

Table of spans

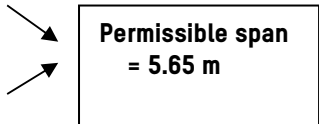
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COMMENTS ON THE TABLES FOR WALL ELEMENTS

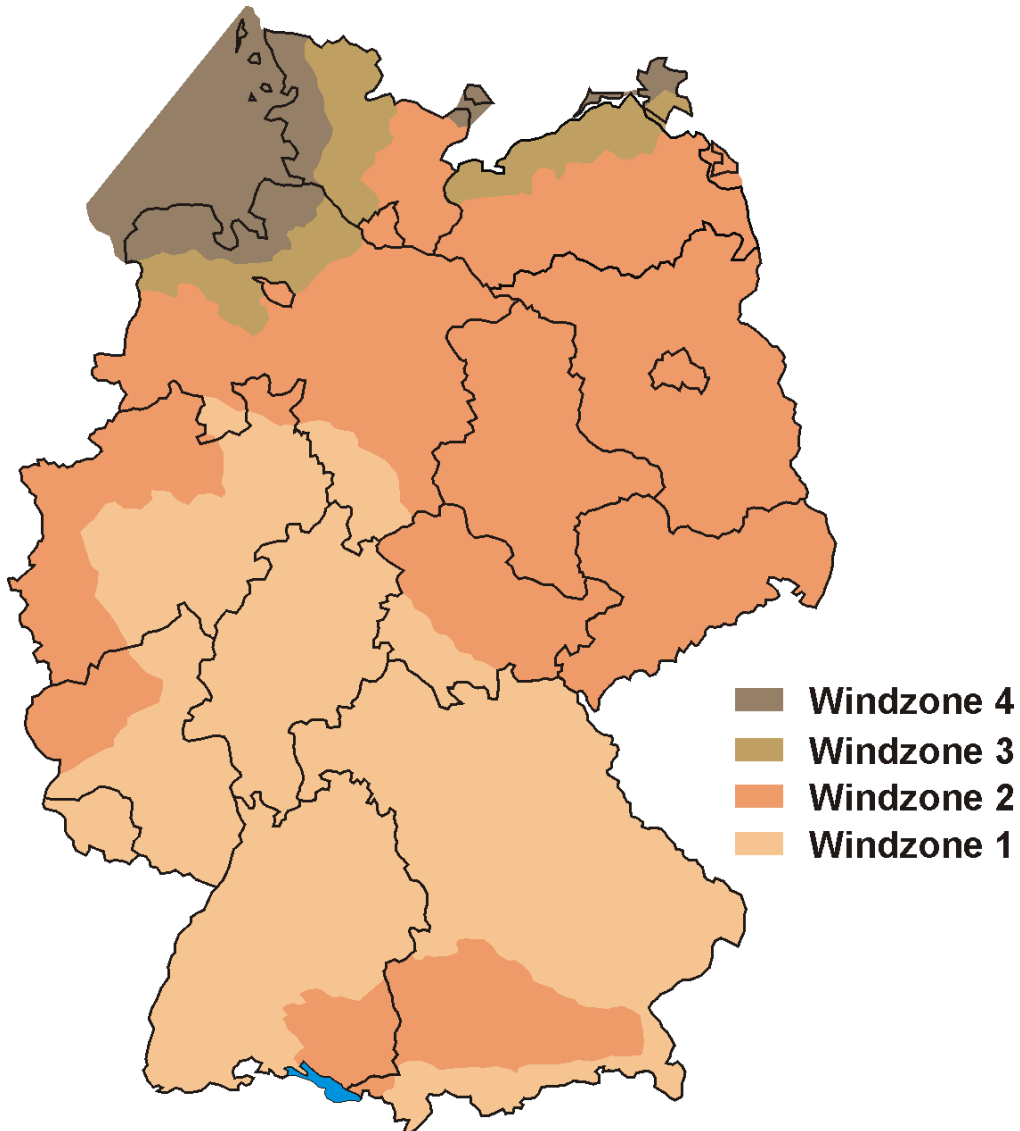
When using the tables, the following should be observed:

1. The characteristic loads must be determined in accordance with Eurocodes.
2. Values in accordance with Table E.6 and E.8 EN 14509, appendix E are the basis for load factors and combined coefficients.
3. The general building authority approval Z-10.49-511 of April 14 2011 serves as the basis for the load bearing capacity and the calculation parameters.
4. The relevant minimum span in the tables for wind pressure and wind uplift pressure requirements should be selected for each application case.
5. In the case of double- and triple-span girders/beams, only approximately identical span ratios are permissible (approximately $1.0 \leq \text{min.}l/\text{max.}l \leq 0.8$).
6. Application in buildings with normal interior temperatures of 20 to 25 °C.
7. At most, the deflection amounts to $l/100$ while considering all unfavourable loads.
Spans in the additional line marked with * are not relevant for calculations where deflection is restricted.
8. Spans in the "Characteristic wind uplift pressure" table do not take fasteners into consideration. Fasteners have to be verified on a case-by-case basis and can at number > 3 pieces reduce the specified span.
9. The quantity of direct fasteners was calculated using a characteristic screw load capacity of $N_{R,k} = 2.3 \text{ kN}$.
10. Interpolation between spans and numbers of screws is possible, but extrapolation is not.
11. For indirect (concealed) fastening, load capacity in accordance with approval Z-10.49-511. Appendix 2 is considered.
For thin walls ($t \leq 5 \text{ mm}$), asymmetrical substructures (no symmetrical axis parallel to the screw axis such as with Z or C profiles), a separate structural analysis must be carried out in each individual case.
12. See approval Z-10.49-511 for specific instructions related to load capacity, calculation parameters and their monitoring.
13. Please refer to the Roma color chart for information about surface colors and their category: I (very light), II (light) and III (dark).
14. Permissible spans are listed in m and the required support width in mm; see the following reading example.

READING EXAMPLE

From "Wind pressure" table	46 5.65 92	Required end support width in millimetres Permissible span based on element verification in m Required intermediate support width in mm
		
From "Wind uplift" table	6.05	Permissible span based on element verification
From "Wind uplift" table For screws	3 3.5	Number of screws per meter at support Permissible span in m with 3 screws per support

CALCULATION OF WIND LOAD



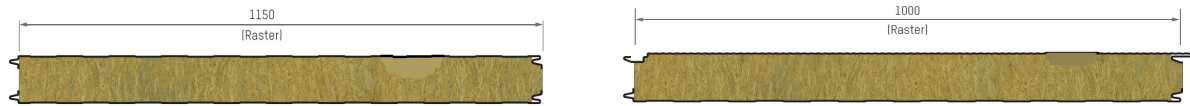
Source: <http://de.wikipedia.org/wiki/windlast>

Table 1: Characteristic wind load (kN/m²)

Building height	WIND LOAD ZONE				
		1	2	3	4
5 m	PERIPHERAL AREA	0.34/-0.58/-0.67	0.41/-0.71/-0.82	0.49/-0.85/-0.99	0.59/-1.01/-1.18
	NORMAL AREA	0.34/-0.38/-0.53	0.41/-0.47/-0.64	0.49/-0.56/-0.78	0.59/-0.67/-0.92
10 m	PERIPHERAL AREA	0.39/-0.65/-0.76	0.48/-0.80/-0.93	0.58/-0.96/-1.12	0.69/-1.14/-1.33
	NORMAL AREA	0.39/-0.44/-0.66	0.48/-0.53/-0.73	0.58/-0.64/-0.88	0.69/-0.76/-1.05
15 m	PERIPHERAL AREA	0.47/-0.76/-0.88	0.58/-0.92/-1.08	0.69/-1.11/-1.30	0.83/-1.33/-1.55
	NORMAL AREA	0.47/-0.51/-0.70	0.58/-0.62/-0.85	0.69/-0.74/-1.02	0.83/-0.88/-1.22

Note 3: Example values for buildings in the onshore terrain category
(wind pressure/general wind uplift pressure/wind uplift pressure for screws)

Permissible spans for ROMA wall elements FP 60 LL/ML 0.6/0.5 or FV 60 ML/LL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-511 of April 12, 2011 as well as based on EN 14509, Annex E, particularly using table E.6 and E.8. The most adverse loading condition combination consisting of wind and temperature has been verified in accordance with EN 14509, Annex E. The application notes (see page 2) must be observed.

Table W.1: Wind pressure

*without accounting for deflection

Structural system	Color group	Characteristic wind pressure in kN/m ²																								
		0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00													
1- span	I,II,III*	40	40	49	50	50	50	50	50	50	50	50	50	6.92	4.90	4.00	3.10	2.48	2.07	1.77	1.55	1.38	1.24	1.12	1.03	
	I,II,III	40	40	49	50	50	50	50	50	50	50	50	50	6.88	4.90	4.00	3.10	2.48	2.07	1.77	1.55	1.38	1.24	1.12	1.03	
2- span	I,II	40	40	40	40	40	40	47	50	50	50	50	50	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.55	1.38	1.24	1.12	1.03	
	III	40	40	40	40	40	40	40	40	40	40	42	46	50	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.03
3- span	I	40	40	40	41	47	50	50	50	50	50	50	50	50	4.51	3.34	2.82	2.52	2.32	2.07	1.77	1.55	1.38	1.24	1.12	1.03
		60	60	68	81	94	100	100	100	100	100	100	99	100	60	60	68	81	94	100	100	100	100	100	99	100
	II	40	40	40	40	46	50	50	50	50	50	50	50	50	2.26	2.26	2.26	2.26	2.26	2.07	1.77	1.55	1.38	1.24	1.12	1.03
		60	60	60	73	91	100	100	100	100	100	100	99	100	60	60	60	73	91	100	100	100	100	100	99	100
	III	40	40	40	40	40	40	40	40	40	40	40	41	43	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
		60	60	60	60	60	60	60	60	60	60	65	72	79	86	60	60	60	60	60	60	60	60	65	72	79

Table W.2: Wind uplift pressure

[see Comments no. 8]

Structural system	Color group	Characteristic wind uplift pressure in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	5.80	4.82	3.93	3.10	2.48	2.07	1.77	1.55	1.38	1.24	1.12	1.03
2- span	I	2.96	2.49	2.25	2.10	1.98	1.90	1.77	1.55	1.38	1.24	1.12	1.03
	II	1.58	1.52	1.48	1.45	1.42	1.39	1.36	1.34	1.32	1.24	1.12	1.03
	III	1.04	1.03	1.02	1.02	1.01	1.00	1.00	1.00	0.99	0.99	0.98	0.98
3- span	I	4.80	3.50	2.94	2.60	2.38	2.07	1.77	1.55	1.38	1.24	1.12	1.03
	II	1.87	1.70	1.60	1.52	1.46	1.41	1.37	1.34	1.30	1.24	1.12	1.03
	III	0.89	0.88	0.87	0.87	0.86	0.86	0.85	0.85	0.84	0.84	0.83	0.83

Table W.3: Characteristic wind uplift for screws in kN/m², direct fastening with 3 screws per support

[see Comments no. 9]

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	5.80	4.82	3.93	3.10	2.48	2.07	1.77	1.55	1.38	1.24	1.12	1.03
2- span	I	2.96	2.49	2.25	2.10	1.74	1.42	1.22	1.07	0.97	0.89	0.81	0.76
	II	1.58	1.52	1.48	1.45	1.42	1.19	1.00	0.92	0.84	0.78	0.72	0.68
	III	1.04	1.00	0.84	0.74	0.68	0.64	0.60	0.58	0.55	0.53	0.51	0.50
3- span	I	4.80	3.50	2.94	2.60	2.29	1.88	1.59	1.37	1.20	1.08	0.99	0.90
	II	1.87	1.70	1.60	1.52	1.46	1.41	1.37	1.29	1.12	1.00	0.92	0.83
	III	0.89	0.88	0.87	0.87	0.86	0.86	0.85	0.85	0.84	0.84	0.80	0.73

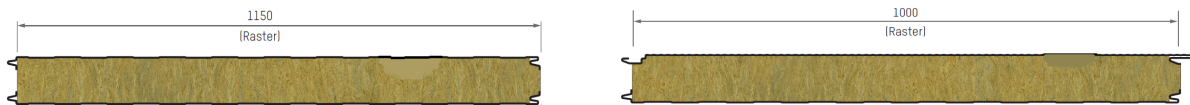
Table W.4: Characteristic wind uplift for screws in kN/m², indirect fastening, steel sheet 0.6/0.6

[see Comments no. 11]

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
2- span	I	2.92	2.49	1.34	0.99	0.84	0.75	0.69	0.64	0.60	0.57	0.53	0.50
	II	0.81	0.70	0.63	0.59	0.55	0.52	0.50	0.48	0.46	0.44	0.43	0.41
	III	0.43	0.42	0.40	0.39	0.38	0.37	0.36	0.35	0.34	0.33	0.32	0.31
3- span	I	4.80	3.50	2.57	1.84	1.41	1.14	0.98	0.84	0.75	0.67	0.61	0.56
	II	1.44	1.44	1.44	1.44	1.25	1.00	0.85	0.73	0.65	0.59	0.54	0.50
	III	0.81	0.81	0.81	0.61	0.53	0.49	0.45	0.43	0.41	0.39	0.37	0.36

* Intermediate support with 2 screws with load distribute plate indirect fastening, end support with 3 screws direct fastening

Permissible spans for ROMA wall elements FP 80 LL/ML 0.6/0.5 or FV 80 ML/LL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-511 of April 12, 2011 as well as based on EN 14509, Annex E, particularly using table E.6 and E.8. The most adverse loading condition combination consisting of wind and temperature has been verified in accordance with EN 14509, Annex E. The application notes (see page 2) must be observed.

Table W.5: Wind pressure

*without accounting for deflection

Structural system	Color group	Characteristic wind pressure in kN/m ²																							
		0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00												
1- span	I,II,III*	40	44	54	62	65	65	65	65	65	65	65	65	7.67	5.43	4.43	3.84	3.22	2.68	2.30	2.01	1.79	1.61	1.46	1.34
	I,II,III	40	44	54	62	65	65	65	65	65	65	65	65	7.67	5.43	4.43	3.84	3.22	2.68	2.30	2.01	1.79	1.61	1.46	1.34
2- span	I,II	40	40	40	40	40	43	50	57	64	65	65	65	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.76	1.61	1.46	1.34
	III	60	60	60	60	72	86	100	114	128	130	130	130	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
3- span	I	40	40	40	40	45	51	57	63	65	65	65	65	3.80	2.98	2.62	2.38	2.23	2.11	2.02	1.94	1.79	1.61	1.46	1.34
		60	60	64	77	90	102	114	125	130	130	130	130	3.80	2.98	2.62	2.38	2.23	2.11	2.02	1.94	1.79	1.61	1.46	1.34
	II	40	40	40	40	42	50	57	63	65	65	65	65	2.06	2.06	2.06	2.06	2.06	2.06	2.02	1.94	1.79	1.61	1.46	1.34
		60	60	60	67	83	100	114	125	130	130	130	130	2.06	2.06	2.06	2.06	2.06	2.06	2.02	1.94	1.79	1.61	1.46	1.34
	III	40	40	40	40	41	42	43	44	45	46	47	48	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
		60	60	60	60	60	60	60	60	63	71	79	87	95	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98

Table W.6: Wind uplift pressure

(see Comments no. 8)

Structural system	Color group	Characteristic wind uplift pressure in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	7.49	5.34	4.36	3.78	3.22	2.68	2.30	2.01	1.79	1.61	1.46	1.34
2- span	I	2.59	2.59	2.45	2.30	2.18	2.10	2.02	1.96	1.79	1.61	1.46	1.34
	II	1.71	1.67	1.63	1.60	1.56	1.54	1.52	1.49	1.47	1.45	1.44	1.34
	III	1.15	1.14	1.14	1.13	1.12	1.12	1.11	1.11	1.10	1.10	1.09	1.09
3- span	I	5.07	3.74	3.15	2.81	2.58	2.40	2.27	2.01	1.79	1.61	1.46	1.34
	II	1.87	1.76	1.67	1.61	1.56	1.52	1.48	1.44	1.42	1.39	1.36	1.34
	III	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91

Table W.6: Characteristic wind uplift for screws in kN/m², direct fastening with 3 screws per support

(see Comments no. 9)

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	7.49	5.34	4.36	3.78	3.22	2.68	2.30	2.01	1.79	1.61	1.46	1.34
2- span	I	2.59	2.59	2.45	2.07	1.60	1.33	1.15	1.02	0.93	0.86	0.79	0.74
	II	1.71	1.67	1.63	1.22	1.00	0.92	0.84	0.78	0.74	0.70	0.67	0.64
	III	0.77	0.71	0.66	0.63	0.60	0.57	0.55	0.53	0.52	0.50	0.48	0.47
3- span	I	5.07	3.74	3.15	2.81	2.22	1.81	1.52	1.31	1.15	1.03	0.95	0.87
	II	1.87	1.76	1.67	1.61	1.56	1.52	1.40	1.20	1.05	0.95	0.86	0.79
	III	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.90	0.78	0.70	0.65

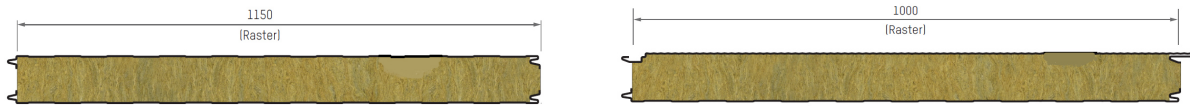
Table W.7: Characteristic wind uplift for screws in kN/m², indirect fastening, steel sheet 0.6/0.6

(see Comments no. 11)

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
2- span	I	2.59	1.00	0.86	0.77	0.70	0.65	0.62	0.58	0.55	0.53	0.51	0.48
	II	0.62	0.58	0.55	0.52	0.50	0.48	0.46	0.44	0.43	0.41	0.40	0.39
	III	0.40	0.39	0.38	0.36	0.36	0.34	0.34	0.33	0.32	0.31	0.30	0.30
3- span	I	5.07	3.74	2.34	1.64	1.24	1.01	0.87	0.76	0.68	0.62	0.57	0.53
	II	1.50	1.50	1.50	1.38	0.84	0.69	0.62	0.57	0.53	0.50	0.47	0.45
	III	0.56	0.51	0.47	0.44	0.42	0.40	0.39	0.37	0.36	0.35	0.34	0.33

* Intermediate support with 2 screws with load distribute plate indirect fastening, end support with 3 screws direct fastening

Permissible spans for ROMA wall elements FP 100 LL/ML 0.6/0.5 or FV 100 ML/LL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-511 of April 12, 2011 as well as based on EN 14509, Annex E, particularly using table E.6 and E.8. The most adverse loading condition combination consisting of wind and temperature has been verified in accordance with EN 14509, Annex E. The application notes (see page 2) must be observed.

Table W.8: Wind pressure

*without accounting for deflection

Structural system	Color group	Characteristic wind pressure in kN/m ²											
		0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00
1- span	I,II,III*	40	47	58	66	74	78	78	78	78	77	78	78
	I,II,III	8.19	5.79	4.73	4.10	3.66	3.20	2.74	2.40	2.13	1.92	1.74	1.60
2- span	I,II	40	47	58	66	74	78	78	78	78	77	78	78
		8.19	5.79	4.73	4.10	3.66	3.20	2.74	2.40	2.13	1.92	1.74	1.60
	III	40	40	40	40	40	41	43	44	45	50	55	60
		1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24
3- span	I	40	40	40	40	41	47	53	59	65	70	76	78
		2.72	2.40	2.22	2.10	2.01	1.94	1.87	1.82	1.77	1.73	1.70	1.60
	II	60	60	60	62	65	69	72	80	90	100	110	120
		1.96	1.96	1.96	1.96	1.96	1.94	1.87	1.82	1.77	1.73	1.70	1.60
	III	40	40	40	40	41	47	53	59	65	70	76	78
		1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02

Table W.9: Wind uplift pressure

[see Comments no. 8]

Structural system	Color group	Characteristic wind uplift pressure in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	8.06	5.70	4.65	4.03	3.60	3.20	2.74	2.40	2.13	1.92	1.74	1.60
2- span	I	2.25	2.25	2.25	2.25	2.25	2.23	2.16	2.10	2.05	1.92	1.74	1.60
	II	1.80	1.76	1.73	1.70	1.67	1.64	1.62	1.60	1.58	1.56	1.54	1.53
	III	1.24	1.23	1.22	1.22	1.21	1.21	1.20	1.20	1.19	1.18	1.18	1.18
3- span	I	3.76	3.76	3.24	2.91	2.68	2.52	2.38	2.28	2.13	1.92	1.74	1.60
	II	1.84	1.76	1.70	1.65	1.60	1.57	1.54	1.51	1.48	1.46	1.44	1.42
	III	1.01	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.98	0.98	0.98

Table W.10: Characteristic wind uplift for screws in kN/m², direct fastening with 3 screws per support

[see Comments no. 9]

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	8.06	5.70	4.65	4.03	3.60	3.20	2.74	2.40	2.13	1.92	1.74	1.60
2- span	I	2.25	2.25	2.25	1.91	1.49	1.23	1.08	1.00	0.91	0.84	0.78	0.73
	II	1.80	1.76	1.08	0.98	0.89	0.82	0.77	0.73	0.69	0.66	0.64	0.61
	III	0.67	0.64	0.61	0.59	0.57	0.55	0.53	0.51	0.50	0.48	0.47	0.46
3- span	I	3.76	3.76	3.24	2.76	2.14	1.74	1.46	1.26	1.10	1.00	0.91	0.84
	II	1.84	1.76	1.70	1.65	1.60	1.57	1.31	1.12	1.00	0.90	0.82	0.75
	III	1.01	1.00	1.00	1.00	1.00	1.00	0.86	0.75	0.68	0.64	0.60	0.57

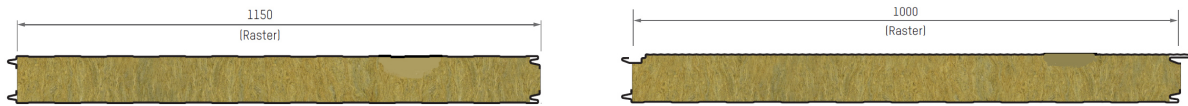
Table W.11: Characteristic wind uplift for screws in kN/m², indirect fastening, steel sheet 0.6/0.6

[see Comments no. 11]

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
2- span	I	0.93	0.81	0.74	0.68	0.64	0.60	0.57	0.55	0.52	0.50	0.48	0.46
	II	0.56	0.53	0.51	0.49	0.47	0.45	0.44	0.42	0.41	0.39	0.38	0.37
	III	0.38	0.37	0.36	0.35	0.34	0.33	0.32	0.31	0.31	0.30	0.29	0.29
3- span	I	3.76	3.50	2.09	1.43	1.09	0.92	0.79	0.70	0.63	0.58	0.54	0.50
	II	1.52	1.52	0.81	0.67	0.60	0.56	0.52	0.49	0.47	0.45	0.43	0.41
	III	0.45	0.43	0.41	0.39	0.38	0.37	0.35	0.34	0.33	0.32	0.32	0.31

* Intermediate support with 2 screws with load distribute plate indirect fastening, end support with 3 screws direct fastening

Permissible spans for ROMA wall elements FP 120 LL/ML 0.6/0.5 or FV 120 ML/LL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-511 of April 12, 2011 as well as based on EN 14509, Annex E, particularly using table E.6 and E.8. The most adverse loading condition combination consisting of wind and temperature has been verified in accordance with EN 14509, Annex E. The application notes (see page 2) must be observed.

Table W.12: Wind pressure

*without accounting for deflection

Structural system	Color group	Characteristic wind pressure in kN/m ²											
		0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00
1- span	I,II,III*	40	49	60	69	77	84	90	90	90	90	90	90
	I,II,III	8.51	6.02	4.92	4.26	3.81	3.48	3.18	2.78	2.47	2.22	2.02	1.85
2- span	I,II	40	49	60	69	77	84	90	90	90	90	90	90
		60	61	66	71	76	87	101	113	126	138	150	162
	III	40	40	41	42	43	45	46	48	49	53	58	64
		60	60	63	67	71	74	78	85	95	106	116	127
3- span	I	40	40	40	40	40	42	48	54	59	65	70	75
		60	60	60	60	71	83	95	107	118	129	140	150
	II	40	40	40	40	40	42	48	54	59	65	70	75
		60	60	60	60	71	83	95	107	118	129	140	150
	III	46	47	48	50	51	52	53	54	55	56	58	59
		60	60	60	60	60	60	60	60	60	60	60	60

Table W.13: Wind uplift pressure

[see Comments no. 8]

Structural system	Color group	Characteristic wind uplift pressure in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	8.37	5.92	4.83	4.19	3.74	3.42	3.16	2.78	2.47	2.22	2.02	1.85
2- span	I	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	1.85
	II	1.86	1.82	1.80	1.77	1.74	1.72	1.70	1.68	1.66	1.64	1.63	1.61
	III	1.30	1.30	1.29	1.28	1.28	1.28	1.27	1.26	1.26	1.25	1.25	1.24
3- span	I	2.12	2.12	2.12	2.12	2.12	2.12	2.12	2.12	2.12	2.12	2.02	1.85
	II	1.80	1.74	1.70	1.66	1.62	1.60	1.57	1.54	1.52	1.50	1.48	1.46
	III	1.05	1.04	1.04	1.04	1.03	1.03	1.03	1.02	1.02	1.02	1.01	1.01

Table W.14: Characteristic wind uplift for screws in kN/m², direct fastening with 3 screws per support

[see Comments no. 9]

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	8.37	5.92	4.83	4.19	3.74	3.42	3.16	2.78	2.47	2.22	2.02	1.85
2- span	I	2.02	2.02	2.02	1.54	1.24	1.10	1.00	0.95	0.89	0.82	0.77	0.72
	II	1.34	1.04	0.96	0.88	0.82	0.77	0.73	0.70	0.67	0.64	0.62	0.60
	III	0.64	0.61	0.59	0.56	0.55	0.53	0.51	0.50	0.49	0.47	0.46	0.45
3- span	I	2.12	2.12	2.12	2.12	2.06	1.67	1.40	1.21	1.07	0.98	0.89	0.82
	II	1.80	1.74	1.70	1.66	1.62	1.48	1.23	1.06	0.96	0.86	0.79	0.73
	III	1.05	1.04	1.04	1.04	0.89	0.76	0.69	0.65	0.61	0.58	0.55	0.53

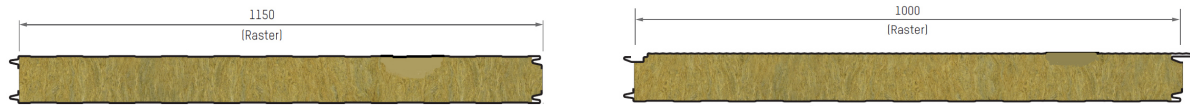
Table W.15: Characteristic wind uplift for screws in kN/m², indirect fastening, steel sheet 0.6/0.6

[see Comments no. 11]

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
2- span	I	0.79	0.72	0.67	0.63	0.60	0.57	0.54	0.52	0.50	0.48	0.46	0.45
	II	0.52	0.50	0.48	0.46	0.45	0.43	0.42	0.40	0.39	0.38	0.37	0.36
	III	0.36	0.35	0.34	0.33	0.32	0.32	0.31	0.31	0.30	0.29	0.29	0.28
3- span	I	2.12	2.12	1.82	1.00	0.85	0.74	0.67	0.62	0.58	0.55	0.51	0.48
	II	0.87	0.68	0.61	0.56	0.53	0.50	0.47	0.45	0.43	0.42	0.40	0.39
	III	0.41	0.39	0.38	0.36	0.35	0.34	0.33	0.32	0.32	0.31	0.30	0.29

* Intermediate support with 2 screws with load distribute plate indirect fastening, end support with 3 screws direct fastening

Permissible spans for ROMA wall elements FP 140 LL/ML 0.6/0.5 or FV 140 ML/LL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-511 of April 12, 2011 as well as based on EN 14509, Annex E, particularly using table E.6 and E.8. The most adverse loading condition combination consisting of wind and temperature has been verified in accordance with EN 14509, Annex E. The application notes (see page 2) must be observed.

Table W.16: Wind pressure

*without accounting for deflection

Structural system	Color group	Characteristic wind pressure in kN/m ²											
		0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00
1- span	I,II,III*	40	50	61	70	78	86	93	99	99	99	99	99
	I,II,III	8.66	6.13	5.00	4.33	3.88	3.54	3.28	3.06	2.73	2.45	2.23	2.04
2- span	I,II	40	50	61	70	78	86	93	99	99	99	99	99
	III	8.66	6.13	5.00	4.33	3.88	3.54	3.28	3.06	2.73	2.45	2.23	2.04
3- span	I	40	40	40	40	40	42	48	54	61	66	73	79
	II	1.81	1.79	1.76	1.74	1.72	1.71	1.69	1.67	1.66	1.64	1.63	1.62
3- span	I	60	64	69	74	78	83	96	108	121	132	145	157
	II	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36
3- span	I	40	41	42	44	45	47	48	50	51	55	61	66
	II	1.63	1.60	1.58	1.55	1.53	1.51	1.49	1.48	1.46	1.44	1.43	1.42
3- span	I	60	63	66	70	73	77	81	88	99	110	121	132
	II	1.63	1.60	1.58	1.55	1.53	1.51	1.49	1.48	1.46	1.44	1.43	1.42
3- span	I	40	40	40	40	40	40	42	48	53	58	64	69
	II	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
3- span	I	60	60	60	60	62	73	84	96	106	116	127	137
	II	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
3- span	I	49	50	48	52	54	55	56	48	58	59	50	61
	II	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
3- span	I	60	60	60	60	60	60	61	70	79	87	96	105
	II	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08

Table W.17: Wind uplift pressure

[see Comments no. 8]

Structural system	Color group	Characteristic wind uplift pressure in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	8.52	6.02	4.92	4.26	3.81	3.48	3.22	3.01	2.73	2.45	2.23	2.04
2- span	I	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84
	II	1.84	1.84	1.84	1.82	1.79	1.77	1.75	1.74	1.72	1.70	1.69	1.67
2- span	III	1.35	1.35	1.34	1.34	1.33	1.32	1.32	1.32	1.31	1.30	1.30	1.30
	I	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66
3- span	II	1.66	1.66	1.66	1.65	1.62	1.60	1.58	1.56	1.54	1.52	1.50	1.49
	III	1.08	1.07	1.07	1.06	1.06	1.06	1.06	1.05	1.05	1.04	1.04	1.04

Table W.18: Characteristic wind uplift for screws in kN/m², direct fastening with 3 screws per support

[see Comments no. 9]

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	8.52	6.02	4.92	4.26	3.81	3.48	3.22	3.01	2.73	2.45	2.23	2.04
2- span	I	1.84	1.84	1.68	1.29	1.13	1.02	0.97	0.91	0.85	0.81	0.76	0.71
	II	1.04	0.96	0.88	0.83	0.78	0.74	0.71	0.68	0.65	0.63	0.60	0.59
2- span	III	0.61	0.59	0.57	0.55	0.53	0.52	0.50	0.49	0.48	0.47	0.46	0.45
	I	1.66	1.66	1.66	1.66	1.66	1.60	1.35	1.17	1.04	0.95	0.87	0.80
3- span	II	1.66	1.66	1.66	1.65	1.62	1.38	1.16	1.00	0.91	0.83	0.76	0.71
	III	1.08	1.07	1.00	0.80	0.72	0.67	0.63	0.60	0.57	0.55	0.53	0.51

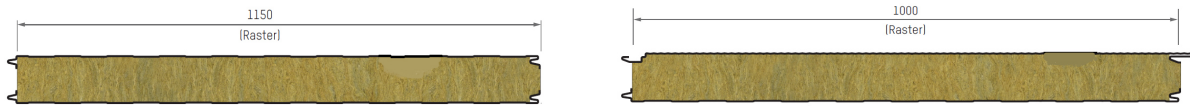
Table W.19: Characteristic wind uplift for screws in kN/m², indirect fastening, steel sheet 0.6/0.6

[see Comments no. 11]

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
2- span	I	0.72	0.67	0.63	0.59	0.56	0.54	0.51	0.49	0.47	0.46	0.44	0.43
	II	0.49	0.47	0.46	0.44	0.42	0.41	0.40	0.39	0.37	0.37	0.36	0.35
2- span	III	0.34	0.34	0.33	0.32	0.31	0.31	0.30	0.29	0.29	0.28	0.28	0.27
	I	1.66	1.66	0.99	0.80	0.71	0.65	0.60	0.57	0.53	0.51	0.48	0.46
3- span	II	0.63	0.58	0.54	0.51	0.48	0.46	0.44	0.42	0.41	0.39	0.38	0.37
	III	0.38	0.36	0.35	0.34	0.33	0.33	0.32	0.31	0.30	0.29	0.28	0.28

* Intermediate support with 2 screws with load distribute plate indirect fastening, end support with 3 screws direct fastening

Permissible spans for ROMA wall elements FP 170 LL/ML 0.6/0.5 or FV 170 ML/LL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-511 of April 12, 2011 as well as based on EN 14509, Annex E, particularly using table E.6 and E.8. The most adverse loading condition combination consisting of wind and temperature has been verified in accordance with EN 14509, Annex E. The application notes (see page 2) must be observed.

Table W.20: Wind pressure

*without accounting for deflection

Structural system	Color group	Characteristic wind pressure in kN/m ²											
		0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00
1- span	I,II,III*	40	40	40	45	51	55	60	61	61	61	61	61
	I,II,III	11.14	7.87	6.43	5.57	4.98	4.55	4.21	3.74	3.32	2.99	2.72	2.49
2- span	I,II	40	40	40	45	51	55	60	61	61	61	61	61
	III	2.38	2.32	2.27	2.23	2.19	2.16	2.13	2.1	2.07	2.05	2.02	2
3- span	I	40	40	40	40	40	40	40	40	40	42	45	49
	II	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.05	2.02	2.00
3- span	I	40	40	40	40	40	40	40	40	40	40	43	46
	II	2.50	2.38	2.29	2.21	2.15	2.10	2.05	2.01	1.97	1.94	1.91	1.88
3- span	III	40	40	40	40	40	40	40	40	40	40	43	46
	III	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.88

Table W.21: Wind uplift pressure

[see Comments no. 8]

Structural system	Color group	Characteristic wind uplift pressure in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	9.40	6.64	5.42	4.70	4.20	3.84	3.55	3.32	3.12	2.81	2.55	2.34
2- span	I	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03
	II	2.03	2.03	2.03	2.00	1.98	1.96	1.93	1.91	1.90	1.88	1.86	1.84
3- span	III	1.49	1.48	1.48	1.47	1.47	1.46	1.46	1.45	1.44	1.44	1.44	1.43
	I	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83
3- span	II	1.83	1.83	1.83	1.82	1.79	1.76	1.74	1.72	1.70	1.68	1.66	1.64
	III	1.19	1.18	1.18	1.18	1.17	1.17	1.16	1.16	1.16	1.15	1.15	1.15

Table W.22: Characteristic wind uplift for screws in kN/m², direct fastening with 3 screws per support

[see Comments no. 9]

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	9.40	6.64	5.42	4.70	4.20	3.84	3.55	3.32	3.12	2.81	2.55	2.34
2- span	I	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03
	II	2.03	2.03	2.03	2.00	1.98	1.96	1.93	1.91	1.90	1.88	1.86	1.84
3- span	III	1.49	1.48	1.48	1.47	1.47	1.46	1.46	1.45	1.44	1.44	1.44	1.43
	I	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83
3- span	II	1.83	1.83	1.83	1.82	1.79	1.76	1.74	1.72	1.70	1.68	1.66	1.64
	III	1.19	1.18	1.18	1.18	1.17	1.17	1.16	1.16	1.16	1.15	1.15	1.15

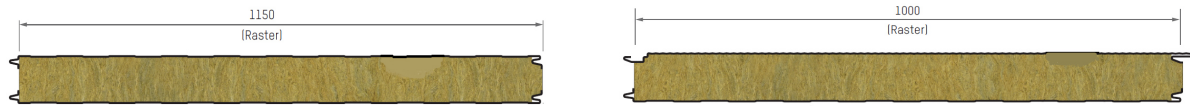
Table W.23: Characteristic wind uplift for screws in kN/m², indirect fastening, steel sheet 0.6/0.6

[see Comments no. 11]

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
2- span	I	0.65	0.61	0.58	0.55	0.53	0.50	0.48	0.47	0.45	0.43	0.42	0.41
	II	0.46	0.45	0.43	0.42	0.40	0.39	0.38	0.37	0.36	0.35	0.34	0.33
3- span	III	0.33	0.32	0.31	0.31	0.30	0.29	0.29	0.28	0.28	0.27	0.27	0.26
	I	1.06	0.84	0.73	0.66	0.61	0.57	0.54	0.51	0.49	0.47	0.45	0.43
3- span	II	0.54	0.50	0.48	0.46	0.44	0.42	0.40	0.39	0.38	0.36	0.36	0.34
	III	0.35	0.34	0.33	0.32	0.31	0.30	0.30	0.29	0.28	0.27	0.27	0.26

* Intermediate support with 2 screws with load distribute plate indirect fastening, end support with 3 screws direct fastening

Permissible spans for ROMA wall elements FP 200 LL/ML 0.6/0.5 or FV 200 ML/LL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-511 of April 12, 2011 as well as based on EN 14509, Annex E, particularly using table E.6 and E.8. The most adverse loading condition combination consisting of wind and temperature has been verified in accordance with EN 14509, Annex E. The application notes (see page 2) must be observed.

Table W.24: Wind pressure

*without accounting for deflection

Structural system	Color group	Characteristic wind pressure in kN/m ²											
		0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00
1- span	I,II,III*	42	59	73	84	94	103	111	118	125	125	125	125
	I,II,III	10.38	7.34	5.99	5.19	4.64	4.24	3.92	3.67	3.44	3.10	2.82	2.58
2- span	I,II	42	59	73	84	94	103	111	118	125	125	125	125
		10.38	7.34	5.99	5.19	4.64	4.24	3.92	3.67	3.44	3.10	2.82	2.58
	III	40	40	40	42	44	50	57	65	72	80	87	94
		2.17	2.14	2.11	2.09	2.06	2.04	2.02	2	1.98	1.97	1.95	1.94
3- span	I	47	49	51	53	54	56	58	59	61	66	73	79
		1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63
	II	71	75	79	84	88	92	92	105	118	131	145	158
		1.95	1.92	1.88	1.86	1.83	1.81	1.78	1.77	1.75	1.73	1.72	1.70
2- span	II	40	40	40	40	40	44	51	57	64	70	77	82
		1.95	1.92	1.88	1.86	1.83	1.81	1.78	1.77	1.75	1.73	1.72	1.70
	III	60	60	60	60	74	88	101	114	127	140	153	164
		1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
3- span	III	59	60	57	63	64	65	67	68	69	71	72	74
		1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
	III	60	60	60	60	60	63	73	83	94	104	115	125
		1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29

Table W.25: Wind uplift pressure

[see Comments no. 8]

Structural system	Color group	Characteristic wind uplift pressure in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	10.20	7.21	5.89	5.10	4.56	4.16	3.85	3.61	3.40	3.10	2.82	2.58
2- span	I	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20
	II	2.20	2.20	2.20	2.17	2.15	2.12	2.10	2.08	2.06	2.04	2.02	2.00
	III	1.62	1.61	1.61	1.60	1.59	1.59	1.58	1.58	1.57	1.56	1.56	1.55
3- span	I	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98
	II	1.98	1.98	1.98	1.98	1.94	1.92	1.89	1.86	1.84	1.82	1.80	1.78
	III	1.29	1.28	1.28	1.28	1.27	1.27	1.26	1.26	1.26	1.25	1.25	1.24

Table W.26: Characteristic wind uplift for screws in kN/m², direct fastening with 3 screws per support

[see Comments no. 9]

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	10.20	7.21	5.89	5.10	4.56	4.16	3.85	3.46	3.08	2.77	2.52	2.31
2- span	I	2.20	1.34	1.17	1.06	1.00	0.94	0.89	0.84	0.80	0.77	0.74	0.70
	II	0.89	0.84	0.79	0.76	0.72	0.69	0.67	0.64	0.62	0.60	0.58	0.57
	III	0.58	0.56	0.54	0.53	0.52	0.50	0.49	0.48	0.47	0.46	0.45	0.44
3- span	I	1.98	1.98	1.98	1.98	1.78	1.44	1.22	1.08	0.98	0.89	0.82	0.77
	II	1.98	1.98	1.98	1.32	1.04	0.95	0.86	0.80	0.75	0.71	0.68	0.65
	III	0.76	0.71	0.66	0.63	0.60	0.58	0.55	0.54	0.52	0.50	0.49	0.47

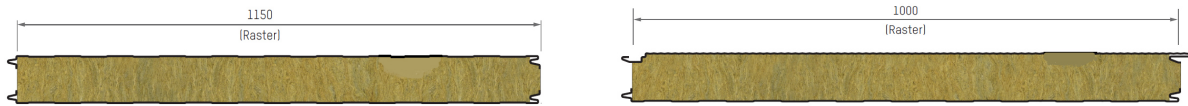
Table W.27: Characteristic wind uplift for screws in kN/m², indirect fastening, steel sheet 0.6/0.6

[see Comments no. 11]

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
2- span	I	0.60	0.57	0.54	0.52	0.49	0.47	0.46	0.44	0.43	0.41	0.40	0.39
	II	0.43	0.42	0.41	0.39	0.38	0.37	0.36	0.35	0.34	0.33	0.32	0.32
	III	0.31	0.31	0.30	0.29	0.29	0.28	0.27	0.27	0.26	0.26	0.25	0.25
3- span	I	0.77	0.69	0.63	0.59	0.55	0.52	0.49	0.47	0.45	0.43	0.42	0.40
	II	0.48	0.46	0.44	0.42	0.40	0.39	0.38	0.36	0.35	0.34	0.33	0.32
	III	0.32	0.32	0.31	0.30	0.29	0.28	0.28	0.27	0.27	0.26	0.25	0.25

* Intermediate support with 2 screws with load distribute plate indirect fastening, end support with 3 screws direct fastening

Permissible spans for ROMA wall elements FP 240 LL/ML 0.6/0.5 or FV 240 ML/LL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-511 of April 12, 2011 as well as based on EN 14509, Annex E, particularly using table E.6 and E.8. The most adverse loading condition combination consisting of wind and temperature has been verified in accordance with EN 14509, Annex E. The application notes (see page 2) must be observed.

Table W.28: Wind pressure

*without accounting for deflection

Structural system	Color group	Characteristic wind pressure in kN/m ²											
		0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00
1- span	I,II,III*	46	65	80	92	103	112	121	130	136	136	137	136
	I,II,III	11.37	8.04	6.57	5.69	5.09	4.64	4.30	4.02	3.76	3.38	3.08	2.82
2- span	I,II	46	65	80	92	103	112	121	130	136	136	137	136
		11.37	8.04	6.57	5.69	5.09	4.64	4.30	4.02	3.76	3.38	3.08	2.82
	III	40	41	43	45	48	54	63	71	79	87	95	103
		2.38	2.35	2.32	2.29	2.27	2.24	2.22	2.2	2.18	2.16	2.14	2.13
3- span	I	78	71	90	97	103	108	125	142	158	174	190	206
		1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79
	II	52	50	56	57	59	61	63	65	67	72	80	87
		2.15	2.11	2.08	2.04	2.02	1.99	1.96	1.94	1.92	1.90	1.88	1.87
3- span	II	60	60	60	66	82	96	111	125	139	153	167	181
		2.15	2.11	2.08	2.04	2.02	1.99	1.96	1.94	1.92	1.90	1.88	1.87
	III	64	66	67	69	70	72	73	75	76	78	79	80
		1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42

Table W.29: Wind uplift pressure

[see Comments no. 8]

Structural system	Color group	Characteristic wind uplift pressure in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	11.18	7.90	6.45	5.59	5.00	4.56	4.22	3.95	3.73	3.38	3.08	2.82
2- span	I	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42
	II	2.42	2.42	2.42	2.39	2.36	2.33	2.30	2.28	2.26	2.24	2.22	2.20
	III	1.78	1.77	1.76	1.76	1.75	1.74	1.74	1.73	1.72	1.72	1.71	1.70
3- span	I	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19
	II	2.19	2.19	2.19	2.18	2.14	2.11	2.08	2.05	2.03	2.00	1.98	1.96
	III	1.42	1.41	1.41	1.40	1.40	1.39	1.39	1.38	1.38	1.38	1.37	1.37

Table W.30: Characteristic wind uplift for screws in kN/m², direct fastening with 3 screws per support

[see Comments no. 9]

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	11.18	7.90	6.45	5.59	5.00	4.56	3.95	3.46	3.08	2.77	2.52	2.31
2- span	I	1.37	1.20	1.09	1.01	0.96	0.91	0.86	0.82	0.79	0.75	0.72	0.70
	II	0.85	0.81	0.77	0.73	0.71	0.68	0.66	0.63	0.61	0.59	0.58	0.56
	III	0.57	0.55	0.54	0.52	0.51	0.50	0.48	0.47	0.46	0.45	0.44	0.43
3- span	I	2.19	2.19	2.19	2.18	1.66	1.36	1.16	1.04	0.95	0.87	0.81	0.75
	II	2.19	2.19	1.18	1.00	0.92	0.85	0.79	0.75	0.71	0.68	0.65	0.62
	III	0.69	0.65	0.62	0.59	0.57	0.55	0.53	0.52	0.50	0.49	0.48	0.46

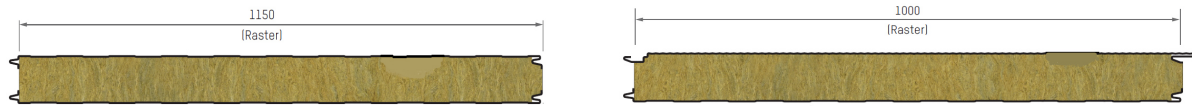
Table W.31: Characteristic wind uplift for screws in kN/m², indirect fastening, steel sheet 0.6/0.6

[see Comments no. 11]

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
2- span	I	0.55	0.52	0.50	0.48	0.46	0.44	0.42	0.41	0.40	0.38	0.37	0.36
	II	0.40	0.39	0.38	0.37	0.36	0.35	0.34	0.33	0.32	0.31	0.30	0.30
	III	0.29	0.29	0.28	0.27	0.27	0.26	0.26	0.25	0.25	0.24	0.24	0.23
3- span	I	0.63	0.58	0.55	0.52	0.49	0.47	0.45	0.43	0.41	0.40	0.38	0.37
	II	0.43	0.41	0.40	0.38	0.37	0.36	0.34	0.33	0.32	0.32	0.31	0.30
	III	0.30	0.29	0.28	0.28	0.27	0.26	0.26	0.26	0.25	0.25	0.24	0.24

* Intermediate support with 2 screws with load distribute plate indirect fastening, end support with 3 screws direct fastening

Permissible spans for ROMA wall elements FP+60 LL/ML 0.6/0.5 or FV+60 ML/LL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-511 of April 12, 2011 as well as based on EN 14509, Annex E, particularly using table E.6 and E.8. The most adverse loading condition combination consisting of wind and temperature has been verified in accordance with EN 14509, Annex E. The application notes (see page 2) must be observed.

Table W.32: Wind pressure

*without accounting for deflection

Structural system	Color group	Characteristic wind pressure in kN/m ²											
		0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00
1- span	I,II,III*	40	40	40	40	40	40	40	40	40	40	40	40
	I,II,III	8.42	5.96	4.83	3.62	2.90	2.41	2.07	1.81	1.61	1.44	1.31	1.20
2- span	I,II	40	40	40	40	40	40	40	40	40	40	40	40
	III	4.8	3.65	3.14	2.84	2.63	2.41	2.07	1.81	1.61	1.44	1.31	1.2
3- span	I	60	60	60	60	60	60	60	60	60	60	60	60
	II	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.81	1.61	1.44	1.31	1.20
3- span	I	40	40	40	40	40	40	40	40	40	40	40	40
	II	7.24	5.17	4.26	3.62	2.90	2.41	2.07	1.81	1.61	1.44	1.31	1.20
3- span	III	60	60	60	60	60	60	60	60	60	60	60	60
	III	7.24	5.17	4.26	3.62	2.90	2.41	2.07	1.81	1.61	1.44	1.31	1.20

Table W.33: Wind uplift pressure

(see Comments no. 8)

Structural system	Color group	Characteristic wind uplift pressure in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	5.80	5.21	4.39	3.62	2.90	2.41	2.07	1.81	1.61	1.44	1.31	1.20
2- span	I	6.63	4.81	4.01	3.54	2.90	2.41	2.07	1.81	1.61	1.44	1.31	1.20
	II	4.31	3.35	2.92	2.66	2.48	2.34	2.07	1.81	1.61	1.44	1.31	1.20
3- span	III	1.80	1.74	1.68	1.64	1.60	1.56	1.53	1.51	1.48	1.44	1.31	1.20
	I	7.60	5.38	4.39	3.62	2.90	2.41	2.07	1.81	1.61	1.44	1.31	1.20
3- span	II	6.76	4.84	4.00	3.50	2.90	2.41	2.07	1.81	1.61	1.44	1.31	1.20
	III	2.84	2.36	2.12	1.96	1.85	1.76	1.70	1.64	1.59	1.44	1.31	1.20

Table W.34: Characteristic wind uplift for screws in kN/m², direct fastening with 3 screws per support

(see Comments no. 9)

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	5.80	5.21	4.39	3.62	2.90	2.41	2.07	1.81	1.61	1.44	1.31	1.20
2- span	I	6.63	4.81	3.12	2.24	1.73	1.41	1.20	1.06	0.96	0.87	0.80	0.75
	II	4.31	3.35	2.86	1.97	1.49	1.12	0.99	0.88	0.80	0.75	0.70	0.66
3- span	III	1.80	0.94	0.76	0.69	0.64	0.60	0.57	0.55	0.53	0.51	0.49	0.48
	I	7.60	5.38	3.96	2.92	2.29	1.88	1.58	1.37	1.20	1.07	0.98	0.90
3- span	II	6.76	4.84	3.88	2.83	2.20	1.79	1.50	1.28	1.12	1.00	0.91	0.83
	III	2.84	2.36	2.12	1.96	1.85	1.64	1.35	1.14	1.00	0.89	0.80	0.72

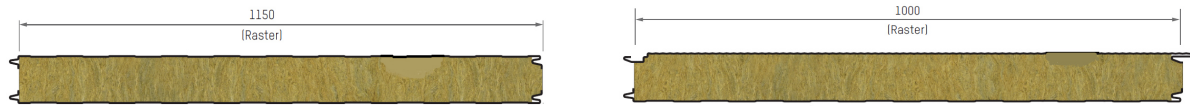
Table W.35: Characteristic wind uplift for screws in kN/m², indirect fastening, steel sheet 0.6/0.6

(see Comments no. 11)

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
2- span	I	6.63	3.61	2.15	1.50	1.11	0.97	0.86	0.78	0.72	0.66	0.61	0.58
	II	4.31	1.00	0.82	0.73	0.67	0.62	0.59	0.56	0.53	0.51	0.49	0.47
3- span	III	0.50	0.48	0.46	0.44	0.43	0.42	0.40	0.39	0.38	0.37	0.36	0.35
	I	7.60	4.74	3.05	2.21	1.71	1.39	1.16	1.00	0.90	0.80	0.73	0.67
3- span	II	6.76	4.62	2.92	2.08	1.58	1.26	1.04	0.91	0.80	0.71	0.65	0.60
	III	1.88	1.88	1.88	1.84	1.32	0.78	0.62	0.56	0.51	0.48	0.46	0.43

* Intermediate support with 2 screws with load distribute plate indirect fastening, end support with 3 screws direct fastening

Permissible spans for ROMA wall elements FP+80 LL/ML 0.6/0.5 or FV+80 ML/LL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-511 of April 12, 2011 as well as based on EN 14509, Annex E, particularly using table E.6 and E.8. The most adverse loading condition combination consisting of wind and temperature has been verified in accordance with EN 14509, Annex E. The application notes (see page 2) must be observed.

Table W.36: Wind pressure

*without accounting for deflection

Structural system	Color group	Characteristic wind pressure in kN/m ²																							
		0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00												
1- span	I,II,III*	40	40	40	40	40	40	40	40	40	40	40	40	9.27	6.55	5.35	4.52	3.61	3.01	2.58	2.26	2.00	1.80	1.64	1.50
	I,II,III	40	40	40	40	40	40	40	40	40	40	40	40	8.76	6.55	5.35	4.52	3.61	3.01	2.58	2.26	2.00	1.80	1.64	1.50
2- span	I,II	40	40	40	40	40	40	40	40	40	40	40	40	4.18	3.39	3.02	2.78	2.62	2.49	2.38	2.26	2	1.8	1.64	1.5
	III	60	60	60	60	60	60	61	67	73	73	73	73	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.80	1.64	1.50
3- span	I	40	40	40	40	40	40	40	40	40	40	40	40	7.00	5.04	4.18	3.67	3.33	3.01	2.58	2.26	2.00	1.80	1.64	1.50
		60	60	60	60	60	60	60	60	63	70	73	73	60	60	60	60	67	73	73	73	73	73	73	73
	II	40	40	40	40	40	40	40	40	40	40	40	40	7.00	5.04	4.18	3.67	3.33	3.01	2.58	2.26	2.00	1.80	1.64	1.50
		60	60	60	60	60	60	60	60	63	70	73	73	60	60	60	60	67	73	73	73	73	73	73	73
	III	40	40	40	40	40	40	40	40	40	40	40	40	3.02	3.02	3.02	3.02	3.02	3.01	2.58	2.26	2.00	1.80	1.64	1.50
		60	60	60	60	60	61	73	73	73	73	73	73	60	60	60	60	61	73	73	73	73	73	73	73

Table W.37: Wind uplift pressure

(see Comments no. 8)

Structural system	Color group	Characteristic wind uplift pressure in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	7.50	5.92	4.83	4.18	3.61	3.01	2.58	2.26	2.00	1.80	1.64	1.50
2- span	I	7.07	5.16	4.33	3.84	3.51	3.01	2.58	2.26	2.00	1.80	1.64	1.50
	II	4.24	3.43	3.04	2.80	2.64	2.50	2.40	2.26	2.00	1.80	1.64	1.50
	III	1.87	1.82	1.77	1.74	1.70	1.68	1.65	1.62	1.60	1.58	1.56	1.50
3- span	I	8.37	5.92	4.83	4.18	3.61	3.01	2.58	2.26	2.00	1.80	1.64	1.50
	II	7.06	5.08	4.22	3.70	3.36	3.01	2.58	2.26	2.00	1.80	1.64	1.50
	III	2.42	2.18	2.04	1.93	1.85	1.78	1.73	1.68	1.64	1.61	1.58	1.50

Table W.38: Characteristic wind uplift for screws in kN/m², direct fastening with 3 screws per support

(see Comments no. 9)

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	7.50	5.92	4.83	4.18	3.61	3.01	2.58	2.26	2.00	1.80	1.64	1.50
2- span	I	7.07	4.74	2.92	2.05	1.59	1.31	1.13	1.00	0.92	0.84	0.78	0.73
	II	4.24	3.43	2.52	1.12	0.98	0.88	0.80	0.75	0.71	0.67	0.64	0.61
	III	0.71	0.66	0.62	0.59	0.57	0.55	0.53	0.51	0.49	0.48	0.46	0.45
3- span	I	8.37	5.92	3.88	2.84	2.22	1.80	1.52	1.30	1.15	1.02	0.94	0.86
	II	7.06	5.08	3.76	2.72	2.09	1.68	1.40	1.19	1.04	0.94	0.85	0.78
	III	2.42	2.18	2.04	1.93	1.85	1.46	1.18	1.00	0.85	0.74	0.67	0.62

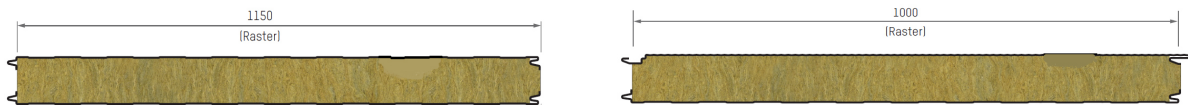
Table W.39: Characteristic wind uplift for screws in kN/m², indirect fastening, steel sheet 0.6/0.6

(see Comments no. 11)

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
2- span	I	7.07	3.08	1.14	0.97	0.86	0.78	0.72	0.68	0.64	0.61	0.58	0.55
	II	0.76	0.69	0.65	0.61	0.58	0.55	0.53	0.50	0.49	0.47	0.45	0.44
	III	0.45	0.43	0.42	0.41	0.40	0.39	0.38	0.37	0.36	0.35	0.34	0.33
3- span	I	8.37	4.48	2.83	2.02	1.54	1.24	1.04	0.92	0.81	0.73	0.67	0.62
	II	7.06	4.30	2.64	1.81	1.34	1.06	0.89	0.75	0.67	0.62	0.58	0.54
	III	1.72	1.72	0.64	0.56	0.52	0.49	0.46	0.44	0.42	0.41	0.39	0.38

* Intermediate support with 2 screws with load distribute plate indirect fastening, end support with 3 screws direct fastening

Permissible spans for ROMA wall elements FP+100 LL/ML 0.6/0.5 or FV+100 ML/LL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-511 of April 12, 2011 as well as based on EN 14509, Annex E, particularly using table E.6 and E.8. The most adverse loading condition combination consisting of wind and temperature has been verified in accordance with EN 14509, Annex E. The application notes (see page 2) must be observed.

Table W.40: Wind pressure

*without accounting for deflection

Structural system	Color group	Characteristic wind pressure in kN/m ²											
		0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00
1- span	I,II,III*	40	40	40	40	43	43	43	43	42	42	42	42
	I,II,III	9.80	6.93	5.66	4.90	4.19	3.49	2.99	2.62	2.32	2.09	1.90	1.74
2- span	I,II	40	40	40	40	43	43	43	43	42	42	42	42
		60	60	60	60	60	60	65	72	79	84	84	84
	III	40	40	40	40	40	40	40	40	40	40	42	42
		60	60	60	60	60	60	60	63	70	78	84	84
3- span	I	40	40	40	40	40	40	40	41	42	42	42	42
		60	60	60	60	61	69	76	82	84	84	84	84
	II	40	40	40	40	40	40	40	41	42	42	42	42
		60	60	60	60	61	69	76	82	84	84	84	84
	III	40	40	40	40	40	40	40	40	41	42	42	42
		60	60	60	60	60	60	63	72	81	84	84	84

Table W.41: Wind uplift pressure

(see Comments no. 8)

Structural system	Color group	Characteristic wind uplift pressure in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	8.85	6.26	5.11	4.42	3.96	3.49	2.99	2.62	2.32	2.09	1.90	1.74
2- span	I	4.42	4.42	4.42	3.99	3.66	3.42	2.99	2.62	2.32	2.09	1.90	1.74
	II	3.94	3.35	3.04	2.84	2.69	2.58	2.48	2.40	2.32	2.09	1.90	1.74
	III	1.88	1.85	1.82	1.78	1.76	1.73	1.71	1.69	1.67	1.65	1.64	1.62
3- span	I	8.85	6.26	5.11	4.42	3.96	3.49	2.99	2.62	2.32	2.09	1.90	1.74
	II	6.95	5.04	4.22	3.72	3.39	3.15	2.96	2.62	2.32	2.09	1.90	1.74
	III	2.08	1.98	1.90	1.84	1.78	1.74	1.70	1.67	1.64	1.61	1.59	1.56

Table W.42: Characteristic wind uplift for screws in kN/m², direct fastening with 3 screws per support

(see Comments no. 9)

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	8.85	6.26	5.11	4.42	3.96	3.49	2.99	2.62	2.32	2.09	1.90	1.74
2- span	I	4.42	4.42	2.70	1.88	1.42	1.18	1.04	0.98	0.89	0.82	0.77	0.72
	II	3.94	1.30	1.00	0.92	0.84	0.78	0.73	0.70	0.66	0.64	0.61	0.59
	III	0.63	0.60	0.58	0.56	0.54	0.52	0.50	0.49	0.48	0.46	0.45	0.44
3- span	I	8.85	5.89	3.80	2.76	2.14	1.73	1.45	1.25	1.10	1.00	0.91	0.83
	II	6.95	5.04	3.64	2.60	1.97	1.57	1.30	1.11	1.00	0.89	0.81	0.74
	III	2.08	1.98	1.90	1.84	1.66	1.00	0.80	0.71	0.65	0.61	0.57	0.55

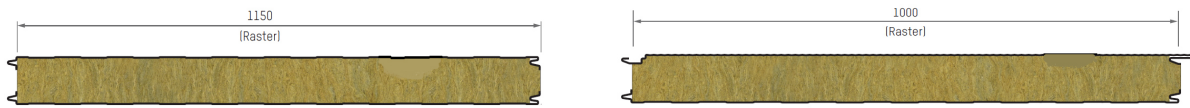
Table W.43: Characteristic wind uplift for screws in kN/m², indirect fastening, steel sheet 0.6/0.6

(see Comments no. 11)

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
2- span	I	4.42	1.00	0.89	0.80	0.74	0.69	0.65	0.62	0.59	0.57	0.54	0.52
	II	0.65	0.61	0.58	0.55	0.53	0.51	0.49	0.47	0.46	0.44	0.43	0.42
	III	0.42	0.41	0.39	0.38	0.37	0.36	0.36	0.35	0.34	0.33	0.32	0.32
3- span	I	8.85	4.18	2.58	1.80	1.36	1.10	0.95	0.83	0.74	0.68	0.62	0.58
	II	6.95	3.93	2.29	1.08	0.83	0.71	0.64	0.59	0.56	0.53	0.50	0.48
	III	0.55	0.51	0.48	0.46	0.44	0.42	0.41	0.39	0.38	0.37	0.36	0.35

* Intermediate support with 2 screws with load distribute plate indirect fastening, end support with 3 screws direct fastening

Permissible spans for ROMA wall elements FP+120 LL/ML 0.6/0.5 or FV+120 ML/LL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-511 of April 12, 2011 as well as based on EN 14509, Annex E, particularly using table E.6 and E.8. The most adverse loading condition combination consisting of wind and temperature has been verified in accordance with EN 14509, Annex E. The application notes (see page 2) must be observed.

Table W.48: Wind pressure

*without accounting for deflection

Structural system	Color group	Characteristic wind pressure in kN/m ²											
		0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00
1- span	I,II,III*	40	40	40	41	46	47	47	47	47	47	47	47
	I,II,III	10.07	7.12	5.81	5.03	4.50	3.85	3.30	2.89	2.56	2.31	2.10	1.92
2- span	I,II	40	40	40	40	40	40	40	40	40	41	44	47
	III	2.6	2.48	2.38	2.3	2.23	2.18	2.13	2.08	2.05	2.01	1.98	1.92
3- span	I	40	40	40	40	40	40	40	40	40	40	42	46
	II	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90
3- span	I	40	40	40	40	40	40	40	40	40	42	45	47
	II	3.96	3.24	2.88	2.66	2.51	2.39	2.29	2.21	2.14	2.08	2.03	1.92
3- span	III	40	40	40	40	40	40	40	40	40	40	43	47
	III	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92

Table W.49: Wind uplift pressure

(see Comments no. 8)

Structural system	Color group	Characteristic wind uplift pressure in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	9.09	6.43	5.25	4.54	4.06	3.71	3.30	2.89	2.56	2.31	2.10	1.92
2- span	I	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.56	2.31	2.10	1.92
	II	2.80	2.80	2.80	2.80	2.68	2.58	2.50	2.43	2.37	2.31	2.10	1.92
3- span	III	1.88	1.84	1.82	1.80	1.78	1.76	1.74	1.72	1.70	1.69	1.68	1.66
	I	9.09	6.43	5.25	4.54	4.06	3.71	3.30	2.89	2.56	2.31	2.10	1.92
3- span	II	6.43	4.75	4.02	3.58	3.29	3.08	2.90	2.77	2.56	2.31	2.10	1.92
	III	1.86	1.81	1.77	1.73	1.70	1.67	1.64	1.62	1.60	1.58	1.56	1.54

Table W.50: Characteristic wind uplift for screws in kN/m², direct fastening with 3 screws per support

(see Comments no. 9)

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	9.09	6.43	5.25	4.54	4.06	3.71	3.30	2.89	2.56	2.31	2.10	1.92
2- span	I	2.80	2.80	2.47	1.44	1.18	1.05	0.98	0.91	0.85	0.81	0.76	0.71
	II	1.12	1.00	0.90	0.83	0.78	0.73	0.70	0.67	0.64	0.62	0.59	0.57
3- span	III	0.60	0.57	0.55	0.54	0.52	0.50	0.49	0.48	0.46	0.45	0.44	0.43
	I	9.09	5.81	3.72	2.67	2.06	1.66	1.39	1.20	1.06	0.97	0.88	0.81
3- span	II	6.43	4.75	3.52	2.46	1.85	1.46	1.22	1.04	0.94	0.85	0.78	0.72
	III	1.86	1.81	1.77	1.00	0.80	0.71	0.65	0.61	0.58	0.55	0.53	0.51

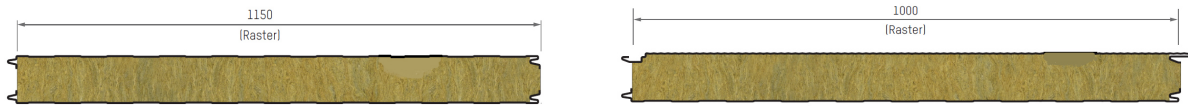
Table W.51: Characteristic wind uplift for screws in kN/m², indirect fastening, steel sheet 0.6/0.6

(see Comments no. 11)

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
2- span	I	0.96	0.85	0.78	0.72	0.68	0.64	0.61	0.58	0.56	0.54	0.52	0.50
	II	0.59	0.56	0.54	0.52	0.50	0.48	0.46	0.45	0.43	0.42	0.41	0.40
3- span	III	0.40	0.39	0.38	0.37	0.36	0.35	0.34	0.33	0.33	0.32	0.32	0.31
	I	8.57	3.88	2.32	1.58	1.20	1.00	0.85	0.76	0.69	0.63	0.59	0.55
3- span	II	6.43	3.53	0.83	0.71	0.64	0.59	0.55	0.53	0.50	0.48	0.46	0.44
	III	0.47	0.45	0.43	0.41	0.40	0.39	0.37	0.36	0.35	0.34	0.34	0.33

* Intermediate support with 2 screws with load distribute plate indirect fastening, end support with 3 screws direct fastening

Permissible spans for ROMA wall elements FP+140 LL/ML 0.6/0.5 or FV+140 ML/LL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-511 of April 12, 2011 as well as based on EN 14509, Annex E, particularly using table E.6 and E.8. The most adverse loading condition combination consisting of wind and temperature has been verified in accordance with EN 14509, Annex E. The application notes (see page 2) must be observed.

Table W.52: Wind pressure

*without accounting for deflection

Structural system	Color group	Characteristic wind pressure in kN/m ²											
		0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00
1- span	I,II,III*	40	40	40	41	46	50	50	50	50	50	50	50
	I,II,III	10.09	7.14	5.83	5.05	4.51	4.09	3.51	3.07	2.73	2.45	2.23	2.04
2- span	I,II	40	40	40	40	40	40	40	40	40	41	44	
	III	2.16	2.1	2.06	2.02	1.99	1.96	1.93	1.9	1.88	1.86	1.84	1.82
3- span	I	40	40	40	40	40	40	40	40	40	40	42	44
	II	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.86	1.84	1.82
3- span	I	40	40	40	40	40	40	40	40	40	40	40	42
	II	2.28	2.16	2.08	2.01	1.95	1.90	1.86	1.82	1.79	1.76	1.73	1.71
3- span	III	40	40	40	40	40	40	40	40	40	40	40	42
	III	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.71

Table W.53: Wind uplift pressure

(see Comments no. 8)

Structural system	Color group	Characteristic wind uplift pressure in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	9.11	6.44	5.26	4.56	4.08	3.72	3.44	3.07	2.73	2.45	2.23	2.04
2- span	I	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.04
	II	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.04
3- span	III	1.84	1.82	1.80	1.79	1.77	1.76	1.74	1.73	1.71	1.70	1.69	1.68
	I	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.23	2.04
3- span	II	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.23	2.04
	III	1.70	1.68	1.65	1.63	1.61	1.59	1.57	1.56	1.54	1.53	1.51	1.50

Table W.54: Characteristic wind uplift for screws in kN/m², direct fastening with 3 screws per support

(see Comments no. 9)

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	9.11	6.44	5.26	4.56	4.08	3.72	3.44	3.07	2.73	2.45	2.23	2.04
2- span	I	2.22	2.22	1.52	1.22	1.08	1.00	0.93	0.87	0.82	0.78	0.75	0.70
	II	0.99	0.90	0.83	0.78	0.74	0.71	0.67	0.65	0.62	0.60	0.58	0.56
3- span	III	0.58	0.56	0.54	0.52	0.51	0.49	0.48	0.47	0.46	0.45	0.44	0.43
	I	2.44	2.44	2.44	2.44	1.98	1.60	1.34	1.16	1.02	0.94	0.86	0.79
3- span	II	2.44	2.44	2.44	2.33	1.73	1.37	1.10	0.98	0.88	0.80	0.74	0.70
	III	1.70	1.68	0.86	0.74	0.67	0.63	0.60	0.57	0.54	0.52	0.50	0.49

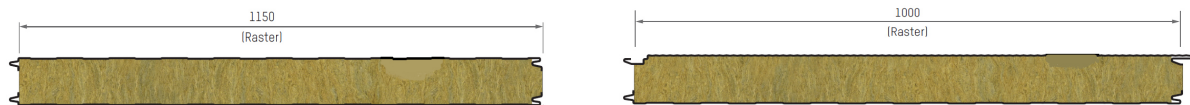
Table W.55: Characteristic wind uplift for screws in kN/m², indirect fastening, steel sheet 0.6/0.6

(see Comments no. 11)

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
2- span	I	0.83	0.76	0.71	0.67	0.63	0.60	0.58	0.55	0.53	0.51	0.49	0.48
	II	0.55	0.53	0.51	0.49	0.47	0.46	0.44	0.43	0.42	0.40	0.39	0.38
3- span	III	0.38	0.37	0.36	0.35	0.34	0.33	0.33	0.32	0.32	0.31	0.30	0.30
	I	2.44	2.44	2.04	1.12	0.93	0.80	0.73	0.67	0.63	0.59	0.56	0.52
3- span	II	0.90	0.72	0.65	0.60	0.56	0.53	0.50	0.48	0.46	0.44	0.43	0.41
	III	0.43	0.41	0.40	0.38	0.37	0.36	0.35	0.34	0.34	0.33	0.32	0.31

* Intermediate support with 2 screws with load distribute plate indirect fastening, end support with 3 screws direct fastening

Permissible spans for ROMA wall elements FP+170 LL/ML 0.6/0.5 or FV+170 ML/LL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-511 of April 12, 2011 as well as based on EN 14509, Annex E, particularly using table E.6 and E.8. The most adverse loading condition combination consisting of wind and temperature has been verified in accordance with EN 14509, Annex E. The application notes (see page 2) must be observed.

Table W.56: Wind pressure

*without accounting for deflection

Structural system	Color group	Characteristic wind pressure in kN/m ²											
		0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00
1- span	I,II,III*	40	40	40	45	51	55	60	61	61	61	61	61
	I,II,III	11.14	7.87	6.43	5.57	4.98	4.55	4.21	3.74	3.32	2.99	2.72	2.49
2- span	I,II	40	40	40	45	51	55	60	61	61	61	61	61
	III	2.38	2.32	2.27	2.23	2.19	2.16	2.13	2.1	2.07	2.05	2.02	2
3- span	I	40	40	40	40	40	40	40	40	40	42	45	49
	II	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.05	2.02	2.00
3- span	I	40	40	40	40	40	40	40	40	40	40	43	46
	II	2.50	2.38	2.29	2.21	2.15	2.10	2.05	2.01	1.97	1.94	1.91	1.88
3- span	III	40	40	40	40	40	40	40	40	40	40	43	46
	III	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.88

Table W.57: Wind uplift pressure

(see Comments no. 8)

Structural system	Color group	Characteristic wind uplift pressure in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	10.05	7.11	5.80	5.03	4.50	4.10	3.80	3.55	3.32	2.99	2.72	2.49
2- span	I	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44
	II	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44
3- span	III	2.04	2.01	1.99	1.97	1.96	1.94	1.92	1.90	1.89	1.88	1.86	1.85
	I	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.49
3- span	II	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.66	2.49
	III	1.88	1.84	1.82	1.80	1.78	1.75	1.74	1.72	1.70	1.68	1.67	1.66

Table W.58: Characteristic wind uplift for screws in kN/m², direct fastening with 3 screws per support

(see Comments no. 9)

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	10.05	7.11	5.80	5.03	4.50	4.10	3.80	3.46	3.08	2.77	2.52	2.31
2- span	I	2.44	1.50	1.22	1.08	1.00	0.94	0.88	0.83	0.79	0.76	0.73	0.70
	II	0.89	0.83	0.78	0.74	0.71	0.68	0.65	0.63	0.61	0.59	0.57	0.55
3- span	III	0.56	0.54	0.53	0.51	0.50	0.49	0.47	0.46	0.45	0.44	0.43	0.42
	I	2.70	2.70	2.70	2.46	1.87	1.50	1.27	1.10	1.00	0.91	0.83	0.77
3- span	II	2.70	2.70	2.70	2.12	1.28	1.00	0.92	0.84	0.77	0.72	0.69	0.65
	III	0.84	0.74	0.68	0.64	0.60	0.58	0.55	0.53	0.51	0.50	0.48	0.47

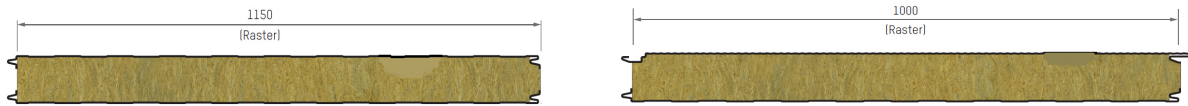
Table W.59: Characteristic wind uplift for screws in kN/m², indirect fastening, steel sheet 0.6/0.6

(see Comments no. 11)

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
2- span	I	0.73	0.68	0.64	0.61	0.58	0.56	0.54	0.51	0.50	0.48	0.46	0.45
	II	0.51	0.49	0.47	0.46	0.44	0.43	0.41	0.40	0.39	0.38	0.37	0.36
3- span	III	0.36	0.35	0.34	0.33	0.33	0.32	0.31	0.31	0.30	0.29	0.29	0.28
	I	2.70	2.70	0.94	0.80	0.72	0.67	0.62	0.59	0.56	0.53	0.51	0.49
3- span	II	0.62	0.58	0.55	0.52	0.49	0.47	0.45	0.44	0.42	0.41	0.39	0.38
	III	0.39	0.37	0.36	0.35	0.34	0.34	0.33	0.32	0.31	0.30	0.30	0.29

* Intermediate support with 2 screws with load distribute plate indirect fastening, end support with 3 screws direct fastening

Permissible spans for ROMA wall elements FP+200 LL/ML 0.6/0.5 or FV+200 ML/LL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-511 of April 12, 2011 as well as based on EN 14509, Annex E, particularly using table E.6 and E.8. The most adverse loading condition combination consisting of wind and temperature has been verified in accordance with EN 14509, Annex E. The application notes (see page 2) must be observed.

Table W.60: Wind pressure

*without accounting for deflection

Structural system	Color group	Characteristic wind pressure in kN/m ²											
		0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00
1- span	I,II,III*	40	40	43	49	55	60	65	69	71	71	71	71
	I,II,III	12.09	8.55	6.98	6.04	5.40	4.93	4.57	4.27	3.91	3.52	3.20	2.93
2- span	I,II	40	40	40	40	40	40	40	40	41	45	49	53
		60	60	60	60	60	60	65	74	82	90	98	106
	III	40	40	40	40	40	40	40	40	41	45	49	53
		60	60	60	60	60	60	63	72	81	90	98	106
3- span	I	40	40	40	40	40	40	40	40	40	43	46	50
		60	60	60	60	60	60	63	71	78	85	92	99
	II	40	40	40	40	40	40	40	40	40	43	46	50
		60	60	60	60	60	60	63	71	78	85	92	99
	III	40	40	40	40	40	40	40	40	40	42	46	50
		60	60	60	60	60	60	60	67	75	84	92	99

Table W.61: Wind uplift pressure

(see Comments no. 8)

Structural system	Color group	Characteristic wind uplift pressure in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	10.91	7.72	6.30	5.46	4.88	4.45	4.12	3.86	3.64	3.45	3.20	2.93
2- span	I	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65
	II	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65
	III	2.21	2.18	2.16	2.14	2.12	2.10	2.08	2.07	2.05	2.04	2.02	2.01
3- span	I	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
	II	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.88	2.80
	III	2.04	2.00	1.98	1.95	1.92	1.90	1.88	1.86	1.84	1.83	1.81	1.80

Table W.62: Characteristic wind uplift for screws in kN/m², direct fastening with 3 screws per support

(see Comments no. 9)

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	10.91	7.72	6.30	5.46	4.88	4.45	3.95	3.46	3.08	2.77	2.52	2.31
2- span	I	1.56	1.24	1.10	1.01	0.96	0.90	0.85	0.81	0.77	0.74	0.71	0.69
	II	0.84	0.79	0.75	0.72	0.69	0.66	0.64	0.62	0.60	0.58	0.56	0.55
	III	0.55	0.53	0.52	0.50	0.49	0.48	0.47	0.46	0.45	0.44	0.43	0.42
3- span	I	2.92	2.92	2.92	2.32	1.76	1.42	1.21	1.06	0.97	0.88	0.81	0.76
	II	2.92	2.92	2.92	1.18	1.00	0.90	0.82	0.76	0.72	0.68	0.65	0.62
	III	0.70	0.66	0.62	0.59	0.57	0.55	0.53	0.51	0.49	0.48	0.47	0.45

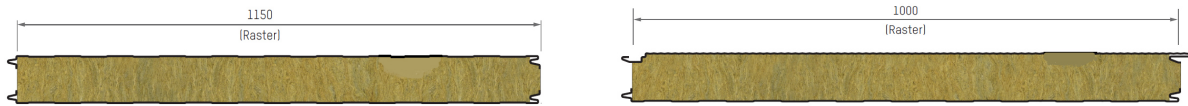
Table W.63: Characteristic wind uplift for screws in kN/m², indirect fastening, steel sheet 0.6/0.6

(see Comments no. 11)

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
2- span	I	0.66	0.63	0.59	0.57	0.54	0.52	0.50	0.48	0.47	0.45	0.44	0.42
	II	0.47	0.46	0.44	0.43	0.41	0.40	0.39	0.38	0.37	0.36	0.35	0.34
	III	0.34	0.33	0.32	0.32	0.31	0.30	0.30	0.29	0.28	0.28	0.27	0.27
3- span	I	1.00	0.83	0.74	0.67	0.63	0.59	0.56	0.53	0.51	0.48	0.47	0.45
	II	0.54	0.51	0.49	0.47	0.45	0.43	0.42	0.40	0.39	0.38	0.37	0.36
	III	0.36	0.35	0.34	0.33	0.32	0.31	0.30	0.30	0.29	0.28	0.28	0.27

* Intermediate support with 2 screws with load distribute plate indirect fastening, end support with 3 screws direct fastening

Permissible spans for ROMA wall elements FP+240 LL/ML 0.6/0.5 or FV+240 ML/LL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-511 of April 12, 2011 as well as based on EN 14509, Annex E, particularly using table E.6 and E.8. The most adverse loading condition combination consisting of wind and temperature has been verified in accordance with EN 14509, Annex E. The application notes (see page 2) must be observed.

Table W.60: Wind pressure

*without accounting for deflection

Structural system	Color group	Characteristic wind pressure in kN/m ²											
		0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00
1- span	I,II,III*	40	40	47	54	60	66	71	76	80	85	86	85
	I,II,III	13.25	9.37	7.65	6.62	5.93	5.41	5.01	4.68	4.42	4.19	3.85	3.52
2- span	I,II	40	40	40	40	40	40	40	41	45	50	54	58
		2.84	2.77	2.71	2.66	2.62	2.57	2.54	2.5	2.47	2.44	2.42	2.39
	60	60	60	60	60	62	72	81	90	99	107	116	
	III	40	40	40	40	40	40	40	40	45	50	54	58
3- span	I	40	40	40	40	40	40	40	40	43	47	51	55
		3.02	2.86	2.74	2.65	2.58	2.51	2.45	2.40	2.36	2.32	2.28	2.25
	60	60	60	60	60	61	69	78	86	94	101	109	
	II	40	40	40	40	40	40	40	40	43	47	51	55
	3.02	2.86	2.74	2.65	2.58	2.51	2.45	2.40	2.36	2.32	2.28	2.25	
	60	60	60	60	60	61	69	78	86	94	101	109	
III	40	40	40	40	40	40	40	40	42	47	51	55	
2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.28	2.25	
60	60	60	60	60	60	60	65	74	83	93	101	109	

Table W.61: Wind uplift pressure

(see Comments no. 8)

Structural system	Color group	Characteristic wind uplift pressure in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	11.96	8.46	6.90	5.98	5.35	4.88	4.52	4.23	3.99	3.78	3.61	3.45
2- span	I	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
	II	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
	III	2.43	2.40	2.38	2.35	2.33	2.31	2.29	2.27	2.25	2.24	2.22	2.20
3- span	I	3.26	3.26	3.26	3.26	3.26	3.26	3.26	3.26	3.26	3.26	3.26	3.26
	II	3.26	3.26	3.26	3.26	3.26	3.26	3.26	3.26	3.26	3.26	3.17	3.09
	III	2.24	2.21	2.18	2.15	2.12	2.10	2.07	2.05	2.03	2.01	2.00	1.98

Table W.62: Characteristic wind uplift for screws in kN/m², direct fastening with 3 screws per support

(see Comments no. 9)

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
1- span	I,II,III	11.96	8.46	6.90	5.98	5.35	4.61	3.95	3.46	3.08	2.77	2.52	2.31
2- span	I	1.26	1.12	1.03	0.98	0.92	0.87	0.83	0.79	0.76	0.73	0.70	0.68
	II	0.80	0.76	0.73	0.70	0.67	0.65	0.63	0.61	0.59	0.57	0.56	0.54
	III	0.54	0.52	0.51	0.50	0.48	0.47	0.46	0.45	0.44	0.43	0.43	0.42
3- span	I	3.26	3.26	3.16	2.16	1.64	1.27	1.09	1.00	0.94	0.86	0.79	0.74
	II	3.26	3.26	1.06	0.96	0.87	0.81	0.76	0.71	0.68	0.65	0.62	0.60
	III	0.64	0.61	0.59	0.56	0.54	0.52	0.51	0.49	0.48	0.47	0.46	0.44

Table W.63: Characteristic wind uplift for screws in kN/m², indirect fastening, steel sheet 0.6/0.6

(see Comments no. 11)

Structural system	Color group	Characteristic wind uplift for screws in kN/m ²											
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00
2- span	I	0.60	0.57	0.54	0.52	0.50	0.48	0.46	0.45	0.43	0.42	0.40	0.39
	II	0.43	0.42	0.41	0.39	0.38	0.37	0.36	0.35	0.34	0.34	0.33	0.32
	III	0.31	0.31	0.30	0.29	0.29	0.28	0.28	0.27	0.26	0.26	0.26	0.25
3- span	I	0.72	0.66	0.62	0.58	0.55	0.52	0.50	0.47	0.46	0.44	0.42	0.41
	II	0.47	0.45	0.43	0.42	0.40	0.39	0.38	0.37	0.35	0.34	0.34	0.33
	III	0.32	0.31	0.31	0.30	0.29	0.28	0.28	0.27	0.27	0.26	0.26	0.26

* Intermediate support with 2 screws with load distribute plate indirect fastening, end support with 3 screws direct fastening