e-04	-474.20	-21.70	-0.43	96.02	5.88	1.54
2	6		62.86	-437.97	-21.39	-5.26	77.75	1.90	2.21
2	6		111.43	-396.45	-23.19	-3.78	57.89	0.47	0.98
2	6		160.00	-322.20	-18.07	-2.89	32.96	-1.14	-2.40
2	7		-130.00	-325.92	-15.86	36.64	74.47	-18.15	-0.32
2	7		-82.86	-323.46	-17.50	36.64	70.33	0.57	-0.54
2	7		-34.29	-302.30	-15.81	13.59	63.86	6.31	0.13
2	7		-2.86e-04	-283.68	-14.34	0.05	58.81	5.30	0.81
2	7		62.86	-257.57	-13.18	-4.71	47.68	1.73	1.48
2	7		111.43	-227.81	-14.03	-3.26	35.90	0.34	0.80
2	7		160.00	-178.61	-11.12	-2.19	21.02	-0.89	-1.35
2	8		-130.00	-327.74	-15.85	36.63	75.06	-18.14	-0.32
2	8		-82.86	-325.26	-17.51	36.63	70.93	0.58	-0.54
2	8		-34.29	-304.05	-15.82	13.58	64.46	6.31	0.13
2	8		-2.86e-04	-285.38	-14.35	0.04	59.39	5.30	0.82
2	8		62.86	-259.16	-13.20	-4.71	48.18	1.73	1.49
2	8		111.43	-229.30	-14.07	-3.26	36.31	0.34	0.79
2	8		160.00	-179.66	-11.15	-2.19	21.30	-0.89	-1.36
2	9		-130.00	-372.80	-18.46	36.52	91.40	-17.83	-0.31
2	9		-82.86	-370.25	-20.55	36.52	86.81	0.79	-0.40
2	9		-34.29	-348.73	-19.05	13.51	79.38	6.45	0.40
2	9		-2.86e-04	-329.77	-17.76	-0.02	73.30	5.39	1.13
2	9		62.86	-302.93	-17.00	-4.80	59.48	1.74	1.79
2	9		111.43	-272.25	-18.06	-3.43	44.66	0.32	0.94
2	9		160.00	-219.29	-13.87	-2.38	25.69	-1.00	-1.55
2	10		-130.00	-374.63	-18.45	36.51	91.98	-17.82	-0.31
2	10		-82.86	-372.05	-20.56	36.51	87.42	0.80	-0.40
2	10		-34.29	-350.48	-19.06	13.50	79.98	6.45	0.41
2	10		-2.86e-04	-331.47	-17.77	-0.02	73.87	5.39	1.13
2	10		62.86	-304.52	-17.02	-4.80	59.98	1.74	1.79
2	10		111.43	-273.73	-18.10	-3.43	45.07	0.33	0.94
2	10		160.00	-220.34	-13.90	-2.39	25.98	-1.00	-1.57
2	11		-130.00	-486.27	-19.29	40.55	101.21	-19.54	-0.39
2	11		-82.86	-482.88	-21.44	40.55	96.77	1.20	-0.49
2	11		-34.29	-454.72	-19.67	14.30	88.83	7.09	0.43
2	11		-2.86e-04	-429.80	-18.29	-0.37	82.10	5.79	1.23
2	11		62.86	-394.21	-17.59	-5.16	66.44	1.89	1.91
2	11		111.43	-353.49	-19.21	-3.61	49.55	0.49	0.83
2	11		160.00	-282.57	-15.35	-2.70	28.57	-1.02	-2.21
2	12		-130.00	-515.43	-21.12	40.48	111.88	-19.33	-0.38
2	12		-82.86	-512.04	-23.56	40.48	107.10	1.34	-0.39
2	12		-34.29	-483.72	-21.92	14.26	98.50	7.18	0.61
2	12		-2.86e-04	-458.67	-20.66	-0.41	91.09	5.85	1.44
2	12		62.86	-422.76	-20.22	-5.23	73.70	1.90	2.12
2	12		111.43	-381.63	-21.95	-3.73	54.85	0.48	0.94
2	12		160.00	-308.94	-17.22	-2.83	31.27	-1.10	-2.32
2	13		-130.00	-519.08	-21.11	40.46	113.06	-19.31	-0.38
2	13		-82.86	-515.64	-23.57	40.46	108.31	1.35	-0.39
2	13		-34.29	-487.22	-21.94	14.25	99.70	7.18	0.62
2	13		-2.86e-04	-462.07	-20.68	-0.42	92.25	5.85	1.45
2	13		62.86	-425.96	-20.26	-5.23	74.70	1.90	2.12
2	13		111.43	-384.60	-22.02	-3.73	55.68	0.48	0.93
2	13		160.00	-311.05	-17.28	-2.83	31.84	-1.10	-2.35
2	14		-130.00	-329.57	-15.85	36.62	75.65	-18.13	-0.32
2	14		-82.86	-327.05	-17.51	36.62	71.53	0.58	-0.54
2	14		-34.29	-305.80	-15.83	13.57	65.06	6.32	0.14
2	14		-2.86e-04	-287.08	-14.36	0.04	59.96	5.30	0.82
2	14		62.86	-260.76	-13.22	-4.71	48.68	1.73	1.49
2	14		111.43	-230.78	-14.11	-3.26	36.72	0.35	0.79
2	14		160.00	-180.72	-11.18	-2.19	21.59	-0.89	-1.38
2	15		-130.00	-358.74	-17.68	36.55	86.32	-17.93	-0.31
2	15		-82.86	-356.22	-19.64	36.55	81.87	0.73	-0.44
2	15		-34.29	-334.80	-18.08	13.53	74.72	6.41	0.32
2	15		-2.86e-04	-315.94	-16.73	3.49e-03	68.95	5.36	1.03

M	S	Cmb	Z	N memb.	V memb.	V orto	M memb.	M orto	T
2	15	62.86	-289.32	-15.86	-4.78	55.94	1.73	1.70	
2	15	111.43	-258.92	-16.85	-3.38	42.03	0.33	0.90	
2	15	160.00	-207.08	-13.05	-2.33	24.29	-0.97	-1.49	
2	16	-130.00	-362.38	-17.67	36.53	87.50	-17.91	-0.31	
2	16	-82.86	-359.81	-19.65	36.53	83.08	0.74	-0.44	
2	16	-34.29	-338.30	-18.09	13.52	75.92	6.41	0.33	
2	16	-2.86e-04	-319.34	-16.75	-3.23e-03	70.10	5.36	1.04	
2	16	62.86	-292.51	-15.90	-4.78	56.94	1.73	1.71	
2	16	111.43	-261.88	-16.93	-3.38	42.86	0.33	0.89	
2	16	160.00	-209.19	-13.10	-2.33	24.86	-0.97	-1.52	
2	17	-130.00	-531.03	-18.99	40.49	115.90	-19.46	-0.40	
2	17	-82.86	-527.11	-21.41	40.49	111.61	1.25	-0.49	
2	17	-34.29	-497.80	-19.70	14.30	103.24	7.13	0.45	
2	17	-2.86e-04	-471.78	-18.39	-0.34	95.86	5.85	1.26	
2	17	62.86	-433.65	-17.85	-5.09	78.26	2.00	1.92	
2	17	111.43	-390.00	-19.90	-3.55	59.35	0.68	0.75	
2	17	160.00	-308.59	-15.83	-2.83	35.35	-0.92	-2.53	
2	18	-130.00	-532.86	-18.99	40.48	116.49	-19.45	-0.40	
2	18	-82.86	-528.91	-21.42	40.48	112.21	1.25	-0.49	
2	18	-34.29	-499.55	-19.71	14.29	103.84	7.13	0.46	
2	18	-2.86e-04	-473.48	-18.40	-0.35	96.44	5.85	1.26	
2	18	62.86	-435.25	-17.87	-5.09	78.76	2.00	1.93	
2	18	111.43	-391.49	-19.94	-3.55	59.76	0.69	0.74	
2	18	160.00	-309.64	-15.86	-2.84	35.64	-0.92	-2.55	
2	19	-130.00	-563.85	-20.81	40.40	127.74	-19.23	-0.40	
2	19	-82.86	-559.87	-23.55	40.40	123.15	1.40	-0.39	
2	19	-34.29	-530.30	-21.97	14.24	114.10	7.23	0.64	
2	19	-2.86e-04	-504.04	-20.78	-0.39	106.00	5.91	1.48	
2	19	62.86	-465.41	-20.53	-5.16	86.52	2.00	2.14	
2	19	111.43	-421.11	-22.72	-3.67	65.48	0.67	0.85	
2	19	160.00	-337.07	-17.76	-2.97	38.63	-1.00	-2.67	
2	20	-130.00	-565.67	-20.81	40.39	128.33	-19.22	-0.40	
2	20	-82.86	-561.66	-23.55	40.39	123.75	1.41	-0.39	
2	20	-34.29	-532.05	-21.98	14.24	114.70	7.23	0.65	
2	20	-2.86e-04	-505.74	-20.79	-0.39	106.58	5.91	1.48	
2	20	62.86	-467.00	-20.55	-5.16	87.02	2.00	2.14	
2	20	111.43	-422.59	-22.76	-3.67	65.89	0.67	0.84	
2	20	160.00	-338.12	-17.79	-2.98	38.91	-1.00	-2.69	
2	21	-130.00	-374.34	-15.55	36.56	90.34	-18.05	-0.33	
2	21	-82.86	-371.28	-17.49	36.56	86.37	0.63	-0.54	
2	21	-34.29	-348.88	-15.86	13.57	79.46	6.36	0.16	
2	21	-2.86e-04	-329.05	-14.46	0.07	73.72	5.36	0.85	
2	21	62.86	-300.21	-13.48	-4.64	60.49	1.83	1.51	
2	21	111.43	-267.29	-14.81	-3.20	46.53	0.54	0.71	
2	21	160.00	-206.73	-11.66	-2.33	28.37	-0.79	-1.70	
2	22	-130.00	-376.16	-15.55	36.55	90.92	-18.04	-0.33	
2	22	-82.86	-373.08	-17.49	36.55	86.97	0.63	-0.54	
2	22	-34.29	-350.63	-15.87	13.56	80.06	6.36	0.17	
2	22	-2.86e-04	-330.75	-14.48	0.07	74.30	5.36	0.86	
2	22	62.86	-301.81	-13.50	-4.64	60.99	1.83	1.51	
2	22	111.43	-268.77	-14.84	-3.20	46.94	0.54	0.70	
2	22	160.00	-207.79	-11.69	-2.34	28.66	-0.79	-1.72	
2	23	-130.00	-407.15	-17.37	36.47	102.18	-17.83	-0.33	
2	23	-82.86	-404.04	-19.62	36.47	97.91	0.78	-0.44	
2	23	-34.29	-381.38	-18.13	13.52	90.33	6.46	0.35	
2	23	-2.86e-04	-361.31	-16.85	0.03	83.86	5.42	1.07	
2	23	62.86	-331.96	-16.16	-4.71	68.76	1.84	1.72	
2	23	111.43	-298.39	-17.62	-3.32	52.66	0.53	0.81	
2	23	160.00	-235.21	-13.59	-2.47	31.64	-0.87	-1.84	
2	24	-130.00	-408.98	-17.37	36.46	102.77	-17.82	-0.33	
2	24	-82.86	-405.83	-19.62	36.46	98.51	0.79	-0.44	
2	24	-34.29	-383.13	-18.13	13.51	90.92	6.46	0.36	
2	24	-2.86e-04	-363.01	-16.87	0.02	84.44	5.42	1.08	
2	24	62.86	-333.56	-16.18	-4.71	69.26	1.84	1.72	
2	24	111.43	-299.87	-17.66	-3.32	53.07	0.53	0.81	
2	24	160.00	-236.26	-13.62	-2.47	31.93	-0.87	-1.86	
2	25	-130.00	-482.89	-22.97	50.40	104.60	-24.94	-0.45	
2	25	-82.86	-479.44	-25.29	50.40	98.75	0.79	-0.74	
2	25	-34.29	-451.26	-22.99	18.98	89.51	8.85	0.24	
2	25	-2.86e-04	-426.39	-20.98	0.22	82.19	7.50	1.21	
2	25	62.86	-390.97	-19.45	-6.51	65.91	2.55	2.18	
2	25	111.43	-350.52	-20.65	-4.54	48.79	0.66	1.20	
2	25	160.00	-280.49	-16.26	-3.24	27.71	-1.15	-1.91	
2	26	-130.00	-484.71	-22.97	50.39	105.19	-24.93	-0.45	

M	S	Cmb	Z	N memb.	V memb.	V orto	M memb.	M orto	T
2	26		-82.86	-481.24	-25.29	50.39	99.36	0.79	-0.74
2	26		-34.29	-453.00	-22.99	18.98	90.11	8.85	0.24
2	26		-2.86e-04	-428.09	-21.00	0.21	82.76	7.50	1.22
2	26		62.86	-392.57	-19.47	-6.51	66.41	2.55	2.19
2	26		111.43	-352.00	-20.69	-4.54	49.20	0.67	1.20
2	26		160.00	-281.55	-16.29	-3.25	28.00	-1.15	-1.93
2	27		-130.00	-515.71	-24.79	50.31	116.44	-24.71	-0.44
2	27		-82.86	-512.20	-27.42	50.31	110.29	0.94	-0.64
2	27		-34.29	-483.76	-25.25	18.93	100.37	8.95	0.43
2	27		-2.86e-04	-458.65	-23.37	0.17	92.33	7.56	1.44
2	27		62.86	-422.73	-22.13	-6.58	74.17	2.55	2.40
2	27		111.43	-381.62	-23.46	-4.66	54.92	0.65	1.30
2	27		160.00	-308.97	-18.19	-3.38	30.98	-1.23	-2.05
2	28		-130.00	-517.53	-24.79	50.30	117.03	-24.70	-0.45
2	28		-82.86	-513.99	-27.43	50.30	110.90	0.95	-0.64
2	28		-34.29	-485.50	-25.26	18.92	100.97	8.95	0.43
2	28		-2.86e-04	-460.35	-23.39	0.17	92.91	7.56	1.44
2	28		62.86	-424.32	-22.15	-6.58	74.67	2.55	2.40
2	28		111.43	-383.10	-23.50	-4.66	55.33	0.65	1.30
2	28		160.00	-310.02	-18.22	-3.38	31.27	-1.23	-2.07
2	29		-130.00	-326.19	-19.53	46.47	79.04	-23.53	-0.38
2	29		-82.86	-323.61	-21.36	46.47	73.51	0.17	-0.79
2	29		-34.29	-302.34	-19.14	18.25	65.73	8.08	-0.05
2	29		-2.86e-04	-283.66	-17.06	0.63	60.05	7.01	0.81
2	29		62.86	-257.53	-15.09	-6.06	48.14	2.38	1.77
2	29		111.43	-227.80	-15.55	-4.18	35.96	0.52	1.16
2	29		160.00	-178.63	-12.09	-2.74	20.73	-1.02	-1.08
2	30		-130.00	-328.02	-19.53	46.46	79.62	-23.52	-0.38
2	30		-82.86	-325.41	-21.36	46.46	74.12	0.17	-0.79
2	30		-34.29	-304.08	-19.15	18.25	66.33	8.08	-0.05
2	30		-2.86e-04	-285.36	-17.07	0.63	60.62	7.01	0.81
2	30		62.86	-259.13	-15.11	-6.06	48.64	2.38	1.77
2	30		111.43	-229.28	-15.59	-4.18	36.38	0.52	1.16
2	30		160.00	-179.69	-12.12	-2.74	21.01	-1.02	-1.09
2	31		-130.00	-359.01	-21.35	46.38	90.88	-23.31	-0.37
2	31		-82.86	-356.37	-23.49	46.38	85.06	0.32	-0.69
2	31		-34.29	-334.84	-21.41	18.20	76.59	8.18	0.14
2	31		-2.86e-04	-315.92	-19.45	0.59	70.19	7.07	1.03
2	31		62.86	-289.28	-17.76	-6.13	56.41	2.39	1.98
2	31		111.43	-258.91	-18.37	-4.30	42.10	0.51	1.27
2	31		160.00	-207.11	-14.02	-2.88	24.00	-1.10	-1.22
2	32		-130.00	-360.83	-21.35	46.37	91.47	-23.30	-0.38
2	32		-82.86	-358.17	-23.50	46.37	85.66	0.33	-0.69
2	32		-34.29	-336.58	-21.41	18.20	77.19	8.18	0.14
2	32		-2.86e-04	-317.62	-19.46	0.58	70.77	7.07	1.03
2	32		62.86	-290.88	-17.78	-6.13	56.91	2.39	1.98
2	32		111.43	-260.39	-18.41	-4.30	42.51	0.51	1.26
2	32		160.00	-208.17	-14.05	-2.88	24.29	-1.10	-1.23
2	33		-130.00	-279.86	94.89	59.99	-244.04	-62.68	-6.93
2	33		-82.86	-277.39	93.19	59.99	-247.01	-49.15	-15.94
2	33		-34.29	-257.86	108.16	40.11	-214.74	-32.05	-28.16
2	33		-2.86e-04	-237.95	122.24	28.67	-187.44	-21.57	-35.43
2	33		62.86	-214.54	141.99	25.30	-145.22	-11.21	-40.18
2	33		111.43	-188.80	164.05	21.82	-45.08	1.18	-41.43
2	33		160.00	-148.83	270.82	17.16	-69.80	9.13	-33.53
2	34		-130.00	-335.45	157.12	47.58	-385.42	-46.96	-5.60
2	34		-82.86	-332.98	155.42	47.58	-388.39	-33.46	-12.57
2	34		-34.29	-307.44	176.71	31.55	-333.24	-20.53	-20.78
2	34		-2.86e-04	-289.52	195.20	21.43	-274.27	-12.82	-25.64
2	34		62.86	-271.59	216.88	18.70	-184.06	-5.01	-28.14
2	34		111.43	-247.05	247.19	16.43	-61.76	5.13	-28.16
2	34		160.00	-201.85	357.72	8.14	-79.28	8.59	-23.83
2	35		-130.00	-404.75	-184.65	5.78	544.36	21.91	5.09
2	35		-82.86	-402.28	-186.35	5.78	541.40	35.73	12.13
2	35		-34.29	-384.90	-205.50	-13.85	474.79	29.84	21.74
2	35		-2.86e-04	-364.84	-222.51	-22.57	405.67	20.15	27.66
2	35		62.86	-328.73	-244.00	-25.48	291.21	7.25	30.93
2	35		111.43	-291.43	-277.13	-21.26	142.26	-4.67	29.18
2	35		160.00	-229.85	-381.54	-11.77	126.05	-10.16	20.23
2	36		-130.00	-460.34	-122.43	-6.62	402.98	37.63	6.42
2	36		-82.86	-457.87	-124.12	-6.62	400.01	51.43	15.50
2	36		-34.29	-434.48	-136.96	-22.40	356.29	41.36	29.12
2	36		-2.86e-04	-416.41	-149.55	-29.81	318.84	28.90	37.45
2	36		62.86	-385.78	-169.12	-32.08	252.37	13.45	42.97

M	S	Cmb	Z	N memb.	V memb.	V orto	M memb.	M orto	T
2	36	111.43	-349.67	-193.99	-26.64	125.58	-0.72	42.46	
2	36	160.00	-282.88	-294.63	-20.79	116.57	-10.70	29.93	
2	37	-130.00	-294.06	81.04	60.44	-210.28	-63.24	-7.24	
2	37	-82.86	-291.59	79.35	60.44	-213.24	-49.71	-16.53	
2	37	-34.29	-265.40	92.95	40.63	-191.88	-32.45	-28.68	
2	37	-2.86e-04	-250.86	105.65	29.25	-159.51	-21.82	-36.03	
2	37	62.86	-225.42	120.94	25.93	-113.69	-11.32	-40.76	
2	37	111.43	-167.59	131.65	22.23	-54.77	1.84	-41.90	
2	37	160.00	-149.88	226.98	17.47	-105.64	9.36	-33.76	
2	38	-130.00	-321.25	170.96	47.12	-419.19	-46.41	-5.29	
2	38	-82.86	-318.78	169.27	47.12	-422.16	-32.90	-11.98	
2	38	-34.29	-299.89	191.91	31.02	-356.09	-20.13	-20.27	
2	38	-2.86e-04	-276.62	211.79	20.86	-302.21	-12.57	-25.04	
2	38	62.86	-260.71	237.93	18.06	-215.59	-4.89	-27.55	
2	38	111.43	-268.26	279.58	16.02	-52.07	4.47	-27.69	
2	38	160.00	-200.80	401.56	7.83	-43.44	8.36	-23.60	
2	39	-130.00	-418.95	-198.50	6.24	578.13	21.36	4.78	
2	39	-82.86	-416.48	-200.20	6.24	575.16	35.17	11.53	
2	39	-34.29	-392.45	-220.71	-13.32	497.64	29.44	21.22	
2	39	-2.86e-04	-377.74	-239.10	-22.00	433.61	19.90	27.06	
2	39	62.86	-339.62	-265.05	-24.85	322.74	7.14	30.35	
2	39	111.43	-270.22	-309.53	-20.84	132.57	-4.01	28.72	
2	39	160.00	-230.90	-425.37	-11.47	90.21	-9.94	20.00	
2	40	-130.00	-446.15	-108.58	-7.08	369.22	38.18	6.73	
2	40	-82.86	-443.67	-110.28	-7.08	366.25	51.98	16.09	
2	40	-34.29	-426.93	-121.75	-22.93	333.44	41.76	29.63	
2	40	-2.86e-04	-403.50	-132.96	-30.39	290.90	29.15	38.06	
2	40	62.86	-374.90	-148.06	-32.71	220.84	13.56	43.56	
2	40	111.43	-370.88	-161.60	-27.05	135.27	-1.38	42.92	
2	40	160.00	-281.82	-250.79	-21.10	152.41	-10.93	30.15	
2	41	-130.00	-289.93	60.02	63.18	-167.72	-69.30	-7.83	
2	41	-82.86	-287.46	58.32	63.18	-170.69	-55.81	-18.06	
2	41	-34.29	-266.52	69.83	43.46	-150.90	-37.20	-32.01	
2	41	-2.86e-04	-244.67	81.05	31.92	-134.94	-25.36	-40.33	
2	41	62.86	-214.34	95.82	28.27	-115.20	-13.75	-45.72	
2	41	111.43	-195.59	111.01	24.06	-38.38	0.44	-46.75	
2	41	160.00	-152.14	193.06	19.06	-61.73	8.96	-37.43	
2	42	-130.00	-345.52	122.24	50.78	-309.10	-53.58	-6.50	
2	42	-82.86	-343.05	120.54	50.78	-312.07	-40.11	-14.68	
2	42	-34.29	-316.10	138.38	34.91	-269.40	-25.68	-24.63	
2	42	-2.86e-04	-296.23	154.01	24.68	-221.76	-16.61	-30.54	
2	42	62.86	-271.40	170.70	21.67	-154.04	-7.55	-33.67	
2	42	111.43	-253.84	194.15	18.68	-55.05	4.39	-33.47	
2	42	160.00	-205.16	279.96	10.04	-71.20	8.42	-27.73	
2	43	-130.00	-394.69	-149.77	2.58	468.04	28.52	5.99	
2	43	-82.86	-392.21	-151.47	2.58	465.07	42.38	14.24	
2	43	-34.29	-376.24	-167.18	-17.21	410.95	34.99	25.58	
2	43	-2.86e-04	-358.13	-181.32	-25.82	353.16	23.94	32.56	
...									
2	152	160.00	-215.85	-11.91	-1.82	23.38	-0.79	-1.80	
M	S		N memb.	V memb.	V orto	M memb.	M orto	T	
			-565.67	-425.37	-35.68	-422.16	-69.85	-47.21	
			-86.07	401.56	63.64	578.13	58.64	49.10	

VERIFICHE ELEMENTI TRAVE E/O PILASTRO IN C.A.

LEGENDA TABELLA VERIFICHE ELEMENTI TRAVE E/O PILASTRO IN C.A.

In tabella vengono riportati per ogni elemento il numero identificativo ed il codice di verifica con le sigle **Ok** o **NV**.

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

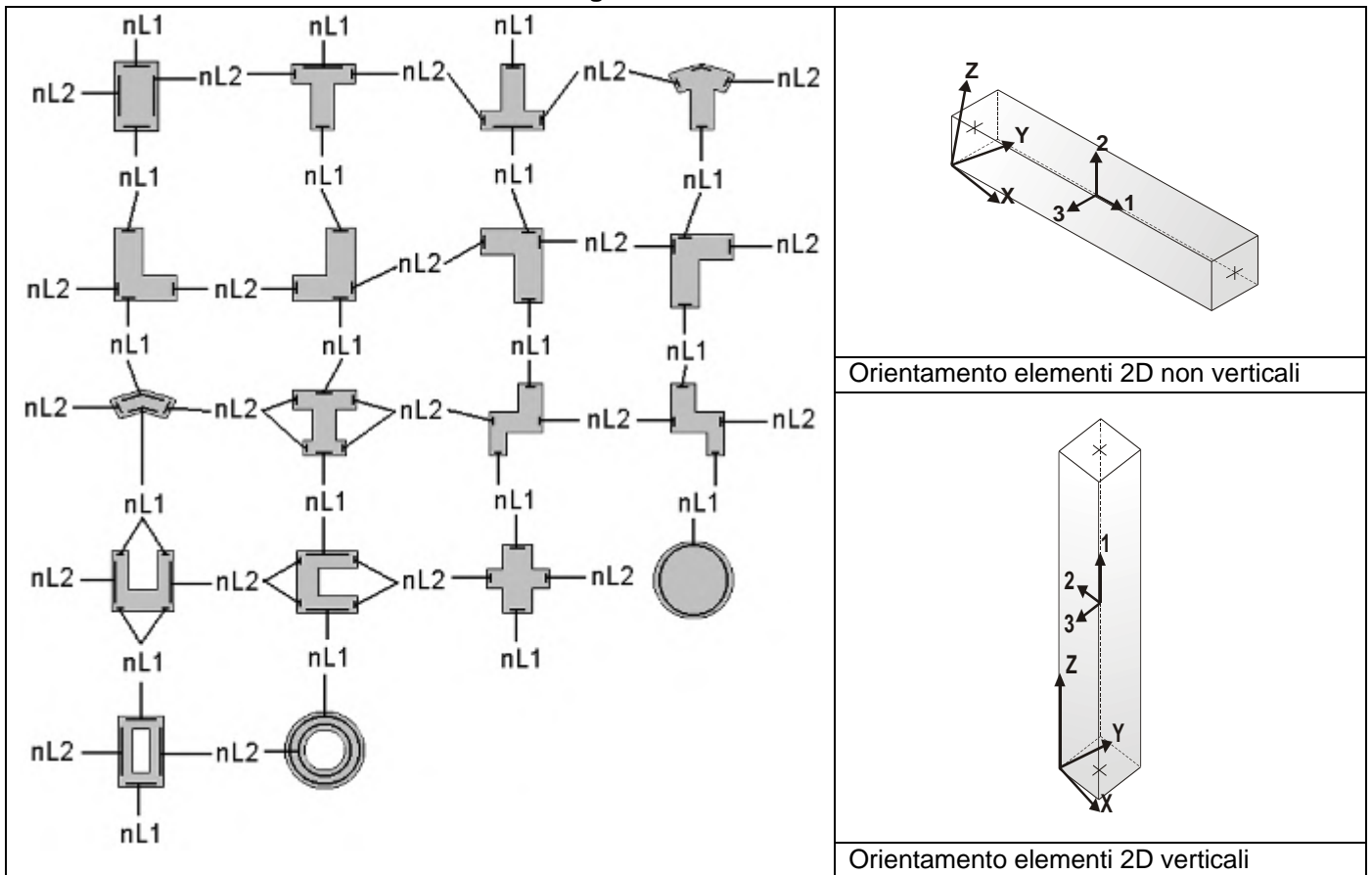
Nel caso in cui si sia proceduto alla progettazione con le tensioni ammissibili (**T.A.**) vengono riportate le massime tensioni nell'elemento (massima compressione nel calcestruzzo, massima compressione media nel calcestruzzo, massima tensione nell'acciaio, massima tensione tangenziale) con l'indicazione delle combinazioni in cui si sono attinti i rispettivi valori.

Nel caso in cui la struttura abbia comportamento dissipativo e sia prevista la progettazione con il criterio della gerarchia delle resistenze (**G.R.**) vengono riportate le verifiche di sovraresistenza e del nodo.

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

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

Schema della distribuzione delle armature longitudinali



PROGETTAZIONE DELLE FONDAZIONI

Il D.M.17/01/2018 - par: 7.2.5 prevede:

“Sia per CD“A” sia per CD“B” il dimensionamento delle strutture di fondazione e la verifica di sicurezza del complesso fondazione-terreno devono essere eseguiti assumendo come azione in fondazione, trasmessa dagli elementi soprastanti, una tra le seguenti:

- quella derivante dall’analisi strutturale eseguita ipotizzando comportamento strutturale non dissipativo;
- [...];
- quella trasferita dagli elementi soprastanti nell’ipotesi di comportamento strutturale dissipativo, amplificata di un coefficiente pari a 1,30 in CD“A” e 1,10 in CD“B”;

Nel contesto visualizzazione risultati e nella stampa della relazione sulle fondazioni PRO_SAP mostra le sollecitazioni che derivano dall’analisi non incrementate sia in termini di pressioni sul terreno che in termini di sollecitazioni.

La progettazione degli elementi strutturali con proprietà fondazione è effettuata da PRO_SAP (per travi e platee) o da PRO_CAD Plinti (per plinti e pali di fondazione) incrementando la componente sismica delle combinazioni di un coefficiente pari 1.1 in CDB e 1.3 in CDA per pali, plinti, travi e platee.

Per i bicchieri dei plinti di fondazione prefabbricati l’incremento delle sollecitazioni ha un fattore pari a 1.2 in CDB e 1.35 in CDA.

N.B.: nel caso di comportamento strutturale non dissipativo la progettazione viene effettuata senza nessun incremento.

Le verifiche geotecniche di pali, plinti, plinti su pali, travi e platee vengono eseguita dal modulo geotecnico incrementando automaticamente le componenti sismiche delle sollecitazioni del fattore 1.1 in CDB e 1.3 in CDA

N.B.: nel caso di comportamento strutturale non dissipativo le verifiche geotecniche vengono effettuate senza nessun incremento.

Simbologia adottata nelle tabelle di verifica

Per le verifiche agli S.L. dei pilastri è presente una tabella con i simboli di seguito descritti:

M_P X Y	Numero della pilastrata (P) e posizione in pianta (X,Y)
Pilas.	numero identificativo dell’elemento D2
Note	Codici identificativi delle sezione (s) e materiale (m) pilastro
Stato	Codici relativi all’esito delle verifiche effettuate appresso descritte
Quota	Quota sezione di verifica
%Af	Percentuale di area di armatura rispetto a quella di calcestruzzo
r. snell.	Rapporto di snellezza λ su λ^* : valore superiore a 1 per elementi snelli nel caso in cui viene effettuata la verifica con il metodo diretto dello stato di equilibrio
Armat. long.	Numero e diametro (d) dei ferri di armatura longitudinale distinti in ferri di vertice + ferri di lato nelle posizioni nL1 e nL2, come da schemi in figura precedente
V N/M	Verifica a pressoflessione con rapporto E_d/R_d : valore minore o uguale a 1 per verifica positiva
V N sis	Verifica a compressione solo calcestruzzo con rapporto N_{sd}/N_{rd} ed N_{rd} calcolato come al punto 7.4.4.2.1: valore minore o uguale a 1 per verifica positiva
Staffe	Dati tratto di staffatura oggetto di verifica, nello specifico: numero delle braccia, diametro, passo, lunghezza L tratto
V V/T cls	Verifica a taglio/torsione con rapporto V_{ed}/V_{rd} : valore minore o uguale a 1 per verifica positiva
Rif. cmb.	Riferimento combinazioni da cui si generano le verifiche più gravose per il pilastro

Per le verifiche di gerarchia delle resistenze dei pilastri è presente una tabella con i simboli di seguito descritti:

Pilas.	numero identificativo dell’elemento D2 pilastro
--------	---

sovr. Xi (Xf)	Verifica sovraresistenza come da formula 7.4.4 in direzione X, alla base (i) ed alla sommità (f): rapporto tra i momenti resistenti dei pilastri e delle travi. La verifica è positiva se maggiore del γ_{Rd} adottato
sovr. Yi (Yf)	Verifica sovraresistenza come da formula 7.4.4 in direzione Y, alla base (i) ed alla sommità (f): rapporto tra i momenti resistenti dei pilastri e delle travi. La verifica è positiva se maggiore del γ_{Rd} adottato
M 2-2 i (f)	Valore del momento resistente 2-2 alla base (i) ed alla sommità (f) con massimo momento in presenza dello sforzo normale di calcolo
M 3-3 i (f)	Valore del momento resistente 3-3 alla base (i) ed alla sommità (f) con massimo momento in presenza dello sforzo normale di calcolo
Luce per V	Luce di calcolo per la definizione del taglio (generato dai momenti resistenti)
V M2-2 (M3-3)	Valore del taglio generato dai momenti resistenti 2-2 (3-3)

Per le verifiche dei dettagli costruttivi relativi alla duttilità è presente una tabella con i simboli di seguito descritti: (Non presente nel caso di comportamento strutturale non dissipativo)

Pilas	Numero identificativo D2 pilastro
ni	Sforzo assiale adimensionalizzato di progetto relativo alla combinazione sismica SLV
alfaomega	Prodotto tra il coefficiente di efficacia del confinamento e il rapporto meccanico dell'armatura trasversale di confinamento all'interno del nodo
V.7.4.29 2-2 (3-3)	Rapporto tra la domanda di staffe minima nel nodo e il rapporto meccanico dell'armatura trasversale di confinamento inserito all'interno del nodo in direzione 2 (3)
V. 7.4.29 Stato	Codici relativi all'esito della verifica 7.4.29
dmu_fi 2-2 (3-3)	Domanda in duttilità di curvatura in direzione 2 (3)
cmu_fi 2-2 (3-3)	Capacità in duttilità di curvatura in direzione 2 (3)
V. dutt. 2-2 (3-3)	Rapporto tra la domanda in duttilità di curvatura e la capacità in duttilità di curvatura in direzione 2 (3)

Per le verifiche dei nodi trave-pilastro di elementi nuovi è presente una tabella con i simboli di seguito descritti:

Nodo	Numero identificativo del nodo trave-pilastro
Stato	Esito delle verifiche
Pilastro	Numero identificativo D2 pilastro
Diam st	Diametro staffe nodo
Passo	Passo staffe nodo
n. br. 2 (3)	Numero braccia staffe per il taglio in direzione 2 (3)
Bj2 (3)	Larghezza effettiva del nodo per il taglio in direzione 2 (3)
Hjc2 (3)	Distanza tra le giaciture più esterne delle armature del pilastro per il taglio in direzione 2 (3)
V. 7.4.8	Rapporto tra il taglio V_{jbd} e il taglio resistente come da formula 7.4.8
V. Ash	Rapporto tra il passo staffe calcolato secondo il capitolo 7.4.4.3.1. e il passo staffe effettivamente inserita nel nodo. Nel caso di valore indica passo staffe utilizzato deriva dalle formule presenti nel paragrafo 7.4.4.3.1. Nel caso di valore minore di 1 il passo staffe utilizzato deriva del pilastro superiore o inferiore al nodo
7.4.10	Check passo staffe valutato in funzione della formula 7.4.10: <ul style="list-style-type: none"> • SI il passo staffe è calcolato utilizzando la formula 7.4.10; • NO il passo staffe è calcolato utilizzando le formule 7.4.11 e/o 7.4.12; • NR calcolo passo staffe non richiesto;
Rif. comb.	Riferimento combinazioni da cui si generano le verifiche più gravose per il nodo

Per le verifiche dei nodi trave-pilastro di elementi esistenti è presente una tabella con i simboli di seguito descritti:

Pilastro I	Numero identificativo D2 del pilastro inferiore.
Pilastro S	Numero identificativo D2 del pilastro superiore.
Nodo	Numero identificativo del nodo trave-pilastro.
SL cod	Stato limite di riferimento e relativo esito delle verifiche.
ver. (+)	Coefficiente di sicurezza, calcolato come rapporto D/C, nei riguardi della verifica di resistenza a trazione
V +	Azione di Taglio presente al di sopra del nodo nella verifica di resistenza a trazione
V + af s	Sollecitazione di trazione presente nell' armatura longitudinale superiore della trave nella verifica di resistenza a trazione
N +	Azione Assiale presente al di sopra del nodo nella verifica di resistenza a trazione
ver. (-)	Coefficiente di sicurezza, calcolato come rapporto D/C, nei riguardi della verifica di resistenza a compressione
V -	Azione di Taglio presente al di sopra del nodo nella verifica di resistenza a compressione
V - af s	Sollecitazione di trazione presente nell' armatura longitudinale superiore della trave nella verifica di resistenza a compressione
N -	Azione Assiale presente al di sopra del nodo nella verifica di resistenza a compressione
AreaV2	Area resistente del nodo in direzione 2 ($A_{j2}=b_{j2}*h_{jc2}$).
AreaV3	Area resistente del nodo in direzione 3 ($A_{j3}=b_{j3}*h_{jc3}$).
Rif. comb.	Combinazione (direzione) di riferimento nella verifica di trazione.

Per le verifiche agli S.L. delle travi è presente una tabella con i simboli di seguito descritti:

M_T	Z	P	Numero della travata (T), quota media (Z), n° pilastrata iniziale (P) e finale (P) (nodo in assenza di pilastrata)
Trave	numero identificativo dell'elemento D2		
Note	Codici identificativi sezione (s) e materiale (m) trave; sono inoltre presenti le sigle relative all'esito delle verifiche effettuate appresso descritte		
%Af	Percentuale di area di armatura rispetto a quella di calcestruzzo		
Af inf.	Area di armatura longitudinale posta all'intradosso		
Af sup	Area di armatura longitudinale posta all'estradosso		
Af long.	Area complessiva armatura longitudinale		
x/d	rapporto tra posizione dell'asse neutro e altezza utile		
V N/M	Verifica a pressoflessione rapporto E_d/R_d : valore minore o uguale a 1 per verifica positiva		
Staffe	Dati tratto di staffatura oggetto di verifica, nello specifico: numero delle braccia, diametro, passo, lunghezza L tratto		
V V/T cls	Verifica a taglio/torsione con rapporto V_{ed}/V_{rd} : valore minore o uguale a 1 per verifica positiva		
Rif. cmb.	Riferimento combinazioni da cui si generano le verifiche più gravose per la trave		

Per le verifiche di gerarchia delle resistenze delle travi è presente una tabella con i simboli di seguito descritti:

Trave	numero identificativo dell'elemento D2 trave
M negativo i (f)	Valore del momento resistente negativo all' estremità iniziale i (finale f) della trave
M positivo i (f)	Valore del momento resistente positivo all' estremità iniziale i (finale f) della trave
Luce per V	Luce di calcolo per la definizione del taglio (generato dai momenti resistenti)
V M-i M+f	Taglio generato dai momenti resistenti negativo i e positivo f
V M+i M-f	Taglio generato dai momenti resistenti positivo i e negativo f
VE _d , min	Valore di taglio minimo per verifica condizioni p.to 7.4.4.1.1 armatura diagonale (solo per CD "A")
VE _d , max	Valore di taglio massimo per verifica condizioni p.to 7.4.4.1.1 armatura diagonale (solo per CD "A")
Vr1	Valore di taglio come da formula 7.4.1 per armatura diagonale (solo per CD "A")
As	Area singolo ordine armature diagonali come da formula 7.4.2 (solo per CD "A")

Per le verifiche a taglio ciclico di travi e pilastri esistenti è presente una tabella con i simboli di seguito descritti:

Trave/Pilastro	Numero identificativo dell'elemento D2 trave/pilastro
V. SLV	Codice relativo all'esito delle verifiche
Nodo	Numero identificativo del nodo di verifica
Ver. VC	Fattore di sicurezza nei confronti della verifica a taglio ciclico (verificato se < 1.00)
Direz.	Direzione di verifica
N fr	Valore di sforzo normale calcolato con fattore di comportamento fragile
V fr	Valore di taglio calcolato con fattore di comportamento fragile
M fr	Valore di momento calcolato con fattore di comportamento fragile
N dutt	Valore di sforzo normale calcolato con fattore di comportamento duttile
LV	Lunghezza di taglio
Mud,pl	Parte plastica della domanda di duttilità
V cic	Resistenza a taglio in condizioni cicliche (C8.7.2.8)
Cmb	Riferimento combinazioni da cui si generano le verifiche più gravose

Pilas.	Note	Stato	Quota cm	%Af	M P= 1 X=0.0 Y=0.7			V N sis	Staffe L=cm	V V/T cls	V V/T acc	Rif. cmb
					r. snell.	Armat. long.	V N/M					
69	s=1,m=4	ok,ok	-130.0	1.80	0.05	4d20 4+4 d20	0.13	0.08	3+4d10/20 L=47	0.08	0.07	45,39,43,45
			-106.4	1.80	0.05	4d20 4+4 d20	0.11	0.08	3+4d10/20 L=47	0.08	0.07	45,39,43,45
	[b=1.0;1.0]		-82.9	1.80	0.05	4d20 4+4 d20	0.10	0.08	3+4d10/20 L=47	0.08	0.07	45,39,43,45
78	s=1,m=4	ok,ok	-82.9	1.80	0.05	4d20 4+4 d20	0.08	0.08	3+4d10/20 L=49	0.09	0.08	45,39,48,48
			-58.6	1.80	0.05	4d20 4+4 d20	0.08	0.08	3+4d10/20 L=49	0.09	0.08	48,39,48,48
	[b=1.0;1.0]		-34.3	1.80	0.05	4d20 4+4 d20	0.07	0.08	3+4d10/20 L=49	0.09	0.08	48,39,48,48
87	s=1,m=4	ok,ok	-34.3	1.80	0.04	4d20 4+4 d20	0.06	0.08	3+4d10/20 L=34	0.10	0.09	48,39,48,48
			-17.1	1.80	0.04	4d20 4+4 d20	0.05	0.08	3+4d10/20 L=34	0.10	0.09	48,39,48,48
	[b=1.0;1.0]		-2.86e-04	1.80	0.04	4d20 4+4 d20	0.04	0.08	3+4d10/20 L=34	0.10	0.09	48,39,48,48
96	s=1,m=4	ok,ok	-2.86e-04	1.80	0.07	4d20 4+4 d20	0.03	0.08	3+4d10/20 L=63	0.12	0.09	48,40,44,48
			31.4	1.80	0.07	4d20 4+4 d20	0.03	0.08	3+4d10/20 L=63	0.12	0.09	39,40,44,48
	[b=1.0;1.0]		62.9	1.80	0.07	4d20 4+4 d20	0.04	0.08	3+4d10/20 L=63	0.12	0.09	39,40,44,48
105	s=1,m=4	ok,ok	62.9	1.80	0.05	4d20 4+4 d20	0.04	0.08	3+4d10/20 L=49	0.15	0.11	39,40,39,39
			87.1	1.80	0.05	4d20 4+4 d20	0.06	0.08	3+4d10/20 L=49	0.15	0.11	39,40,39,39
	[b=1.0;1.0]		111.4	1.80	0.05	4d20 4+4 d20	0.09	0.08	3+4d10/20 L=49	0.15	0.11	39,40,39,39
114	s=1,m=4	ok,ok	111.4	1.80	0.05	4d20 4+4 d20	0.10	0.09	3+4d10/20 L=49	0.12	0.11	39,40,48,48
			135.7	1.80	0.05	4d20 4+4 d20	0.11	0.08	3+4d10/20 L=49	0.12	0.11	39,40,48,48
	[b=1.0;1.0]		160.0	1.80	0.05	4d20 4+4 d20	0.12	0.08	3+4d10/20 L=49	0.12	0.11	39,40,48,48
21	s=1,m=4	ok,ok	160.0	1.80	0.44	4d20 4+4 d20	0.39	0.09	3+4d10/15 L=75	0.75	0.43	59,36,45,45
			345.0	1.80	0.44	4d20 4+4 d20	0.15	0.09	3+4d10/20 L=220	0.75	0.58	38,36,45,45
	[b=1.0;1.0]		530.0	1.80	0.44	4d20 4+4 d20	0.23	0.08	3+4d10/15 L=75	0.75	0.43	61,36,45,45
41	s=1,m=4	ok,ok	530.0	1.80	0.30	4d20 4+4 d20	0.20	0.03	3+4d10/15 L=75	0.67	0.39	59,36,45,48
			717.5	1.80	0.30	4d20 4+4 d20	0.05	0.03	3+4d10/20 L=225	0.67	0.52	50,36,45,48
	[b=1.0;1.0]		905.0	1.80	0.30	4d20 4+4 d20	0.25	0.03	3+4d10/15 L=75	0.67	0.39	59,36,45,48
					M P= 2 X=472.4 Y=0.7							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
73	s=1,m=4	ok,ok	-130.0	1.80	0.04	4d20 4+4 d20	0.03	0.06	3+4d10/20 L=47	0.04	0.03	58,58,38,48
			-106.4	1.80	0.04	4d20 4+4 d20	0.02	0.06	3+4d10/20 L=47	0.04	0.03	58,58,38,48
	[b=1.0;1.0]		-82.9	1.80	0.04	4d20 4+4 d20	0.02	0.06	3+4d10/20 L=47	0.04	0.03	58,58,38,48
82	s=1,m=4	ok,ok	-82.9	1.80	0.04	4d20 4+4 d20	0.02	0.06	3+4d10/20 L=49	0.05	0.04	58,58,41,45
			-58.6	1.80	0.04	4d20 4+4 d20	0.02	0.06	3+4d10/20 L=49	0.05	0.04	58,58,41,45
	[b=1.0;1.0]		-34.3	1.80	0.04	4d20 4+4 d20	0.02	0.06	3+4d10/20 L=49	0.05	0.04	58,58,41,45
91	s=1,m=4	ok,ok	-34.3	1.80	0.03	4d20 4+4 d20	0.02	0.06	3+4d10/20 L=34	0.06	0.05	58,58,44,45
			-17.1	1.80	0.03	4d20 4+4 d20	0.02	0.06	3+4d10/20 L=34	0.06	0.05	58,58,44,45
	[b=1.0;1.0]		-2.86e-04	1.80	0.03	4d20 4+4 d20	0.02	0.06	3+4d10/20 L=34	0.06	0.05	58,58,44,45
100	s=1,m=4	ok,ok	-2.86e-04	1.80	0.05	4d20 4+4 d20	0.02	0.05	3+4d10/20 L=63	0.08	0.06	58,58,44,44
			31.4	1.80	0.05	4d20 4+4 d20	0.02	0.05	3+4d10/20 L=63	0.08	0.06	38,58,44,44
	[b=1.0;1.0]		62.9	1.80	0.05	4d20 4+4 d20	0.03	0.05	3+4d10/20 L=63	0.08	0.06	38,58,44,44
109	s=1,m=4	ok,ok	62.9	1.80	0.04	4d20 4+4 d20	0.03	0.05	3+4d10/20 L=49	0.11	0.08	38,58,36,36
			87.1	1.80	0.04	4d20 4+4 d20	0.05	0.05	3+4d10/20 L=49	0.11	0.08	38,58,36,36
	[b=1.0;1.0]		111.4	1.80	0.04	4d20 4+4 d20	0.07	0.05	3+4d10/20 L=49	0.11	0.08	38,58,36,36
9	s=1,m=4	ok,ok	111.4	1.80	0.04	4d20 4+4 d20	0.07	0.06	3+4d10/20 L=49	0.08	0.08	38,58,48,48
			135.7	1.80	0.04	4d20 4+4 d20	0.06	0.06	3+4d10/20 L=49	0.08	0.08	38,58,48,48
	[b=1.0;1.0]		160.0	1.80	0.04	4d20 4+4 d20	0.06	0.06	3+4d10/20 L=49	0.08	0.08	38,58,48,48
29	s=1,m=4	ok,ok	160.0	1.80	0.46	4d20 4+4 d20	0.37	0.10	3+4d10/15 L=75	0.74	0.45	58,58,43,48
			345.0	1.80	0.46	4d20 4+4 d20	0.13	0.10	3+4d10/20 L=220	0.75	0.59	39,58,43,48
	[b=1.0;1.0]		530.0	1.80	0.46	4d20 4+4 d20	0.21	0.09	3+4d10/15 L=75	0.75	0.45	62,58,43,48
49	s=1,m=4	ok,ok	530.0	1.80	0.30	4d20 4+4 d20	0.17	0.03	3+4d10/15 L=75	0.68	0.39	56,58,48,48

Pilas.	sovr. Xi	sovr. Xf	sovr. Yi	sovr. Yf	M 2-2 i	M 2-2 f	M 3-3 i	M 3-3 f	Luce per V	V M2-2	V M3-3
23	8.07	8.46	2.95	3.09	181.97	180.59	499.83	496.77	320.00	125.11	343.63
24	1.66	1.66	9.13	9.13	180.91	179.52	497.47	494.41	320.00	124.37	342.01
25	8.49	6.62	3.10	3.18	183.64	182.27	503.53	500.48	320.00	126.25	346.17
26	1.53	3.15	4.19	8.64	184.73	183.36	505.94	502.90	320.00	127.00	347.84
27	1.61	3.26	2.20	4.46	185.83	184.46	508.38	505.35	320.00	127.76	349.51
28	1.66	3.33	2.29	4.57	182.24	180.86	500.42	497.36	320.00	125.29	344.04
29	4.43	8.91	1.61	3.25	179.91	178.52	495.25	492.19	320.00	123.68	340.49
41	8.91	0.0	3.25	0.0	168.49	167.06	462.84	458.12	325.00	114.05	313.30
42	3.30	0.0	4.53	0.0	169.66	168.24	466.67	462.01	325.00	114.85	315.90
43	8.46	0.0	3.09	0.0	170.53	169.11	469.46	464.86	325.00	115.44	317.79
44	1.66	1.62	9.13	8.86	172.37	170.95	475.31	470.80	325.00	116.68	321.75
45	6.62	8.75	3.18	0.0	174.37	172.95	481.53	477.13	325.00	118.04	325.96
46	3.15	3.18	8.64	0.0	174.29	172.87	481.27	476.86	325.00	117.98	325.78
47	3.26	3.20	4.46	4.39	174.91	173.50	483.19	478.82	325.00	118.40	327.08
48	3.33	0.0	4.57	0.0	169.81	168.39	467.15	462.51	325.00	114.95	316.23
49	8.91	0.0	3.25	0.0	168.74	167.31	463.67	458.96	325.00	114.22	313.87
61	3.18	0.0	0.0	0.0	166.38	165.29	455.88	452.80	195.00	187.71	514.32
62	8.75	0.0	0.0	0.0	166.26	165.13	455.45	452.36	195.00	187.57	513.84
63	1.62	0.0	8.86	0.0	166.58	165.55	456.54	453.47	195.00	187.94	515.08
64	3.20	0.0	4.39	0.0	166.56	165.52	456.48	453.41	195.00	187.92	515.00
Pilas.					M 2-2 i	M 2-2 f	M 3-3 i	M 3-3 f		V M2-2	V M3-3
					190.15	189.09	517.98	515.62		187.94	515.08

Pilas.	nid	alfaomega	V. 7.4.29	V. 7.4.29	V. 7.4.29	dmu fi	dmu fi	cmu fi	cmu fi	V. dut.	V. dut.
			2-2	3-3	Stato	2-2	3-3	2-2	3-3	2-2	3-3
2	0.10	0.09	0.18	0.45	ok	8.1	10.4	7.9	8.0	1.02	1.30
	0.09	0.09	0.15	0.42	ok			8.0	8.1	1.01	1.29
3	0.10	0.09	0.39	0.33	ok	10.4	8.1	7.8	7.8	1.33	1.04
	0.10	0.09	0.36	0.30	ok			7.9	7.9	1.32	1.03
4	0.10	0.09	0.18	0.45	ok	8.1	10.4	7.9	8.0	1.02	1.30
	0.09	0.09	0.15	0.42	ok			8.0	8.1	1.01	1.29
5	0.10	0.09	0.37	0.31	ok	10.4	8.1	7.8	7.9	1.32	1.03
	0.10	0.09	0.34	0.28	ok			7.9	8.0	1.31	1.02
21	0.06	0.09	0.05	0.02	ok	10.4	8.1	9.2	8.9	1.12	0.91
	0.05	0.09	0.01	0.0	ok			9.5	9.2	1.09	0.88
22	0.06	0.09	0.0	0.17	ok	8.1	10.4	8.9	8.7	0.91	1.19
	0.06	0.09	0.0	0.13	ok			9.2	8.9	0.88	1.16
23	0.07	0.09	0.16	0.11	ok	10.4	8.1	8.5	8.4	1.22	0.97
	0.07	0.09	0.12	0.08	ok			8.8	8.5	1.18	0.95
24	0.07	0.09	0.02	0.21	ok	8.1	10.4	8.7	8.5	0.93	1.22
	0.06	0.09	0.0	0.17	ok			9.0	8.7	0.91	1.19
25	0.08	0.09	0.20	0.16	ok	10.4	8.1	8.3	8.3	1.25	0.98
	0.07	0.09	0.16	0.12	ok			8.5	8.4	1.22	0.97
26	0.08	0.09	0.10	0.34	ok	8.1	10.4	8.2	8.2	0.99	1.26
	0.08	0.09	0.07	0.30	ok			8.3	8.3	0.98	1.25
27	0.09	0.09	0.13	0.38	ok	8.1	10.4	8.1	8.1	1.00	1.27
	0.08	0.09	0.10	0.33	ok			8.2	8.2	0.99	1.26
28	0.07	0.09	0.05	0.26	ok	8.1	10.4	8.5	8.4	0.96	1.24
	0.07	0.09	0.02	0.21	ok			8.7	8.5	0.93	1.22
29	0.07	0.09	0.10	0.06	ok	10.4	8.1	8.9	8.6	1.16	0.94
	0.06	0.09	0.06	0.02	ok			9.2	8.9	1.13	0.92
41	0.02	0.09	0.0	0.0	ok	10.4	8.1	11.6	11.3	0.89	0.72
	0.02	0.09	0.0	0.0	ok			12.0	11.8	0.86	0.69
42	0.03	0.09	0.0	0.0	ok	8.1	10.4	11.3	11.0	0.72	0.95
	0.02	0.09	0.0	0.0	ok			11.7	11.4	0.70	0.91
43	0.03	0.09	0.0	0.0	ok	10.4	8.1	11.0	10.7	0.94	0.76
	0.02	0.09	0.0	0.0	ok			11.4	11.1	0.91	0.73
44	0.04	0.09	0.0	0.0	ok	8.1	10.4	10.5	10.2	0.77	1.01
	0.03	0.09	0.0	0.0	ok			10.9	10.6	0.75	0.98
45	0.04	0.09	0.0	0.0	ok	10.4	8.1	10.1	9.7	1.03	0.84
	0.04	0.09	0.0	0.0	ok			10.4	10.1	1.00	0.81
46	0.04	0.09	0.0	0.0	ok	8.1	10.4	10.1	9.8	0.81	1.06
	0.04	0.09	0.0	0.0	ok			10.4	10.1	0.78	1.03
47	0.05	0.09	0.0	0.02	ok	8.1	10.4	9.9	9.6	0.82	1.08
	0.04	0.09	0.0	0.0	ok			10.3	10.0	0.79	1.04
48	0.03	0.09	0.0	0.0	ok	8.1	10.4	11.2	10.9	0.73	0.95
	0.02	0.09	0.0	0.0	ok			11.6	11.3	0.70	0.91
49	0.02	0.09	0.0	0.0	ok	10.4	8.1	11.5	11.2	0.90	0.72
	0.02	0.09	0.0	0.0	ok			12.0	11.7	0.87	0.70
61	0.01	0.09	0.0	0.0	ok	8.1	10.4	12.3	12.0	0.66	0.86
	0.01	0.09	0.0	0.0	ok			12.6	12.3	0.65	0.84

Pilas.	nid	alfaomega	V. 7.4.29	V. 7.4.29	V. 7.4.29	dmu fi	dmu fi	cmu fi	cmu fi	V. dut.	V. dut.
62	0.01	0.09	0.0	0.0	ok	10.4	8.1	12.3	12.0	0.84	0.68
	9.89e-03	0.09	0.0	0.0	ok			12.6	12.3	0.82	0.66
63	0.01	0.09	0.0	0.0	ok	8.1	10.4	12.2	11.9	0.67	0.87
	0.01	0.09	0.0	0.0	ok			12.5	12.2	0.65	0.85
64	0.01	0.09	0.0	0.0	ok	8.1	10.4	12.2	11.9	0.67	0.87
	0.01	0.09	0.0	0.0	ok			12.5	12.2	0.65	0.85
			2-2	3-3						2-2	3-3
			0.39	0.45						1.33	1.30

Nodo	Conf.	Stato	Pilas.	Diam st	Passo	n. br. 2	Bj2	Hjc2	n. br. 3	Bj3	Hjc3	V. 7.4.8	V. Ash	7.4.10	Rif. cmb
				mm	cm		cm	cm		cm	cm				
4	NO	ok	2	10	15.0	3	30.0	60.0	4	45.0	20.0	0.4	0.9	SI	45,57
6	NO	ok	3	10	15.0	3	30.0	60.0	4	45.0	20.0	0.4	0.7	NO	63,62
8	NO	ok	4	10	10.0	3	30.0	60.0	4	45.0	20.0	0.6	1.0	NO	38,35
10	NO	ok	5	10	15.0	3	30.0	60.0	4	45.0	20.0	0.4	0.7	NO	55,50
19	NO	ok	21	10	15.0	3	30.0	60.0	4	45.0	20.0	0.4	0.8	NO	56,49
20	NO	ok	22	10	8.0	3	30.0	60.0	4	45.0	20.0	0.4	0.8	SI	45,57
21	NO	ok	23	10	15.0	3	30.0	60.0	4	45.0	20.0	0.4	0.8	NO	63,50
22	NO	ok	24	10	8.0	3	30.0	60.0	4	45.0	20.0	0.6	0.8	NO	38,41
23	NO	ok	25	10	15.0	3	30.0	60.0	4	45.0	20.0	0.4	0.8	NO	63,50
24	NO	ok	26	10	15.0	3	30.0	60.0	4	45.0	20.0	0.4	0.8	NO	37,36
25	NO	ok	27	10	8.0	3	30.0	60.0	4	45.0	20.0	0.4	0.8	SI	40,59
26	NO	ok	28	10	8.0	3	30.0	60.0	4	45.0	20.0	0.4	0.9	SI	48,59
27	NO	ok	29	10	15.0	3	30.0	60.0	4	45.0	20.0	0.4	0.8	NO	62,59
28	NO	ok	41	10	15.0	3	30.0	60.0	4	45.0	20.0	0.4	0.8	NO	49,49
29	NO	ok	42	10	5.0	3	30.0	60.0	4	45.0	20.0	0.4	0.7	NO	33,49
30	NO	ok	43	10	15.0	3	30.0	60.0	4	45.0	20.0	0.4	0.8	NO	49,50
31	NO	ok	44	10	8.0	3	30.0	60.0	4	45.0	20.0	0.6	0.8	NO	46,41
32	NO	ok	45	10	15.0	3	30.0	60.0	4	45.0	20.0	0.2	0.0	NR	40,0
33	NO	ok	46	10	15.0	3	30.0	60.0	4	45.0	20.0	0.4	0.8	NO	40,36
34	NO	ok	47	10	5.0	3	30.0	60.0	4	45.0	20.0	0.4	0.7	NO	48,51
35	NO	ok	48	10	5.0	3	30.0	60.0	4	45.0	20.0	0.4	0.7	NO	33,49
36	NO	ok	49	10	15.0	3	30.0	60.0	4	45.0	20.0	0.4	0.8	NO	49,59
37	NO	ok	61	10	15.0	3	30.0	60.0	4	45.0	20.0	0.3	0.7	NO	33,36
38	NO	ok	62	10	15.0	3	30.0	60.0	4	45.0	20.0	0.3	0.7	NO	49,50
39	NO	ok	63	10	15.0	3	30.0	60.0	4	45.0	20.0	0.3	0.7	NO	33,33
40	NO	ok	64	10	15.0	3	30.0	60.0	4	45.0	20.0	0.3	0.7	NO	33,35
Nodo					Passo							V. 7.4.8	V. Ash		
					5.00							0.64	0.96		

Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	M_T= 1	Z=160.0	P=1	P=2	Staffe	Rif. cmb
		cm					x/d	V N/M	V V/T cls	V V/T acc	L=cm	
10	ok,ok	0.0	0.40	6.0	6.0	0.0	0.09	0.12	0.12	0.07	2d8/20 L=0	39,40,37
	s=2,m=4	25.3	0.40	6.0	6.0	0.0	0.09	0.18	0.14	0.10	2d8/20 L=0	39,40,40
		50.6	0.40	6.0	6.0	0.0	0.09	0.27	0.16	0.13	2d8/20 L=0	39,40,40
74	ok,ok	0.0	0.40	6.0	6.0	0.0	0.09	0.25	0.13	0.15	2d8/20 L=51	39,59,39
	s=2,m=4	25.3	0.40	6.0	6.0	0.0	0.09	0.15	0.11	0.14	2d8/20 L=51	39,59,38
		50.6	0.40	6.0	6.0	0.0	0.09	0.08	0.12	0.17	2d8/20 L=51	39,58,38
83	ok,ok	0.0	0.40	6.0	6.0	0.0	0.09	0.07	0.10	0.07	2d8/20 L=51	39,44,39
	s=2,m=4	25.3	0.40	6.0	6.0	0.0	0.09	0.03	0.08	0.04	2d8/20 L=51	39,44,39
		50.6	0.40	6.0	6.0	0.0	0.09	0.02	0.09	0.06	2d8/20 L=51	40,41,38
92	ok,ok	0.0	0.40	6.0	6.0	0.0	0.09	0.02	0.09	0.06	2d8/20 L=51	40,44,6
	s=2,m=4	25.3	0.40	6.0	6.0	0.0	0.09	7.57e-03	0.07	8.93e-03	2d8/20 L=51	37,44,39
		50.6	0.40	6.0	6.0	0.0	0.09	0.01	0.09	0.05	2d8/20 L=51	36,41,5
101	ok,ok	0.0	0.40	6.0	6.0	0.0	0.09	0.01	0.09	0.05	2d8/20 L=51	20,45,6
	s=2,m=4	25.3	0.40	6.0	6.0	0.0	0.09	6.10e-03	0.07	3.00e-03	2d8/20 L=51	49,45,39
		50.6	0.40	6.0	6.0	0.0	0.09	9.57e-03	0.09	0.05	2d8/20 L=51	20,45,5
110	ok,ok	0.0	0.40	6.0	6.0	0.0	0.09	9.51e-03	0.09	0.05	2d8/20 L=51	20,45,5
	s=2,m=4	25.3	0.40	6.0	6.0	0.0	0.09	7.16e-03	0.07	3.17e-03	2d8/20 L=51	49,45,50
		50.6	0.40	6.0	6.0	0.0	0.09	0.01	0.09	0.05	2d8/20 L=51	54,45,6
8	ok,ok	0.0	0.40	6.0	6.0	0.0	0.09	0.01	0.09	0.05	2d8/20 L=51	50,44,6
	s=2,m=4	25.3	0.40	6.0	6.0	0.0	0.09	0.01	0.08	0.02	2d8/20 L=51	59,41,38
		50.6	0.40	6.0	6.0	0.0	0.09	0.03	0.10	0.05	2d8/20 L=51	58,41,5
6	ok,ok	0.0	0.40	6.0	6.0	0.0	0.09	0.03	0.13	0.14	2d8/20 L=51	58,36,39
	s=2,m=4	25.3	0.40	6.0	6.0	0.0	0.09	0.08	0.11	0.11	2d8/20 L=51	38,33,39

		306.4	0.40	6.0	6.0	0.0	0.09	0.72	0.39	0.29	2d8/10 L=50	45,56,64	
							M_T= 5	Z=160.0	P=6	P=8			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
17	ok,ok	0.0	0.40	6.0	6.0	4.5	0.09	0.34	0.64	0.73	2d8/5 L=141	41,34,48	
	s=2,m=4	105.2	0.40	6.0	6.0	4.5	0.09	0.12	0.61	0.69	2d8/5 L=141	45,34,48	
		210.3	0.40	6.0	6.0	4.5	0.09	0.35	0.64	0.73	2d8/5 L=141	41,34,48	
							M_T= 6	Z=160.0	P=8	P=9			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
18	ok,ok	0.0	0.40	6.0	6.0	0.0	0.09	0.83	0.33	0.28	2d8/10 L=50	48,58,64	
	s=2,m=4	153.2	0.40	6.0	6.0	0.0	0.09	0.15	0.28	0.47	2d8/20 L=136	45,58,64	
		306.4	0.40	6.0	6.0	0.0	0.09	0.87	0.33	0.28	2d8/10 L=50	45,58,64	
							M_T= 7	Z=160.0	P=3	P=4			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
19	ok,ok	0.0	0.40	6.0	6.0	0.0	0.09	0.65	0.39	0.30	2d8/10 L=50	40,45,64	
	s=2,m=4	236.2	0.40	6.0	6.0	0.0	0.09	0.57	0.20	0.25	2d8/20 L=342	6,45,64	
		472.4	0.40	6.0	6.0	0.0	0.09	0.75	0.39	0.30	2d8/10 L=50	45,45,64	
							M_T= 8	Z=530.0	P=1	P=2			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
30	ok,ok	0.0	0.40	6.0	6.0	0.0	0.11	0.86	0.39	0.32	2d8/10 L=50	39,48,64	
	s=3,m=4	236.2	0.40	6.0	6.0	0.0	0.11	0.44	0.21	0.31	2d8/20 L=262	5,48,64	
		472.4	0.40	6.0	6.0	0.0	0.11	0.88	0.39	0.32	2d8/10 L=50	38,48,64	
							M_T= 9	Z=530.0	P=2	P=9			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
31	ok,ok	0.0	0.40	6.0	6.0	0.0	0.11	0.51	0.45	0.27	2d8/10 L=50	54,58,64	
	s=3,m=4	166.5	0.40	6.0	6.0	0.0	0.11	0.13	0.38	0.42	2d8/20 L=163	54,58,64	
		333.0	0.40	6.0	6.0	0.0	0.11	0.46	0.45	0.27	2d8/10 L=50	55,58,64	
32	ok,ok	0.0	0.40	6.0	6.0	0.0	0.11	0.82	0.42	0.29	2d8/10 L=50	54,63,64	
	s=3,m=4	151.7	0.40	6.0	6.0	0.0	0.11	0.09	0.36	0.48	2d8/20 L=133	5,63,64	
		303.5	0.40	6.0	6.0	0.0	0.11	0.53	0.42	0.29	2d8/10 L=50	55,63,64	
33	ok,ok	0.0	0.40	6.0	6.0	0.0	0.11	0.73	0.52	0.43	2d8/10 L=140	54,60,64	
	s=3,m=4	105.2	0.40	6.0	6.0	0.0	0.11	0.09	0.48	0.40	2d8/10 L=140	54,60,64	
		210.3	0.40	6.0	6.0	0.0	0.11	0.49	0.52	0.43	2d8/10 L=140	54,60,64	
							M_T= 10	Z=530.0	P=1	P=5			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
34	ok,ok	0.0	0.40	6.0	6.0	0.0	0.11	0.58	0.39	0.23	2d8/10 L=50	64,59,64	
	s=3,m=4	166.5	0.40	6.0	6.0	0.0	0.11	0.09	0.37	0.42	2d8/20 L=163	64,59,64	
		333.0	0.40	6.0	6.0	0.0	0.11	0.52	0.39	0.23	2d8/10 L=50	64,59,64	
35	ok,ok	0.0	0.40	6.0	6.0	0.0	0.11	0.82	0.42	0.22	2d8/10 L=50	61,48,64	
	s=3,m=4	151.7	0.40	6.0	6.0	0.0	0.11	0.11	0.41	0.41	2d8/20 L=173	61,48,64	
		303.5	0.40	6.0	6.0	0.0	0.11	0.66	0.42	0.22	2d8/10 L=50	61,48,64	
							M_T= 11	Z=530.0	P=5	P=7			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
36	ok,ok	0.0	0.40	6.0	6.0	0.0	0.11	0.71	0.83	0.63	2d8/10 L=96	48,53,64	
	s=3,m=4	83.0	0.40	6.0	6.0	0.0	0.11	0.36	0.78	0.58	2d8/10 L=96	45,53,64	
		166.0	0.40	6.0	6.0	0.0	0.11	0.52	0.83	0.63	2d8/10 L=96	45,53,64	
40	ok,ok	0.0	0.40	6.0	6.0	0.0	0.11	0.66	0.40	0.29	2d8/10 L=50	47,64,64	
	s=3,m=4	153.2	0.40	6.0	6.0	0.0	0.11	0.24	0.29	0.40	2d8/20 L=176	6,64,64	
		306.4	0.40	6.0	6.0	0.0	0.11	0.80	0.40	0.29	2d8/10 L=50	46,64,64	
							M_T= 12	Z=530.0	P=6	P=8			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
37	ok,ok	0.0	0.40	6.0	6.0	4.5	0.11	0.50	0.65	0.77	2d8/5 L=141	53,64,48	
	s=3,m=4	105.2	0.40	6.0	6.0	4.5	0.11	0.17	0.61	0.73	2d8/5 L=141	53,64,48	
		210.3	0.40	6.0	6.0	4.5	0.11	0.51	0.65	0.77	2d8/5 L=141	53,64,48	
							M_T= 13	Z=530.0	P=8	P=9			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
38	ok,ok	0.0	0.54	8.0	6.0	0.0	0.12	0.95	0.38	0.28	2d8/10 L=50	48,53,64	
	s=3,m=4	153.2	0.40	6.0	6.0	0.0	0.11	0.25	0.37	0.55	2d8/20 L=136	45,53,64	
		306.4	0.40	6.0	6.0	0.0	0.11	0.96	0.42	0.32	2d8/10 L=50	45,53,64	
							M_T= 14	Z=530.0	P=3	P=4			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
39	ok,ok	0.0	0.40	6.0	6.0	0.0	0.11	0.94	0.40	0.31	2d8/10 L=50	39,48,64	
	s=3,m=4	236.2	0.40	6.0	6.0	0.0	0.11	0.64	0.20	0.25	2d8/20 L=342	5,48,64	
		472.4	0.40	6.0	6.0	0.0	0.11	0.94	0.40	0.31	2d8/10 L=50	38,48,64	
							M_T= 15	Z=905.0	P=1	P=2			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
50	ok,ok	0.0	0.40	6.0	6.0	0.0	0.11	0.56	0.26	0.22	2d8/10 L=50	39,46,64	
	s=4,m=4	236.2	0.40	6.0	6.0	0.0	0.11	0.35	0.19	0.31	2d8/20 L=262	18,46,64	
		472.4	0.40	6.0	6.0	0.0	0.11	0.57	0.26	0.22	2d8/10 L=50	38,46,64	
							M_T= 16	Z=905.0	P=2	P=9			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
51	ok,ok	0.0	0.40	6.0	6.0	0.0	0.11	0.26	0.38	0.23	2d8/10 L=50	56,58,64	
	s=4,m=4	166.5	0.40	6.0	6.0	0.0	0.11	0.05	0.36	0.42	2d8/20 L=163	56,58,64	
		333.0	0.40	6.0	6.0	0.0	0.11	0.25	0.38	0.23	2d8/10 L=50	53,58,64	
52	ok,ok	0.0	0.40	6.0	6.0	0.0	0.11	0.49	0.35	0.25	2d8/10 L=50	55,63,64	
	s=4,m=4	151.7	0.40	6.0	6.0	0.0	0.11	0.03	0.33	0.48	2d8/20 L=133	54,63,64	

		303.5	0.40	6.0	6.0	0.0	0.11	0.38	0.35	0.25	2d8/10 L=50	55,63,64	
53	ok,ok	0.0	0.40	6.0	6.0	0.0	0.11	0.48	0.52	0.42	2d8/10 L=30	55,38,64	
	s=4,m=4	105.2	0.40	6.0	6.0	0.0	0.11	0.33	0.51	0.41	2d8/10 L=0	55,38,64	
		210.3	0.40	6.0	6.0	0.0	0.11	0.21	0.54	0.44	2d8/10 L=0	55,38,64	
								M T= 17	Z=905.0	P=1	P=5		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
54	ok,ok	0.0	0.40	6.0	6.0	0.0	0.11	0.30	0.37	0.23	2d8/10 L=50	62,59,64	
	s=4,m=4	166.5	0.40	6.0	6.0	0.0	0.11	0.08	0.35	0.42	2d8/20 L=163	58,59,64	
		333.0	0.40	6.0	6.0	0.0	0.11	0.30	0.37	0.23	2d8/10 L=50	62,59,64	
55	ok,ok	0.0	0.40	6.0	6.0	0.0	0.11	0.49	0.38	0.22	2d8/10 L=50	61,47,64	
	s=4,m=4	151.7	0.40	6.0	6.0	0.0	0.11	0.09	0.37	0.41	2d8/20 L=173	61,47,64	
		303.5	0.40	6.0	6.0	0.0	0.11	0.37	0.38	0.22	2d8/10 L=50	53,47,64	
								M T= 18	Z=905.0	P=5	P=7		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
56	ok,ok	0.0	0.40	6.0	6.0	0.0	0.11	0.45	0.80	0.60	2d8/10 L=96	48,53,64	
	s=4,m=4	83.0	0.40	6.0	6.0	0.0	0.11	0.23	0.78	0.58	2d8/10 L=96	35,53,64	
		166.0	0.40	6.0	6.0	0.0	0.11	0.27	0.80	0.60	2d8/10 L=96	44,53,64	
60	ok,ok	0.0	0.40	6.0	6.0	0.0	0.11	0.48	0.37	0.29	2d8/10 L=50	39,62,64	
	s=4,m=4	153.2	0.40	6.0	6.0	0.0	0.11	0.37	0.28	0.42	2d8/20 L=176	20,62,64	
		306.4	0.40	6.0	6.0	0.0	0.11	0.58	0.39	0.31	2d8/10 L=50	38,62,64	
								M T= 19	Z=905.0	P=6	P=8		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
57	ok,ok	0.0	0.40	6.0	6.0	0.0	0.11	0.45	0.62	0.42	2d8/10 L=141	53,45,64	
	s=4,m=4	105.2	0.40	6.0	6.0	0.0	0.11	0.38	0.58	0.40	2d8/10 L=141	53,45,64	
		210.3	0.40	6.0	6.0	0.0	0.11	0.19	0.62	0.43	2d8/10 L=141	53,45,64	
								M T= 20	Z=905.0	P=8	P=9		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
58	ok,ok	0.0	0.40	6.0	6.0	0.0	0.11	0.57	0.35	0.29	2d8/10 L=50	46,49,64	
	s=4,m=4	153.2	0.40	6.0	6.0	0.0	0.11	0.20	0.31	0.50	2d8/20 L=136	46,49,64	
		306.4	0.40	6.0	6.0	0.0	0.11	0.60	0.39	0.32	2d8/10 L=50	46,49,64	
								M T= 21	Z=905.0	P=3	P=4		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
59	ok,ok	0.0	0.40	6.0	6.0	0.0	0.11	0.53	0.29	0.24	2d8/10 L=50	39,64,18	
	s=4,m=4	236.2	0.40	6.0	6.0	0.0	0.11	0.65	0.18	0.25	2d8/20 L=342	18,64,64	
		472.4	0.40	6.0	6.0	0.0	0.11	0.54	0.29	0.24	2d8/10 L=50	38,64,20	
								M T= 22	Z=1145.0	P=6	P=8		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
65	ok,ok	0.0	0.34	4.0	4.0	0.0	0.12	0.23	0.36	0.22	2d8/8 L=141	53,47,64	
	s=5,m=4	105.2	0.34	4.0	4.0	0.0	0.12	0.06	0.35	0.21	2d8/8 L=141	53,47,64	
		210.3	0.33	4.0	4.0	0.0	0.12	0.28	0.36	0.22	2d8/8 L=141	53,47,64	
								M T= 23	Z=1145.0	P=8	P=9		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
66	ok,ok	0.0	0.34	4.0	4.0	0.0	0.12	0.35	0.24	0.16	2d8/8 L=50	47,37,64	
	s=5,m=4	153.2	0.34	4.0	4.0	0.0	0.12	0.20	0.20	0.32	2d8/20 L=136	18,37,64	
		306.4	0.34	4.0	4.0	0.0	0.12	0.40	0.24	0.16	2d8/8 L=50	46,37,64	
								M T= 24	Z=1145.0	P=7	P=9		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
67	ok,ok	0.0	0.34	4.0	4.0	0.0	0.12	0.39	0.33	0.22	2d8/8 L=140	55,48,64	
	s=5,m=4	105.2	0.34	4.0	4.0	0.0	0.12	0.01	0.32	0.21	2d8/8 L=140	55,48,64	
		210.3	0.33	4.0	4.0	0.0	0.12	0.21	0.33	0.22	2d8/8 L=140	55,48,64	
								M T= 25	Z=1145.0	P=6	P=7		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
68	ok,ok	0.0	0.34	4.0	4.0	0.0	0.12	0.46	0.23	0.14	2d8/8 L=50	39,58,64	
	s=5,m=4	153.2	0.34	4.0	4.0	0.0	0.12	0.21	0.19	0.27	2d8/20 L=176	18,58,64	
		306.4	0.34	4.0	4.0	0.0	0.12	0.45	0.23	0.14	2d8/8 L=50	38,58,64	
Trave			%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc			
			0.54	8.04	6.03	4.52	0.12	0.96	0.83	0.82			

Trave	M negativo i	M positivo i	M negativo f	M positivo f	Luce per V	V M-i M+f	V M+i M-f	VEd,min	VEd,max	Vr1	As
	kN m	kN m	kN m	kN m	cm	kN	kN	kN	kN	kN	cm2
14	104.31	104.31	104.31	104.31	262.29	87.50	87.50	0.0	0.0	0.0	0.0
15	104.31	104.31	104.31	104.31	273.49	83.91	83.91	0.0	0.0	0.0	0.0
16	104.31	104.31	104.31	104.31	96.00	239.05	239.05	0.0	0.0	0.0	0.0
17	104.31	104.31	104.31	104.31	140.81	162.98	162.98	0.0	0.0	0.0	0.0
18	104.31	104.31	104.31	104.31	236.41	97.07	97.07	0.0	0.0	0.0	0.0
19	104.31	104.31	104.31	104.31	442.41	51.87	51.87	0.0	0.0	0.0	0.0
20	104.31	104.31	104.31	104.31	276.41	83.03	83.03	0.0	0.0	0.0	0.0
30	101.60	101.60	101.60	101.60	362.41	61.68	61.68	0.0	0.0	0.0	0.0
31	101.60	101.60	101.60	101.60	263.00	84.99	84.99	0.0	0.0	0.0	0.0
32	101.60	101.60	101.60	101.60	233.49	95.73	95.73	0.0	0.0	0.0	0.0
33	101.60	101.60	101.60	101.60	140.33	159.28	159.28	0.0	0.0	0.0	0.0
34	101.60	101.60	101.60	101.60	263.00	84.99	84.99	0.0	0.0	0.0	0.0

Trave	M negativo i	M positivo i	M negativo f	M positivo f	Luce per V	V M-i M+f	V M+i M-f	VEd,min	VEd,max	Vr1	As
35	101.60	101.60	101.60	101.60	273.49	81.73	81.73	0.0	0.0	0.0	0.0
36	101.60	101.60	101.60	101.60	96.00	232.83	232.83	0.0	0.0	0.0	0.0
37	101.60	101.60	101.58	101.58	140.81	158.73	158.73	0.0	0.0	0.0	0.0
38	101.61	133.77	101.60	101.60	236.41	94.55	109.52	0.0	0.0	0.0	0.0
39	101.60	101.60	101.60	101.60	442.41	50.52	50.52	0.0	0.0	0.0	0.0
40	101.60	101.60	101.60	101.60	276.41	80.87	80.87	0.0	0.0	0.0	0.0
50	101.60	101.60	101.60	101.60	362.41	61.68	61.68	0.0	0.0	0.0	0.0
51	101.60	101.60	101.60	101.60	263.00	84.99	84.99	0.0	0.0	0.0	0.0
52	101.60	101.60	101.60	101.60	233.49	95.73	95.73	0.0	0.0	0.0	0.0
53	101.60	101.60	101.60	101.60	140.33	159.28	159.28	0.0	0.0	0.0	0.0
54	101.60	101.60	101.60	101.60	263.00	84.99	84.99	0.0	0.0	0.0	0.0
55	101.60	101.60	101.60	101.60	273.49	81.73	81.73	0.0	0.0	0.0	0.0
56	101.60	101.60	101.60	101.60	96.00	232.83	232.83	0.0	0.0	0.0	0.0
57	101.60	101.60	101.60	101.60	140.81	158.74	158.74	0.0	0.0	0.0	0.0
58	101.60	101.60	101.58	101.58	236.41	94.54	94.54	0.0	0.0	0.0	0.0
59	101.60	101.60	101.60	101.60	442.41	50.52	50.52	0.0	0.0	0.0	0.0
60	101.60	101.60	101.58	101.58	276.41	80.86	80.86	0.0	0.0	0.0	0.0
65	53.56	53.56	53.53	53.53	140.81	83.66	83.66	0.0	0.0	0.0	0.0
66	53.56	53.56	53.56	53.56	236.41	49.84	49.84	0.0	0.0	0.0	0.0
67	53.56	53.56	53.53	53.53	140.33	83.95	83.95	0.0	0.0	0.0	0.0
68	53.56	53.56	53.56	53.56	276.41	42.63	42.63	0.0	0.0	0.0	0.0
Trave	M negativo i	M positivo i	M negativo f	M positivo f		V M-i M+f	V M+i M-f	VEd,min	VEd,max	Vr1	As
								0.0			
	104.31	133.77	104.31	104.31		239.05	239.05		0.0	0.0	0.0

VERIFICHE ELEMENTI PARETE E/O GUSCIO IN C.A.

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

Per le pareti in c.a., in ottemperanza al cap. 7 del DM 17-01-18, viene effettuata una doppia progettazione: sia come *Singolo Elemento* sia come *Parete Sismica* o *Parete Debolmente Armata*.

Per la progettazione come *Singolo Elemento* di ogni elemento vengono riportati il codice dello stato di verifica con le sigle **Ok e NV**, il rapporto x/d , la verifica per sollecitazioni ultime (verifica a compressione media gli sforzi membranali, verifica a presso-flessionale e verifica a sollecitazioni taglianti), gli sforzi membranali e flessionali, il quantitativo di armatura nella direzione principale e secondaria sia inferiore che superiore e il quantitativo di armatura a taglio.

Per la progettazione come *Parete Sismica* o *Parete Debolmente Armata* vengono riportate invece le caratteristiche geometriche della parete e delle zone dissipative (quest'ultime solo nel caso di parete sismica), i coefficienti di verifica a compressione assiale, pressoflessione e sollecitazioni taglianti.

Inoltre vengono riportate per ogni quota significativa l'armatura principale e secondaria, l'armatura in zona confinata (solo per parete sismica) e non confinata, l'armatura concentrata all'estremità (per pareti debolmente armate), lo sforzo assiale aggiuntivo per q superiore a 2 e i valori di involuppo di taglio e momento. Per le pareti debolmente armate viene riportato anche lo stato di verifica relativo alla snellezza.

Le azioni derivate dall'analisi, in ogni combinazione di calcolo, sono elaborate come previsto al punto 7.4.4.5.1: traslazione del momento, incremento e variazione diagramma taglio, incremento e decremento sforzo assiale

La progettazione nel caso dei gusci viene effettuata una progettazione come *Singolo Elemento*, riportando in tabella il rapporto x/d , la verifica per sollecitazioni ultime, (verifica a compressione media gli sforzi membranali, verifica a presso-flessionale e verifica a sollecitazioni taglianti) di ogni elemento.

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

Nel caso dei gusci viene effettuata, inoltre, la verifica a punzonamento, riportando in tabella il codice dello stato di verifica, il coefficiente di verifica per piastre prive di armature a taglio lungo il perimetro resistente e lungo il perimetro del pilastro, coefficiente di incremento dovuto ai momenti flettenti, fattore di amplificazione per le fondazioni, il fattore di amplificazione dell'altezza utile per individuare il perimetro di verifica lungo il quale l'armatura a taglio non è richiesta, il quantitativo di armatura a punzonamento, il numero di serie di armature, il numero di braccia di armatura ed il riferimento alla combinazione più gravosa.

Simbologia adottata nelle tabelle di verifica

Per gli elementi con progettazione di tipo "*Singolo Elemento ...*" è presente una tabella con i simboli di seguito descritti:

Macro Guscio	Numero del macroelemento di tipo guscio (elementi non verticali contigui ed analoghi per proprietà)
Macro Setto	Numero del macroelemento di tipo setto (elementi verticali contigui ed analoghi per proprietà)
Spessore	Spessore della parete
Id Materiale	Codice del materiale assegnato all'elemento
Id Criterio	Codice del criterio di progetto assegnato all'elemento
Progettazione	Sigla tipo di Elemento: - Singolo Elemento; - Singolo Elemento FONDAZIONE; - Singolo

Elemento NON DISSIPATIVO

Per gli elementi con progettazione di tipo “*Parete Sismica*” e “*Parete Debolmente Armata*” è presente una tabella con i simboli di seguito descritti:

Parete	Numero della PARETE SISMICA
Parete PDA	Numero della PARETE DEBOLMENTE ARMATA
H totale	Altezza complessiva della parete
Spessore	Spessore della parete
H critica	Altezza come da punto 7.4.4.5.1 per traslazione momento (solo in Parete Sismica)
H critica V	Altezza della zona dissipativa (solo in Parete Sismica)
L totale	Larghezza di base della parete
L confinata	Lunghezza della zona dissipativa (solo in Parete Sismica)
Verif. N	Verifica di cui al punto 7.4.4.5.1 compressione semplice
Verif. N-M	Verifica di cui al punto 7.4.4.5.1 pressoflessione
Fattore V	Fattore di amplificazione del taglio di cui al punto 7.4.4.5.1
Diagramma V	Diagramma elaborato per effetto modi superiori come da fig. 7.4.4
Verif. V	Verifica di cui al punto 7.4.4.5.1 taglio (compressione cls, trazione acciaio, scorrimento in zona critica) (solo in Parete Sismica)
Verifica Snellezza	Verifica di cui al punto 7.4.4.5.1 limitazione compressione per prevenire l'instabilità (solo in Parete Debolmente Armata)
Prog. composta	Sigla per la progettazione composta

Sia per le verifiche degli elementi con progettazione di tipo “*Singolo Elemento ...*” e “*Parete ...*” è presente una tabella con i simboli di seguito descritti:

Nodo	numero del nodo
Stato	codice di verifica dell'elemento ok o NV
x/d	rapporto tra posizione dell'asse neutro e altezza utile alla rottura della sezione (per sola flessione)
V N/M	Verifica delle sollecitazioni Normali (momento e sforzo normale)
Ver. rid	Rapporto Nd/Nu (Nu ottenuto con riduzione del 25% di fcd)
Af pr+	quantità di armatura richiesta in direzione principale relativa alla faccia positiva (estradosso piastre) (valore derivante da calcolo o minimo normativo)
Af pr-	quantità di armatura richiesta in direzione principale relativa alla faccia negativa (intradosso piastre) (valore derivante da calcolo o minimo normativo)
Af sec+	quantità di armatura richiesta in direzione secondaria relativa alla faccia positiva (estradosso piastre) (valore derivante da calcolo o minimo normativo)
Af sec-	quantità di armatura richiesta in direzione secondaria relativa alla faccia negativa (intradosso piastre) (valore derivante da calcolo o minimo normativo)
Nz No Nzo	Sforzi membranali per pareti e/o setti verticali
Mz Mo Mzo	Sforzi flessionali per pareti e/o setti verticali
Nx Ny Nxy	Sforzi membranali per gusci orizzontali
Mx My Mxy	Sforzi flessionali per gusci orizzontali

Nodo	numero del nodo
Stato	codice di verifica dell'elemento ok o NV
Max tau	Tensione tangenziale Massima
Ver V pr	Verifica a taglio nella direzione principale lato calcestruzzo
Ver V sec	Verifica a taglio nella direzione secondaria lato calcestruzzo
Af V pr	Armatura nella direzione principale
V pr-	Verifica dell'armatura nella direzione principale
Af V sec	Armatura nella direzione secondaria
V sec-	Verifica dell'armatura nella direzione secondaria

Per le verifiche degli elementi con progettazione “*Parete Sismica o Parete Debolmente Armata*”, oltre alla tabella con le verifiche per gli elementi con progettazione “*Singolo Elemento ...*”, è presente una tabella con i simboli di seguito descritti:

Quota	Ascissa verticale di riferimento
Af conf.	Numero e diametro armatura presente in una zona confinata
Af std	Diametro e passo armatura in zona non confinata (doppia maglia)
Af estremi	Diametro dei ferri di estremità del pannello; se posto uguale 0, viene utilizzato il diametro standard
Af V (ori)	Diametro e passo armatura orizzontale (doppia maglia)
Ver. N	Rapporto tra azione di calcolo e resistenza a compressione (normalizzato a 1 in quanto da confrontare con 40% in CDB e 35 % in CDA)
Ver. N/M	Rapporto tra azione di calcolo e resistenza a pressoflessione
Ver. V acc(7)	Rapporto tra azione di calcolo e resistenza a taglio-trazione per alfaS minore di 2 secondo paragrafo 7.4.4.5.1
Ver. V cls	Rapporto tra azione di calcolo e resistenza a taglio-compressione
Ver. V acc	Rapporto tra azione di calcolo e resistenza a taglio-trazione
Ver. V scorr.	Rapporto tra azione di calcolo e resistenza a taglio scorrimento
N add	Sforzo assiale di cui al punto 7.4.4.5.1 da sommare e sottrarre nelle verifiche quando q supera 2
N invil M invil	Inviluppo del Momento e Sforzo Normale come al punto 7.4.4.5.1 (informativo) (solo in Parete Sismica)

Quota	Ascissa verticale di riferimento
N v.N	Valore dello sforzo assiale per cui Ver. N attinge il massimo valore
N v.M/N, M v.M/N	Valore dello sforzo assiale e momento per cui Ver. N/M attinge il massimo valore
N v.M/N, M v.M/N Mo v.M/N	Valore dello sforzo assiale e dei momenti per cui Ver. N/M attinge il massimo valore (per le pareti estese debolmente armate)
N v.Vcls, V v.Vcls,	Valore dello sforzo assiale e taglio per cui Ver. V. cls attinge il massimo valore
N v.Vacc, M v.Vacc, V v.Vacc,	Valore dello sforzo assiale, momento e taglio per cui Ver. V. acc attinge il massimo valore
N v.Vscorr, M v.Vscorr, V v.Vscorr,	Valore dello sforzo assiale, momento e taglio per cui Ver. V. scorr.e attinge il massimo valore
N v.N	Valore dello sforzo assiale per cui Ver. N attinge il massimo valore
N v.M/N, M v.M/N	Valore dello sforzo assiale e momento per cui Ver. N/M attinge il massimo valore
N v.M/N, M v.M/N Mo v.M/N	Valore dello sforzo assiale e dei momenti per cui Ver. N/M attinge il massimo valore (per le pareti estese debolmente armate)
N v.Vcls, V v.Vcls,	Valore dello sforzo assiale e taglio per cui Ver. V. cls attinge il massimo valore

Quota	Ascissa verticale di riferimento
CtgT Vcls	Valore di ctg(teta) adottato nella verifica V compressione cls
Vrsd Vcls	Valore della resistenza a taglio trazione (armatura di calcolo)
Vrcd Vcls	Valore della resistenza a taglio compressione
CtgT Vacc	Valore di ctg(teta) adottato nella verifica V trazione armatura
Vrsd Vacc	Valore della resistenza a taglio trazione (armatura presente)
Vrcd Vacc	Valore della resistenza a taglio compressione
Vdd	Valore del contributo alla resistenza allo scorrimento come da [7.4.20]
Vid	Valore del contributo alla resistenza allo scorrimento come da [7.4.21]
A s.i.	Somma delle aree di armature
Incli.	Angolo di inclinazione delle armature

Dist.	Distanza alla base tra le armature inclinate
Quota	Ascissa verticale di riferimento
V[7.4.16]	Verifica a taglio-trazione dell'armatura dell'anima (7.4.16)
N M V	Sollecitazioni di calcolo della condizione più gravosa
Alfas	Rapporto di Taglio
Vrd,c	Resistenza a taglio degli elementi non armati
VRd,s	Resistenza a taglio nei confronti dello scorrimento
V[7.4.17]	Verifica a taglio-trazione dell'armatura dell'anima (7.4.17)
roH	Rapporto tra l'armatura orizzontale e l'area della sezione relativa di calcestruzzo
roV	Rapporto tra l'armatura verticale e l'area della sezione relativa di calcestruzzo
roN	Sforzo normale adimensionalizzato $Ned/(bw f_{yd})$

Per la verifica a *Punzonamento* è presente una tabella con i simboli di seguito descritti:

Nodo	numero del nodo
Stato	codice di verifica dell'elemento ok o NV
V. 6.47	Fattore di sicurezza per la verifica per piastre prive di armature a taglio lungo il perimetro resistente U1
V. 6.53	Fattore di sicurezza per la verifica per piastre prive di armature a taglio lungo il perimetro del pilastro U0
Beta	Fattore di incremento dovuto ai momenti flettenti
f. a fon	fattore di amplificazione per le fondazioni (solo per gusci di fondazione)
f. Uout	fattore di amplificazione dell'altezza utile per individuare il perimetro di verifica lungo il quale l'armatura a taglio non è richiesta
Aw tot	Quantitativo di armatura per la verifica di piastre munite di armatura (formula 6.52 dell'EC2)
Asw,min	Quantitativo minimo di armatura previsto dai dettagli costruttivi (formula 9.11 dell'EC2)
n. x serie	Numero di serie di armature
n.ser 0(R)	Numero di braccia delle armature in direzione 0 (o numero di braccia radiale)
n.ser 90	Numero di braccia delle armature in direzione 90 (solo se armatura cruciforme)
Rif. cmb	Riferimento combinazioni da cui si generano le verifiche più gravose

PROGETTAZIONE DELLE FONDAZIONI

Il D.M.17/01/2018 - par: 7.2.5 prevede:

“Sia per CD“A” sia per CD“B” il dimensionamento delle strutture di fondazione e la verifica di sicurezza del complesso fondazione-terreno devono essere eseguiti assumendo come azione in fondazione, trasmessa dagli elementi soprastanti, una tra le seguenti:

- quella derivante dall'analisi strutturale eseguita ipotizzando comportamento strutturale non dissipativo;
- [...];
- quella trasferita dagli elementi soprastanti nell'ipotesi di comportamento strutturale dissipativo, amplificata di un coefficiente pari a 1,30 in CD“A” e 1,10 in CD“B”;

Nel contesto visualizzazione risultati e nella stampa della relazione sulle fondazioni PRO_SAP mostra le sollecitazioni che derivano dall'analisi non incrementate sia in termini di pressioni sul terreno che in termini di sollecitazioni.

La progettazione degli elementi strutturali con proprietà fondazione è effettuata da PRO_SAP (per travi e platee) o da PRO_CAD Plinti (per plinti e pali di fondazione) incrementando la componente sismica delle combinazioni di un coefficiente pari 1.1 in CDB e 1.3 in CDA per pali, plinti, travi e platee.

Per i bicchieri dei plinti di fondazione prefabbricati l'incremento delle sollecitazioni ha un fattore pari a 1.2 in CDB e 1.35 in CDA.

N.B.: nel caso di comportamento strutturale non dissipativo la progettazione viene effettuata senza nessun incremento.

Le verifiche geotecniche di pali, plinti, plinti su pali, travi e platee vengono effettuate dal modulo geotecnico incrementando automaticamente la componente sismica delle azioni di un fattore 1.1 in CDB e 1.3 in CDA.

N.B.: nel caso di comportamento strutturale non dissipativo le verifiche geotecniche vengono effettuate senza nessun incremento.

Macro Setto	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
1	30.00	4	1	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N z	N o	N zo	M z	M o	M zo
									kN/ m	kN/ m	kN/ m	kN	kN	kN
1	ok	0.17	0.3	4.73e-02	13.4	13.4	7.5	7.5	-192.8	-46.2	-13.3	-15.6	-3.8	2.2
11	ok	0.17	0.3	6.36e-02	13.4	13.4	7.5	7.5	-284.8	-21.0	-3.8	-17.0	-3.3	2.5
12	ok	0.17	0.2	8.61e-02	13.4	13.4	7.5	7.5	-424.8	138.4	39.1	18.0	0.5	-3.6
13	ok	0.17	0.2	6.59e-02	13.4	13.4	7.5	7.5	-281.0	-33.1	7.9	-10.0	-2.0	2.8
14	ok	0.17	0.2	7.79e-02	13.4	13.4	7.5	7.5	-172.5	-46.8	-98.2	14.9	4.6	6.0
15	ok	0.17	0.4	6.80e-02	13.4	13.4	7.5	7.5	-291.9	-30.8	-14.7	-24.8	-4.7	1.6
16	ok	0.17	0.3	6.79e-02	13.4	13.4	7.5	7.5	-181.0	-176.3	-104.5	25.8	4.5	7.0
17	ok	0.17	0.1	5.30e-02	13.4	13.4	7.5	7.5	-149.2	-44.0	40.0	5.1	-1.8	5.4
18	ok	0.17	9.53e-02	5.62e-02	13.4	13.4	7.5	7.5	-266.7	38.4	-59.6	-7.9	-3.9	1.2
43	ok	0.17	0.2	4.47e-02	13.4	13.4	7.5	7.5	-177.8	-51.2	-9.3	-9.7	-2.9	2.7
56	ok	0.17	0.1	3.62e-02	13.4	13.4	7.5	7.5	-179.7	-80.7	-2.6	-2.9	-2.6	2.9
64	ok	0.17	7.61e-02	3.52e-02	13.4	13.4	7.5	7.5	-112.4	-40.3	25.3	3.2	-3.8	3.8
72	ok	0.17	5.69e-02	4.23e-02	13.4	13.4	7.5	7.5	-36.3	116.0	-105.2	3.8	-0.7	1.3
80	ok	0.17	0.4	5.71e-02	13.4	13.4	7.5	7.5	-282.3	-52.6	-16.9	-21.0	-4.2	0.7
88	ok	0.17	0.2	8.86e-02	13.4	13.4	7.5	7.5	-438.4	-144.4	10.4	18.6	4.9	1.8
96	ok	0.17	0.4	5.78e-02	13.4	13.4	7.5	7.5	-244.4	-42.1	-12.9	-23.3	-5.0	1.6
104	ok	0.17	0.3	5.68e-02	13.4	13.4	7.5	7.5	-238.9	-38.1	-7.4	-16.4	-3.8	2.4
111	ok	0.17	4.26e-02	4.61e-02	13.4	13.4	7.5	7.5	-221.7	-48.4	34.3	-1.7	-0.2	-4.52e-02
112	ok	0.17	4.50e-02	4.46e-02	13.4	13.4	7.5	7.5	-218.5	-32.6	23.0	-1.2	1.1	-0.3
113	ok	0.17	6.13e-02	4.09e-02	13.4	13.4	7.5	7.5	-201.6	-19.7	15.1	-0.5	1.0	-0.3
114	ok	0.17	5.77e-02	4.01e-02	13.4	13.4	7.5	7.5	-197.5	-13.2	-15.9	-1.6	9.80e-02	3.0
115	ok	0.17	7.89e-02	4.93e-02	13.4	13.4	7.5	7.5	-239.0	-30.1	-33.0	-5.1	-2.3	3.0
116	ok	0.17	0.1	5.45e-02	13.4	13.4	7.5	7.5	-265.6	-86.8	-27.3	-7.9	-5.7	2.7
117	ok	0.17	4.79e-02	4.50e-02	13.4	13.4	7.5	7.5	-218.7	-37.7	27.5	1.1	0.2	-0.5
118	ok	0.17	0.2	5.53e-02	13.4	13.4	7.5	7.5	-227.4	-48.5	3.5	-9.5	-2.6	2.7
119	ok	0.17	5.35e-02	4.59e-02	13.4	13.4	7.5	7.5	-165.6	-37.1	30.5	-0.4	-0.8	-0.5
120	ok	0.17	5.81e-02	4.12e-02	13.4	13.4	7.5	7.5	-164.6	-35.1	25.3	-0.4	-1.2	-5.42e-02
121	ok	0.17	6.83e-02	3.87e-02	13.4	13.4	7.5	7.5	-139.4	-28.4	-17.9	-2.6	-1.8	3.9
122	ok	0.17	8.09e-02	4.37e-02	13.4	13.4	7.5	7.5	-208.0	-16.3	-40.4	-4.4	-3.1	3.6
123	ok	0.17	9.83e-02	4.05e-02	13.4	13.4	7.5	7.5	-194.1	-33.2	-32.1	-4.8	-4.5	3.1
124	ok	0.17	8.93e-02	3.37e-02	13.4	13.4	7.5	7.5	-167.1	86.4	-5.5	-3.5	-4.2	0.7
125	ok	0.17	6.60e-02	3.61e-02	13.4	13.4	7.5	7.5	-171.5	-31.0	32.4	1.4	0.3	-0.1
126	ok	0.17	9.78e-02	4.65e-02	13.4	13.4	7.5	7.5	-134.3	-42.1	49.4	5.1	-3.3	4.2
127	ok	0.17	7.05e-02	3.63e-02	13.4	13.4	7.5	7.5	-170.5	-35.2	35.5	-0.8	-1.3	-0.2
128	ok	0.17	7.63e-02	3.42e-02	13.4	13.4	7.5	7.5	-114.2	-38.1	46.5	-1.3	-1.3	0.4
129	ok	0.17	7.82e-02	3.07e-02	13.4	13.4	7.5	7.5	-131.0	-25.5	-10.3	-3.7	-2.4	3.9
130	ok	0.17	7.74e-02	2.40e-02	13.4	13.4	7.5	7.5	-117.0	-41.1	-12.4	-2.9	-2.6	4.0
131	ok	0.17	8.10e-02	1.82e-02	13.4	13.4	7.5	7.5	-73.0	-14.4	-26.1	-1.3	-1.2	4.0
132	ok	0.17	8.24e-02	2.09e-02	13.4	13.4	7.5	7.5	1.8	115.9	57.0	-0.9	-3.0	-1.1
133	ok	0.17	8.52e-02	3.21e-02	13.4	13.4	7.5	7.5	-147.1	-27.1	37.9	1.1	0.2	2.41e-02
134	ok	0.17	8.53e-02	6.07e-02	13.4	13.4	7.5	7.5	17.1	-220.1	131.1	0.3	1.1	0.3
135	ok	0.17	9.26e-02	3.25e-02	13.4	13.4	7.5	7.5	-131.1	-33.6	52.3	-1.8	-0.6	0.4
136	ok	0.17	9.38e-02	3.11e-02	13.4	13.4	7.5	7.5	-117.0	-36.9	57.2	-1.7	-1.4	0.6
137	ok	0.17	9.07e-02	3.00e-02	13.4	13.4	7.5	7.5	-112.2	-41.5	58.9	-0.8	-1.6	0.6
138	ok	0.17	9.23e-02	2.90e-02	13.4	13.4	7.5	7.5	-79.6	-42.6	66.5	1.0	-1.8	0.1
139	ok	0.17	9.24e-02	2.63e-02	13.4	13.4	7.5	7.5	-26.3	-15.6	-43.3	2.7	1.7	-1.4
140	ok	0.17	8.81e-02	1.69e-02	13.4	13.4	7.5	7.5	-12.3	83.3	58.0	-0.5	-2.1	-1.7
141	ok	0.17	0.1	3.14e-02	13.4	13.4	7.5	7.5	-124.1	-25.6	54.1	-0.9	-0.2	0.2
142	ok	0.17	0.4	6.66e-02	13.4	13.4	7.5	7.5	-292.2	-63.2	-22.8	-23.1	-4.6	0.7
143	ok	0.17	0.1	3.22e-02	13.4	13.4	7.5	7.5	-128.4	-28.7	58.5	-2.3	-0.5	0.6
144	ok	0.17	0.1	3.26e-02	13.4	13.4	7.5	7.5	-121.9	-29.0	68.8	-1.8	-0.4	0.7
145	ok	0.17	0.1	3.39e-02	13.4	13.4	7.5	7.5	-113.9	-28.6	82.3	-0.3	-0.7	0.8
146	ok	0.17	0.1	3.94e-02	13.4	13.4	7.5	7.5	-105.1	-25.6	91.5	1.9	-1.0	0.2

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N z	N o	N zo	M z	M o	M zo
221	ok	0.17	0.2	3.62e-02	13.4	13.4	7.5	7.5	-176.5	-43.9	-19.7	-9.4	-2.8	2.6
222	ok	0.17	0.1	3.54e-02	13.4	13.4	7.5	7.5	-144.5	-47.1	-34.8	-3.0	-2.4	2.3
223	ok	0.17	7.47e-02	4.48e-02	13.4	13.4	7.5	7.5	-100.7	-3.3	-89.0	3.4	-1.8	1.8
224	ok	0.17	8.27e-02	3.94e-02	13.4	13.4	7.5	7.5	-71.1	23.7	-155.7	3.8	1.0	2.7
225	ok	0.17	0.4	4.82e-02	13.4	13.4	7.5	7.5	-238.4	-43.9	-13.8	-19.1	-3.8	0.6
226	ok	0.17	0.1	8.34e-02	13.4	13.4	7.5	7.5	-398.6	-81.3	67.4	5.6	2.0	1.6
Nodo		x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N z	N o	N zo	M z	M o	M zo
									-438.39	-220.05	-155.65	-38.08	-7.21	-4.20
		0.17	0.42	0.09	13.40	13.40	7.54	7.54	17.07	206.90	177.16	25.79	10.62	7.00

Nodo	Stato	Max tau	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
		N/mm2					kN/ m	kN/ m
1	ok	1.11						
11	ok	2.51						
12	ok	3.16						
13	ok	3.02						
14	ok	2.08						
15	ok	2.43						
16	ok	2.25						
17	ok	1.14						
18	ok	0.55						
43	ok	1.05						
56	ok	1.01						
64	ok	0.77						
72	ok	0.22						
80	ok	1.53						
88	ok	3.59						
96	ok	1.54						
104	ok	1.16						
111	ok	0.33						
112	ok	0.51						
113	ok	0.40						
114	ok	0.59						
115	ok	0.92						
116	ok	1.25						
117	ok	0.33						
118	ok	1.11						
119	ok	0.51						
120	ok	0.40						
121	ok	0.59						
122	ok	0.92						
123	ok	1.25						
124	ok	0.58						
125	ok	0.39						
126	ok	1.65						
127	ok	0.39						
128	ok	0.25						
129	ok	0.21						
130	ok	0.19						
131	ok	0.17						
132	ok	0.63						
133	ok	0.39						
134	ok	0.34						
135	ok	0.39						
136	ok	0.30						
137	ok	0.29						
138	ok	0.31						
139	ok	0.23						
140	ok	0.78						
141	ok	0.37						
142	ok	2.14						
143	ok	0.37						
144	ok	0.34						
145	ok	0.36						
146	ok	0.42						
147	ok	0.44						
148	ok	1.03						
149	ok	0.48						
150	ok	1.38						
151	ok	0.75						
152	ok	0.93						

Nodo	Stato	Max tau	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
153	ok	1.05						
154	ok	1.25						
155	ok	1.43						
156	ok	2.25						
157	ok	0.65						
158	ok	0.87						
159	ok	0.97						
160	ok	1.07						
161	ok	1.27						
162	ok	1.63						
163	ok	0.65						
164	ok	3.03						
165	ok	0.87						
166	ok	0.97						
167	ok	1.07						
168	ok	1.27						
169	ok	1.63						
170	ok	1.33						
171	ok	0.61						
172	ok	3.59						
173	ok	0.67						
174	ok	0.60						
175	ok	0.59						
176	ok	0.55						
177	ok	0.64						
178	ok	0.64						
179	ok	0.68						
180	ok	3.16						
181	ok	0.74						
182	ok	0.64						
183	ok	0.62						
184	ok	0.59						
185	ok	0.41						
186	ok	0.64						
187	ok	0.68						
188	ok	2.14						
189	ok	0.74						
190	ok	0.64						
191	ok	0.63						
192	ok	0.66						
193	ok	0.67						
194	ok	0.72						
195	ok	1.07						
196	ok	2.43						
197	ok	1.21						
198	ok	1.31						
199	ok	1.42						
200	ok	1.52						
201	ok	1.91						
202	ok	2.08						
203	ok	1.35						
204	ok	1.45						
205	ok	1.38						
206	ok	1.46						
207	ok	1.58						
208	ok	2.07						
209	ok	1.35						
210	ok	2.51						
211	ok	1.45						
212	ok	1.38						
213	ok	1.46						
214	ok	1.58						
215	ok	2.07						
216	ok	2.02						
217	ok	1.21						
218	ok	3.02						
219	ok	1.26						
220	ok	1.03						
221	ok	0.98						
222	ok	0.90						
223	ok	0.90						
224	ok	0.32						
225	ok	1.34						
226	ok	3.03						

Nodo	Stato	Max tau	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
Nodo		Max tau	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
		3.59						

Macro Setto	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
2	30.00	4	1	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N z	N o	N zo	M z	M o	M zo
									kN/ m	kN/ m	kN/ m	kN	kN	kN
2	ok	0.17	0.2	6.53e-02	13.4	13.4	7.5	7.5	-259.3	249.3	37.8	-15.6	-2.1	1.2
18	ok	0.17	0.1	5.97e-02	13.4	13.4	7.5	7.5	-172.7	203.3	-16.3	5.2	3.1	3.5
41	ok	0.17	0.2	5.92e-02	13.4	13.4	7.5	7.5	-288.1	-61.8	-34.3	16.8	3.4	-1.2
42	ok	0.17	0.2	5.21e-02	13.4	13.4	7.5	7.5	-255.2	-44.6	-25.4	14.1	2.8	-1.2
44	ok	0.17	0.2	5.58e-02	13.4	13.4	7.5	7.5	-275.0	-31.0	-20.5	18.0	3.5	-1.8
45	ok	0.17	0.2	5.46e-02	13.4	13.4	7.5	7.5	-203.9	-44.5	-27.1	16.6	3.8	-2.7
46	ok	0.17	0.2	5.17e-02	13.4	13.4	7.5	7.5	-256.1	-27.0	-11.2	12.4	2.4	-2.8
47	ok	0.17	0.2	5.01e-02	13.4	13.4	7.5	7.5	-194.6	-48.3	-20.4	11.6	3.1	-3.9
48	ok	0.17	0.1	5.37e-02	13.4	13.4	7.5	7.5	-252.9	-35.5	-0.6	7.7	1.5	-3.3
49	ok	0.17	0.1	4.90e-02	13.4	13.4	7.5	7.5	-178.0	-64.9	-7.0	7.4	2.3	-4.6
50	ok	0.17	9.53e-02	6.46e-02	13.4	13.4	7.5	7.5	-294.1	-80.1	75.5	-4.8	-1.8	-4.6
51	ok	0.17	0.1	5.71e-02	13.4	13.4	7.5	7.5	-139.8	-92.3	18.8	4.0	2.0	-6.6
52	ok	0.17	0.2	6.95e-02	13.4	13.4	7.5	7.5	-288.3	-102.7	-2.2	-14.2	-4.0	-3.0
53	ok	0.17	9.76e-02	5.57e-02	13.4	13.4	7.5	7.5	-252.3	-57.8	68.5	-4.7	-2.0	-4.8
54	ok	0.17	0.1	8.36e-02	13.4	13.4	7.5	7.5	-182.1	369.9	-32.3	-5.2	3.2	1.3
55	ok	0.17	0.2	3.86e-02	13.4	13.4	7.5	7.5	-186.1	-32.4	-27.8	9.3	1.9	-0.9
57	ok	0.17	0.2	3.92e-02	13.4	13.4	7.5	7.5	-187.2	-39.4	-32.2	12.8	3.1	-2.5
58	ok	0.17	0.2	3.64e-02	13.4	13.4	7.5	7.5	-175.6	-43.5	-25.1	10.1	3.0	-3.9
59	ok	0.17	0.1	3.21e-02	13.4	13.4	7.5	7.5	-101.2	-66.6	-35.5	6.6	2.9	-4.2
60	ok	0.17	0.1	3.80e-02	13.4	13.4	7.5	7.5	-107.1	-82.5	7.8	3.9	2.3	-6.3
61	ok	0.17	8.47e-02	4.95e-02	13.4	13.4	7.5	7.5	-80.5	-19.0	121.8	1.0	-3.3	2.4
62	ok	0.17	8.94e-02	7.09e-02	13.4	13.4	7.5	7.5	-72.3	-140.3	122.3	1.1	-3.5	2.2
63	ok	0.17	0.2	2.94e-02	13.4	13.4	7.5	7.5	-134.2	-21.4	-36.1	6.0	1.2	-0.7
65	ok	0.17	0.1	3.02e-02	13.4	13.4	7.5	7.5	-132.4	-42.1	-41.2	9.8	2.4	-1.8
66	ok	0.17	0.1	2.63e-02	13.4	13.4	7.5	7.5	-102.6	-54.0	-42.6	8.5	2.8	-3.2
67	ok	0.17	0.1	2.99e-02	13.4	13.4	7.5	7.5	-84.6	-63.2	-47.6	5.8	2.8	-3.8
68	ok	0.17	0.1	3.33e-02	13.4	13.4	7.5	7.5	-61.8	-13.3	93.5	2.2	-2.9	-1.3
69	ok	0.17	9.31e-02	3.24e-02	13.4	13.4	7.5	7.5	-20.8	28.6	-90.9	-0.4	5.0	-2.7
70	ok	0.17	0.1	4.37e-02	13.4	13.4	7.5	7.5	-16.8	117.3	-84.4	-0.6	5.6	-2.4
71	ok	0.17	0.1	2.34e-02	13.4	13.4	7.5	7.5	-90.9	-16.8	-47.5	3.5	0.7	-0.5
73	ok	0.17	0.1	2.48e-02	13.4	13.4	7.5	7.5	-88.2	-30.4	-52.9	7.4	1.8	-1.4
74	ok	0.17	0.1	2.61e-02	13.4	13.4	7.5	7.5	-74.7	-36.7	-61.5	7.0	2.5	-2.6
75	ok	0.17	0.1	2.85e-02	13.4	13.4	7.5	7.5	-59.0	-37.7	-76.0	5.1	2.7	-3.1
76	ok	0.17	9.49e-02	2.78e-02	13.4	13.4	7.5	7.5	-42.3	-11.7	-100.1	2.6	4.3	-3.1
77	ok	0.17	9.55e-02	2.82e-02	13.4	13.4	7.5	7.5	-30.8	12.2	-107.4	0.7	5.2	-3.0
78	ok	0.17	0.1	2.66e-02	13.4	13.4	7.5	7.5	-26.7	44.8	-77.1	-0.3	6.0	-2.6
79	ok	0.17	0.1	2.21e-02	13.4	13.4	7.5	7.5	-73.4	-13.8	-55.8	1.7	0.3	-0.4
81	ok	0.17	8.94e-02	2.47e-02	13.4	13.4	7.5	7.5	-70.9	-21.4	-61.2	5.6	1.4	-1.0
82	ok	0.17	9.30e-02	2.74e-02	13.4	13.4	7.5	7.5	-61.8	-24.2	-73.5	5.6	2.1	-2.0
83	ok	0.17	9.09e-02	2.99e-02	13.4	13.4	7.5	7.5	-53.1	-23.4	-91.4	4.3	2.3	-2.5
84	ok	0.17	8.54e-02	2.91e-02	13.4	13.4	7.5	7.5	-40.8	-13.0	-108.5	2.4	4.2	-2.9
85	ok	0.17	8.99e-02	2.93e-02	13.4	13.4	7.5	7.5	-30.5	9.7	-114.2	0.8	5.1	-2.9
86	ok	0.17	9.88e-02	2.26e-02	13.4	13.4	7.5	7.5	-26.9	41.3	-93.4	1.0	6.0	-2.7
87	ok	0.17	9.51e-02	2.31e-02	13.4	13.4	7.5	7.5	-80.2	-17.3	47.4	-0.6	-0.1	-0.1
89	ok	0.17	7.09e-02	2.41e-02	13.4	13.4	7.5	7.5	-97.1	-34.8	41.0	3.1	0.8	-0.2
90	ok	0.17	7.46e-02	2.64e-02	13.4	13.4	7.5	7.5	-54.2	11.0	-73.5	3.4	1.1	-1.7
91	ok	0.17	7.61e-02	3.01e-02	13.4	13.4	7.5	7.5	-56.9	-3.5	-110.6	2.3	1.6	-2.3
92	ok	0.17	7.41e-02	3.17e-02	13.4	13.4	7.5	7.5	-51.9	-8.2	-112.1	1.8	3.4	-2.6
93	ok	0.17	7.73e-02	3.33e-02	13.4	13.4	7.5	7.5	-44.4	-17.7	-119.3	0.7	4.3	-2.9
94	ok	0.17	8.60e-02	3.76e-02	13.4	13.4	7.5	7.5	-58.4	-90.6	-100.7	-0.6	3.8	-2.8
95	ok	0.17	7.62e-02	2.81e-02	13.4	13.4	7.5	7.5	-101.3	-22.4	39.4	-0.7	-0.1	-7.90e-02
97	ok	0.17	5.90e-02	2.88e-02	13.4	13.4	7.5	7.5	-132.8	-37.0	30.9	2.7	1.0	-6.98e-03
98	ok	0.17	6.07e-02	2.65e-02	13.4	13.4	7.5	7.5	-120.5	-41.2	29.3	2.9	1.7	-0.6
99	ok	0.17	6.25e-02	2.82e-02	13.4	13.4	7.5	7.5	-59.1	24.0	-83.3	2.3	1.1	-1.8
100	ok	0.17	6.26e-02	3.44e-02	13.4	13.4	7.5	7.5	-66.1	14.9	-103.8	1.1	2.2	-2.5
101	ok	0.17	6.98e-02	4.62e-02	13.4	13.4	7.5	7.5	-68.3	-34.2	-126.3	-0.5	2.8	-2.9
102	ok	0.17	8.32e-02	6.45e-02	13.4	13.4	7.5	7.5	-63.1	-104.4	-119.6	-0.6	3.5	-2.8
103	ok	0.17	5.31e-02	4.08e-02	13.4	13.4	7.5	7.5	-200.0	-30.7	19.2	0.1	1.07e-02	0.3
105	ok	0.17	4.70e-02	4.21e-02	13.4	13.4	7.5	7.5	-206.1	-27.6	22.6	2.3	0.9	0.5

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N z	N o	N zo	M z	M o	M zo
106	ok	0.17	4.94e-02	3.77e-02	13.4	13.4	7.5	7.5	-127.5	-45.7	26.6	1.6	1.2	-0.6
107	ok	0.17	5.61e-02	3.48e-02	13.4	13.4	7.5	7.5	-155.0	-19.2	-16.5	1.7	1.3	-1.3
108	ok	0.17	6.74e-02	3.47e-02	13.4	13.4	7.5	7.5	-138.7	5.4	-44.3	2.5	2.3	-1.9
109	ok	0.17	7.40e-02	4.82e-02	13.4	13.4	7.5	7.5	-143.1	5.0	-27.0	2.6	3.0	-1.6
110	ok	0.17	0.1	7.56e-02	13.4	13.4	7.5	7.5	-101.2	298.6	47.3	1.4	3.5	3.8
111	ok	0.17	4.52e-02	4.29e-02	13.4	13.4	7.5	7.5	-207.7	-49.0	27.3	2.5	0.6	0.1
112	ok	0.17	4.07e-02	4.17e-02	13.4	13.4	7.5	7.5	-204.8	-40.3	17.7	1.4	-0.7	-1.56e-02
113	ok	0.17	4.94e-02	3.78e-02	13.4	13.4	7.5	7.5	-176.2	-35.7	7.5	-0.2	-1.8	-0.6
114	ok	0.17	5.51e-02	3.53e-02	13.4	13.4	7.5	7.5	-166.4	-43.8	-11.9	0.2	-0.4	-0.8
115	ok	0.17	6.42e-02	3.58e-02	13.4	13.4	7.5	7.5	-166.5	-80.5	-30.3	2.9	1.8	-1.5
116	ok	0.17	8.35e-02	3.95e-02	13.4	13.4	7.5	7.5	-184.8	-43.4	18.2	5.9	3.3	2.4
Nodo		x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N z	N o	N zo	M z	M o	M zo
									-294.07	-140.28	-126.29	-15.59	-3.99	-6.56
		0.17	0.22	0.08	13.40	13.40	7.54	7.54	-16.84	369.95	122.31	17.97	5.99	3.83

Nodo	Stato	Max tau	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
		N/mm2					kN/ m	kN/ m
2	ok	1.78						
18	ok	1.15						
41	ok	1.58						
42	ok	1.58						
44	ok	1.60						
45	ok	1.60						
46	ok	1.61						
47	ok	1.61						
48	ok	1.78						
49	ok	1.78						
50	ok	1.82						
51	ok	1.82						
52	ok	2.06						
53	ok	2.06						
54	ok	1.78						
55	ok	0.70						
57	ok	0.78						
58	ok	0.52						
59	ok	0.41						
60	ok	0.42						
61	ok	0.54						
62	ok	0.84						
63	ok	0.65						
65	ok	0.72						
66	ok	0.52						
67	ok	0.41						
68	ok	0.42						
69	ok	0.26						
70	ok	0.67						
71	ok	0.60						
73	ok	0.63						
74	ok	0.41						
75	ok	0.28						
76	ok	0.27						
77	ok	0.22						
78	ok	0.54						
79	ok	0.60						
81	ok	0.60						
82	ok	0.36						
83	ok	0.25						
84	ok	0.23						
85	ok	0.23						
86	ok	0.45						
87	ok	0.58						
89	ok	0.58						
90	ok	0.32						
91	ok	0.23						
92	ok	0.20						
93	ok	0.23						
94	ok	0.56						
95	ok	0.54						
97	ok	0.54						
98	ok	0.28						
99	ok	0.32						

Nodo	Stato	Max tau	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
100	ok	0.30						
101	ok	0.33						
102	ok	0.71						
103	ok	0.44						
105	ok	0.47						
106	ok	0.54						
107	ok	0.57						
108	ok	0.63						
109	ok	0.67						
110	ok	1.15						
111	ok	0.32						
112	ok	0.46						
113	ok	0.54						
114	ok	0.57						
115	ok	0.63						
116	ok	0.67						
Nodo		Max tau	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
		2.06						

STATI LIMITE D' ESERCIZIO

LEGENDA TABELLA STATI LIMITE D' ESERCIZIO

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

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

- Combinazioni rare
- Combinazioni frequenti
- Combinazioni quasi permanenti.

I valori di interesse sono i seguenti:

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

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

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

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

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

Pilas.	Pos.	rRfck	rRfyk	rPfck	Rif. cmb	Pos.	rRfck	rRfyk	rPfck	Rif. cmb
	cm					cm				
1	0.0	0.06	0.04	0.07	132,132,152	24.3	0.10	0.05	0.11	132,132,152
	48.6	0.14	0.10	0.17	132,131,152					
2	0.0	0.11	0.07	0.13	132,139,152	145.0	0.08	0.06	0.10	139,139,152
	290.0	0.15	0.09	0.18	132,132,152					
3	0.0	0.05	0.03	0.06	139,139,152	145.0	0.03	0.03	0.04	139,139,152
	290.0	0.05	0.03	0.06	139,139,152					
4	0.0	0.07	0.05	0.09	139,139,152	145.0	0.06	0.05	0.08	139,139,152
	290.0	0.08	0.06	0.10	139,139,152					
5	0.0	0.05	0.04	0.07	139,139,152	145.0	0.04	0.03	0.05	139,139,152
	290.0	0.05	0.04	0.06	139,139,152					
9	0.0	0.03	0.02	0.03	139,139,152	24.3	0.03	0.02	0.03	139,139,152
	48.6	0.03	0.02	0.03	139,139,152					
21	0.0	0.04	0.03	0.05	139,139,152	185.0	0.04	0.03	0.05	139,139,152
	370.0	0.06	0.04	0.08	131,132,152					
22	0.0	0.17	0.09	0.19	131,132,152	185.0	0.04	0.03	0.05	139,139,152
	370.0	0.18	0.09	0.20	131,131,152					
23	0.0	0.04	0.03	0.05	139,139,152	185.0	0.02	0.02	0.03	139,139,152
	370.0	0.04	0.03	0.04	139,139,152					
24	0.0	0.07	0.05	0.08	139,139,152	185.0	0.04	0.03	0.05	139,139,152
	370.0	0.07	0.05	0.08	139,139,152					
25	0.0	0.04	0.03	0.05	139,139,152	185.0	0.03	0.02	0.04	139,139,152
	370.0	0.04	0.03	0.05	139,139,152					
26	0.0	0.05	0.03	0.06	139,139,152	185.0	0.03	0.02	0.04	139,139,152
	370.0	0.04	0.03	0.05	139,139,152					
27	0.0	0.08	0.05	0.09	139,139,152	185.0	0.05	0.04	0.05	139,139,152
	370.0	0.07	0.05	0.09	139,139,152					
28	0.0	0.13	0.08	0.16	131,132,152	185.0	0.06	0.04	0.07	139,139,152
	370.0	0.17	0.09	0.19	131,131,152					
29	0.0	0.05	0.03	0.06	139,139,152	185.0	0.05	0.03	0.06	139,139,152
	370.0	0.07	0.04	0.08	131,132,152					
41	0.0	0.08	0.05	0.09	139,139,152	187.5	0.02	0.02	0.02	137,137,152
	375.0	0.09	0.07	0.07	139,139,152					
42	0.0	0.18	0.13	0.20	139,132,152	187.5	0.04	0.02	0.02	137,137,151
	375.0	0.22	0.19	0.19	139,139,152					
43	0.0	0.04	0.03	0.05	139,139,152	187.5	0.02	0.01	0.01	139,139,152
	375.0	0.06	0.04	0.07	139,139,152					
44	0.0	0.07	0.04	0.07	139,139,152	187.5	0.03	0.02	0.03	137,137,151
	375.0	0.07	0.05	0.07	139,139,152					
45	0.0	0.04	0.03	0.05	139,139,152	187.5	0.02	0.02	0.02	139,139,152
	375.0	0.04	0.02	0.04	139,139,152					
46	0.0	0.04	0.03	0.05	139,139,152	187.5	0.02	0.01	0.02	139,139,152
	375.0	0.04	0.03	0.05	139,139,152					
47	0.0	0.07	0.04	0.08	139,139,152	187.5	0.03	0.02	0.03	137,137,151
	375.0	0.08	0.04	0.08	139,139,152					
48	0.0	0.20	0.15	0.22	139,132,152	187.5	0.04	0.02	0.02	137,137,152
	375.0	0.23	0.21	0.20	139,139,152					
49	0.0	0.08	0.05	0.10	139,139,152	187.5	0.02	0.02	0.02	137,137,152
	375.0	0.09	0.07	0.07	139,139,152					
61	0.0	0.04	0.02	0.04	139,139,152	120.0	0.01	8.36e-03	7.57e-03	137,137,152
	240.0	0.05	0.04	0.04	139,139,152					
62	0.0	0.04	0.02	0.04	139,139,152	120.0	8.98e-03	6.55e-03	0.01	137,137,152
	240.0	0.03	0.02	0.03	139,139,152					
63	0.0	0.08	0.07	0.08	139,139,152	120.0	0.02	0.01	0.02	131,139,152
	240.0	0.07	0.06	0.05	139,139,152					
64	0.0	0.11	0.10	0.10	139,139,152	120.0	0.01	9.56e-03	0.02	139,139,152
	240.0	0.08	0.08	0.06	139,139,152					
69	0.0	0.03	0.02	0.03	139,139,152	23.6	0.02	0.02	0.03	139,139,152
	47.1	0.02	0.02	0.02	139,139,152					
70	0.0	0.03	0.02	0.04	143,139,152	23.6	0.03	0.02	0.03	139,139,152
	47.1	0.02	0.02	0.03	139,139,152					
71	0.0	0.02	0.02	0.03	143,143,152	23.6	0.02	0.01	0.02	143,139,152
	47.1	0.02	0.01	0.02	139,139,152					
72	0.0	0.02	0.01	0.03	132,132,152	23.6	0.02	0.01	0.03	132,139,152
	47.1	0.02	0.01	0.03	139,139,152					
73	0.0	0.01	0.01	0.02	139,139,152	23.6	0.01	0.01	0.02	139,139,152
	47.1	0.01	9.95e-03	0.02	139,139,152					
78	0.0	0.02	0.02	0.02	139,139,152	24.3	0.02	0.02	0.02	139,139,152
	48.6	0.02	0.02	0.03	139,139,152					
79	0.0	0.02	0.02	0.03	139,139,152	24.3	0.02	0.01	0.02	139,139,152
	48.6	0.02	0.01	0.02	139,139,152					
80	0.0	0.02	0.01	0.02	139,139,152	24.3	0.02	0.01	0.02	139,139,152

Pilas.	Pos.	rRfck	rRfyk	rPfck	Rif. cmb	Pos.	rRfck	rRfyk	rPfck	Rif. cmb
	48.6	0.02	0.01	0.02	139,139,152					
81	0.0	0.02	0.02	0.03	139,139,152	24.3	0.02	0.01	0.02	139,139,152
	48.6	0.02	0.01	0.02	139,139,152					
82	0.0	0.01	9.98e-03	0.02	139,139,152	24.3	0.01	9.62e-03	0.02	139,139,152
	48.6	0.01	9.25e-03	0.01	139,139,152					
87	0.0	0.02	0.02	0.03	139,139,152	17.1	0.02	0.02	0.03	139,139,152
	34.3	0.02	0.02	0.03	139,139,152					
88	0.0	0.02	0.01	0.02	139,139,152	17.1	0.02	0.01	0.02	139,139,152
	34.3	0.02	0.01	0.02	139,139,152					
89	0.0	0.02	0.01	0.02	139,139,152	17.1	0.02	0.01	0.02	139,139,152
	34.3	0.02	0.01	0.02	139,139,152					
90	0.0	0.02	0.01	0.02	139,139,152	17.1	0.02	0.01	0.02	139,139,152
	34.3	0.02	0.01	0.02	139,139,152					
91	0.0	0.01	9.71e-03	0.02	139,139,152	17.1	0.01	9.51e-03	0.01	139,139,152
	34.3	0.01	9.31e-03	0.01	139,139,152					
96	0.0	0.02	0.02	0.03	139,139,152	31.4	0.02	0.02	0.02	139,139,152
	62.9	0.02	0.02	0.02	139,139,152					
97	0.0	0.02	0.01	0.02	139,139,152	31.4	0.02	0.01	0.02	139,139,152
	62.9	0.02	0.02	0.03	139,139,152					
98	0.0	0.02	0.01	0.02	139,139,152	31.4	0.02	0.01	0.02	139,139,152
	62.9	0.02	0.02	0.03	139,139,152					
99	0.0	0.02	0.01	0.02	139,139,152	31.4	0.03	0.02	0.03	139,139,152
	62.9	0.03	0.02	0.04	132,139,152					
100	0.0	0.01	9.90e-03	0.02	139,139,152	31.4	0.01	9.60e-03	0.01	139,139,152
	62.9	0.01	9.48e-03	0.01	139,139,152					
105	0.0	0.02	0.02	0.03	139,139,152	24.3	0.03	0.02	0.03	139,139,152
	48.6	0.03	0.02	0.04	139,139,152					
106	0.0	0.02	0.02	0.03	139,139,152	24.3	0.02	0.02	0.03	139,139,152
	48.6	0.03	0.02	0.03	139,139,152					
107	0.0	0.02	0.02	0.03	139,139,152	24.3	0.03	0.02	0.03	139,139,152
	48.6	0.03	0.02	0.04	139,139,152					
108	0.0	0.03	0.02	0.04	132,139,152	24.3	0.04	0.03	0.05	132,132,152
	48.6	0.06	0.03	0.07	132,132,152					
109	0.0	0.02	0.01	0.02	139,139,152	24.3	0.02	0.01	0.02	139,139,152
	48.6	0.02	0.02	0.03	139,139,152					
114	0.0	0.03	0.02	0.04	139,139,152	24.3	0.04	0.02	0.04	139,139,152
	48.6	0.04	0.03	0.05	139,139,152					
115	0.0	0.03	0.02	0.04	139,139,152	24.3	0.03	0.02	0.04	139,139,152
	48.6	0.03	0.02	0.04	139,139,152					
116	0.0	0.03	0.02	0.04	139,139,152	24.3	0.04	0.02	0.05	139,139,152
	48.6	0.05	0.03	0.06	132,132,152					
Pilas.		rRfck	rRfyk	rPfck			rRfck	rRfyk	rPfck	
		0.23	0.21	0.22						

Trave	Pos.	rRfck	rRfyk	rPfck	Rif. cmb	wR	wF	wP	Rif. cmb	dR	dF	dP	Rif. cmb
	cm					mm	mm	mm		mm	mm	mm	
6	0.0	0.0	0.03	0.0	0,139,0	0.0	0.0	0.0	0,0,0	-0.01	-8.95e-03	-8.92e-03	139,148,152
	25.3	0.0	0.03	0.0	0,139,0	0.0	0.0	0.0	0,0,0				
	50.6	0.0	0.03	0.0	0,139,0	0.0	0.0	0.0	0,0,0				
7	0.0	0.0	0.01	0.0	0,139,0	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-0.02	139,145,152
	33.7	0.01	0.05	0.01	139,139,152	0.0	0.0	0.0	0,0,0				
	67.3	0.01	0.05	0.01	137,139,151	0.0	0.0	0.0	0,0,0				
8	0.0	0.0	0.04	0.0	0,139,0	0.0	0.0	0.0	0,0,0	-5.40e-03	-4.34e-03	-4.32e-03	139,148,152
	25.3	0.0	0.04	0.0	0,139,0	0.0	0.0	0.0	0,0,0				
	50.6	0.0	0.04	0.0	0,139,0	0.0	0.0	0.0	0,0,0				
10	0.0	0.01	0.06	0.01	137,139,151	0.0	0.0	0.0	0,0,0	0.03	0.03	0.03	139,145,152
	25.3	8.21e-03	0.05	5.45e-03	137,132,151	0.0	0.0	0.0	0,0,0				
	50.6	0.0	0.03	0.0	0,131,0	0.0	0.0	0.0	0,0,0				
11	0.0	8.11e-04	0.04	4.61e-04	142,139,152	0.0	0.0	0.0	0,0,0	0.02	0.02	0.02	139,145,152
	27.7	0.0	0.03	0.0	0,139,0	0.0	0.0	0.0	0,0,0				
	55.5	0.0	0.03	0.0	0,139,0	0.0	0.0	0.0	0,0,0				
12	0.0	0.02	0.03	0.03	139,139,152	0.0	0.0	0.0	0,0,0	0.02	0.02	0.02	139,145,152
	25.3	0.02	0.02	0.02	139,139,152	0.0	0.0	0.0	0,0,0				
	50.6	7.93e-03	7.44e-03	9.50e-03	132,132,152	0.0	0.0	0.0	0,0,0				
13	0.0	0.01	0.03	0.02	139,139,152	0.0	0.0	0.0	0,0,0	8.67e-03	7.38e-03	7.29e-03	139,145,152
	18.6	0.01	0.03	0.01	139,139,152	0.0	0.0	0.0	0,0,0				
	37.2	5.52e-03	0.01	6.46e-03	139,139,152	0.0	0.0	0.0	0,0,0				
14	0.0	0.02	0.05	0.02	139,139,152	0.0	0.0	0.0	0,0,0	-0.20	-0.18	-0.18	139,145,152
	166.5	7.36e-03	0.02	9.75e-03	137,133,151	0.0	0.0	0.0	0,0,0				
	333.0	2.66e-03	4.90e-03	2.01e-03	139,139,152	0.0	0.0	0.0	0,0,0				
15	0.0	7.61e-03	0.02	7.58e-03	132,132,152	0.0	0.0	0.0	0,0,0	0.14	0.13	0.13	132,145,152

Trave	Pos.	rRfck	rRfyk	rPfck	Rif. cmb	wR	wF	wP	Rif. cmb	dR	dF	dP	Rif. cmb
	151.7	0.01	0.03	0.02	132,132,152	0.0	0.0	0.0	0,0,0				
	303.5	0.01	0.04	0.02	132,132,152	0.0	0.0	0.0	0,0,0				
16	0.0	9.58e-03	0.02	0.01	139,139,152	0.0	0.0	0.0	0,0,0	-0.14	-0.13	-0.12	139,145,152
	83.0	3.40e-03	5.05e-03	4.57e-03	133,129,151	0.0	0.0	0.0	0,0,0				
	166.0	0.01	0.03	0.01	131,131,152	0.0	0.0	0.0	0,0,0				
17	0.0	5.89e-03	0.02	6.39e-03	139,139,152	0.0	0.0	0.0	0,0,0	0.09	0.08	0.08	139,145,152
	105.2	0.01	0.04	0.02	137,137,151	0.0	0.0	0.0	0,0,0				
	210.3	0.01	0.03	0.01	139,139,152	0.0	0.0	0.0	0,0,0				
18	0.0	6.44e-03	0.01	7.63e-03	131,131,152	0.0	0.0	0.0	0,0,0	0.11	-0.11	-0.11	139,145,152
	153.2	0.03	0.06	0.03	132,132,152	0.0	0.0	0.0	0,0,0				
	306.4	0.02	0.04	0.02	132,132,152	0.0	0.0	0.0	0,0,0				
19	0.0	0.16	0.39	0.19	131,131,152	0.09	0.0	0.0	131,0,0	-2.54	-2.39	-2.33	131,145,152
	236.2	0.18	0.45	0.22	132,132,152	0.10	0.11	0.10	132,145,152				
	472.4	0.22	0.53	0.26	132,131,152	0.13	0.14	0.13	131,145,152				
20	0.0	0.04	0.10	0.05	131,131,152	0.0	0.0	0.0	0,0,0	-0.28	-0.27	-0.27	139,145,152
	153.2	0.07	0.16	0.08	132,132,152	0.0	0.0	0.0	0,0,0				
	306.4	0.06	0.15	0.07	132,132,152	0.0	0.0	0.0	0,0,0				
30	0.0	0.08	0.21	0.10	132,139,152	0.0	0.0	0.0	0,0,0	-1.18	-1.12	-1.10	131,145,152
	236.2	0.14	0.35	0.18	131,132,152	0.0	0.0	0.0	0,0,0				
	472.4	0.09	0.23	0.11	132,139,152	0.0	0.0	0.0	0,0,0				
31	0.0	0.02	0.04	0.02	139,132,152	0.0	0.0	0.0	0,0,0	-0.17	-0.17	-0.17	132,145,152
	166.5	0.04	0.09	0.05	137,137,151	0.0	0.0	0.0	0,0,0				
	333.0	0.02	0.06	0.03	131,131,152	0.0	0.0	0.0	0,0,0				
32	0.0	0.02	0.05	0.02	136,136,151	0.0	0.0	0.0	0,0,0	-0.12	-0.12	-0.12	131,145,152
	151.7	0.03	0.07	0.04	131,132,152	0.0	0.0	0.0	0,0,0				
	303.5	0.02	0.04	0.02	132,132,152	0.0	0.0	0.0	0,0,0				
33	0.0	8.47e-03	0.03	7.73e-03	139,139,152	0.0	0.0	0.0	0,0,0	0.09	0.06	0.06	139,145,152
	105.2	0.01	0.04	0.02	131,139,152	0.0	0.0	0.0	0,0,0				
	210.3	7.14e-03	0.02	7.67e-03	139,139,152	0.0	0.0	0.0	0,0,0				
34	0.0	0.01	0.04	0.02	139,139,152	0.0	0.0	0.0	0,0,0	-0.29	-0.27	-0.26	132,145,152
	166.5	0.01	0.03	0.01	137,137,151	0.0	0.0	0.0	0,0,0				
	333.0	4.16e-03	9.97e-03	2.77e-03	139,139,152	0.0	0.0	0.0	0,0,0				
35	0.0	0.02	0.05	0.02	132,132,152	0.0	0.0	0.0	0,0,0	0.26	0.23	0.23	139,145,152
	151.7	0.01	0.04	0.02	131,132,152	0.0	0.0	0.0	0,0,0				
	303.5	0.02	0.06	0.03	139,139,152	0.0	0.0	0.0	0,0,0				
36	0.0	0.02	0.05	0.02	139,139,152	0.0	0.0	0.0	0,0,0	-0.28	-0.24	-0.24	139,145,152
	83.0	4.01e-05	8.48e-03	0.0	132,139,0	0.0	0.0	0.0	0,0,0				
	166.0	8.80e-03	0.03	3.43e-03	137,137,152	0.0	0.0	0.0	0,0,0				
37	0.0	0.02	0.04	0.02	139,139,152	0.0	0.0	0.0	0,0,0	0.18	0.13	0.13	139,145,152
	105.2	0.02	0.05	0.02	137,137,151	0.0	0.0	0.0	0,0,0				
	210.3	0.02	0.05	0.02	139,139,152	0.0	0.0	0.0	0,0,0				
38	0.0	2.45e-03	6.58e-03	2.89e-03	131,131,152	0.0	0.0	0.0	0,0,0	-0.13	-0.13	-0.13	139,145,152
	153.2	0.03	0.08	0.04	132,131,152	0.0	0.0	0.0	0,0,0				
	306.4	0.02	0.04	0.02	139,132,152	0.0	0.0	0.0	0,0,0				
39	0.0	0.18	0.44	0.22	132,132,152	0.13	0.12	0.12	132,145,152	-3.10	-3.20	-3.06	131,145,152
	236.2	0.21	0.51	0.25	131,131,152	0.16	0.15	0.14	131,145,152				
	472.4	0.18	0.44	0.22	132,132,152	0.14	0.12	0.12	132,145,152				
40	0.0	0.04	0.11	0.05	131,131,152	0.0	0.0	0.0	0,0,0	-0.37	-0.34	-0.33	131,145,152
	153.2	0.08	0.19	0.09	131,132,152	0.0	0.0	0.0	0,0,0				
	306.4	0.05	0.12	0.05	139,139,152	0.0	0.0	0.0	0,0,0				
50	0.0	0.06	0.11	0.04	139,139,152	0.0	0.0	0.0	0,0,0	-1.08	-0.49	-0.48	137,146,151
	236.2	0.12	0.27	0.08	137,137,151	0.0	0.0	0.0	0,0,0				
	472.4	0.06	0.12	0.05	139,139,152	0.0	0.0	0.0	0,0,0				
51	0.0	6.89e-03	0.02	8.56e-03	139,139,152	0.0	0.0	0.0	0,0,0	-0.19	-0.15	-0.15	139,145,152
	166.5	8.98e-03	0.02	0.01	131,131,152	0.0	0.0	0.0	0,0,0				
	333.0	9.32e-03	0.02	9.06e-03	137,137,151	0.0	0.0	0.0	0,0,0				
52	0.0	0.01	0.03	7.89e-03	137,137,151	0.0	0.0	0.0	0,0,0	-0.05	-0.04	-0.04	136,149,151
	151.7	0.01	0.02	0.01	137,137,151	0.0	0.0	0.0	0,0,0				
	303.5	0.01	0.02	0.01	139,139,152	0.0	0.0	0.0	0,0,0				
53	0.0	0.02	0.04	0.01	139,139,152	0.0	0.0	0.0	0,0,0	-0.13	-0.12	-0.12	138,145,152
	105.2	0.05	0.11	0.06	139,139,152	0.0	0.0	0.0	0,0,0				
	210.3	0.04	0.11	0.06	139,139,152	0.0	0.0	0.0	0,0,0				
54	0.0	9.64e-03	0.02	0.01	132,139,152	0.0	0.0	0.0	0,0,0	-0.33	-0.27	-0.27	139,145,152
	166.5	0.01	0.03	0.02	131,131,152	0.0	0.0	0.0	0,0,0				
	333.0	2.92e-03	5.80e-03	2.27e-03	131,131,152	0.0	0.0	0.0	0,0,0				
55	0.0	0.03	0.06	0.02	139,139,152	0.0	0.0	0.0	0,0,0	0.34	0.28	0.27	139,145,152
	151.7	0.02	0.05	0.02	139,139,152	0.0	0.0	0.0	0,0,0				
	303.5	0.02	0.04	0.02	139,139,152	0.0	0.0	0.0	0,0,0				
56	0.0	0.02	0.05	0.03	131,131,152	0.0	0.0	0.0	0,0,0	-0.42	-0.33	-0.32	139,145,152
	83.0	9.73e-03	0.02	0.01	131,131,152	0.0	0.0	0.0	0,0,0				
	166.0	8.72e-03	0.02	0.01	131,131,152	0.0	0.0	0.0	0,0,0				
57	0.0	0.01	0.03	0.02	139,132,152	0.0	0.0	0.0	0,0,0	-0.09	-0.09	-0.09	131,145,152
	105.2	0.03	0.08	0.04	132,131,152	0.0	0.0	0.0	0,0,0				
	210.3	0.04	0.08	0.05	131,131,152	0.0	0.0	0.0	0,0,0				

Trave	Pos.	rRfck	rRfyk	rPfck	Rif. cmb	wR	wF	wP	Rif. cmb	dR	dF	dP	Rif. cmb
	55.5	0.04	0.06	0.04	139,139,152	0.0	0.0	0.0	0,0,0				
112	0.0	0.01	0.02	0.01	139,139,152	0.0	0.0	0.0	0,0,0	-0.01	-0.01	-0.01	139,145,152
	25.3	0.02	0.04	0.02	139,139,152	0.0	0.0	0.0	0,0,0				
	50.6	0.03	0.05	0.03	139,139,152	0.0	0.0	0.0	0,0,0				
113	0.0	0.01	0.03	0.01	139,139,152	0.0	0.0	0.0	0,0,0	-8.19e-03	-7.83e-03	-7.77e-03	139,145,152
	12.1	0.01	0.04	0.02	139,139,152	0.0	0.0	0.0	0,0,0				
	24.2	0.02	0.04	0.02	139,139,152	0.0	0.0	0.0	0,0,0				
Trave		rRfck	rRfyk	rPfck		wR	wF	wP		dR	dF	dP	
										-3.52	-3.20	-3.06	
		0.22	0.53	0.26		0.16	0.15	0.14		0.34	0.28	0.27	

Setto	rRfck	rRfyk	rPfck	Rif. cmb	wR	wF	wP	Rif. cmb
					mm	mm	mm	
1	0.03	0.02	0.03	143,143,152	0.0	0.0	0.0	0,0,0
2	0.03	0.02	0.03	139,139,152	0.0	0.0	0.0	0,0,0
3	0.02	0.02	0.03	139,139,152	0.0	0.0	0.0	0,0,0
4	0.02	0.02	0.03	139,139,152	0.0	0.0	0.0	0,0,0
5	0.02	0.02	0.03	139,139,152	0.0	0.0	0.0	0,0,0
6	0.03	0.02	0.04	139,139,152	0.0	0.0	0.0	0,0,0
7	0.04	0.04	0.05	139,131,152	0.0	0.0	0.0	0,0,0
8	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
9	0.03	0.02	0.03	143,139,152	0.0	0.0	0.0	0,0,0
10	0.02	0.02	0.03	139,139,152	0.0	0.0	0.0	0,0,0
11	0.02	0.02	0.03	139,139,152	0.0	0.0	0.0	0,0,0
12	0.02	0.02	0.02	139,139,152	0.0	0.0	0.0	0,0,0
13	0.02	0.02	0.02	139,139,152	0.0	0.0	0.0	0,0,0
14	0.02	0.08	0.02	139,139,152	0.0	0.0	0.0	0,0,0
15	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
16	0.03	0.02	0.03	143,143,152	0.0	0.0	0.0	0,0,0
17	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
18	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
19	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
20	0.01	0.02	0.01	139,142,152	0.0	0.0	0.0	0,0,0
21	8.68e-03	0.08	0.01	139,139,152	0.0	0.0	0.0	0,0,0
22	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
23	0.03	0.02	0.03	143,143,152	0.0	0.0	0.0	0,0,0
24	0.02	0.01	0.02	143,139,152	0.0	0.0	0.0	0,0,0
25	0.02	0.01	0.02	143,139,152	0.0	0.0	0.0	0,0,0
26	0.01	9.81e-03	0.02	143,139,152	0.0	0.0	0.0	0,0,0
27	9.11e-03	0.03	0.01	139,143,152	0.0	0.0	0.0	0,0,0
28	5.67e-03	0.08	7.06e-03	132,139,152	0.0	0.0	0.0	0,0,0
29	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
30	0.03	0.02	0.03	143,143,152	0.0	0.0	0.0	0,0,0
31	0.01	0.01	0.02	143,143,152	0.0	0.0	0.0	0,0,0
32	0.01	9.62e-03	0.02	143,143,152	0.0	0.0	0.0	0,0,0
33	0.01	8.44e-03	0.01	143,143,152	0.0	0.0	0.0	0,0,0
34	8.55e-03	0.03	0.01	143,143,152	0.0	0.0	0.0	0,0,0
35	5.99e-03	0.07	7.48e-03	132,139,152	0.0	0.0	0.0	0,0,0
36	0.02	0.05	0.02	139,139,152	0.0	0.0	0.0	0,0,0
37	0.03	0.02	0.03	143,143,152	0.0	0.0	0.0	0,0,0
38	0.01	0.01	0.02	143,143,152	0.0	0.0	0.0	0,0,0
39	0.01	9.86e-03	0.02	143,143,152	0.0	0.0	0.0	0,0,0
40	0.01	8.84e-03	0.02	143,139,152	0.0	0.0	0.0	0,0,0
41	9.43e-03	0.03	0.01	139,143,152	0.0	0.0	0.0	0,0,0
42	6.62e-03	0.07	8.17e-03	139,139,152	0.0	0.0	0.0	0,0,0
43	0.02	0.02	0.03	139,139,152	0.0	0.0	0.0	0,0,0
44	0.03	0.02	0.03	143,143,152	0.0	0.0	0.0	0,0,0
45	0.02	0.01	0.02	143,139,152	0.0	0.0	0.0	0,0,0
46	0.02	0.01	0.02	143,139,152	0.0	0.0	0.0	0,0,0
47	0.01	9.74e-03	0.02	139,139,152	0.0	0.0	0.0	0,0,0
48	0.01	0.02	0.01	139,139,152	0.0	0.0	0.0	0,0,0
49	8.47e-03	0.05	0.01	139,139,152	0.0	0.0	0.0	0,0,0
50	0.03	0.02	0.03	143,143,152	0.0	0.0	0.0	0,0,0
51	0.02	0.01	0.03	143,143,152	0.0	0.0	0.0	0,0,0
52	0.02	0.01	0.02	143,139,152	0.0	0.0	0.0	0,0,0
53	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
54	0.01	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
55	0.02	0.02	0.02	139,137,152	0.0	0.0	0.0	0,0,0
56	0.01	0.04	0.02	139,137,152	0.0	0.0	0.0	0,0,0
57	0.02	0.02	0.02	139,139,152	0.0	0.0	0.0	0,0,0
58	0.02	0.02	0.02	143,141,152	0.0	0.0	0.0	0,0,0

Setto	rRfck	rRfyk	rPfck	Rif. cmb	wR	wF	wP	Rif. cmb
59	0.02	0.03	0.02	139,141,152	0.0	0.0	0.0	0,0,0
60	0.02	0.03	0.02	139,141,152	0.0	0.0	0.0	0,0,0
61	0.02	0.03	0.02	139,141,152	0.0	0.0	0.0	0,0,0
62	0.02	0.02	0.03	139,139,152	0.0	0.0	0.0	0,0,0
63	0.03	0.02	0.03	139,139,152	0.0	0.0	0.0	0,0,0
64	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
65	0.02	0.01	0.02	143,140,152	0.0	0.0	0.0	0,0,0
66	0.01	0.02	0.02	139,141,152	0.0	0.0	0.0	0,0,0
67	0.02	0.02	0.02	139,140,152	0.0	0.0	0.0	0,0,0
68	0.02	0.02	0.02	139,141,152	0.0	0.0	0.0	0,0,0
69	0.02	0.02	0.03	139,141,152	0.0	0.0	0.0	0,0,0
70	0.03	0.05	0.03	139,139,152	0.0	0.0	0.0	0,0,0
71	0.02	0.01	0.03	139,139,152	0.0	0.0	0.0	0,0,0
72	0.02	0.01	0.02	143,143,152	0.0	0.0	0.0	0,0,0
73	0.01	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
74	0.01	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
75	0.01	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
76	0.01	9.60e-03	0.02	139,139,152	0.0	0.0	0.0	0,0,0
77	9.81e-03	0.06	0.01	139,139,152	0.0	0.0	0.0	0,0,0
78	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
79	0.02	0.01	0.02	141,141,151	0.0	0.0	0.0	0,0,0
80	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
81	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
82	0.01	9.20e-03	0.02	132,132,152	0.0	0.0	0.0	0,0,0
83	0.01	8.68e-03	0.02	132,132,152	0.0	0.0	0.0	0,0,0
84	0.01	0.06	0.02	132,139,152	0.0	0.0	0.0	0,0,0
85	0.02	0.05	0.02	139,139,152	0.0	0.0	0.0	0,0,0
86	0.02	0.01	0.02	141,139,152	0.0	0.0	0.0	0,0,0
87	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
88	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
89	0.02	0.01	0.03	132,139,152	0.0	0.0	0.0	0,0,0
90	0.03	0.02	0.03	132,139,152	0.0	0.0	0.0	0,0,0
91	0.02	0.06	0.03	132,139,152	0.0	0.0	0.0	0,0,0
92	0.03	0.03	0.04	139,139,152	0.0	0.0	0.0	0,0,0
93	0.02	0.02	0.03	139,139,152	0.0	0.0	0.0	0,0,0
94	0.02	0.02	0.03	139,139,152	0.0	0.0	0.0	0,0,0
95	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
96	0.03	0.05	0.04	132,132,152	0.0	0.0	0.0	0,0,0
97	0.05	0.08	0.06	132,139,152	0.0	0.0	0.0	0,0,0
98	0.05	0.16	0.06	132,139,152	0.0	0.0	0.0	0,0,0
99	0.03	0.02	0.04	143,143,152	0.0	0.0	0.0	0,0,0
100	0.02	0.02	0.03	132,132,152	0.0	0.0	0.0	0,0,0
101	0.02	0.02	0.03	139,139,152	0.0	0.0	0.0	0,0,0
102	0.02	0.04	0.03	139,132,152	0.0	0.0	0.0	0,0,0
103	0.04	0.09	0.05	132,132,152	0.0	0.0	0.0	0,0,0
104	0.06	0.14	0.08	132,132,152	0.0	0.0	0.0	0,0,0
105	0.14	0.16	0.17	132,132,152	0.0	0.0	0.0	0,0,0
106	0.02	0.02	0.03	139,139,152	0.0	0.0	0.0	0,0,0
107	0.02	0.02	0.03	132,139,152	0.0	0.0	0.0	0,0,0
108	0.02	0.02	0.03	139,139,152	0.0	0.0	0.0	0,0,0
109	0.02	0.02	0.03	139,132,152	0.0	0.0	0.0	0,0,0
110	0.04	0.06	0.04	132,132,152	0.0	0.0	0.0	0,0,0
111	0.06	0.08	0.07	132,131,152	0.0	0.0	0.0	0,0,0
112	0.15	0.11	0.18	132,131,152	0.0	0.0	0.0	0,0,0
113	0.02	0.02	0.03	139,139,152	0.0	0.0	0.0	0,0,0
114	0.02	0.02	0.03	139,139,152	0.0	0.0	0.0	0,0,0
115	0.02	0.02	0.03	139,139,152	0.0	0.0	0.0	0,0,0
116	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
117	0.03	0.03	0.04	132,132,152	0.0	0.0	0.0	0,0,0
118	0.04	0.06	0.05	132,132,152	0.0	0.0	0.0	0,0,0
119	0.05	0.11	0.06	132,132,152	0.0	0.0	0.0	0,0,0
120	0.02	0.02	0.03	139,139,152	0.0	0.0	0.0	0,0,0
121	0.02	0.02	0.03	141,141,152	0.0	0.0	0.0	0,0,0
122	0.02	0.01	0.03	139,139,152	0.0	0.0	0.0	0,0,0
123	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
124	0.02	0.01	0.03	132,132,152	0.0	0.0	0.0	0,0,0
125	0.03	0.02	0.03	132,132,152	0.0	0.0	0.0	0,0,0
126	0.03	0.06	0.03	132,139,152	0.0	0.0	0.0	0,0,0
127	0.03	0.03	0.03	139,139,152	0.0	0.0	0.0	0,0,0
128	0.02	0.02	0.03	141,143,151	0.0	0.0	0.0	0,0,0
129	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
130	0.02	0.01	0.02	143,139,152	0.0	0.0	0.0	0,0,0
131	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
132	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0

Setto	rRfck	rRfyk	rPfck	Rif. cmb	wR	wF	wP	Rif. cmb
133	0.02	0.06	0.02	132,139,152	0.0	0.0	0.0	0,0,0
134	0.03	0.07	0.04	139,139,152	0.0	0.0	0.0	0,0,0
135	0.02	0.02	0.03	143,143,152	0.0	0.0	0.0	0,0,0
136	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
137	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
138	0.02	0.02	0.03	139,139,152	0.0	0.0	0.0	0,0,0
139	0.03	0.07	0.04	139,139,152	0.0	0.0	0.0	0,0,0
140	0.03	0.14	0.03	139,139,152	0.0	0.0	0.0	0,0,0
141	0.04	0.03	0.05	139,139,152	0.0	0.0	0.0	0,0,0
142	0.02	0.02	0.03	143,143,152	0.0	0.0	0.0	0,0,0
143	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
144	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
145	0.02	0.02	0.03	139,139,152	0.0	0.0	0.0	0,0,0
146	0.03	0.05	0.04	139,139,152	0.0	0.0	0.0	0,0,0
147	0.05	0.06	0.06	139,139,152	0.0	0.0	0.0	0,0,0
148	0.03	0.02	0.04	143,139,152	0.0	0.0	0.0	0,0,0
149	0.03	0.02	0.03	143,143,152	0.0	0.0	0.0	0,0,0
150	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
151	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
152	0.02	0.02	0.03	139,139,152	0.0	0.0	0.0	0,0,0
153	0.03	0.03	0.04	139,139,152	0.0	0.0	0.0	0,0,0
154	0.05	0.03	0.06	132,139,152	0.0	0.0	0.0	0,0,0
155	0.02	0.02	0.03	139,139,152	0.0	0.0	0.0	0,0,0
156	0.03	0.02	0.03	143,143,152	0.0	0.0	0.0	0,0,0
157	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
158	0.02	0.01	0.02	139,139,152	0.0	0.0	0.0	0,0,0
159	0.02	0.02	0.03	139,139,152	0.0	0.0	0.0	0,0,0
160	0.03	0.04	0.03	139,139,152	0.0	0.0	0.0	0,0,0
161	0.03	0.09	0.04	139,139,152	0.0	0.0	0.0	0,0,0
162	0.02	0.02	0.03	139,139,152	0.0	0.0	0.0	0,0,0
Setto	rRfck	rRfyk	rPfck		wR	wF	wP	
	0.15	0.16	0.18		0.0	0.0	0.0	

STATO LIMITE D' ESERCIZIO: SLD DANNO SISMICO

LEGENDA TABELLA STATI LIMITE DI DANNO (VERIFICHE RES)

Le verifiche RES per SLD sono effettuate in accordo alle Norme Tecniche 17 Gennaio 2018 e alla circolare n.7 del 21 gennaio 2019 nonché alle linee guida del Consiglio Superiore LL.PP. “Linee guida per la Progettazione, l’Esecuzione ed il Collaudo di Interventi di Rinforzo di strutture di c.a., c.a.p. e murarie mediante FRP”.

Le verifiche RES per SLD, sono riportate nelle successive tabelle nella forma di rapporto “domanda” su “capacità” e hanno esito positivo quando il rapporto è non superiore al valore unitario.

La “domanda” è ottenuta direttamente dall’analisi per le previste combinazioni SLD (NTC18 2.5.3. COMBINAZIONI DELLE AZIONI formula [2.5.5]).

Per “capacità” si intende qui il valore della sollecitazione corrispondente al raggiungimento dello stato limite di danno per la sezione: per la resistenza flessionale questo stato limite si identifica con la tensione di snervamento dell’acciaio o la resistenza massima a compressione per il calcestruzzo e la muratura. Lo stato limite di danno si ritiene attinto anche in caso di superamento della resistenza a taglio.

Le resistenze flessionali sono valutate utilizzando i legami costitutivi del materiale limitati al solo tratto elastico, ottenendo così resistenze sostanzialmente elastiche come previsto dalla norma.

La seguente tabella identifica per quali configurazioni (materiale nuovo, esistente, con rinforzi e metodo di analisi) sono state condotte le verifiche di seguito riportate.

Configurazione	Verifica SLD	NOTE
1) c.a. nuovo e esist. Verifica SLU con $q>1$	Verifica N/M SE Verifica V/T	Sono verifiche per struttura non dissipativa condotte secondo il cap.4 NTC18 in regime sostanzialmente elastico; si verificano travi,pilastri, setti e gusci.
2) Muratura nuova Verifica SLU con $q>1$	Verifica N/M SE Verifica V	Per N/M identificato SL elastico, per V formulazione secondo cap.7
3) Muratura esis. AO Verifica SLU con $q>1$	Verifica N/M SE Verifica V	Per N/M identificato SL elastico, per V formulazione secondo cap. 7 e 8
4) Muratura esis. PO Verifica SLU con $q>1$	Verifica N/M SE Verifica V	Per N/M identificato SL elastico, per V formulazione secondo cap. 7 e 8; Anche per rinforzi FRP è prevista verifica N/M SE e V

Simbologia adottata nelle tabelle di verifica

Per le verifiche agli SLD di pilastri, travi setti e gusci in c.a. è presente una tabella con i simboli di seguito descritti:

Pilas./Trave/ Setto/Guscio	numero identificativo dell'elemento D2 o D3
Stato	Codici relativi all'esito delle verifiche effettuate appresso descritte
Pos.	Posizione nell'elemento della sezione per la quale si riporta la verifica

V N/M	Verifica a pressoflessione con rapporto E_d/R_d : valore minore o uguale a 1 per verifica positiva
V V/T cls	Verifica a taglio/torsione con rapporto V_{ed}/V_{rd} lato cls: valore minore o uguale a 1 per verifica positiva
V V/T acc	Verifica a taglio/torsione con rapporto V_{ed}/V_{rd} lato acciaio: valore minore o uguale a 1 per verifica positiva
Rif. cmb.	Riferimento combinazioni da cui si generano le verifiche più gravose per il pilastro

Per le verifiche agli SLD di maschi e fasce in *muratura* è presente una tabella con i simboli di seguito descritti:

Setto/Fascia/Elem.	numero del macroelemento (D3) o elemento (D2) considerato	
Mat.	Materiale	
s=,m=	Indice della sezione e del materiale assegnati all' elemento (per D2)	
Spessore	spessore dell'elemento	
Stato	ok	elemento verificato (SLD)
	NV	elemento non verificato (SLD)

e a seguire:

Nodo/Pos.	numero del nodo appartenente al setto / posizione relativa al nodo I per D2
h0/t	valore della snellezza convenzionale
P/Ap	tensione verticale media utilizzata per la verifica a pressoflessione nel piano del muro
P/Acv	tensione verticale media nella parte compressa, utilizzata nella verifica a taglio nel piano del muro
Ver. Mp	rapporto tra il momento di progetto e il momento M_{rd} in relazione alla verifica Par. 7.8.2.2.1 (pressoflessione complanare) effettuato per tutte le combinazioni
Ver. V	rapporto il taglio di progetto e il taglio ultimo in relazione alla verifica Par. 7.8.2.2.2 (taglio complanare) o C8.7.1.16 della circolare 21-01-19 per edifici esistenti effettuato per tutte le combinazioni (solo per elementi maschi)
Ver. V	rapporto tra il taglio di progetto e il minore dei tagli resistenti V_p e V_t in relazione alla verifica del par. 7.8.2.2.3 (solo per elementi fasce)
Rif. cmb	Combinazioni in cui si hanno i massimi valori dei rapporti Ver. Mp, Ver. V

Per elementi consolidati secondo il paragrafo C8.5.3.1 il programma opera come per gli elementi non rinforzati, considerando ai fini delle analisi e delle verifiche gli opportuni coefficienti correttivi delle rigidzze e delle resistenze.

Per elementi consolidati con FRP il programma implementa le verifiche previste dalle "Linee guida per la Progettazione, l'Esecuzione ed il Collaudo di Interventi di Rinforzo di strutture di c.a., c.a.p. e murarie mediante FRP" approvate dal CSLPP il 24/07/2009.

Per elementi consolidati con FRCM il programma implementa le verifiche previste dalle CNR-DT 215/2018 "Istruzioni per la Progettazione, l'Esecuzione ed il Controllo di Interventi di Consolidamento Statico mediante l'utilizzo di Compositi Fibrorinforzati a Matrice Inorganica"

Per semplicità la simbologia adottata nelle tabelle è uniformata a quella degli elementi non rinforzati.

Le tabelle riportano inoltre i seguenti parametri:

Fibra	Tipo di fibra del fibrorinforzo
E fibra	Modulo elastico del fibrorinforzo
epsr	Dilatazione di rottura del fibrorinforzo
epsd	Dilatazione di calcolo
epsd(s)	Dilatazione di calcolo per combinazioni sismiche
Spess.	Spessore del fibrorinforzo, il programma prevede l' applicazione di uno strato di spessore s su entrambe le facce della parete (o sui quattro lati della sezione in caso di confinamento)
AO fib.	Area orizzontale complessiva di fibrorinforzo per metro lineare

AV fib. Area verticale complessiva di fibrorinforzo per metro lineare

Affinché l'elemento sia verificato deve essere:

Ver. Mp, Ver.V non superiore a 1

TABELLA VERIFICHE ELEMENTI D2 PILASTRI C.A.

Pilas.	Stato	Pos.	V N/M	V V/T cls	V V/T acc	Rif. cmb	Pos.	V N/M	V V/T cls	V V/T acc	Rif. cmb
		cm					cm				
1	ok	0.0	0.09	0.12	0.12	91,77,77	24.3	0.13	0.12	0.12	91,77,77
		48.6	0.17	0.12	0.12	93,77,77					
2	ok	0.0	0.34	0.18	0.10	80,80,80	145.0	0.12	0.18	0.13	77,80,80
		290.0	0.23	0.18	0.10	75,80,80					
3	ok	0.0	0.47	0.16	0.08	77,80,80	145.0	0.20	0.16	0.11	77,80,80
		290.0	0.24	0.16	0.08	74,80,80					
4	ok	0.0	0.39	0.16	0.10	80,80,80	145.0	0.09	0.16	0.13	93,80,80
		290.0	0.28	0.16	0.10	75,80,80					
5	ok	0.0	0.48	0.18	0.10	77,80,80	145.0	0.17	0.18	0.13	77,80,80
		290.0	0.17	0.18	0.10	77,80,80					
9	ok	0.0	0.09	0.08	0.08	70,80,80	24.3	0.09	0.08	0.08	70,80,80
		48.6	0.09	0.08	0.08	70,80,80					
21	ok	0.0	0.55	0.19	0.09	91,91,91	185.0	0.22	0.19	0.13	70,91,91
		370.0	0.33	0.19	0.09	93,91,91					
22	ok	0.0	0.52	0.24	0.12	91,80,96	185.0	0.17	0.24	0.16	70,80,96
		370.0	0.50	0.24	0.12	80,80,96					
23	ok	0.0	0.56	0.25	0.13	77,77,80	185.0	0.06	0.25	0.17	66,77,80
		370.0	0.48	0.25	0.13	77,77,80					
24	ok	0.0	0.58	0.22	0.14	80,80,80	185.0	0.05	0.23	0.19	87,80,80
		370.0	0.58	0.23	0.14	80,80,80					
25	ok	0.0	0.52	0.26	0.14	77,77,80	185.0	0.07	0.26	0.18	86,77,80
		370.0	0.44	0.26	0.14	77,77,80					
26	ok	0.0	0.54	0.19	0.13	75,74,77	185.0	0.12	0.19	0.18	86,75,77
		370.0	0.47	0.19	0.13	80,75,77					
27	ok	0.0	0.50	0.20	0.12	87,74,77	185.0	0.12	0.20	0.15	95,74,77
		370.0	0.42	0.20	0.12	74,74,77					
28	ok	0.0	0.52	0.20	0.11	86,74,77	185.0	0.10	0.20	0.15	87,74,77
		370.0	0.41	0.20	0.11	78,74,77					
29	ok	0.0	0.51	0.20	0.11	91,74,74	185.0	0.17	0.20	0.15	71,74,74
		370.0	0.29	0.20	0.11	94,74,74					
41	ok	0.0	0.29	0.16	0.08	91,91,90	187.5	0.06	0.16	0.10	82,91,90
		375.0	0.37	0.16	0.08	91,91,90					
42	ok	0.0	0.41	0.18	0.10	71,80,96	187.5	0.12	0.18	0.13	73,80,96
		375.0	0.48	0.18	0.10	91,80,96					
43	ok	0.0	0.27	0.16	0.09	93,80,93	187.5	0.06	0.16	0.11	80,80,93
		375.0	0.37	0.16	0.09	77,80,93					
44	ok	0.0	0.44	0.17	0.12	80,80,80	187.5	0.03	0.17	0.15	85,80,80
		375.0	0.48	0.17	0.12	80,80,80					
45	ok	0.0	0.23	0.16	0.09	73,77,80	187.5	0.10	0.16	0.12	77,77,80
		375.0	0.41	0.16	0.09	77,77,80					
46	ok	0.0	0.38	0.14	0.10	78,75,77	187.5	0.03	0.14	0.13	86,75,77
		375.0	0.43	0.14	0.10	78,75,77					
47	ok	0.0	0.38	0.16	0.09	74,74,74	187.5	0.02	0.16	0.12	86,74,74
		375.0	0.43	0.16	0.09	74,74,74					
48	ok	0.0	0.42	0.17	0.10	78,74,74	187.5	0.05	0.17	0.13	87,74,74
		375.0	0.48	0.17	0.10	78,74,74					
49	ok	0.0	0.22	0.14	0.08	85,93,77	187.5	0.12	0.14	0.10	95,93,77
		375.0	0.32	0.14	0.08	94,93,77					
61	ok	0.0	0.17	0.08	0.06	78,74,74	120.0	0.04	0.08	0.08	86,74,74
		240.0	0.22	0.08	0.06	78,74,74					
62	ok	0.0	0.17	0.08	0.05	73,96,93	120.0	0.08	0.08	0.07	74,96,93
		240.0	0.15	0.08	0.05	77,96,93					
63	ok	0.0	0.26	0.08	0.06	72,92,71	120.0	0.06	0.08	0.08	96,92,71
		240.0	0.21	0.08	0.06	71,92,71					
64	ok	0.0	0.23	0.10	0.06	70,90,70	120.0	0.03	0.10	0.09	79,90,70
		240.0	0.23	0.10	0.06	70,90,70					
69	ok	0.0	0.16	0.08	0.07	77,75,77	23.6	0.14	0.08	0.07	77,75,77
		47.1	0.12	0.08	0.07	77,75,77					
70	ok	0.0	0.31	0.07	0.07	80,80,80	23.6	0.27	0.07	0.07	80,80,80

Pilas.	Stato	Pos.	V N/M	V V/T cls	V V/T acc	Rif. cmb	Pos.	V N/M	V V/T cls	V V/T acc	Rif. cmb
		47.1	0.23	0.07	0.07	80,80,80					
71	ok	0.0	0.19	0.05	0.04	80,75,80	23.6	0.18	0.05	0.04	80,75,80
		47.1	0.17	0.05	0.04	80,75,80					
72	ok	0.0	0.09	0.04	0.03	77,75,75	23.6	0.09	0.04	0.03	77,75,75
		47.1	0.09	0.04	0.03	77,75,75					
73	ok	0.0	0.04	0.04	0.03	91,70,78	23.6	0.03	0.04	0.03	91,70,78
		47.1	0.02	0.04	0.03	91,70,78					
78	ok	0.0	0.11	0.09	0.08	77,80,80	24.3	0.09	0.09	0.08	77,80,80
		48.6	0.08	0.09	0.08	80,80,80					
79	ok	0.0	0.22	0.09	0.10	80,80,80	24.3	0.19	0.09	0.10	80,80,80
		48.6	0.16	0.09	0.10	80,80,80					
80	ok	0.0	0.14	0.06	0.05	80,80,80	24.3	0.13	0.06	0.05	80,80,80
		48.6	0.13	0.06	0.05	80,80,80					
81	ok	0.0	0.07	0.05	0.05	77,80,80	24.3	0.07	0.05	0.05	77,80,80
		48.6	0.07	0.05	0.05	77,80,80					
82	ok	0.0	0.01	0.04	0.04	71,73,77	24.3	0.01	0.04	0.04	71,73,77
		48.6	0.01	0.04	0.04	71,73,77					
87	ok	0.0	0.07	0.10	0.09	80,80,80	17.1	0.06	0.10	0.09	80,80,80
		34.3	0.06	0.10	0.09	80,80,80					
88	ok	0.0	0.15	0.12	0.11	80,77,77	17.1	0.13	0.12	0.11	80,77,77
		34.3	0.11	0.12	0.11	80,77,77					
89	ok	0.0	0.10	0.07	0.06	80,77,77	17.1	0.10	0.07	0.06	80,77,77
		34.3	0.10	0.07	0.06	80,77,77					
90	ok	0.0	0.05	0.07	0.06	77,80,80	17.1	0.05	0.07	0.06	80,80,80
		34.3	0.06	0.07	0.06	80,80,80					
91	ok	0.0	0.01	0.06	0.05	71,80,77	17.1	0.01	0.06	0.05	71,80,77
		34.3	0.01	0.06	0.05	71,80,77					
96	ok	0.0	0.04	0.12	0.09	76,76,80	31.4	0.03	0.12	0.09	76,76,80
		62.9	0.05	0.12	0.09	91,76,80					
97	ok	0.0	0.09	0.12	0.11	80,77,77	31.4	0.06	0.12	0.11	76,77,77
		62.9	0.04	0.12	0.11	75,77,77					
98	ok	0.0	0.06	0.07	0.06	80,77,77	31.4	0.06	0.07	0.06	80,77,77
		62.9	0.07	0.07	0.06	80,77,77					
99	ok	0.0	0.03	0.09	0.08	80,80,80	31.4	0.05	0.09	0.08	80,80,80
		62.9	0.07	0.09	0.08	80,80,80					
100	ok	0.0	0.01	0.08	0.06	71,76,76	31.4	0.02	0.08	0.06	71,76,76
		62.9	0.04	0.08	0.06	71,76,76					
105	ok	0.0	0.05	0.15	0.11	71,71,71	24.3	0.09	0.15	0.11	71,71,71
		48.6	0.12	0.15	0.11	71,71,71					
106	ok	0.0	0.04	0.14	0.12	83,75,77	24.3	0.08	0.14	0.12	81,75,77
		48.6	0.11	0.14	0.12	81,75,77					
107	ok	0.0	0.03	0.09	0.07	68,74,77	24.3	0.03	0.09	0.07	87,74,77
		48.6	0.05	0.09	0.07	86,74,77					
108	ok	0.0	0.04	0.11	0.10	91,72,80	24.3	0.06	0.11	0.10	71,72,80
		48.6	0.09	0.11	0.10	79,72,80					
109	ok	0.0	0.04	0.11	0.08	90,68,68	24.3	0.06	0.11	0.08	70,68,68
		48.6	0.09	0.11	0.08	70,68,68					
114	ok	0.0	0.14	0.12	0.11	71,80,80	24.3	0.15	0.12	0.11	71,80,80
		48.6	0.17	0.12	0.11	71,80,80					
115	ok	0.0	0.12	0.14	0.15	81,80,77	24.3	0.15	0.14	0.15	65,80,77
		48.6	0.20	0.14	0.15	73,80,77					
116	ok	0.0	0.06	0.11	0.11	81,77,77	24.3	0.09	0.11	0.11	77,77,77
		48.6	0.12	0.11	0.11	77,77,77					
Pilas.			V N/M	V V/T cls	V V/T acc			V N/M	V V/T cls	V V/T acc	
			0.58	0.26	0.19						

TABELLA VERIFICHE ELEMENTI D2 TRAVI C.A.

Trave	Stato	Pos.	V N/M	V V/T cls	V V/T acc	Rif. cmb	Pos.	V N/M	V V/T cls	V V/T acc	Rif. cmb
		cm					cm				
50	ok	0.0	0.58	0.14	0.13	71,71,71	236.2	0.11	0.10	0.16	82,70,70
		472.4	0.59	0.15	0.13	70,70,70					
51	ok	0.0	0.28	0.17	0.12	88,90,90	166.5	0.06	0.16	0.20	88,90,90
		333.0	0.26	0.15	0.11	85,81,81					
52	ok	0.0	0.51	0.14	0.11	87,87,87	151.7	0.03	0.16	0.25	66,87,87
		303.5	0.40	0.17	0.14	87,87,87					
53	ok	0.0	0.50	0.20	0.17	87,86,86	105.2	0.34	0.17	0.15	87,87,87

Trave	Stato	Pos.	V N/M	V V/T cls	V V/T acc	Rif. cmb	Pos.	V N/M	V V/T cls	V V/T acc	Rif. cmb
		210.3	0.21	0.19	0.16	87,87,87					
54	ok	0.0	0.32	0.16	0.11	94,91,91	166.5	0.08	0.18	0.24	90,91,91
		333.0	0.32	0.19	0.13	94,91,91					
55	ok	0.0	0.51	0.19	0.13	93,76,76	151.7	0.10	0.18	0.24	93,76,76
		303.5	0.38	0.18	0.13	85,95,91					
56	ok	0.0	0.45	0.26	0.23	80,76,76	83.0	0.25	0.26	0.22	77,76,76
		166.0	0.29	0.27	0.22	73,73,73					
57	ok	0.0	0.48	0.21	0.16	85,80,80	105.2	0.42	0.21	0.15	85,77,77
		210.3	0.22	0.24	0.18	85,77,77					
58	ok	0.0	0.60	0.16	0.15	78,79,79	153.2	0.24	0.16	0.27	78,78,78
		306.4	0.63	0.22	0.20	78,78,78					
59	ok	0.0	0.55	0.17	0.15	71,71,71	236.2	0.27	0.07	0.11	70,71,71
		472.4	0.56	0.17	0.15	70,70,70					
60	ok	0.0	0.50	0.20	0.18	71,79,79	153.2	0.22	0.14	0.24	68,78,78
		306.4	0.61	0.24	0.21	70,78,78					
Trave			V N/M	V V/T cls	V V/T acc			V N/M	V V/T cls	V V/T acc	
			0.63	0.27	0.27						

TABELLA VERIFICHE ELEMENTI D3 SETTI C.A.

Setto	Stato	Nodo	V N/M	V V/T cls	V V/T acc	Rif. cmb	Nodo	V N/M	V V/T cls	V V/T acc	Rif. cmb
1	ok	217	0.35	0.0	0.0	80,0,0	225	0.37	0.0	0.0	80,0,0
		150	0.35	0.0	0.0	80,0,0	219	0.33	0.0	0.0	80,0,0
2	ok	44	0.20	0.0	0.0	73,0,0	45	0.19	0.0	0.0	73,0,0
		42	0.22	0.0	0.0	73,0,0	41	0.20	0.0	0.0	73,0,0
3	ok	46	0.14	0.0	0.0	73,0,0	47	0.12	0.0	0.0	73,0,0
		45	0.13	0.0	0.0	73,0,0	44	0.13	0.0	0.0	73,0,0
4	ok	48	0.11	0.0	0.0	73,0,0	49	0.10	0.0	0.0	73,0,0
		47	0.10	0.0	0.0	73,0,0	46	0.11	0.0	0.0	73,0,0
5	ok	50	0.17	0.0	0.0	70,0,0	51	0.12	0.0	0.0	65,0,0
		49	0.11	0.0	0.0	65,0,0	48	0.13	0.0	0.0	65,0,0
6	ok	52	0.18	0.0	0.0	69,0,0	53	0.14	0.0	0.0	69,0,0
		51	0.13	0.0	0.0	69,0,0	50	0.21	0.0	0.0	65,0,0
7	ok	2	0.45	0.0	0.0	71,0,0	54	0.66	0.0	0.0	71,0,0
		53	0.19	0.0	0.0	69,0,0	52	0.26	0.0	0.0	69,0,0
8	ok	219	0.25	0.0	0.0	80,0,0	150	0.26	0.0	0.0	80,0,0
		1	0.27	0.0	0.0	80,0,0	220	0.26	0.0	0.0	80,0,0
9	ok	45	0.17	0.0	0.0	73,0,0	57	0.14	0.0	0.0	73,0,0
		55	0.16	0.0	0.0	73,0,0	42	0.19	0.0	0.0	73,0,0
10	ok	47	0.12	0.0	0.0	73,0,0	58	0.11	0.0	0.0	73,0,0
		57	0.11	0.0	0.0	73,0,0	45	0.11	0.0	0.0	73,0,0
11	ok	49	0.12	0.0	0.0	70,0,0	59	0.11	0.0	0.0	73,0,0
		58	0.10	0.0	0.0	73,0,0	47	0.10	0.0	0.0	73,0,0
12	ok	51	0.18	0.0	0.0	70,0,0	60	0.14	0.0	0.0	65,0,0
		59	0.08	0.0	0.0	70,0,0	49	0.10	0.0	0.0	70,0,0
13	ok	53	0.17	0.0	0.0	69,0,0	61	0.15	0.0	0.0	93,0,0
		60	0.14	0.0	0.0	70,0,0	51	0.14	0.0	0.0	69,0,0
14	ok	54	0.55	0.0	0.0	71,0,0	62	0.63	0.0	0.0	71,0,0
		61	0.21	0.0	0.0	70,0,0	53	0.27	0.0	0.0	70,0,0
15	ok	220	0.19	0.0	0.0	80,0,0	1	0.19	0.0	0.0	80,0,0
		43	0.20	0.0	0.0	80,0,0	221	0.21	0.0	0.0	80,0,0
16	ok	57	0.12	0.0	0.0	73,0,0	65	0.10	0.0	0.0	73,0,0
		63	0.13	0.0	0.0	73,0,0	55	0.15	0.0	0.0	73,0,0
17	ok	58	0.10	0.0	0.0	70,0,0	66	0.09	0.0	0.0	77,0,0
		65	0.08	0.0	0.0	77,0,0	57	0.09	0.0	0.0	77,0,0
18	ok	59	0.11	0.0	0.0	70,0,0	67	0.09	0.0	0.0	73,0,0
		66	0.07	0.0	0.0	70,0,0	58	0.09	0.0	0.0	70,0,0
19	ok	60	0.11	0.0	0.0	66,0,0	68	0.12	0.0	0.0	93,0,0
		67	0.11	0.0	0.0	70,0,0	59	0.12	0.0	0.0	70,0,0
20	ok	61	0.19	0.0	0.0	71,0,0	69	0.23	0.0	0.0	71,0,0
		68	0.16	0.0	0.0	71,0,0	60	0.15	0.0	0.0	70,0,0
21	ok	62	0.44	0.0	0.0	71,0,0	70	0.46	0.0	0.0	71,0,0
		69	0.23	0.0	0.0	71,0,0	61	0.20	0.0	0.0	71,0,0
22	ok	221	0.13	0.0	0.0	80,0,0	43	0.12	0.0	0.0	80,0,0
		56	0.14	0.0	0.0	80,0,0	222	0.16	0.0	0.0	80,0,0
23	ok	65	0.09	0.0	0.0	77,0,0	73	0.08	0.0	0.0	93,0,0

Setto	Stato	Nodo	V N/M	V V/T cls	V V/T acc	Rif. cmb	Nodo	V N/M	V V/T cls	V V/T acc	Rif. cmb
		71	0.10	0.0	0.0	77,0,0	63	0.12	0.0	0.0	77,0,0
24	ok	66	0.09	0.0	0.0	79,0,0	74	0.09	0.0	0.0	93,0,0
		73	0.08	0.0	0.0	93,0,0	65	0.08	0.0	0.0	93,0,0
25	ok	67	0.10	0.0	0.0	79,0,0	75	0.11	0.0	0.0	93,0,0
		74	0.11	0.0	0.0	71,0,0	66	0.10	0.0	0.0	79,0,0
26	ok	68	0.15	0.0	0.0	71,0,0	76	0.17	0.0	0.0	71,0,0
		75	0.14	0.0	0.0	71,0,0	67	0.12	0.0	0.0	71,0,0
27	ok	69	0.23	0.0	0.0	71,0,0	77	0.25	0.0	0.0	71,0,0
		76	0.19	0.0	0.0	71,0,0	68	0.17	0.0	0.0	71,0,0
28	ok	70	0.32	0.0	0.0	71,0,0	78	0.33	0.0	0.0	71,0,0
		77	0.22	0.0	0.0	71,0,0	69	0.21	0.0	0.0	71,0,0
29	ok	222	0.10	0.0	0.0	75,0,0	56	0.10	0.0	0.0	84,0,0
		64	0.11	0.0	0.0	75,0,0	223	0.14	0.0	0.0	75,0,0
30	ok	73	0.07	0.0	0.0	93,0,0	81	0.07	0.0	0.0	93,0,0
		79	0.08	0.0	0.0	93,0,0	71	0.09	0.0	0.0	93,0,0
31	ok	74	0.10	0.0	0.0	71,0,0	82	0.10	0.0	0.0	71,0,0
		81	0.09	0.0	0.0	71,0,0	73	0.09	0.0	0.0	71,0,0
32	ok	75	0.13	0.0	0.0	71,0,0	83	0.13	0.0	0.0	71,0,0
		82	0.13	0.0	0.0	71,0,0	74	0.12	0.0	0.0	71,0,0
33	ok	76	0.18	0.0	0.0	71,0,0	84	0.18	0.0	0.0	71,0,0
		83	0.15	0.0	0.0	71,0,0	75	0.15	0.0	0.0	71,0,0
34	ok	77	0.21	0.0	0.0	71,0,0	85	0.22	0.0	0.0	71,0,0
		84	0.19	0.0	0.0	71,0,0	76	0.18	0.0	0.0	71,0,0
35	ok	78	0.21	0.0	0.0	71,0,0	86	0.23	0.0	0.0	71,0,0
		85	0.18	0.0	0.0	71,0,0	77	0.18	0.0	0.0	71,0,0
36	ok	223	0.16	0.0	0.0	87,0,0	64	0.13	0.0	0.0	87,0,0
		72	0.27	0.0	0.0	81,0,0	224	0.27	0.0	0.0	81,0,0
37	ok	81	0.08	0.0	0.0	71,0,0	89	0.08	0.0	0.0	71,0,0
		87	0.08	0.0	0.0	91,0,0	79	0.08	0.0	0.0	93,0,0
38	ok	82	0.12	0.0	0.0	71,0,0	90	0.12	0.0	0.0	71,0,0
		89	0.09	0.0	0.0	71,0,0	81	0.09	0.0	0.0	71,0,0
39	ok	83	0.14	0.0	0.0	71,0,0	91	0.15	0.0	0.0	71,0,0
		90	0.13	0.0	0.0	71,0,0	82	0.13	0.0	0.0	71,0,0
40	ok	84	0.18	0.0	0.0	71,0,0	92	0.18	0.0	0.0	71,0,0
		91	0.16	0.0	0.0	71,0,0	83	0.16	0.0	0.0	71,0,0
41	ok	85	0.18	0.0	0.0	71,0,0	93	0.18	0.0	0.0	71,0,0
		92	0.19	0.0	0.0	71,0,0	84	0.19	0.0	0.0	71,0,0
42	ok	86	0.22	0.0	0.0	90,0,0	94	0.20	0.0	0.0	90,0,0
		93	0.15	0.0	0.0	71,0,0	85	0.16	0.0	0.0	71,0,0
43	ok	13	0.15	0.0	0.0	76,0,0	218	0.15	0.0	0.0	76,0,0
		226	0.14	0.0	0.0	88,0,0	164	0.14	0.0	0.0	88,0,0
44	ok	89	0.08	0.0	0.0	71,0,0	97	0.09	0.0	0.0	71,0,0
		95	0.08	0.0	0.0	91,0,0	87	0.08	0.0	0.0	91,0,0
45	ok	90	0.12	0.0	0.0	71,0,0	98	0.12	0.0	0.0	71,0,0
		97	0.09	0.0	0.0	71,0,0	89	0.09	0.0	0.0	71,0,0
46	ok	91	0.14	0.0	0.0	71,0,0	99	0.15	0.0	0.0	71,0,0
		98	0.13	0.0	0.0	71,0,0	90	0.12	0.0	0.0	71,0,0
47	ok	92	0.17	0.0	0.0	71,0,0	100	0.17	0.0	0.0	71,0,0
		99	0.15	0.0	0.0	71,0,0	91	0.16	0.0	0.0	71,0,0
48	ok	93	0.17	0.0	0.0	70,0,0	101	0.16	0.0	0.0	70,0,0
		100	0.19	0.0	0.0	71,0,0	92	0.20	0.0	0.0	71,0,0
49	ok	94	0.31	0.0	0.0	90,0,0	102	0.29	0.0	0.0	90,0,0
		101	0.16	0.0	0.0	70,0,0	93	0.16	0.0	0.0	70,0,0
50	ok	225	0.38	0.0	0.0	80,0,0	80	0.41	0.0	0.0	80,0,0
		96	0.39	0.0	0.0	80,0,0	150	0.37	0.0	0.0	80,0,0
51	ok	97	0.08	0.0	0.0	71,0,0	105	0.09	0.0	0.0	91,0,0
		103	0.07	0.0	0.0	91,0,0	95	0.09	0.0	0.0	91,0,0
52	ok	98	0.10	0.0	0.0	71,0,0	106	0.11	0.0	0.0	71,0,0
		105	0.09	0.0	0.0	91,0,0	97	0.08	0.0	0.0	71,0,0
53	ok	99	0.12	0.0	0.0	71,0,0	107	0.13	0.0	0.0	71,0,0
		106	0.11	0.0	0.0	71,0,0	98	0.10	0.0	0.0	71,0,0
54	ok	100	0.14	0.0	0.0	71,0,0	108	0.15	0.0	0.0	71,0,0
		107	0.12	0.0	0.0	71,0,0	99	0.11	0.0	0.0	71,0,0
55	ok	101	0.14	0.0	0.0	71,0,0	109	0.13	0.0	0.0	71,0,0
		108	0.15	0.0	0.0	91,0,0	100	0.16	0.0	0.0	71,0,0
56	ok	102	0.50	0.0	0.0	70,0,0	110	0.46	0.0	0.0	70,0,0
		109	0.22	0.0	0.0	71,0,0	101	0.20	0.0	0.0	71,0,0
57	ok	150	0.27	0.0	0.0	80,0,0	96	0.28	0.0	0.0	80,0,0
		104	0.29	0.0	0.0	80,0,0	1	0.28	0.0	0.0	80,0,0
58	ok	105	0.09	0.0	0.0	91,0,0	112	0.12	0.0	0.0	91,0,0
		111	0.09	0.0	0.0	91,0,0	103	0.11	0.0	0.0	91,0,0
59	ok	106	0.09	0.0	0.0	71,0,0	113	0.11	0.0	0.0	91,0,0
		112	0.09	0.0	0.0	91,0,0	105	0.08	0.0	0.0	71,0,0
60	ok	107	0.08	0.0	0.0	71,0,0	114	0.11	0.0	0.0	91,0,0

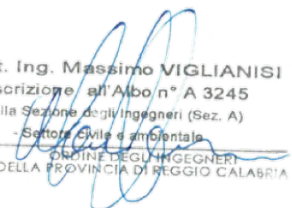
Setto	Stato	Nodo	V N/M	V V/T cls	V V/T acc	Rif. cmb	Nodo	V N/M	V V/T cls	V V/T acc	Rif. cmb
		113	0.09	0.0	0.0	91,0,0	106	0.08	0.0	0.0	71,0,0
61	ok	108	0.08	0.0	0.0	92,0,0	115	0.16	0.0	0.0	71,0,0
		114	0.12	0.0	0.0	71,0,0	107	0.06	0.0	0.0	68,0,0
62	ok	109	0.04	0.0	0.0	90,0,0	116	0.09	0.0	0.0	92,0,0
		115	0.19	0.0	0.0	71,0,0	108	0.07	0.0	0.0	96,0,0
63	ok	110	0.56	0.0	0.0	70,0,0	18	0.37	0.0	0.0	70,0,0
		116	0.11	0.0	0.0	72,0,0	109	0.08	0.0	0.0	91,0,0
64	ok	1	0.21	0.0	0.0	76,0,0	104	0.21	0.0	0.0	76,0,0
		118	0.22	0.0	0.0	76,0,0	43	0.22	0.0	0.0	76,0,0
65	ok	111	0.09	0.0	0.0	91,0,0	117	0.09	0.0	0.0	71,0,0
		119	0.08	0.0	0.0	71,0,0	112	0.11	0.0	0.0	91,0,0
66	ok	112	0.07	0.0	0.0	91,0,0	119	0.06	0.0	0.0	91,0,0
		120	0.06	0.0	0.0	91,0,0	113	0.08	0.0	0.0	91,0,0
67	ok	113	0.06	0.0	0.0	91,0,0	120	0.06	0.0	0.0	91,0,0
		121	0.06	0.0	0.0	71,0,0	114	0.07	0.0	0.0	71,0,0
68	ok	114	0.07	0.0	0.0	71,0,0	121	0.08	0.0	0.0	71,0,0
		122	0.11	0.0	0.0	71,0,0	115	0.09	0.0	0.0	71,0,0
69	ok	115	0.13	0.0	0.0	71,0,0	122	0.14	0.0	0.0	71,0,0
		123	0.16	0.0	0.0	71,0,0	116	0.14	0.0	0.0	71,0,0
70	ok	116	0.13	0.0	0.0	71,0,0	123	0.17	0.0	0.0	71,0,0
		124	0.27	0.0	0.0	82,0,0	18	0.18	0.0	0.0	82,0,0
71	ok	43	0.14	0.0	0.0	76,0,0	118	0.14	0.0	0.0	76,0,0
		17	0.17	0.0	0.0	76,0,0	56	0.18	0.0	0.0	76,0,0
72	ok	117	0.05	0.0	0.0	67,0,0	125	0.07	0.0	0.0	67,0,0
		127	0.06	0.0	0.0	67,0,0	119	0.06	0.0	0.0	83,0,0
73	ok	119	0.06	0.0	0.0	83,0,0	127	0.06	0.0	0.0	67,0,0
		128	0.07	0.0	0.0	67,0,0	120	0.08	0.0	0.0	67,0,0
74	ok	120	0.07	0.0	0.0	85,0,0	128	0.07	0.0	0.0	85,0,0
		129	0.07	0.0	0.0	85,0,0	121	0.08	0.0	0.0	85,0,0
75	ok	121	0.07	0.0	0.0	85,0,0	129	0.06	0.0	0.0	71,0,0
		130	0.09	0.0	0.0	71,0,0	122	0.11	0.0	0.0	71,0,0
76	ok	122	0.10	0.0	0.0	67,0,0	130	0.07	0.0	0.0	67,0,0
		131	0.08	0.0	0.0	75,0,0	123	0.10	0.0	0.0	67,0,0
77	ok	123	0.12	0.0	0.0	75,0,0	131	0.10	0.0	0.0	75,0,0
		132	0.26	0.0	0.0	90,0,0	124	0.23	0.0	0.0	90,0,0
78	ok	56	0.10	0.0	0.0	84,0,0	17	0.13	0.0	0.0	88,0,0
		126	0.13	0.0	0.0	84,0,0	64	0.12	0.0	0.0	80,0,0
79	ok	125	0.05	0.0	0.0	75,0,0	133	0.07	0.0	0.0	75,0,0
		135	0.05	0.0	0.0	75,0,0	127	0.06	0.0	0.0	85,0,0
80	ok	127	0.06	0.0	0.0	85,0,0	135	0.06	0.0	0.0	85,0,0
		136	0.07	0.0	0.0	75,0,0	128	0.07	0.0	0.0	85,0,0
81	ok	128	0.08	0.0	0.0	85,0,0	136	0.07	0.0	0.0	85,0,0
		137	0.08	0.0	0.0	75,0,0	129	0.09	0.0	0.0	75,0,0
82	ok	129	0.09	0.0	0.0	75,0,0	137	0.07	0.0	0.0	75,0,0
		138	0.10	0.0	0.0	75,0,0	130	0.12	0.0	0.0	75,0,0
83	ok	130	0.11	0.0	0.0	75,0,0	138	0.09	0.0	0.0	75,0,0
		139	0.11	0.0	0.0	88,0,0	131	0.12	0.0	0.0	75,0,0
84	ok	131	0.10	0.0	0.0	75,0,0	139	0.10	0.0	0.0	88,0,0
		140	0.20	0.0	0.0	90,0,0	132	0.19	0.0	0.0	90,0,0
85	ok	64	0.17	0.0	0.0	86,0,0	126	0.19	0.0	0.0	86,0,0
		134	0.32	0.0	0.0	85,0,0	72	0.36	0.0	0.0	85,0,0
86	ok	133	0.05	0.0	0.0	75,0,0	141	0.06	0.0	0.0	75,0,0
		143	0.07	0.0	0.0	77,0,0	135	0.06	0.0	0.0	85,0,0
87	ok	135	0.06	0.0	0.0	85,0,0	143	0.06	0.0	0.0	77,0,0
		144	0.06	0.0	0.0	75,0,0	136	0.07	0.0	0.0	85,0,0
88	ok	136	0.08	0.0	0.0	85,0,0	144	0.07	0.0	0.0	85,0,0
		145	0.07	0.0	0.0	75,0,0	137	0.08	0.0	0.0	75,0,0
89	ok	137	0.08	0.0	0.0	75,0,0	145	0.08	0.0	0.0	75,0,0
		146	0.09	0.0	0.0	75,0,0	138	0.11	0.0	0.0	75,0,0
90	ok	138	0.11	0.0	0.0	75,0,0	146	0.09	0.0	0.0	75,0,0
		147	0.11	0.0	0.0	87,0,0	139	0.13	0.0	0.0	75,0,0
91	ok	139	0.11	0.0	0.0	75,0,0	147	0.11	0.0	0.0	66,0,0
		148	0.13	0.0	0.0	66,0,0	140	0.16	0.0	0.0	87,0,0
92	ok	164	0.19	0.0	0.0	88,0,0	226	0.22	0.0	0.0	84,0,0
		88	0.19	0.0	0.0	84,0,0	172	0.18	0.0	0.0	84,0,0
93	ok	141	0.06	0.0	0.0	80,0,0	149	0.08	0.0	0.0	77,0,0
		151	0.08	0.0	0.0	77,0,0	143	0.07	0.0	0.0	77,0,0
94	ok	143	0.06	0.0	0.0	77,0,0	151	0.07	0.0	0.0	77,0,0
		152	0.08	0.0	0.0	75,0,0	144	0.06	0.0	0.0	75,0,0
95	ok	144	0.06	0.0	0.0	75,0,0	152	0.08	0.0	0.0	75,0,0
		153	0.08	0.0	0.0	75,0,0	145	0.07	0.0	0.0	75,0,0
96	ok	145	0.07	0.0	0.0	75,0,0	153	0.09	0.0	0.0	75,0,0
		154	0.10	0.0	0.0	86,0,0	146	0.08	0.0	0.0	75,0,0
97	ok	146	0.10	0.0	0.0	74,0,0	154	0.11	0.0	0.0	74,0,0

Setto	Stato	Nodo	V N/M	V V/T cls	V V/T acc	Rif. cmb	Nodo	V N/M	V V/T cls	V V/T acc	Rif. cmb
98	ok	155	0.17	0.0	0.0	74,0,0	147	0.12	0.0	0.0	87,0,0
		147	0.12	0.0	0.0	88,0,0	155	0.27	0.0	0.0	74,0,0
		156	0.18	0.0	0.0	83,0,0	148	0.27	0.0	0.0	87,0,0
99	ok	80	0.42	0.0	0.0	76,0,0	142	0.43	0.0	0.0	80,0,0
		15	0.42	0.0	0.0	80,0,0	96	0.40	0.0	0.0	80,0,0
100	ok	149	0.08	0.0	0.0	77,0,0	157	0.09	0.0	0.0	77,0,0
		158	0.09	0.0	0.0	77,0,0	151	0.09	0.0	0.0	77,0,0
101	ok	151	0.07	0.0	0.0	77,0,0	158	0.08	0.0	0.0	77,0,0
		159	0.10	0.0	0.0	75,0,0	152	0.08	0.0	0.0	75,0,0
102	ok	152	0.08	0.0	0.0	75,0,0	159	0.09	0.0	0.0	75,0,0
		160	0.10	0.0	0.0	75,0,0	153	0.08	0.0	0.0	75,0,0
103	ok	153	0.08	0.0	0.0	75,0,0	160	0.09	0.0	0.0	75,0,0
		161	0.12	0.0	0.0	82,0,0	154	0.07	0.0	0.0	74,0,0
104	ok	154	0.13	0.0	0.0	77,0,0	161	0.09	0.0	0.0	74,0,0
		162	0.19	0.0	0.0	77,0,0	155	0.06	0.0	0.0	79,0,0
105	ok	155	0.10	0.0	0.0	74,0,0	162	0.22	0.0	0.0	77,0,0
		16	0.20	0.0	0.0	87,0,0	156	0.28	0.0	0.0	87,0,0
106	ok	96	0.30	0.0	0.0	76,0,0	15	0.31	0.0	0.0	76,0,0
		11	0.31	0.0	0.0	76,0,0	104	0.30	0.0	0.0	76,0,0
107	ok	157	0.09	0.0	0.0	77,0,0	163	0.11	0.0	0.0	77,0,0
		165	0.11	0.0	0.0	77,0,0	158	0.10	0.0	0.0	75,0,0
108	ok	158	0.09	0.0	0.0	75,0,0	165	0.10	0.0	0.0	75,0,0
		166	0.12	0.0	0.0	75,0,0	159	0.12	0.0	0.0	75,0,0
109	ok	159	0.10	0.0	0.0	75,0,0	166	0.11	0.0	0.0	75,0,0
		167	0.12	0.0	0.0	75,0,0	160	0.13	0.0	0.0	75,0,0
110	ok	160	0.11	0.0	0.0	75,0,0	167	0.10	0.0	0.0	75,0,0
		168	0.12	0.0	0.0	75,0,0	161	0.14	0.0	0.0	83,0,0
111	ok	161	0.12	0.0	0.0	85,0,0	168	0.12	0.0	0.0	71,0,0
		169	0.06	0.0	0.0	79,0,0	162	0.14	0.0	0.0	71,0,0
112	ok	162	0.13	0.0	0.0	85,0,0	169	0.09	0.0	0.0	67,0,0
		170	0.29	0.0	0.0	86,0,0	16	0.24	0.0	0.0	86,0,0
113	ok	104	0.23	0.0	0.0	76,0,0	11	0.24	0.0	0.0	76,0,0
		13	0.24	0.0	0.0	76,0,0	118	0.24	0.0	0.0	76,0,0
114	ok	163	0.11	0.0	0.0	77,0,0	171	0.14	0.0	0.0	75,0,0
		173	0.13	0.0	0.0	75,0,0	165	0.12	0.0	0.0	75,0,0
115	ok	165	0.10	0.0	0.0	75,0,0	173	0.11	0.0	0.0	75,0,0
		174	0.14	0.0	0.0	75,0,0	166	0.13	0.0	0.0	75,0,0
116	ok	166	0.12	0.0	0.0	75,0,0	174	0.12	0.0	0.0	75,0,0
		175	0.13	0.0	0.0	75,0,0	167	0.15	0.0	0.0	75,0,0
117	ok	167	0.13	0.0	0.0	75,0,0	175	0.12	0.0	0.0	75,0,0
		176	0.13	0.0	0.0	75,0,0	168	0.15	0.0	0.0	87,0,0
118	ok	168	0.13	0.0	0.0	83,0,0	176	0.12	0.0	0.0	85,0,0
		177	0.16	0.0	0.0	85,0,0	169	0.17	0.0	0.0	87,0,0
119	ok	169	0.24	0.0	0.0	87,0,0	177	0.17	0.0	0.0	81,0,0
		178	0.28	0.0	0.0	86,0,0	170	0.22	0.0	0.0	86,0,0
120	ok	118	0.16	0.0	0.0	76,0,0	13	0.17	0.0	0.0	76,0,0
		164	0.17	0.0	0.0	84,0,0	17	0.17	0.0	0.0	76,0,0
121	ok	171	0.14	0.0	0.0	75,0,0	179	0.17	0.0	0.0	80,0,0
		181	0.16	0.0	0.0	75,0,0	173	0.15	0.0	0.0	75,0,0
122	ok	173	0.13	0.0	0.0	75,0,0	181	0.14	0.0	0.0	75,0,0
		182	0.15	0.0	0.0	75,0,0	174	0.15	0.0	0.0	75,0,0
123	ok	174	0.14	0.0	0.0	75,0,0	182	0.14	0.0	0.0	75,0,0
		183	0.15	0.0	0.0	75,0,0	175	0.16	0.0	0.0	75,0,0
124	ok	175	0.14	0.0	0.0	75,0,0	183	0.13	0.0	0.0	75,0,0
		184	0.14	0.0	0.0	75,0,0	176	0.16	0.0	0.0	75,0,0
125	ok	176	0.15	0.0	0.0	75,0,0	184	0.14	0.0	0.0	85,0,0
		185	0.16	0.0	0.0	85,0,0	177	0.17	0.0	0.0	85,0,0
126	ok	177	0.15	0.0	0.0	85,0,0	185	0.13	0.0	0.0	85,0,0
		186	0.17	0.0	0.0	86,0,0	178	0.17	0.0	0.0	85,0,0
127	ok	17	0.11	0.0	0.0	84,0,0	164	0.15	0.0	0.0	88,0,0
		172	0.30	0.0	0.0	86,0,0	126	0.24	0.0	0.0	86,0,0
128	ok	179	0.17	0.0	0.0	80,0,0	187	0.20	0.0	0.0	80,0,0
		189	0.18	0.0	0.0	80,0,0	181	0.17	0.0	0.0	75,0,0
129	ok	181	0.15	0.0	0.0	75,0,0	189	0.15	0.0	0.0	75,0,0
		190	0.16	0.0	0.0	75,0,0	182	0.16	0.0	0.0	75,0,0
130	ok	182	0.15	0.0	0.0	75,0,0	190	0.15	0.0	0.0	75,0,0
		191	0.16	0.0	0.0	75,0,0	183	0.16	0.0	0.0	75,0,0
131	ok	183	0.14	0.0	0.0	75,0,0	191	0.14	0.0	0.0	75,0,0
		192	0.15	0.0	0.0	75,0,0	184	0.17	0.0	0.0	75,0,0
132	ok	184	0.15	0.0	0.0	75,0,0	192	0.13	0.0	0.0	85,0,0
		193	0.16	0.0	0.0	85,0,0	185	0.18	0.0	0.0	85,0,0
133	ok	185	0.16	0.0	0.0	85,0,0	193	0.13	0.0	0.0	85,0,0
		194	0.21	0.0	0.0	85,0,0	186	0.24	0.0	0.0	81,0,0
134	ok	126	0.29	0.0	0.0	86,0,0	172	0.39	0.0	0.0	86,0,0

Setto	Stato	Nodo	V N/M	V V/T cls	V V/T acc	Rif. cmb	Nodo	V N/M	V V/T cls	V V/T acc	Rif. cmb
		180	0.33	0.0	0.0	87,0,0	134	0.45	0.0	0.0	87,0,0
135	ok	187	0.20	0.0	0.0	80,0,0	195	0.23	0.0	0.0	80,0,0
		197	0.22	0.0	0.0	80,0,0	189	0.19	0.0	0.0	80,0,0
136	ok	189	0.16	0.0	0.0	75,0,0	197	0.17	0.0	0.0	75,0,0
		198	0.17	0.0	0.0	75,0,0	190	0.16	0.0	0.0	75,0,0
137	ok	190	0.15	0.0	0.0	75,0,0	198	0.15	0.0	0.0	75,0,0
		199	0.15	0.0	0.0	75,0,0	191	0.15	0.0	0.0	75,0,0
138	ok	191	0.14	0.0	0.0	75,0,0	199	0.13	0.0	0.0	75,0,0
		200	0.14	0.0	0.0	75,0,0	192	0.15	0.0	0.0	75,0,0
139	ok	192	0.14	0.0	0.0	75,0,0	200	0.12	0.0	0.0	87,0,0
		201	0.14	0.0	0.0	74,0,0	193	0.15	0.0	0.0	75,0,0
140	ok	193	0.16	0.0	0.0	87,0,0	201	0.27	0.0	0.0	74,0,0
		202	0.31	0.0	0.0	87,0,0	194	0.39	0.0	0.0	87,0,0
141	ok	172	0.29	0.0	0.0	88,0,0	88	0.28	0.0	0.0	88,0,0
		12	0.33	0.0	0.0	87,0,0	180	0.45	0.0	0.0	87,0,0
142	ok	195	0.24	0.0	0.0	80,0,0	203	0.25	0.0	0.0	80,0,0
		204	0.25	0.0	0.0	80,0,0	197	0.23	0.0	0.0	80,0,0
143	ok	197	0.17	0.0	0.0	80,0,0	204	0.18	0.0	0.0	80,0,0
		205	0.19	0.0	0.0	80,0,0	198	0.17	0.0	0.0	80,0,0
144	ok	198	0.14	0.0	0.0	75,0,0	205	0.14	0.0	0.0	75,0,0
		206	0.14	0.0	0.0	75,0,0	199	0.14	0.0	0.0	75,0,0
145	ok	199	0.11	0.0	0.0	75,0,0	206	0.10	0.0	0.0	75,0,0
		207	0.10	0.0	0.0	75,0,0	200	0.10	0.0	0.0	75,0,0
146	ok	200	0.10	0.0	0.0	74,0,0	207	0.05	0.0	0.0	86,0,0
		208	0.14	0.0	0.0	77,0,0	201	0.06	0.0	0.0	87,0,0
147	ok	201	0.12	0.0	0.0	77,0,0	208	0.18	0.0	0.0	77,0,0
		14	0.34	0.0	0.0	87,0,0	202	0.44	0.0	0.0	87,0,0
148	ok	142	0.45	0.0	0.0	76,0,0	188	0.42	0.0	0.0	76,0,0
		196	0.43	0.0	0.0	76,0,0	15	0.43	0.0	0.0	76,0,0
149	ok	203	0.26	0.0	0.0	80,0,0	209	0.30	0.0	0.0	80,0,0
		211	0.29	0.0	0.0	80,0,0	204	0.26	0.0	0.0	80,0,0
...											
162	ok	218	0.23	0.0	0.0	76,0,0	13	0.23	0.0	0.0	76,0,0
Setto			V N/M	V V/T cls	V V/T acc			V N/M	V V/T cls	V V/T acc	
			0.66	0.0	0.0						

Scafati, 02/05/2023

Il Capogruppo Mandatario


 Dott. Ing. Massimo VIGLIANISI
 Iscrizione all'Albo n° A 3245
 alla Sezione degli Ingegneri (Sez. A)
 - Settore Civile e ambientale
 ORDINE DEGLI INGEGNERI
 DELLA PROVINCIA DI REGGIO CALABRIA