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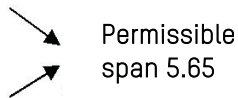
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COMMENTS ON THE TABLES FOR ROOF ELEMENTS

When using the tables, the following should be observed:

1. The characteristic loads must be determined in accordance with Eurocodes or, if necessary, taking account of the national appendix.
2. Values in accordance with DIN EN 1990/NA:2010-12 are the basis for load factors and combined coefficients.
3. The general building authority approval Z-10.49-836 and Z-10.49-837 from June 2021 serves as the basis for the load bearing capacity and the calculation parameters.
4. The relevant minimum span in the tables for snow load 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 (approx. $1.0 \leq \min. l / \max. l \leq 0.8$).
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, including longterm behavior, and $l/200$ in the case of short-term load action.
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.
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 thin-walled ($t \leq 5 \text{ mm}$), asymmetrical substructures (no symmetry axis parallel to the screw axis, e.g. Z or C profiles), a separate structural analysis must be prepared for the individual case.
12. Please refer to the Roma color chart for information about surface colors and their category: I (verylight), II (light) and III (dark).
13. Permissible spans are listed in m and the required support width in mm; see the following reading example.

READING EXAMPLE

From „Snow load“ table	46 5,65 92	Required end support width in millimeters Permissible span in meters due to element verification Required intermediate support width in millimeters
		
From „Wind uplift“ table	6.05	Permissible span in meters due to element verification
From „Wind uplift“ table For screws	3 3.5	Required number of bolts per [m] at the support Permissible span [m] with 3 bolts per support

CALCULATING SNOW LOAD



Source: www.schneelast.info

Table 1: Characteristic snow load (kN/m²)

SNOW LOAD ZONE	Snow load on the ground (kN/m ²)	
1	$0.19 + 0.91 * [(A+140)/760]^2$	≥ 0.65 (≤ 400 m above sea level)
2	$0.25 + 1.91 * [(A+140)/760]^2$	≥ 0.85 (≤ 285 m above sea level)
3	$0.31 + 2.91 * [(A+140)/760]^2$	≥ 1.10 (≤ 255 m above sea level)

A = height of the building site above sea level

Note 1: For zones 1a and 2a, the values for zones 1 and 2 are multiplied by **1.25**.

Note 2: Accounting for the roof type coefficients: $s_i = \mu_1 * s_k$; $\mu_1 = 0.8$

Beispiel: 86647 Buttenwiesen snow load zone 1a: A= 425 m above sea level:

Table 1:

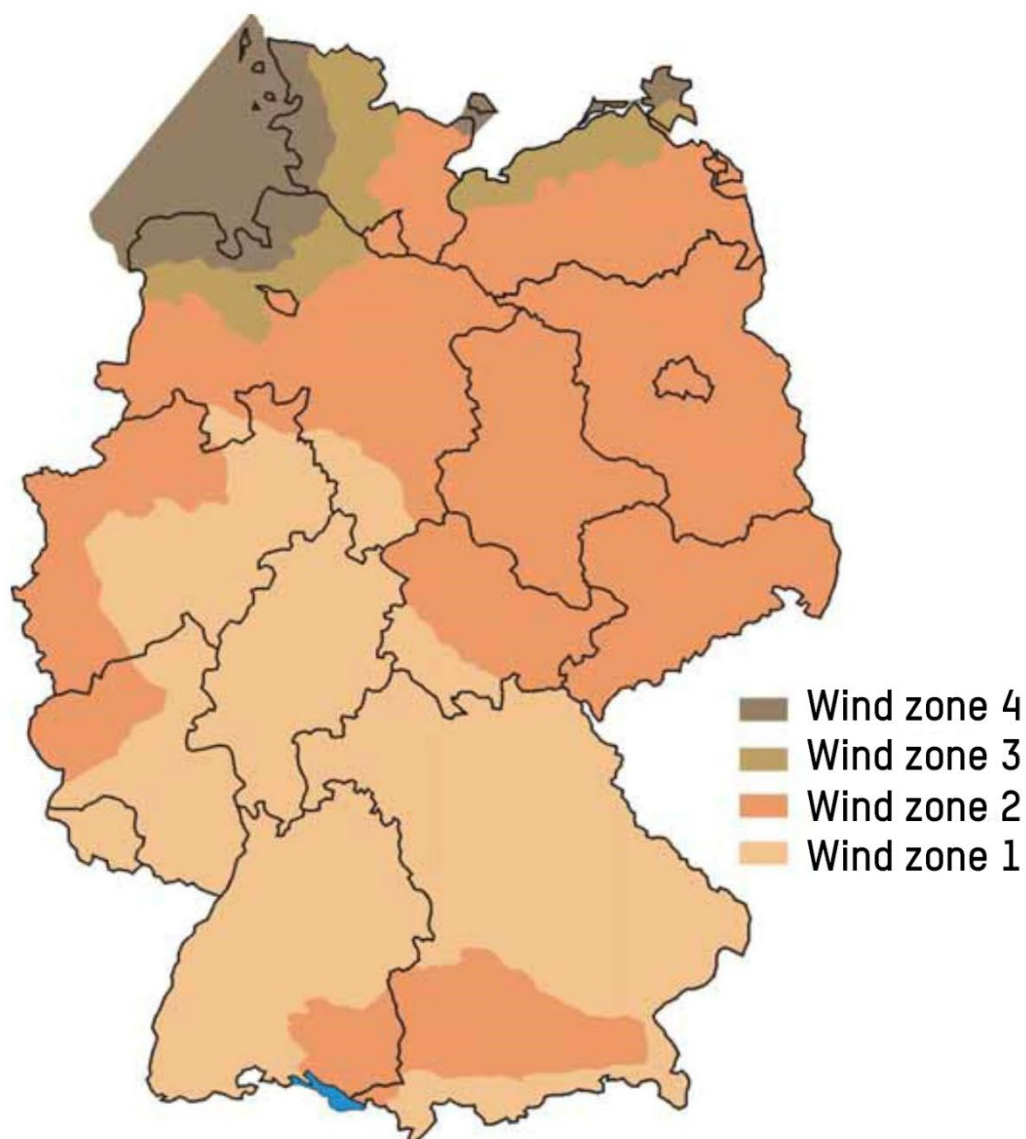
$$0.19 + 0.91 * [(425 + 140) / 760]^2 = 0.69 \text{ kN/m}^2 \geq 0.65 \text{ kN/m}^2$$

Note 1: $1.25 \cdot 0.69 \text{ kN/m}^2 = 0.866 \text{ kN/m}^2$

Note 2: Berücksichtigung des Dachformbeiwert: $0.8 \cdot 0.866 \text{ kN/m}^2 = 0.693 \text{ kN/m}^2$

Tabulated value : 0.693 kN/m²

CALCULATING SNOW LOAD



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

Table 2: Characteristic wind uplift pressure load (kN/m²)

Building height	WIND LOAD ZONE				
		1	2	3	4
5 m	PERIPHERAL AREA	-1.01/-1.25	-1.32/-1.61	-1.59/-1.59	-1.89/-2.31
	NORMAL AREA	-0.29/-0.59	-0.41/-0.70	-0.49/-0.85	-0.59/-1.01
10 m	PERIPHERAL AREA	-1.22/-1.50	-1.49/-1.82	-1.80/-2.20	-2.14/-2.62
	NORMAL AREA	-0.38/-0.65	-0.46/-0.80	-0.56/-0.96	-0.67/-1.14
15 m	PERIPHERAL AREA	-1.42/-1.74	-1.73/-2.12	-2.09/-2.55	-2.49/-3.04
	NORMAL AREA	-0.44/-0.76	-0.54/-0.92	-0.65/-1.11	-0.66/-0.94

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

Permissible spans for ROMA roof elements FD 102 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use [see page 2] must be observed.

Table D.1: Wind uplift pressure

Stat. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	6.32	6.32	6.32	5.88	4.80	4.08	3.57	3.18	2.88	2.64	2.44	2.28	2.14	2.02	1.91	1.82	1.74	1.67	1.60	1.55
2-span	I	6.53	6.53	6.53	5.88	4.80	4.08	3.57	3.18	2.88	2.64	2.44	2.28	2.14	2.02	1.91	1.82	1.74	1.67	1.60	1.55
	II	6.53	6.53	6.53	5.88	4.80	4.08	3.57	3.18	2.88	2.64	2.44	2.28	2.14	2.02	1.91	1.82	1.74	1.67	1.60	1.55
	III	6.54	6.54	6.54	5.87	4.81	4.08	3.57	3.18	2.88	2.64	2.44	2.28	2.14	2.02	1.91	1.82	1.74	1.67	1.61	1.55
3-span	I	6.53	6.53	6.53	5.88	4.80	4.09	3.57	3.18	2.88	2.64	2.44	2.28	2.14	2.02	1.91	1.82	1.74	1.67	1.61	1.55
	II	6.53	6.53	6.53	5.88	4.80	4.09	3.57	3.18	2.88	2.64	2.44	2.28	2.14	2.02	1.91	1.82	1.74	1.67	1.61	1.55
	III	6.54	6.54	6.54	5.87	4.81	4.08	3.57	3.18	2.88	2.64	2.44	2.28	2.14	2.02	1.91	1.82	1.74	1.67	1.61	1.55

Table D.2: Snow load

Stat. System	Color group	Characteristic snow load in kN/m ²																			
		0,25	0,38	0,50	0,63	0,75	0,88	1,00	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13	2,25	2,38	2,50	2,63
1-span	I,II,III	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
		5,91	4,94	4,12	3,55	3,14	2,83	2,59	2,39	2,23	2,09	1,98	1,88	1,79	1,72	1,65	1,59	1,54	1,49	1,44	1,40
2-span	I,II,III	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
		6,28	4,94	4,11	3,55	3,14	2,83	2,59	2,39	2,23	2,09	1,98	1,88	1,79	1,72	1,65	1,59	1,54	1,49	1,44	1,40
		60	60	60	60	60	60	60	60	60	60	60	60	60	60	62	63	64	65	66	67
3-span	I,II,III	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
		6,28	4,95	4,12	3,55	3,14	2,83	2,59	2,39	2,23	2,09	1,98	1,88	1,79	1,72	1,65	1,59	1,54	1,49	1,44	1,40
		60	60	60	60	60	60	60	60	60	60	60	60	60	60	62	63	64	65	66	67

Permissible spans for ROMA roof elements FD 102 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.3: Wind uplift for screws (see Comments no. 9)

Stat. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		6,32	6.32	6.32	5.88	4.80	4.08	3.57	3.18	2.88	2.64	2.44	2.28	2.14	2.02	1.91	1.82	1.74	1.67	1.60	1.55
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
2-span	I,II	6,32	6.32	6.32	5.88	4.80	4.08	3.57	3.18	2.88	2.64	2.44	2.28	2.14	2.02	1.91	1.82	1.74	1.67	1.60	1.55
		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		6,53	6.53	6.24	4.46	3.38	2.68	2.20	1.86	1.61	1.42	1.28	1.17	1.08	1.01	0.94	0.89	0.84	0.80	0.77	0.73
	III	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		6,53	6.53	6.53	5.88	4.80	4.08	3.57	3.18	2.88	2.64	2.44	2.28	2.14	2.02	1.91	1.82	1.74	1.67	1.60	1.55
		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	III	6,54	6.54	5.77	3.19	1.02	0.92	0.86	0.81	0.77	0.74	0.71	0.69	0.67	0.65	0.63	0.61	0.60	0.58	0.57	0.56
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		6,54	6.54	6.54	5.87	4.81	4.08	3.57	3.18	2.88	2.64	2.44	2.28	2.14	2.02	1.91	1.82	1.74	1.67	1.61	1.55
3-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		6,53	6.53	6.53	5.82	4.59	3.77	3.19	2.75	2.41	2.14	1.92	1.73	1.58	1.45	1.34	1.25	1.17	1.09	1.03	0.98
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	III	6,53	6.53	6.53	5.88	4.80	4.09	3.57	3.18	2.88	2.64	2.44	2.28	2.14	2.02	1.91	1.82	1.74	1.67	1.61	1.55
		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		6,54	6.54	6.54	5.66	4.43	3.61	3.02	2.58	2.24	1.96	1.75	1.57	1.42	1.29	1.19	1.10	1.03	0.96	0.91	0.86
	III	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		6,54	6.54	6.54	5.87	4.81	4.08	3.57	3.18	2.88	2.64	2.44	2.28	2.14	2.02	1.91	1.82	1.74	1.67	1.61	1.55
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6

Permissible spans for ROMA roof elements FD 122 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.4: Wind uplift pressure

Stat. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	7.30	7.30	7.30	7.30	6.60	5.55	4.81	4.25	3.82	3.48	3.20	2.96	2.77	2.60	2.45	2.32	2.21	2.11	2.02	1.94
2-span	I	10.13	10.13	9.78	8.17	6.60	5.55	4.81	4.25	3.82	3.48	3.20	2.96	2.77	2.60	2.45	2.32	2.21	2.11	2.02	1.94
	II	10.13	10.13	9.78	8.17	6.60	5.55	4.81	4.25	3.82	3.48	3.20	2.96	2.77	2.60	2.45	2.32	2.21	2.11	2.02	1.94
	III	10.13	10.13	9.76	7.79	6.57	5.56	4.81	4.25	3.83	3.48	3.20	2.97	2.77	2.60	2.45	2.32	2.21	2.11	2.02	1.94
3-span	I	10.06	10.06	9.78	8.17	6.60	5.55	4.81	4.26	3.83	3.48	3.20	2.97	2.77	2.60	2.45	2.32	2.21	2.11	2.02	1.94
	II	10.06	10.06	9.78	8.17	6.60	5.55	4.81	4.26	3.83	3.48	3.20	2.97	2.77	2.60	2.45	2.32	2.21	2.11	2.02	1.94
	III	10.05	10.05	9.78	8.17	6.60	5.55	4.81	4.26	3.83	3.48	3.20	2.96	2.77	2.60	2.45	2.32	2.21	2.11	2.02	1.94

Table D.5: Snow load

Stat. System	Color group	Characteristic snow load in kN/m ²																			
		0,25	0,38	0,50	0,63	0,75	0,88	1,00	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13	2,25	2,38	2,50	2,63
1-span	I,II,III	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
		6,86	5,77	4,80	4,14	3,65	3,28	2,98	2,75	2,55	2,39	2,25	2,13	2,02	1,93	1,85	1,78	1,71	1,65	1,60	1,55
2-span	I,II,III	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
		7,30	5,77	4,80	4,14	3,65	3,28	2,98	2,75	2,55	2,39	2,25	2,13	2,02	1,93	1,85	1,78	1,71	1,65	1,60	1,55
		60	60	60	60	60	60	61	62	63	64	65	66	68	69	70	71	72	73	74	75
3-span	I,II,III	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
		7,30	5,77	4,80	4,13	3,65	3,28	2,98	2,75	2,55	2,39	2,25	2,13	2,02	1,93	1,85	1,78	1,71	1,65	1,60	1,55
		60	60	60	60	60	60	61	62	63	64	65	66	68	69	70	71	72	73	74	75

Permissible spans for ROMA roof elements FD 122 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.6: Wind uplift for screws (see Comments no. 9)

Stat. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		7,30	7,30	7,30	7,30	6,60	5,55	4,81	4,25	3,82	3,48	3,20	2,96	2,77	2,60	2,45	2,32	2,21	2,11	2,02	1,94
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		7,30	7,30	7,30	7,30	6,60	5,55	4,81	4,25	3,82	3,48	3,20	2,96	2,77	2,60	2,45	2,32	2,21	2,11	2,02	1,94
2-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		10,13	10,12	6,21	4,28	3,15	2,44	1,99	1,52	1,30	1,17	1,08	1,02	0,96	0,92	0,88	0,84	0,81	0,78	0,75	0,72
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		10,13	10,13	9,78	8,17	6,60	5,55	4,81	4,25	3,82	3,48	3,20	2,96	2,77	2,57	2,38	2,22	2,08	1,96	1,85	1,75
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		1,19	1,01	0,92	0,87	0,82	0,79	0,76	0,73	0,70	0,68	0,66	0,65	0,63	0,62	0,60	0,59	0,58	0,56	0,55	0,54
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		10,13	10,13	9,76	7,79	6,57	5,56	4,81	4,25	3,83	3,46	3,09	2,78	2,53	2,32	2,14	1,99	1,86	1,74	1,64	1,56
3-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		10,06	10,06	8,07	5,89	4,60	3,74	3,14	2,68	2,34	2,06	1,84	1,66	1,51	1,38	1,28	1,19	1,11	1,05	0,99	0,94
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		10,06	10,06	9,78	8,17	6,60	5,55	4,81	4,26	3,83	3,48	3,20	2,97	2,77	2,60	2,45	2,32	2,21	2,11	2,02	1,94
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		10,05	10,05	7,87	5,68	4,38	3,52	2,90	2,44	2,10	1,82	1,61	1,44	1,30	1,19	1,09	1,02	0,95	0,90	0,85	0,81
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		10,05	10,05	9,78	8,17	6,60	5,55	4,81	4,26	3,83	3,48	3,20	2,96	2,77	2,60	2,45	2,32	2,21	2,11	2,02	1,94

Permissible spans for ROMA roof elements FD 142 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.7: Wind uplift pressure

Stat. System	Color group	Characteristic wind uplift pressure in kN/m2																			
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	8.19	8.19	8.19	8.19	8.18	7.08	6.10	5.36	4.79	4.34	3.98	3.67	3.41	3.19	3.00	2.84	2.69	2.56	2.44	2.34
2-span	I	11.89	11.89	11.01	9.46	8.16	7.07	6.10	5.36	4.80	4.34	3.98	3.67	3.41	3.19	3.00	2.84	2.69	2.56	2.44	2.34
	II	11.89	11.89	11.01	9.35	7.80	6.75	5.98	5.36	4.80	4.34	3.98	3.67	3.41	3.19	3.00	2.84	2.69	2.56	2.44	2.34
	III	11.89	11.89	11.01	8.73	7.24	6.25	5.52	4.96	4.53	4.17	3.87	3.62	3.41	3.19	3.00	2.84	2.69	2.56	2.44	2.34
3-span	I	11.14	11.16	11.01	9.46	8.42	7.08	6.10	5.36	4.79	4.34	3.98	3.67	3.41	3.19	3.00	2.83	2.69	2.56	2.44	2.34
	II	11.15	11.15	11.00	9.46	8.42	7.08	6.10	5.36	4.79	4.34	3.98	3.67	3.41	3.19	3.00	2.83	2.69	2.56	2.44	2.34
	III	11.14	11.14	11.01	9.46	8.42	7.08	6.10	5.36	4.79	4.34	3.98	3.67	3.41	3.19	3.00	2.84	2.69	2.56	2.44	2.34

Table D.8: Snow load

Stat. System	Color group	Characteristic snow load in kN/m ²																			
		0,25	0.38	0.50	0.63	0.75	0.88	1.00	1.13	1.25	1.38	1.50	1.63	1.75	1.88	2.00	2.13	2.25	2.38	2.50	2.63
1-span	I,II,III	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	41	41	42
		7,74	6.57	5.48	4.72	4.16	3.73	3.39	3.12	2.89	2.70	2.53	2.39	2.27	2.16	2.06	1.98	1.90	1.83	1.77	1.71
2-span	I,II,III	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	41	41	42
		8.25	6.57	5.48	4.72	4.16	3.73	3.39	3.12	2.89	2.70	2.53	2.39	2.27	2.16	2.06	1.98	1.90	1.83	1.77	1.71
		64	66	66	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
3-span	I,II,III	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	41	41	42
		8.26	6.57	5.48	4.72	4.16	3.73	3.39	3.12	2.89	2.70	2.53	2.39	2.27	2.16	2.06	1.98	1.90	1.83	1.77	1.71
		64	65	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84

Permissible spans for ROMA roof elements FD 142 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.9: Wind uplift for screws (see Comments no. 9)

Stat. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		8,19	8.19	8.19	8.19	8.18	7.08	6.10	5.36	4.79	4.34	3.98	3.67	3.41	3.19	3.00	2.84	2.69	2.56	2.44	2.34
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
2-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		11.88	10.59	6.18	4.07	2.90	1.62	1.34	1.21	1.12	1.05	0.99	0.94	0.90	0.87	0.84	0.81	0.78	0.76	0.74	0.72
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		0,92	0.87	0.83	0.80	0.77	0.74	0.72	0.70	0.68	0.66	0.64	0.63	0.61	0.60	0.59	0.58	0.56	0.55	0.54	0.53
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	III	11.89	11.88	11.01	9.35	7.80	6.60	5.53	4.75	4.14	3.67	3.29	2.98	2.73	2.51	2.33	2.17	2.03	1.91	1.81	1.72
		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		0,92	0.87	0.83	0.80	0.77	0.74	0.72	0.70	0.68	0.66	0.64	0.63	0.61	0.60	0.59	0.58	0.56	0.55	0.54	0.53
3-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		11.14	11.14	8.34	5.98	4.61	3.71	3.08	2.62	2.26	1.98	1.77	1.59	1.45	1.33	1.23	1.14	1.07	1.01	0.96	0.91
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		11.15	11.15	11.00	9.46	8.42	7.08	6.10	5.36	4.79	4.34	3.98	3.67	3.41	3.19	2.99	2.79	2.61	2.45	2.31	2.19
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		11.14	11.14	8.08	5.72	4.33	3.41	2.77	2.30	1.95	1.68	1.48	1.32	1.20	1.07	0.98	0.92	0.87	0.82	0.79	0.76
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	III	11.14	11.14	11.01	9.46	8.42	7.08	6.10	5.36	4.79	4.34	3.98	3.67	3.37	3.10	2.87	2.67	2.49	2.33	2.19	2.07

Permissible spans for ROMA roof elements FD 162 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.10: Wind uplift pressure

Stat. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	9.00	9.00	9.00	9.00	9.01	8.41	7.43	6.50	5.79	5.23	4.77	4.39	4.07	3.80	3.56	3.36	3.18	3.02	2.87	2.74
2-span	I	11.80	11.80	11.80	10.44	8.88	7.63	6.73	6.04	5.49	5.05	4.68	4.37	4.07	3.80	3.56	3.36	3.18	3.02	2.87	2.74
	II	11.80	11.80	11.80	10.30	8.48	7.26	6.39	5.73	5.20	4.78	4.43	4.13	3.88	3.66	3.47	3.30	3.16	3.02	2.87	2.74
	III	11.80	11.80	11.80	9.56	7.83	6.68	5.85	5.23	4.75	4.35	4.03	3.76	3.53	3.33	3.16	3.01	2.88	2.76	2.65	2.55
3-span	I	12.14	12.14	12.14	10.44	9.26	8.41	7.43	6.50	5.79	5.23	4.77	4.39	4.07	3.80	3.57	3.36	3.18	3.02	2.87	2.75
	II	12.14	12.14	12.14	10.43	9.26	8.41	7.43	6.50	5.79	5.23	4.77	4.39	4.07	3.80	3.57	3.36	3.18	3.02	2.87	2.75
	III	12.13	12.13	12.13	10.44	9.26	8.25	7.25	6.49	5.80	5.23	4.77	4.40	4.07	3.80	3.56	3.36	3.18	3.02	2.87	2.75

Table D.11: Snow load

Stat. System	Color group	Characteristic snow load in kN/m ²																			
		0,25	0.38	0.50	0.63	0.75	0.88	1.00	1.13	1.25	1.38	1.50	1.63	1.75	1.88	2.00	2.13	2.25	2.38	2.50	2.63
1-span	I,II,III	40	40	40	40	40	40	40	41	41	42	42	43	43	44	44	44	45	45	46	46
		8,54	7.34	6.15	5.30	4.68	4.19	3.81	3.49	3.24	3.02	2.83	2.66	2.52	2.40	2.29	2.19	2.10	2.02	1.95	1.88
2-span	I,II,III	40	40	40	40	40	40	40	41	41	42	42	43	43	44	44	44	45	45	46	46
		8.93	7.34	6.14	5.30	4.68	4.19	3.80	3.49	3.23	3.02	2.82	2.66	2.52	2.40	2.29	2.19	2.10	2.02	1.95	1.88
3-span	I,II,III	40	40	40	40	40	40	40	41	41	42	42	43	43	44	44	44	45	45	46	46
		9.18	7.34	6.15	5.30	4.68	4.19	3.81	3.5	3.23	3.01	2.83	2.66	2.52	2.40	2.29	2.19	2.10	2.02	1.95	1.88
		75	76	77	78	79	80	81	81	82	83	84	85	86	87	88	89	90	91	92	93

Permissible spans for ROMA roof elements FD 162 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.12: Wind uplift for screws (see Comments no. 9)

Stat. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		9,00	9,00	9,00	9,00	9,00	8,41	7,43	6,50	5,79	5,23	4,77	4,39	4,07	3,80	3,56	3,36	3,18	3,02	2,87	2,74
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		9,00	9,00	9,00	9,00	9,00	8,41	7,43	6,50	5,79	5,23	4,77	4,39	4,07	3,80	3,56	3,36	3,18	3,02	2,87	2,74
2-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		11,80	11,13	6,14	3,83	1,47	1,29	1,18	1,10	1,04	0,99	0,94	0,91	0,87	0,84	0,82	0,79	0,77	0,75	0,73	0,71
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	III	11,80	11,80	11,80	10,30	8,18	6,60	5,50	4,70	4,08	3,60	3,23	2,92	2,67	2,46	2,28	2,12	1,99	1,88	1,78	1,69
		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		0,86	0,82	0,79	0,76	0,74	0,72	0,70	0,68	0,66	0,65	0,63	0,62	0,60	0,59	0,58	0,57	0,56	0,55	0,54	0,53
3-span	I,II	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		12,14	12,14	12,14	10,43	9,26	8,15	6,88	5,94	5,22	4,65	4,19	3,80	3,48	3,21	2,97	2,76	2,59	2,42	2,29	2,16
		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	III	12,13	12,13	8,32	5,75	4,26	3,30	2,63	2,15	1,80	1,46	1,17	1,04	0,96	0,90	0,86	0,82	0,79	0,76	0,74	0,71
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		12,13	12,13	12,13	10,44	9,26	8,01	6,74	5,80	5,07	4,50	4,04	3,65	3,33	3,06	2,82	2,62	2,44	2,28	2,14	2,02

Permissible spans for ROMA roof elements FD 182 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.13: Wind uplift pressure

Stat. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	9.74	9.74	9.74	9.74	9.75	9.12	8.41	7.68	6.82	6.14	5.59	5.13	4.75	4.42	4.14	3.90	3.68	3.49	3.32	3.16
2-span	I	11.61	11.61	11.61	11.40	9.56	8.13	7.11	6.35	5.75	5.27	4.87	4.53	4.25	4.01	3.79	3.60	3.44	3.29	3.15	3.03
	II	11.61	11.61	11.61	11.20	9.09	7.70	6.73	5.99	5.42	4.96	4.59	4.27	4.00	3.77	3.57	3.39	3.23	3.09	2.97	2.85
	III	11.60	11.61	11.61	10.35	8.34	7.03	6.12	5.43	4.90	4.48	4.14	3.85	3.61	3.40	3.22	3.06	2.92	2.80	2.69	2.59
3-span	I	13.03	13.03	13.03	11.40	10.08	9.13	8.32	7.43	6.72	6.14	5.59	5.13	4.75	4.42	4.14	3.89	3.68	3.49	3.32	3.16
	II	13.03	13.03	13.03	11.40	10.08	9.13	8.06	7.19	6.50	5.94	5.48	5.09	4.75	4.42	4.14	3.89	3.68	3.49	3.32	3.16
	III	13.04	13.04	13.04	11.40	10.08	8.76	7.65	6.81	6.15	5.61	5.17	4.80	4.48	4.21	3.97	3.76	3.58	3.41	3.26	3.12

Table D.14: Snow load

Stat. System	Color group	Characteristic snow load in kN/m ²																			
		0,25	0.38	0.50	0.63	0.75	0.88	1.00	1.13	1.25	1.38	1.50	1.63	1.75	1.88	2.00	2.13	2.25	2.38	2.50	2.63
1-span	I,II,III	40	43	44	44	45	45	45	46	46	47	47	48	48	48	49	49	50	50	51	51
		9.26	8.07	6.78	5.86	5.18	4.64	4.21	3.87	3.58	3.33	3.12	2.94	2.78	2.64	2.52	2.40	2.30	2.21	2.13	2.06
2-span	I,II,III	40	43	44	44	44	45	45	46	46	47	47	48	48	48	49	49	50	50	51	51
		9.31	8.00	6.78	5.86	5.17	4.64	4.22	3.86	3.58	3.33	3.12	2.94	2.78	2.64	2.52	2.40	2.30	2.21	2.13	2.05
		79	86	87	88	89	90	91	92	92	93	94	95	96	97	98	99	99	100	101	102
3-span	I,II,III	43	43	44	44	44	45	45	46	46	47	47	48	48	48	49	49	50	50	51	51
		10.01	8.07	6.78	5.86	5.18	4.64	4.21	3.87	3.58	3.33	3.12	2.94	2.78	2.64	2.51	2.40	2.30	2.21	2.13	2.06
		85	86	87	88	89	90	91	92	93	93	94	95	96	97	98	99	99	100	101	102

Permissible spans for ROMA roof elements FD 182 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.15: Wind uplift for screws (see Comments no. 9)

Stat. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		9,74	9,74	9,74	9,74	9,75	9,12	8,41	7,32	6,46	5,78	5,24	4,78	4,40	4,08	3,80	3,55	3,34	3,15	2,98	2,83
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		9,74	9,74	9,74	9,74	9,74	9,12	8,41	7,68	6,82	6,14	5,59	5,13	4,75	4,42	4,14	3,90	3,68	3,49	3,32	3,16
2-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		11,61	11,61	2,39	1,44	1,28	1,18	1,11	1,05	1,00	0,96	0,92	0,89	0,86	0,83	0,80	0,78	0,76	0,74	0,72	0,70
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		11,61	11,61	11,61	10,90	8,28	6,62	5,47	4,64	4,02	3,54	3,16	2,86	2,61	2,41	2,24	2,09	1,96	1,85	1,76	1,67
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		0,83	0,80	0,77	0,75	0,73	0,71	0,69	0,67	0,66	0,64	0,63	0,61	0,60	0,59	0,58	0,57	0,56	0,55	0,54	0,53
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		11,60	11,61	11,61	10,35	7,78	6,10	4,95	4,12	3,51	3,05	2,70	2,43	2,22	2,04	1,90	1,78	1,68	1,59	1,51	1,44
3-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		13,03	13,02	8,97	6,20	4,64	3,65	2,97	2,48	2,12	1,85	1,64	1,48	1,35	1,24	1,16	1,08	1,02	0,96	0,92	0,87
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		13,03	13,03	13,03	11,40	10,08	8,29	6,96	5,99	5,25	4,66	4,18	3,79	3,47	3,19	2,95	2,74	2,56	2,40	2,26	2,14
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		13,04	13,03	8,60	5,79	4,20	3,17	2,47	1,96	1,19	1,06	0,98	0,92	0,87	0,83	0,80	0,77	0,74	0,72	0,70	0,68
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		13,04	13,04	13,04	11,40	10,03	8,12	6,79	5,82	5,07	4,48	4,01	3,62	3,29	3,01	2,77	2,57	2,39	2,24	2,10	1,98

Permissible spans for ROMA roof elements FD 192 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.16: Wind uplift pressure

Stat. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	10.08	10.08	10.08	10.08	10.08	9.47	8.72	8.12	7.35	6.61	6.01	5.51	5.09	4.74	4.43	4.17	3.93	3.72	3.54	3.37
2-span	I	11.52	11.52	11.52	11.52	9.99	8.46	7.38	6.57	5.94	5.43	5.02	4.66	4.37	4.11	3.89	3.70	3.52	3.37	3.23	3.10
	II	11.52	11.51	11.51	11.51	9.49	8.02	6.98	6.20	5.59	5.11	4.72	4.39	4.10	3.86	3.65	3.47	3.31	3.16	3.03	2.92
	III	11.52	11.52	11.52	10.88	8.70	7.31	6.33	5.60	5.05	4.60	4.24	3.95	3.69	3.48	3.29	3.13	2.99	2.86	2.75	2.64
3-span	I	13.45	13.45	13.45	11.87	10.47	9.48	8.64	7.69	6.95	6.35	5.86	5.44	5.08	4.74	4.44	4.16	3.93	3.72	3.54	3.38
	II	13.46	13.46	13.46	11.87	10.47	9.47	8.36	7.43	6.72	6.13	5.64	5.24	4.89	4.60	4.34	4.11	3.90	3.72	3.54	3.38
	III	13.46	13.46	13.46	11.87	10.47	9.11	7.93	7.04	6.34	5.78	5.32	4.93	4.60	4.32	4.07	3.85	3.66	3.48	3.33	3.19

Table D.17: Snow load

Stat. System	Color group	Characteristic snow load in kN/m ²																			
		0,25	0.38	0.50	0.63	0.75	0.88	1.00	1.13	1.25	1.38	1.50	1.63	1.75	1.88	2.00	2.13	2.25	2.38	2.50	2.63
1-span	I,II,III	42	46	46	47	47	48	48	48	49	49	50	50	50	51	51	52	52	53	53	53
		9.60	8.43	7.10	6.14	5.42	4.87	4.42	4.05	3.75	3.49	3.27	3.08	2.91	2.76	2.63	2.51	2.41	2.31	2.22	2.14
2-span	I,II,III	41	44	46	47	47	48	48	48	49	49	50	50	50	51	51	52	52	53	53	53
		9.48	8.16	7.09	6.14	5.42	4.86	4.42	4.05	3.75	3.49	3.27	3.08	2.91	2.76	2.63	2.51	2.41	2.31	2.22	2.14
		83	89	92	93	94	95	96	97	98	98	99	100	101	102	103	103	104	105	106	107
3-span	I,II,III	45	46	46	47	47	48	48	48	49	49	50	50	50	51	51	52	52	53	53	53
		10.42	8.42	7.10	6.14	5.42	4.87	4.42	4.05	3.75	3.49	3.27	3.08	2.91	2.76	2.63	2.51	2.41	2.31	2.22	2.14
		91	92	93	93	94	95	96	97	98	98	99	100	101	102	103	103	104	105	106	107

Permissible spans for ROMA roof elements FD 192 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.18: Wind uplift for screws (see Comments no. 9)

Stat. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		10.08	10.08	10.08	10.08	10.08	9.47	8.51	7.37	6.50	5.82	5.26	4.81	4.42	4.10	3.81	3.57	3.35	3.16	2.99	2.83
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		10.08	10.08	10.08	10.08	10.08	9.47	8.72	8.12	7.35	6.61	6.01	5.51	5.09	4.74	4.43	4.17	3.93	3.72	3.54	3.37
2-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		11.51	11.51	1.57	1.35	1.24	1.15	1.09	1.03	0.99	0.95	0.91	0.88	0.85	0.82	0.80	0.78	0.76	0.74	0.72	0.70
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	III	11.51	11.51	11.51	11.01	8.33	6.62	5.46	4.62	3.99	3.51	3.14	2.84	2.59	2.39	2.22	2.08	1.95	1.84	1.75	1.66
		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		0.82	0.79	0.76	0.74	0.72	0.70	0.68	0.67	0.65	0.64	0.62	0.61	0.60	0.59	0.58	0.57	0.56	0.55	0.54	0.53
3-span	I,II	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		13.44	13.45	9.14	6.25	4.64	3.63	2.94	2.44	2.08	1.82	1.61	1.46	1.33	1.23	1.14	1.07	1.01	0.96	0.91	0.87
		13.46	13.46	13.46	11.87	10.32	8.35	7.00	6.01	5.26	4.66	4.18	3.79	3.46	3.18	2.94	2.73	2.55	2.39	2.25	2.12
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		13.45	13.45	8.73	5.80	4.16	3.10	2.39	1.23	1.07	0.99	0.93	0.88	0.84	0.81	0.78	0.75	0.73	0.71	0.69	0.67
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		13.46	13.46	13.46	11.87	10.13	8.17	6.82	5.83	5.07	4.48	3.99	3.60	3.27	2.99	2.75	2.55	2.37	2.21	2.08	1.96

Permissible spans for ROMA roof elements FD 212 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.19: Wind uplift pressure

Stat. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	10.73	10.73	10.73	10.73	10.73	10.16	9.34	8.68	8.15	7.56	6.86	6.28	5.79	5.38	5.03	4.72	4.45	4.21	4.00	3.80
2-span	I	11.24	11.24	11.24	11.24	10.88	9.13	7.91	7.01	6.31	5.75	5.30	4.92	4.59	4.32	4.08	3.87	3.68	3.52	3.37	3.23
	II	11.24	11.24	11.24	11.25	10.32	8.64	7.47	6.60	5.93	5.40	4.97	4.61	4.31	4.04	3.82	3.62	3.45	3.30	3.16	3.03
	III	11.25	11.25	11.24	11.25	9.45	7.85	6.75	5.94	5.32	4.84	4.45	4.12	3.85	3.62	3.43	3.25	3.10	2.97	2.84	2.74
3-span	I	13.90	13.90	13.90	12.82	11.27	10.17	9.27	8.22	7.40	6.74	6.20	5.74	5.36	5.02	4.73	4.48	4.25	4.04	3.86	3.70
	II	13.91	13.91	13.91	12.82	11.26	10.17	8.97	7.94	7.14	6.50	5.97	5.52	5.15	4.82	4.54	4.30	4.08	3.88	3.70	3.55
	III	13.91	13.91	13.91	12.82	11.27	9.82	8.49	7.50	6.73	6.11	5.61	5.18	4.82	4.52	4.25	4.02	3.81	3.63	3.46	3.31

Table D.20: Snow load

Stat. System	Color group	Characteristic snow load in kN/m ²																			
		0,25	0,38	0,50	0,63	0,75	0,88	1,00	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13	2,25	2,38	2,50	2,63
1-span	I,II,III	47	51	52	52	52	53	53	54	54	54	55	55	56	56	56	57	57	58	58	58
		10.25	9.10	7.69	6.67	5.90	5.30	4.82	4.42	4.09	3.81	3.56	3.35	3.17	3.01	2.86	2.73	2.61	2.51	2.41	2.32
2-span	I,II,III	44	47	50	52	52	53	53	54	54	54	55	55	56	56	56	57	57	58	58	58
		9.76	8.44	7.46	6.67	5.90	5.30	4.82	4.42	4.08	3.8	3.56	3.35	3.17	3.01	2.86	2.73	2.61	2.51	2.41	2.32
		89	95	100	104	105	105	106	107	108	109	109	110	111	112	113	113	114	115	116	117
3-span	I,II,III	51	51	52	52	52	53	53	54	54	54	55	55	56	56	56	57	57	58	58	58
		11.17	9.09	7.69	6.67	5.90	5.30	4.81	4.42	4.09	3.81	3.56	3.35	3.17	3.01	2.86	2.73	2.61	2.51	2.41	2.32
		101	102	103	104	105	106	106	107	108	109	109	110	111	112	113	114	114	115	116	117

Permissible spans for ROMA roof elements FD 212 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.21: Wind uplift for screws (see Comments no. 9)

Stat. System	Color group	Characteristic wind uplift for screws in kN/m²																			
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		10.73	10.73	10.73	10.73	10.73	10.16	8.67	7.50	6.60	5.90	5.33	4.86	4.47	4.14	3.84	3.59	3.38	3.18	3.01	2.85
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		10.73	10.73	10.73	10.73	10.73	10.16	9.34	8.68	8.15	7.56	6.86	6.28	5.79	5.38	5.03	4.72	4.45	4.21	4.00	3.80
2-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		11.24	1.60	1.38	1.26	1.18	1.11	1.06	1.01	0.97	0.93	0.90	0.87	0.84	0.82	0.80	0.77	0.75	0.74	0.72	0.70
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	III	11.24	11.24	11.24	11.24	8.43	6.65	5.44	4.57	3.94	3.46	3.08	2.79	2.55	2.35	2.19	2.05	1.93	1.82	1.73	1.65
		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		0.80	0.78	0.76	0.73	0.72	0.70	0.68	0.66	0.65	0.64	0.62	0.61	0.60	0.59	0.58	0.56	0.56	0.55	0.54	0.53
3-span	I,II	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		11.24	11.24	11.24	10.72	7.80	5.98	4.76	3.90	3.30	2.87	2.45	2.12	1.92	1.78	1.68	1.59	1.52	1.46	1.41	1.36
		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	III	13.91	13.90	9.55	6.39	4.67	3.60	2.88	2.38	2.02	1.76	1.57	1.42	1.30	1.20	1.12	1.05	1.00	0.94	0.90	0.86
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		13.91	13.91	13.91	12.82	10.57	8.51	7.10	6.07	5.29	4.68	4.19	3.78	3.45	3.16	2.92	2.71	2.53	2.37	2.23	2.10
III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
	13.91	13.90	9.09	5.87	4.08	1.50	1.14	1.03	0.96	0.91	0.87	0.83	0.80	0.78	0.75	0.73	0.71	0.69	0.67	0.66	
	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
	13.91	13.91	13.91	12.82	10.36	8.30	6.88	5.85	5.07	4.46	3.96	3.56	3.23	2.94	2.71	2.50	2.32	2.17	2.04	1.92	

Permissible spans for ROMA roof elements FD 242 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.22: Wind uplift pressure

Stat. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	11.62	11.62	11.62	11.62	11.62	11.17	10.23	9.49	8.90	8.40	7.98	7.46	6.87	6.37	5.94	5.57	5.24	4.95	4.70	4.46
2-span	I	10.77	10.77	10.77	10.77	10.77	10.11	8.67	7.62	6.82	6.19	5.68	5.25	4.90	4.59	4.32	4.09	3.89	3.71	3.55	3.40
	II	10.77	10.77	10.77	10.77	10.77	9.54	8.16	7.15	6.39	5.79	5.30	4.90	4.57	4.28	4.03	3.82	3.63	3.47	3.32	3.18
	III	10.77	10.76	10.77	10.77	10.57	8.64	7.34	6.40	5.70	5.16	4.72	4.36	4.06	3.81	3.59	3.41	3.24	3.10	2.97	2.86
3-span	I	13.42	13.42	13.42	13.42	12.44	11.17	10.19	8.96	8.02	7.27	6.66	6.15	5.72	5.35	5.03	4.75	4.50	4.27	4.07	3.90
	II	13.42	13.42	13.42	13.42	12.44	11.18	9.84	8.64	7.72	6.99	6.40	5.91	5.49	5.13	4.81	4.54	4.30	4.09	3.90	3.73
	III	13.42	13.42	13.42	13.42	12.44	10.86	9.29	8.14	7.26	6.56	5.99	5.52	5.12	4.78	4.49	4.23	4.00	3.80	3.62	3.46

Table D.23: Snow load

Stat. System	Color group	Characteristic snow load in kN/m ²																			
		0,25	0,38	0,50	0,63	0,75	0,88	1,00	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13	2,25	2,38	2,50	2,63
1-span	I,II,III	54	59	60	60	60	61	61	61	62	62	63	63	63	64	64	64	65	65	65	66
		11.14	10.04	8.54	7.44	6.60	5.94	5.40	4.96	4.59	4.27	4.00	3.76	3.56	3.37	3.21	3.06	2.93	2.80	2.70	2.60
2-span	I,II,III	49	52	54	57	59	61	61	61	62	62	62	63	63	64	64	64	65	65	65	66
		10.09	8.79	7.80	7.04	6.43	5.92	5.40	4.96	4.59	4.27	4.00	3.76	3.55	3.37	3.21	3.06	2.93	2.81	2.69	2.59
		97	104	109	113	118	121	122	123	124	124	125	126	127	127	128	129	130	130	131	132
3-span	I,II,III	56	59	60	60	60	61	61	61	62	62	63	63	63	64	64	64	65	65	66	66
		11.64	10.04	8.53	7.43	6.59	5.93	5.40	4.96	4.58	4.27	4.00	3.76	3.55	3.37	3.21	3.06	2.93	2.80	2.70	2.59
		112	118	119	120	121	121	122	123	124	124	125	126	127	127	128	129	130	130	131	132

Permissible spans for ROMA roof elements FD 242 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.24: Wind uplift for screws (see Comments no. 9)

Struc. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		11.62	11.62	11.62	11.62	11.62	10.66	8.93	7.69	6.75	6.02	5.43	4.94	4.54	4.19	3.90	3.64	3.41	3.22	3.04	2.88
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		11.62	11.62	11.62	11.62	11.62	11.17	10.23	9.49	8.90	8.40	7.98	7.46	6.87	6.37	5.94	5.57	5.24	4.95	4.70	4.46
2-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		1,57	1,38	1,28	1,19	1,13	1,08	1,03	0,99	0,95	0,92	0,89	0,86	0,84	0,81	0,79	0,77	0,75	0,74	0,72	0,70
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		10,77	10,77	10,76	10,77	8,62	6,68	5,40	4,51	3,86	3,38	3,01	2,73	2,50	2,31	2,15	2,02	1,90	1,80	1,72	1,64
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		0,79	0,77	0,75	0,73	0,71	0,69	0,68	0,66	0,65	0,64	0,62	0,61	0,60	0,59	0,58	0,57	0,56	0,55	0,54	0,53
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		10,77	10,76	10,77	10,77	7,83	5,84	4,55	3,69	2,71	2,20	1,97	1,83	1,72	1,63	1,56	1,50	1,44	1,39	1,35	1,31
3-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		13,41	13,42	10,26	6,62	4,71	3,54	2,79	2,28	1,93	1,69	1,51	1,37	1,26	1,17	1,10	1,03	0,98	0,93	0,89	0,85
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		13,41	13,41	13,41	13,42	10,96	8,74	7,23	6,15	5,33	4,70	4,18	3,77	3,43	3,14	2,89	2,68	2,50	2,34	2,20	2,07
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		13,42	13,42	9,71	1,89	1,16	1,05	0,98	0,93	0,88	0,85	0,82	0,79	0,77	0,74	0,72	0,71	0,69	0,67	0,66	0,64
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		13,41	13,41	13,42	13,42	10,72	8,49	6,98	5,89	5,07	4,43	3,92	3,51	3,17	2,88	2,64	2,44	2,26	2,11	1,98	1,87

Permissible spans for ROMA roof elements FD 282 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.25: Wind uplift pressure

Stat. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	12.69	12.69	12.69	12.69	12.69	12.50	11.39	10.55	9.86	9.29	8.81	8.40	8.04	7.73	7.20	6.74	6.33	5.97	5.65	5.37
2-span	I	9.99	9.99	9.99	9.99	9.99	9.99	9.65	8.39	7.45	6.71	6.12	5.64	5.24	4.90	4.60	4.34	4.12	3.92	3.75	3.59
	II	9.98	9.98	9.98	9.98	9.98	9.99	9.05	7.85	6.94	6.25	5.69	5.24	4.86	4.54	4.27	4.04	3.83	3.65	3.49	3.34
	III	9.99	9.99	9.99	9.98	9.99	9.67	8.07	6.96	6.13	5.50	5.01	4.61	4.28	4.00	3.77	3.56	3.39	3.24	3.10	2.98
3-span	I	12.58	12.58	12.58	12.57	12.57	12.50	11.38	9.90	8.79	7.91	7.21	6.63	6.14	5.73	5.37	5.05	4.78	4.53	4.31	4.12
	II	12.57	12.57	12.57	12.57	12.57	12.50	10.96	9.52	8.44	7.59	6.91	6.35	5.88	5.47	5.12	4.82	4.56	4.32	4.11	3.92
	III	12.57	12.56	12.56	12.56	12.58	12.24	10.32	8.93	7.89	7.09	6.44	5.90	5.45	5.07	4.75	4.46	4.21	3.99	3.80	3.62

Table D.26: Snow load

Stat. System	Color group	Characteristic snow load in kN/m ²																			
		0,25	0,38	0,50	0,63	0,75	0,88	1,00	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13	2,25	2,38	2,50	2,63
1-span	I,II,III	63	70	70	71	71	71	72	72	72	73	73	73	74	74	74	75	75	75	76	76
		12.21	11.18	9.58	8.38	7.47	6.74	6.14	5.65	5.23	4.88	4.57	4.29	4.06	3.85	3.66	3.49	3.34	3.20	3.07	2.96
2-span	I,II,III	52	57	60	62	64	66	68	69	71	72	73	73	74	74	74	75	75	75	76	76
		9.99	9.13	8.15	7.39	6.77	6.25	5.81	5.44	5.12	4.85	4.56	4.30	4.06	3.84	3.66	3.49	3.34	3.20	3.07	2.96
		103	114	120	125	129	132	136	139	142	145	146	147	147	148	149	149	150	151	152	152
3-span	I,II,III	62	66	69	71	71	71	72	72	72	73	73	73	74	74	74	75	75	75	76	76
		12.01	10.51	9.37	8.38	7.46	6.73	6.14	5.64	5.23	4.87	4.56	4.30	4.06	3.84	3.66	3.49	3.34	3.20	3.07	2.96
		124	132	138	141	142	143	143	144	145	145	146	147	147	148	149	149	150	151	151	152

Permissible spans for ROMA roof elements FD 282 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.27: Wind uplift for screws (see Comments no. 9)

Stat. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		12.69	12.69	12.69	12.69	12.68	11.19	9.31	7.97	6.97	6.19	5.56	5.06	4.63	4.27	3.96	3.70	3.47	3.26	3.08	2.92
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		12.69	12.69	12.69	12.69	12.69	12.50	11.39	10.55	9.86	9.29	8.81	8.40	8.04	7.73	7.20	6.74	6.33	5.97	5.65	5.37
2-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		1,39	1.29	1.22	1.15	1.10	1.05	1.01	0.98	0.94	0.91	0.88	0.86	0.84	0.81	0.79	0.77	0.75	0.74	0.72	0.70
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		9,98	9.98	9.98	9.98	8.91	6.75	5.36	4.42	3.77	3.29	2.94	2.67	2.45	2.27	2.12	2.00	1.88	1.79	1.70	1.63
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		0,78	0.76	0.74	0.72	0.71	0.69	0.68	0.66	0.65	0.64	0.62	0.61	0.60	0.59	0.58	0.57	0.56	0.55	0.54	0.53
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		9,99	9.98	9.99	9.98	7.89	5.65	3.30	2.23	2.00	1.86	1.75	1.66	1.59	1.53	1.47	1.42	1.38	1.34	1.30	1.27
3-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		12.56	12.57	11.48	7.01	4.79	3.48	2.67	2.17	1.80	1.50	1.34	1.24	1.16	1.10	1.04	1.00	0.96	0.92	0.88	0.84
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		12.57	12.56	12.57	12.57	11.58	9.09	7.44	6.27	5.40	4.72	4.19	3.76	3.41	3.11	2.86	2.65	2.46	2.30	2.17	2.04
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		12.57	1.50	1.16	1.06	0.99	0.94	0.90	0.87	0.84	0.81	0.78	0.76	0.74	0.72	0.70	0.69	0.67	0.66	0.64	0.63
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		12.57	12.56	12.56	12.56	11.28	8.79	7.13	5.96	5.08	4.40	3.87	3.44	3.09	2.80	2.56	2.36	2.19	2.04	1.92	1.81

Permissible spans for ROMA roof elements FD eco 102 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.28: Wind uplift pressure

		Characteristic wind uplift pressure in kN/m2																			
Stat. System	Color group	-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	6.37	6.37	5.30	4.64	3.87	3.34	2.97	2.68	2.46	2.28	2.14	2.01	1.91	1.82	1.74	1.67	1.61	1.56	1.51	1.46
2-span	I	4.53	4.53	4.53	4.53	3.87	3.34	2.97	2.68	2.46	2.28	2.14	2.01	1.91	1.82	1.74	1.67	1.61	1.56	1.51	1.46
	II	4.53	4.53	4.53	4.53	3.87	3.34	2.97	2.68	2.46	2.28	2.14	2.01	1.91	1.82	1.74	1.67	1.61	1.56	1.51	1.46
	III	4.53	4.53	4.53	4.53	3.87	3.34	2.97	2.68	2.46	2.28	2.14	2.01	1.91	1.82	1.74	1.67	1.61	1.56	1.51	1.46
3-span	I	5.95	5.95	5.29	4.64	3.87	3.35	2.97	2.68	2.46	2.28	2.14	2.01	1.91	1.82	1.74	1.67	1.61	1.56	1.51	1.46
	II	5.95	5.95	5.29	4.64	3.87	3.35	2.97	2.68	2.46	2.28	2.14	2.01	1.91	1.82	1.74	1.67	1.61	1.56	1.51	1.46
	III	5.95	5.95	5.29	4.64	3.87	3.35	2.97	2.68	2.46	2.28	2.14	2.01	1.91	1.82	1.74	1.67	1.61	1.56	1.51	1.46

Table D.29: Snow load

Stat. System	Color group	Characteristic snow load in kN/m²																			
		0,25	0.38	0.50	0.63	0.75	0.88	1.00	1.13	1.25	1.38	1.50	1.63	1.75	1.88	2.00	2.13	2.25	2.38	2.50	2.63
1-span	I,II,III	42	44	45	47	49	51	52	54	56	57	59	61	62	64	66	67	69	70	72	73
		5,62	4,43	3,71	3,23	2,88	2,62	2,41	2,24	2,10	1,99	1,89	1,81	1,73	1,67	1,61	1,56	1,51	1,47	1,43	1,39
2-span	I,II,III	40	44	45	47	49	51	52	54	56	57	59	61	62	64	66	67	69	70	72	73
		4,53	4,43	3,71	3,23	2,88	2,61	2,41	2,24	2,10	1,99	1,89	1,81	1,73	1,67	1,61	1,56	1,51	1,47	1,43	1,39
		67	87	91	94	98	101	105	108	111	115	118	121	125	128	131	134	138	141	144	147
3-span	I,II,III	42	44	45	47	49	51	52	54	56	57	59	61	62	64	66	67	69	70	72	73
		5,61	4,43	3,71	3,23	2,88	2,62	2,41	2,24	2,10	1,99	1,89	1,81	1,73	1,67	1,61	1,56	1,51	1,47	1,43	1,39
		83	87	91	94	98	101	105	108	111	115	118	122	125	128	131	134	138	141	144	147

Permissible spans for ROMA roof elements FD eco 102 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.30: Wind uplift for screws (see Comments no. 9)

Stat. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		6,37	6,37	5,30	4,64	3,87	3,34	2,97	2,68	2,46	2,28	2,14	2,01	1,91	1,82	1,74	1,67	1,61	1,56	1,51	1,46
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		6,37	6,37	5,30	4,64	3,87	3,34	2,97	2,68	2,46	2,28	2,14	2,01	1,91	1,82	1,74	1,67	1,61	1,56	1,51	1,46
2-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		4,53	4,53	4,53	4,45	3,47	2,83	2,39	2,08	1,84	1,65	1,50	1,38	1,28	1,20	1,12	1,06	1,00	0,96	0,91	0,87
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		4,53	4,53	4,53	4,53	3,87	3,34	2,97	2,68	2,46	2,28	2,14	2,01	1,91	1,82	1,74	1,67	1,61	1,56	1,51	1,46
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		4,53	4,53	4,53	4,00	3,04	2,44	2,05	1,78	1,58	1,43	1,31	1,21	1,13	1,06	1,00	0,95	0,90	0,86	0,82	0,79
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		4,53	4,53	4,53	4,53	3,87	3,34	2,97	2,68	2,46	2,28	2,14	2,01	1,91	1,82	1,74	1,67	1,61	1,56	1,51	1,46
3-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		5,95	5,95	5,29	4,64	3,87	3,35	2,97	2,68	2,42	2,16	1,95	1,78	1,63	1,51	1,41	1,32	1,24	1,17	1,10	1,05
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		5,95	5,95	5,29	4,64	3,87	3,35	2,97	2,68	2,46	2,28	2,14	2,01	1,91	1,82	1,74	1,67	1,61	1,56	1,51	1,46
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		5,95	5,95	5,29	4,64	3,87	3,35	2,97	2,60	2,28	2,02	1,82	1,65	1,51	1,40	1,30	1,22	1,14	1,08	1,02	0,97
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		5,95	5,95	5,29	4,64	3,87	3,35	2,97	2,68	2,46	2,28	2,14	2,01	1,91	1,82	1,74	1,67	1,61	1,56	1,51	1,46

Permissible spans for ROMA roof elements FD eco 122 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.31: Wind uplift pressure

Stat. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	7.39	7.36	6.07	5.28	4.75	4.35	3.82	3.42	3.11	2.85	2.65	2.48	2.33	2.21	2.10	2.00	1.92	1.85	1.78	1.72
2-span	I	4.80	4.80	4.80	4.80	4.75	4.35	3.82	3.42	3.10	2.86	2.65	2.48	2.33	2.21	2.10	2.00	1.92	1.85	1.78	1.72
	II	4.80	4.80	4.80	4.80	4.75	4.35	3.82	3.42	3.10	2.86	2.65	2.48	2.33	2.21	2.10	2.00	1.92	1.85	1.78	1.72
	III	4.80	4.80	4.80	4.80	4.58	4.01	3.60	3.28	3.03	2.83	2.65	2.48	2.33	2.21	2.10	2.00	1.92	1.85	1.78	1.72
3-span	I	6.18	6.18	6.07	5.29	4.75	4.35	3.82	3.42	3.10	2.86	2.65	2.48	2.33	2.21	2.10	2.00	1.92	1.85	1.78	1.72
	II	6.18	6.18	6.07	5.29	4.75	4.35	3.82	3.42	3.10	2.86	2.65	2.48	2.33	2.21	2.10	2.00	1.92	1.85	1.78	1.72
	III	6.19	6.19	6.07	5.29	4.75	4.35	3.82	3.42	3.10	2.85	2.65	2.48	2.33	2.21	2.10	2.00	1.92	1.85	1.78	1.72

Table D.32: Snow load

Stat. System	Color group	Characteristic snow load in kN/m ²																			
		0,25	0.38	0.50	0.63	0.75	0.88	1.00	1.13	1.25	1.38	1.50	1.63	1.75	1.88	2.00	2.13	2.25	2.38	2.50	2.63
1-span	I,II,III	50	52	54	55	57	58	60	61	63	65	66	68	69	71	72	74	75	77	78	80
		6,52	5.14	4.29	3.71	3.29	2.97	2.72	2.52	2.35	2.21	2.10	1.99	1.91	1.83	1.76	1.70	1.64	1.59	1.54	1.50
2-span	I,II,III	40	49	54	55	57	58	60	61	63	65	66	68	69	71	72	74	75	77	78	80
		4.80	4.80	4.28	3.71	3.29	2.97	2.72	2.52	2.35	2.21	2.10	1.99	1.9	1.83	1.76	1.70	1.64	1.59	1.54	1.50
		74	97	107	110	113	117	120	123	126	129	132	135	138	141	144	147	150	153	156	159
3-span	I,II,III	48	52	54	55	57	58	60	61	63	65	66	68	69	71	72	74	75	77	78	80
		6.18	5.14	4.28	3.71	3.29	2.97	2.72	2.52	2.35	2.21	2.10	1.99	1.91	1.83	1.76	1.70	1.64	1.59	1.54	1.50
		96	104	107	110	113	117	120	123	126	129	132	135	138	141	144	147	150	153	156	159

Permissible spans for ROMA roof elements FD eco 122 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.33: Wind uplift for screws (see Comments no. 9)

Stat. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		7,39	7,36	6,07	5,28	4,75	4,35	3,82	3,42	3,11	2,85	2,65	2,48	2,33	2,21	2,10	2,00	1,92	1,85	1,78	1,72
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		7,39	7,36	6,07	5,28	4,75	4,35	3,82	3,42	3,11	2,85	2,65	2,48	2,33	2,21	2,10	2,00	1,92	1,85	1,78	1,72
2-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		4,80	4,80	4,80	4,31	3,33	2,72	2,30	2,01	1,79	1,61	1,48	1,36	1,27	1,19	1,12	1,06	1,00	0,95	0,91	0,87
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		4,80	4,80	4,80	4,80	4,75	4,35	3,82	3,42	3,10	2,86	2,65	2,48	2,33	2,21	2,10	2,00	1,92	1,85	1,78	1,72
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		4,80	4,80	4,80	3,69	2,78	2,24	1,84	1,62	1,48	1,37	1,27	1,19	1,11	1,05	0,99	0,94	0,90	0,86	0,82	0,79
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		4,80	4,80	4,80	4,80	4,58	4,01	3,60	3,28	3,03	2,83	2,65	2,48	2,33	2,21	2,10	2,00	1,92	1,85	1,78	1,72
3-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		6,18	6,18	6,07	5,29	4,49	3,69	3,12	2,69	2,36	2,11	1,90	1,73	1,59	1,48	1,37	1,29	1,21	1,14	1,09	1,03
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		6,18	6,18	6,07	5,29	4,75	4,35	3,82	3,42	3,10	2,86	2,65	2,48	2,33	2,21	2,10	2,00	1,92	1,85	1,78	1,72
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		6,19	6,19	6,07	5,29	4,29	3,48	2,92	2,50	2,18	1,94	1,74	1,58	1,45	1,35	1,26	1,18	1,11	1,05	1,00	0,95
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		6,19	6,19	6,07	5,29	4,75	4,35	3,82	3,42	3,10	2,85	2,65	2,48	2,33	2,21	2,10	2,00	1,92	1,85	1,78	1,72

Permissible spans for ROMA roof elements FD eco 142 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.34: Wind uplift pressure

Stat. System	Color group	Characteristic wind uplift pressure in kN/m2																			
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	8.33	8.32	6.80	5.90	5.29	4.83	4.48	4.18	3.77	3.44	3.18	2.96	2.77	2.61	2.47	2.35	2.24	2.15	2.06	1.98
2-span	I	5.08	5.08	5.08	5.08	5.08	4.83	4.48	4.10	3.75	3.44	3.18	2.96	2.77	2.61	2.47	2.35	2.24	2.14	2.06	1.98
	II	5.08	5.08	5.08	5.08	5.08	4.78	4.25	3.85	3.53	3.27	3.06	2.88	2.72	2.59	2.47	2.35	2.24	2.14	2.06	1.98
	III	5.07	5.07	5.07	5.07	4.93	4.28	3.82	3.47	3.19	2.97	2.79	2.63	2.50	2.38	2.28	2.19	2.11	2.04	1.97	1.91
3-span	I	6.42	6.42	6.42	5.90	5.28	4.83	4.48	4.18	3.77	3.44	3.18	2.96	2.77	2.61	2.47	2.35	2.24	2.15	2.06	1.98
	II	6.42	6.42	6.42	5.90	5.28	4.83	4.48	4.18	3.77	3.44	3.18	2.96	2.77	2.61	2.47	2.35	2.24	2.15	2.06	1.98
	III	6.42	6.42	6.42	5.90	5.29	4.83	4.48	4.17	3.77	3.44	3.18	2.96	2.77	2.61	2.47	2.35	2.24	2.15	2.06	1.98

Table D.35: Snow load

Stat. System	Color group	Characteristic snow load in kN/m²																			
		0,25	0.38	0.50	0.63	0.75	0.88	1.00	1.13	1.25	1.38	1.50	1.63	1.75	1.88	2.00	2.13	2.25	2.38	2.50	2.63
1-span	I,II,III	59	61	62	64	65	67	68	70	71	72	74	75	77	78	79	81	82	84	85	86
		7,41	5.85	4.88	4.20	3.72	3.34	3.05	2.82	2.62	2.46	2.32	2.20	2.10	2.00	1.92	1.85	1.78	1.72	1.67	1.62
2-span	I,II,III	41	53	62	64	65	67	68	69	71	72	74	75	77	78	79	81	82	84	85	86
		5.08	5.08	4.87	4.20	3.71	3.34	3.05	2.82	2.62	2.46	2.32	2.20	2.10	2.00	1.92	1.85	1.78	1.72	1.67	1.62
		81	106	125	127	130	133	136	139	142	145	148	150	153	156	159	162	165	167	170	173
3-span	I,II,III	51	61	62	64	65	67	68	69	71	72	74	75	77	78	79	81	82	84	85	86
		6.42	5.85	4.87	4.20	3.71	3.34	3.05	2.81	2.62	2.46	2.32	2.20	2.09	2.00	1.92	1.85	1.78	1.72	1.67	1.62
		103	122	125	127	130	133	136	139	142	145	148	150	153	156	159	162	164	167	170	173

Permissible spans for ROMA roof elements FD eco 142 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.36: Wind uplift for screws (see Comments no. 9)

Stat. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		8,33	8.32	6.80	5.90	5.29	4.83	4.48	4.18	3.77	3.44	3.18	2.96	2.77	2.61	2.47	2.35	2.24	2.15	2.06	1.98
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
2-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		5,07	5.08	5.07	4.17	3.21	2.62	2.24	1.96	1.76	1.59	1.46	1.36	1.26	1.18	1.12	1.06	1.00	0.95	0.91	0.87
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	III	5,08	5.08	5.08	5.08	5.08	4.78	4.25	3.85	3.53	3.27	3.06	2.88	2.72	2.59	2.47	2.33	2.20	2.08	1.97	1.88
		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		5,07	5.07	5.07	3.40	2.16	1.80	1.61	1.48	1.38	1.30	1.23	1.17	1.10	1.04	0.99	0.94	0.90	0.86	0.82	0.79
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	III	5,07	5.07	5.07	5.07	4.93	4.28	3.82	3.47	3.19	2.97	2.79	2.63	2.50	2.38	2.28	2.16	2.03	1.92	1.82	1.74
		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		6,42	6.42	6.42	5.73	4.47	3.65	3.07	2.64	2.32	2.06	1.86	1.70	1.56	1.45	1.35	1.27	1.20	1.13	1.07	1.02
3-span	I,II	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		6,42	6.42	6.42	5.90	5.28	4.83	4.48	4.18	3.77	3.44	3.18	2.96	2.77	2.61	2.47	2.35	2.24	2.15	2.06	1.98
		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	III	6,42	6.42	6.42	5.47	4.22	3.39	2.82	2.41	2.10	1.86	1.68	1.53	1.41	1.31	1.22	1.15	1.09	1.03	0.98	0.94
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		6,42	6.42	6.42	5.90	5.29	4.83	4.48	4.17	3.77	3.44	3.18	2.96	2.77	2.61	2.47	2.35	2.24	2.15	2.06	1.98

Permissible spans for ROMA roof elements FD eco 162 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.37: Wind uplift pressure

Stat. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	9.18	9.18	7.52	6.48	5.79	5.29	4.90	4.58	4.32	4.06	3.73	3.46	3.23	3.03	2.86	2.71	2.58	2.46	2.35	2.26
2-span	I	5.33	5.33	5.33	5.33	5.33	5.29	4.82	4.34	3.96	3.65	3.40	3.19	3.01	2.85	2.71	2.59	2.48	2.38	2.30	2.22
	II	5.33	5.33	5.33	5.33	5.33	5.09	4.49	4.05	3.70	3.43	3.20	3.00	2.84	2.69	2.57	2.45	2.36	2.27	2.18	2.11
	III	5.33	5.33	5.33	5.32	5.24	4.52	4.00	3.62	3.33	3.09	2.90	2.73	2.59	2.47	2.36	2.26	2.18	2.10	2.03	1.96
3-span	I	6.62	6.62	6.62	6.48	5.80	5.29	4.90	4.58	4.32	4.06	3.73	3.46	3.22	3.03	2.86	2.71	2.58	2.46	2.36	2.26
	II	6.62	6.62	6.62	6.49	5.80	5.29	4.90	4.58	4.32	4.00	3.71	3.46	3.22	3.03	2.86	2.71	2.58	2.46	2.36	2.26
	III	6.62	6.62	6.62	6.49	5.80	5.29	4.90	4.48	4.06	3.73	3.45	3.23	3.03	2.86	2.72	2.60	2.48	2.38	2.29	2.21

Table D.38: Snow load

Stat. System	Color group	Characteristic snow load in kN/m ²																			
		0,25	0.38	0.50	0.63	0.75	0.88	1.00	1.13	1.25	1.38	1.50	1.63	1.75	1.88	2.00	2.13	2.25	2.38	2.50	2.63
1-span	I,II,III	69	70	71	73	74	75	77	78	79	81	82	83	85	86	87	89	90	91	93	94
		8,25	6.54	5.45	4.70	4.14	3.72	3.39	3.12	2.90	2.71	2.55	2.41	2.29	2.19	2.10	2.01	1.94	1.87	1.81	1.75
2-span	I,II,III	44	57	70	73	74	75	77	78	79	81	82	83	85	86	87	89	90	91	92	94
		5.33	5.33	5.33	4.70	4.14	3.72	3.39	3.12	2.90	2.71	2.55	2.41	2.29	2.19	2.10	2.01	1.94	1.87	1.81	1.75
		89	114	139	145	148	151	153	156	159	161	164	167	169	172	175	177	180	182	185	188
3-span	I,II,III	55	70	71	73	74	75	77	78	79	81	82	83	85	86	87	89	90	91	92	94
		6.62	6.53	5.45	4.70	4.14	3.72	3.39	3.12	2.90	2.71	2.55	2.41	2.29	2.19	2.09	2.01	1.94	1.87	1.81	1.75
		110	140	143	145	148	151	153	156	159	161	164	167	169	172	174	177	180	182	185	188

Permissible spans for ROMA roof elements FD eco 162 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.39: Wind uplift for screws (see Comments no. 9)

Stat. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		9,18	9.18	7.52	6.48	5.79	5.29	4.90	4.58	4.32	4.06	3.73	3.46	3.23	3.03	2.86	2.71	2.58	2.46	2.35	2.26
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
2-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		5,33	5.33	5.33	4.06	3.12	2.56	2.20	1.94	1.74	1.58	1.46	1.35	1.26	1.19	1.12	1.06	1.00	0.96	0.92	0.88
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		5,32	5.33	4.79	2.20	1.84	1.65	1.51	1.41	1.33	1.26	1.20	1.14	1.10	1.04	0.99	0.94	0.90	0.86	0.82	0.79
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	III	5,33	5.33	5.33	5.32	5.24	4.52	4.00	3.62	3.33	3.09	2.90	2.73	2.59	2.43	2.27	2.13	2.01	1.91	1.81	1.73
	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		6,62	6.62	6.62	5.77	4.46	3.62	3.03	2.60	2.28	2.03	1.83	1.67	1.54	1.43	1.34	1.26	1.18	1.12	1.07	1.02
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
3-span	I,II	6,62	6.62	6.62	6.49	5.80	5.29	4.90	4.58	4.32	4.00	3.71	3.46	3.22	3.03	2.86	2.71	2.58	2.46	2.33	2.20
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		6,62	6.62	6.62	5.45	4.15	3.30	2.73	2.32	2.03	1.80	1.63	1.49	1.38	1.28	1.20	1.13	1.07	1.02	0.97	0.93
	III	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		6,62	6.62	6.62	6.49	5.80	5.29	4.90	4.48	4.06	3.73	3.45	3.23	3.03	2.86	2.72	2.60	2.48	2.35	2.22	2.10
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6

Permissible spans for ROMA roof elements FD eco 182 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.40: Wind uplift pressure

Struc. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	9.97	9.97	8.20	7.05	6.28	5.72	5.29	4.94	4.66	4.42	4.22	3.97	3.69	3.46	3.25	3.08	2.92	2.78	2.66	2.55
2-span	I	5.56	5.56	5.56	5.56	5.56	5.56	5.06	4.54	4.13	3.80	3.54	3.31	3.12	2.95	2.81	2.68	2.56	2.46	2.36	2.28
	II	5.56	5.56	5.56	5.56	5.56	5.35	4.70	4.22	3.85	3.55	3.31	3.10	2.93	2.78	2.64	2.53	2.42	2.33	2.24	2.17
	III	5.57	5.56	5.56	5.57	5.50	4.71	4.16	3.75	3.44	3.19	2.98	2.81	2.66	2.53	2.42	2.32	2.23	2.15	2.08	2.01
3-span	I	6.82	6.82	6.82	6.82	6.28	5.72	5.29	4.94	4.66	4.36	4.02	3.75	3.51	3.31	3.13	2.97	2.84	2.71	2.60	2.50
	II	6.82	6.82	6.82	6.82	6.28	5.72	5.29	4.94	4.54	4.16	3.84	3.57	3.35	3.16	2.99	2.84	2.71	2.60	2.49	2.40
	III	6.82	6.82	6.82	6.82	6.28	5.72	5.23	4.66	4.21	3.85	3.56	3.32	3.11	2.94	2.78	2.65	2.53	2.43	2.33	2.25

Table D.41: Snow load

Stat. System	Color group	Characteristic snow load in kN/m ²																			
		0,25	0.38	0.50	0.63	0.75	0.88	1.00	1.13	1.25	1.38	1.50	1.63	1.75	1.88	2.00	2.13	2.25	2.38	2.50	2.63
1-span	I,II,III	78	79	81	82	83	84	86	87	88	89	91	92	93	94	95	97	98	99	100	102
		9.06	7.21	6.02	5.19	4.58	4.11	3.74	3.43	3.18	2.97	2.79	2.64	2.50	2.38	2.27	2.18	2.10	2.02	1.95	1.89
2-span	I,II,III	48	61	74	82	83	84	86	87	88	89	90	92	93	94	95	97	98	99	100	102
		5.56	5.56	5.56	5.19	4.58	4.11	3.73	3.43	3.18	2.97	2.79	2.64	2.50	2.38	2.27	2.18	2.10	2.02	1.95	1.89
3-span	I,II,III	96	122	149	164	166	169	171	174	176	178	181	183	186	188	191	193	196	198	201	203
		118	150	161	164	166	169	171	174	176	178	181	183	186	188	191	193	196	198	201	203

Permissible spans for ROMA roof elements FD eco 182 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.42: Wind uplift for screws (see Comments no. 9)

Stat. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		9,97	9,97	8,20	7,05	6,28	5,72	5,29	4,94	4,66	4,42	4,22	3,97	3,69	3,46	3,25	3,08	2,92	2,78	2,66	2,55
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		9,97	9,97	8,20	7,05	6,28	5,72	5,29	4,94	4,66	4,42	4,22	3,97	3,69	3,46	3,25	3,08	2,92	2,78	2,66	2,55
2-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		5,56	5,56	5,56	3,95	3,04	2,51	2,17	1,92	1,73	1,58	1,46	1,35	1,26	1,19	1,12	1,06	1,01	0,96	0,92	0,88
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		5,56	5,56	5,56	5,56	5,56	5,35	4,70	4,22	3,85	3,55	3,31	3,08	2,85	2,64	2,47	2,32	2,19	2,08	1,97	1,88
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		5,57	5,56	2,35	1,92	1,71	1,57	1,46	1,37	1,30	1,24	1,18	1,13	1,09	1,04	0,99	0,94	0,90	0,86	0,83	0,79
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		5,57	5,56	5,56	5,56	5,50	4,71	4,16	3,75	3,44	3,19	2,98	2,80	2,59	2,41	2,25	2,12	2,00	1,90	1,81	1,72
3-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		6,82	6,82	6,82	5,81	4,45	3,58	2,99	2,56	2,24	2,00	1,81	1,65	1,53	1,42	1,32	1,25	1,18	1,12	1,06	1,01
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		6,82	6,82	6,82	6,82	6,28	5,72	5,29	4,94	4,54	4,16	3,84	3,57	3,35	3,16	2,97	2,77	2,60	2,45	2,31	2,19
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		6,82	6,82	6,82	5,43	4,07	3,21	2,64	2,25	1,97	1,76	1,59	1,46	1,35	1,26	1,19	1,12	1,06	1,01	0,96	0,92
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		6,82	6,82	6,82	6,82	6,28	5,72	5,23	4,66	4,21	3,85	3,56	3,32	3,11	2,94	2,78	2,64	2,47	2,32	2,19	2,08

Permissible spans for ROMA roof elements FD eco 192 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.43: Wind uplift pressure

Stat. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	10.34	10.34	8.48	7.27	6.47	5.88	5.43	5.08	4.78	4.54	4.33	4.14	3.93	3.68	3.46	3.26	3.10	2.95	2.81	2.69
2-span	I	5.47	5.47	5.47	5.47	5.47	5.47	5.15	4.61	4.19	3.86	3.58	3.35	3.15	2.98	2.83	2.70	2.58	2.48	2.38	2.30
	II	5.47	5.47	5.47	5.47	5.47	5.44	4.77	4.28	3.90	3.59	3.34	3.13	2.96	2.80	2.67	2.55	2.44	2.35	2.26	2.18
	III	5.47	5.47	5.47	5.47	5.47	4.76	4.20	3.78	3.46	3.21	3.00	2.83	2.68	2.55	2.44	2.34	2.24	2.16	2.09	2.02
3-span	I	6.55	6.55	6.55	6.55	6.47	5.88	5.44	5.08	4.78	4.42	4.08	3.79	3.55	3.34	3.15	3.00	2.86	2.73	2.62	2.52
	II	6.55	6.55	6.55	6.55	6.47	5.88	5.44	5.08	4.60	4.20	3.88	3.61	3.38	3.18	3.01	2.86	2.73	2.61	2.50	2.41
	III	6.56	6.56	6.56	6.56	6.47	5.88	5.30	4.71	4.25	3.88	3.58	3.34	3.13	2.95	2.80	2.66	2.54	2.44	2.34	2.25

Table D.44: Snow load

Stat. System	Color group	Characteristic snow load in kN/m ²																			
		0,25	0.38	0.50	0.63	0.75	0.88	1.00	1.13	1.25	1.38	1.50	1.63	1.75	1.88	2.00	2.13	2.25	2.38	2.50	2.63
1-span	I,II,III	83	84	85	86	88	89	90	91	92	94	95	96	97	98	100	101	102	103	104	106
		9,45	7.53	6.30	5.43	4.79	4.30	3.91	3.59	3.32	3.10	2.91	2.75	2.60	2.48	2.37	2.27	2.18	2.10	2.02	1.96
2-span	I,II,III	48	61	74	86	88	89	90	91	92	94	95	96	97	98	100	101	102	103	104	106
		5.47	5.47	5.47	5.43	4.79	4.30	3.90	3.59	3.32	3.10	2.91	2.75	2.60	2.48	2.36	2.27	2.18	2.10	2.02	1.96
		96	122	148	173	175	178	180	182	185	187	190	192	194	197	199	202	204	206	209	211
3-span	I,II,III	57	73	85	86	88	89	90	91	92	94	95	96	97	98	100	101	102	103	104	106
		6.55	6.55	6.3	5.43	4.79	4.30	3.91	3.59	3.32	3.10	2.91	2.75	2.60	2.48	2.37	2.27	2.18	2.10	2.02	1.96
		115	146	170	173	175	178	180	182	185	187	190	192	194	197	199	202	204	206	209	211

Permissible spans for ROMA roof elements FD eco 192 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.45: Wind uplift for screws (see Comments no. 9)

Stat. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		10.34	10.34	8.48	7.27	6.47	5.88	5.43	5.08	4.78	4.54	4.33	4.14	3.93	3.68	3.46	3.26	3.10	2.95	2.81	2.69
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		10.34	10.34	8.48	7.27	6.47	5.88	5.43	5.08	4.78	4.54	4.33	4.14	3.93	3.68	3.46	3.26	3.10	2.95	2.81	2.69
2-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		5.47	5.47	5.47	3.90	3.01	2.50	2.16	1.91	1.73	1.58	1.46	1.36	1.27	1.19	1.12	1.06	1.01	0.96	0.92	0.88
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		5.47	5.47	5.47	5.47	5.47	5.44	4.77	4.28	3.90	3.59	3.34	3.08	2.84	2.64	2.47	2.32	2.19	2.08	1.97	1.88
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		5.47	5.47	2.16	1.85	1.67	1.54	1.44	1.36	1.29	1.23	1.18	1.13	1.08	1.04	0.99	0.94	0.90	0.86	0.83	0.80
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		5.47	5.47	5.47	5.47	5.47	4.76	4.20	3.78	3.46	3.21	3.00	2.79	2.57	2.40	2.24	2.11	2.00	1.90	1.80	1.72
3-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		6.55	6.55	6.55	5.83	4.45	3.57	2.97	2.54	2.23	1.99	1.80	1.64	1.52	1.41	1.32	1.24	1.18	1.11	1.06	1.01
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		6.55	6.55	6.55	6.55	6.47	5.88	5.44	5.08	4.60	4.20	3.88	3.61	3.38	3.18	2.96	2.77	2.59	2.44	2.31	2.19
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		6.56	6.55	6.56	5.42	4.03	3.17	2.61	2.22	1.94	1.74	1.58	1.45	1.34	1.26	1.18	1.12	1.06	1.01	0.96	0.92
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		6.56	6.56	6.56	6.56	6.47	5.88	5.30	4.71	4.25	3.88	3.58	3.34	3.13	2.95	2.80	2.62	2.46	2.31	2.18	2.07

Permissible spans for ROMA roof elements FD eco 212 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.46: Wind uplift pressure

Stat. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	11.04	11.04	9.01	7.69	6.82	6.19	5.71	5.33	5.02	4.76	4.53	4.34	4.16	4.01	3.76	3.55	3.36	3.19	3.04	2.91
2-span	I	5.27	5.27	5.27	5.27	5.27	5.27	5.28	4.72	4.28	3.93	3.65	3.40	3.20	3.03	2.88	2.74	2.62	2.51	2.41	2.32
	II	5.27	5.28	5.28	5.28	5.28	5.27	4.88	4.36	3.96	3.64	3.39	3.18	2.99	2.84	2.70	2.58	2.47	2.37	2.28	2.20
	III	5.27	5.28	5.27	5.27	5.27	4.84	4.25	3.82	3.50	3.24	3.03	2.85	2.70	2.57	2.45	2.35	2.26	2.18	2.10	2.04
3-span	I	6.02	6.02	6.02	6.02	6.02	6.02	5.71	5.33	4.94	4.50	4.15	3.85	3.60	3.38	3.19	3.03	2.88	2.75	2.64	2.54
	II	6.02	6.02	6.02	6.02	6.02	6.02	5.71	5.22	4.69	4.28	3.93	3.65	3.41	3.21	3.04	2.88	2.74	2.62	2.52	2.42
	III	6.01	6.01	6.01	6.01	6.01	6.01	5.41	4.78	4.30	3.92	3.61	3.36	3.14	2.96	2.80	2.67	2.54	2.44	2.34	2.26

Table D.47: Snow load

Stat. System	Color group	Characteristic snow load in kN/m ²																			
		0,25	0.38	0.50	0.63	0.75	0.88	1.00	1.13	1.25	1.38	1.50	1.63	1.75	1.88	2.00	2.13	2.25	2.38	2.50	2.63
1-span	I,II,III	89	90	91	92	93	94	96	97	98	99	100	101	102	103	105	106	107	108	109	110
		9,79	7.85	6.58	5.68	5.02	4.50	4.09	3.76	3.48	3.24	3.04	2.87	2.72	2.58	2.47	2.36	2.27	2.18	2.10	2.03
2-span	I,II,III	48	60	73	85	93	94	95	97	98	99	100	101	102	103	105	106	107	108	109	110
		5.27	5.27	5.27	5.27	5.01	4.50	4.09	3.76	3.48	3.24	3.04	2.87	2.72	2.58	2.47	2.36	2.27	2.18	2.10	2.03
		96	121	146	171	186	189	191	193	196	198	200	202	205	207	209	211	214	216	218	220
3-span	I,II,III	55	69	83	92	93	94	96	97	98	99	100	101	102	103	105	106	107	108	109	110
		6.02	6.02	6.02	5.68	5.02	4.50	4.09	3.75	3.48	3.24	3.04	2.87	2.72	2.58	2.47	2.36	2.27	2.18	2.10	2.03
		109	138	166	184	186	189	191	193	196	198	200	202	205	207	209	211	214	216	218	220

Permissible spans for ROMA roof elements FD eco 212 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.48: Wind uplift for screws (see Comments no. 9)

Struc. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		11.04	11.04	9.01	7.69	6.82	6.19	5.71	5.33	5.02	4.76	4.53	4.34	4.16	4.01	3.76	3.53	3.32	3.13	2.96	2.81
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		11.04	11.04	9.01	7.69	6.82	6.19	5.71	5.33	5.02	4.76	4.53	4.34	4.16	4.01	3.76	3.55	3.36	3.19	3.04	2.91
2-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		5,27	5,27	5,27	3,82	2,96	2,47	2,14	1,91	1,72	1,58	1,46	1,36	1,27	1,20	1,13	1,07	1,02	0,97	0,93	0,89
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		5,27	5,27	5,27	5,27	5,27	5,27	4,88	4,36	3,96	3,64	3,35	3,07	2,84	2,64	2,47	2,32	2,19	2,08	1,98	1,88
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		5,27	2,40	1,97	1,76	1,61	1,50	1,42	1,34	1,28	1,22	1,17	1,12	1,08	1,04	0,99	0,95	0,90	0,87	0,83	0,80
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		5,27	5,28	5,27	5,27	5,27	4,84	4,25	3,82	3,50	3,24	3,01	2,76	2,56	2,38	2,23	2,11	1,99	1,89	1,80	1,72
3-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		6,01	6,01	6,02	5,88	4,44	3,54	2,94	2,52	2,20	1,97	1,78	1,63	1,51	1,40	1,32	1,24	1,17	1,11	1,06	1,01
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		6,02	6,02	6,02	6,02	6,02	6,02	5,71	5,22	4,69	4,28	3,93	3,65	3,41	3,18	2,95	2,76	2,58	2,43	2,30	2,18
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		6,01	6,01	6,01	5,40	3,96	3,09	2,54	2,16	1,90	1,71	1,55	1,43	1,33	1,24	1,17	1,11	1,05	1,00	0,96	0,92
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		6,01	6,01	6,01	6,01	6,01	6,01	5,41	4,78	4,30	3,92	3,61	3,36	3,14	2,96	2,79	2,60	2,43	2,29	2,16	2,05

Permissible spans for ROMA roof elements FD eco 242 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.49: Wind uplift pressure

Struc. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	12.00	12.00	9.76	8.27	7.29	6.61	6.08	5.67	5.33	5.05	4.80	4.60	4.41	4.25	4.10	3.97	3.79	3.59	3.42	3.26
2-span	I	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.82	4.36	3.99	3.70	3.45	3.24	3.06	2.90	2.76	2.64	2.53	2.43	2.34
	II	4.98	4.98	4.98	4.98	4.98	4.98	4.96	4.42	4.00	3.68	3.42	3.20	3.01	2.85	2.71	2.59	2.48	2.38	2.29	2.21
	III	4.98	4.98	4.98	4.98	4.98	4.79	4.14	3.74	3.45	3.24	3.03	2.85	2.70	2.57	2.45	2.35	2.26	2.18	2.10	2.03
3-span	I	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.04	4.58	4.20	3.89	3.62	3.40	3.21	3.04	2.89	2.76	2.64	2.53
	II	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	4.75	4.32	3.96	3.67	3.42	3.21	3.03	2.88	2.74	2.62	2.51	2.41
	III	5.22	5.22	5.22	5.22	5.22	5.23	5.23	4.81	4.31	3.91	3.60	3.34	3.12	2.94	2.78	2.64	2.52	2.42	2.32	2.23

Table D.50: Snow load

Stat. System	Color group	Characteristic snow load in kN/m ²																			
		0,25	0,38	0,50	0,63	0,75	0,88	1,00	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13	2,25	2,38	2,50	2,63
1-span	I,II,III	101	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122
		10.66	8.71	7.33	6.35	5.61	5.04	4.57	4.20	3.88	3.62	3.39	3.20	3.02	2.87	2.74	2.61	2.51	2.41	2.32	2.24
2-span	I,II,III	47	59	71	83	95	107	109	110	111	112	113	114	115	116	117	118	119	120	121	122
		4.98	4.98	4.98	4.98	4.98	4.98	4.57	4.19	3.88	3.62	3.39	3.20	3.02	2.87	2.73	2.61	2.50	2.41	2.32	2.24
		95	119	142	166	190	213	217	220	222	224	226	228	230	232	234	236	239	241	243	245
3-span	I,II,III	50	62	75	87	100	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122
		5.23	5.23	5.23	5.23	5.23	5.03	4.57	4.20	3.88	3.62	3.39	3.20	3.02	2.87	2.73	2.61	2.50	2.41	2.32	2.24
		99	124	149	174	199	216	218	220	222	224	226	228	230	232	234	236	239	241	243	245

Permissible spans for ROMA roof elements FD eco 242 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.51: Wind uplift for screws (see Comments no. 9)

Struc. System	Color group	Characteristic wind uplift for screws in kN/m²																			
		-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		12.00	12.00	9.76	8.27	7.29	6.61	6.08	5.67	5.33	5.05	4.80	4.60	4.41	4.09	3.81	3.56	3.34	3.15	2.98	2.83
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		12.00	12.00	9.76	8.27	7.29	6.61	6.08	5.67	5.33	5.05	4.80	4.60	4.41	4.25	4.10	3.97	3.79	3.59	3.42	3.26
2-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		4,98	4.98	4.98	3.72	2.80	2.37	2.11	1.90	1.73	1.59	1.47	1.37	1.28	1.21	1.14	1.08	1.03	0.98	0.94	0.90
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		4,98	4.98	4.98	4.98	4.98	4.98	4.96	4.42	4.00	3.68	3.34	3.06	2.83	2.64	2.47	2.32	2.20	2.08	1.98	1.89
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		2,71	2.07	1.84	1.68	1.57	1.47	1.39	1.32	1.26	1.21	1.16	1.12	1.08	1.04	1.00	0.95	0.91	0.87	0.84	0.81
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		4,98	4.98	4.98	4.98	4.98	4.79	4.14	3.74	3.45	3.24	2.97	2.73	2.54	2.37	2.23	2.10	1.99	1.89	1.80	1.73
3-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		5,23	5.23	5.23	5.22	4.44	3.51	2.90	2.48	2.17	1.94	1.76	1.62	1.50	1.40	1.31	1.24	1.17	1.11	1.06	1.01
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		5,23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	4.75	4.32	3.96	3.67	3.42	3.17	2.94	2.74	2.57	2.42	2.29	2.17
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		5,22	5.22	5.22	5.22	3.86	2.98	2.45	2.10	1.85	1.67	1.53	1.41	1.32	1.23	1.16	1.10	1.05	1.00	0.96	0.92
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		5,22	5.22	5.22	5.22	5.22	5.22	5.22	4.81	4.31	3.91	3.60	3.34	3.12	2.94	2.76	2.57	2.41	2.27	2.14	2.03

Permissible spans for ROMA roof elements FD eco 282 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.52: Wind uplift pressure

Stat. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	13.17	13.17	10.70	8.96	7.86	7.09	6.51	6.05	5.68	5.37	5.11	4.88	4.68	4.50	4.35	4.20	4.07	3.96	3.85	3.74
2-span	I	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.36	3.98	3.68	3.43	3.21	3.03	2.87	2.73	2.61	2.50	2.40	2.31
	II	4.60	4.60	4.60	4.60	4.61	4.61	4.60	4.37	3.96	3.63	3.37	3.15	2.97	2.81	2.67	2.55	2.44	2.34	2.25	2.17
	III	4.60	4.61	4.60	4.60	4.61	4.18	3.74	3.44	3.22	3.04	2.89	2.77	2.64	2.51	2.40	2.30	2.21	2.13	2.06	1.99
3-span	I	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.17	3.85	3.58	3.35	3.16	2.99	2.84	2.70	2.59	2.48
	II	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.26	3.90	3.60	3.35	3.14	2.96	2.81	2.68	2.55	2.44	2.35
	III	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.19	3.80	3.48	3.23	3.02	2.84	2.69	2.56	2.44	2.34	2.24	2.16

Table D.53: Snow load

Stat. System	Color group	Characteristic snow load in kN/m ²																			
		0.25	0.38	0.50	0.63	0.75	0.88	1.00	1.13	1.25	1.38	1.50	1.63	1.75	1.88	2.00	2.13	2.25	2.38	2.50	2.63
1-span	I,II,III	111	117	118	119	120	121	122	123	124	125	126	127	128	129	129	130	131	132	133	134
		10.98	9.36	7.93	6.89	6.10	5.49	4.99	4.58	4.24	3.95	3.70	3.49	3.30	3.13	2.98	2.85	2.73	2.62	2.52	2.43
2-span	I,II,III	47	58	68	79	90	101	112	123	124	125	126	127	128	129	129	130	131	132	133	134
		4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.58	4.24	3.95	3.70	3.48	3.30	3.13	2.98	2.85	2.72	2.62	2.52	2.42
		94	115	137	159	181	203	225	245	247	249	251	253	255	257	259	261	263	265	266	268
3-span	I,II,III	44	54	65	75	85	96	106	116	124	125	126	126	128	129	129	130	131	132	133	134
		4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.24	3.95	3.70	3.48	3.30	3.13	2.98	2.85	2.72	2.62	2.52	2.42
		88	108	129	150	170	191	212	232	247	249	251	253	255	257	259	261	263	265	266	268

Permissible spans for ROMA roof elements FD eco 282 TL 0.6/0.5



The following spans have been verified in accordance with the general building authority approval Z-10.49-837/1 and Z-10.49-836/1 from June 2021 as well as based on EN 14509, Annex E. The most unfavorable load combination of dead weight, snow, wind, temperature and long-term effect is to be determined in accordance with EN 14509, Annex E taking into account the load factors and combination coefficients of DIN EN 1990/NA:2010-12 has been verified. The instructions for use (see page 2) must be observed.

Table D.54: Wind uplift for screws (see Comments no. 9)

Stat. 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	-3.25	-3.50	-3.75	-4.00	-4.25	-4.50	-4.75	-5.00
1-span	I,II,III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		13.17	13.17	10.70	8.96	7.86	7.09	6.51	6.05	5.68	5.37	5.11	4.88	4.48	4.14	3.85	3.60	3.38	3.19	3.01	2.86
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		13.17	13.17	10.70	8.96	7.86	7.09	6.51	6.05	5.68	5.37	5.11	4.88	4.68	4.50	4.35	4.20	4.07	3.96	3.85	3.74
2-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		4.60	4.60	4.60	3.22	2.57	2.26	2.05	1.89	1.74	1.60	1.48	1.38	1.30	1.22	1.15	1.09	1.04	0.99	0.95	0.91
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.37	3.96	3.63	3.34	3.06	2.84	2.64	2.48	2.33	2.21	2.10	1.99	1.90
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		2.19	1.93	1.76	1.64	1.54	1.45	1.38	1.32	1.26	1.21	1.16	1.12	1.08	1.05	1.01	0.96	0.92	0.88	0.85	0.82
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		4.60	4.61	4.60	4.60	4.61	4.18	3.74	3.44	3.22	3.04	2.89	2.71	2.52	2.36	2.22	2.10	1.99	1.90	1.81	1.73
3-span	I,II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		4.34	4.34	4.34	4.34	4.34	3.47	2.86	2.44	2.15	1.92	1.75	1.61	1.49	1.39	1.31	1.24	1.17	1.11	1.06	1.01
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.26	3.90	3.60	3.35	3.14	2.93	2.73	2.56	2.41	2.28	2.17
	III	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		4.34	4.34	4.34	4.34	3.73	2.86	2.36	2.04	1.81	1.64	1.51	1.40	1.30	1.23	1.16	1.10	1.05	1.00	0.96	0.92
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.19	3.80	3.48	3.23	3.02	2.84	2.69	2.54	2.38	2.24	2.12	2.02