

Sandwich panels

Load tables for

SPB 80 WE
 SPB 100 WE
 SPB 120 WE
 SPB 140 WE
 SPB 150 WE & WEF
 SPB 160 WE & WEF
 SPB 170 WE & WEF
 SPB 180 WE & WEF
 SPB 200 WE & WEF
 SPB 210 WE
 SPB 230 WE & WEF

Installed in the single span static scheme

Ruukki panels, thanks to their high quality core and cladding materials, as well as an innovative bonding system, boast excellent durability, corrosion resistance, thermal insulation and mechanical properties. Our load tables enable quick and easy selection of panels suitable for a particular building. Our panels have been tested to conform to the highest class of insulation and sound absorption based on European standards. Thanks to our panels your buildings will be built to last.

General information

The load tables enable easy selection of panels for a single span panel system. For multispan structures and for more detailed design, please use TrayPan software which is primarily recommended for designing panels. TrayPan can be found on Ruukki Design Tools portal at designtools.ruukki.com.

The tables have been formed using TrayPan software, which design the panels according to the principles in **EN 14509:2013**. Using load table requires adequate expertise from the user (structural engineer). Ruukki Construction and developer of the tool are not responsible for possible errors or direct and indirect damage caused by applying results incorrectly.

The following abbreviation is used in the tables:

- ULS (2 fasteners): Ultimate limit state when panel is fixed with 2 fasteners at each end of the panel. This should be verified against the **design value of wind load**.
- ULS (3 fasteners): Ultimate limit state when panel is fixed with 3 fasteners at each end of the panel. This should be verified against the **design value of wind load**.
- ULS (4 fasteners): Ultimate limit state when panel is fixed with 4 fasteners at each end of the panel. This should be verified against the **design value of wind load**.
- SLS L/100: Serviceability limit state described by allowable deflection (expressed in mm) of a span whose length is marked by L. Allowable deflection equals 1/100 of span length, e.g. a panel with a span of 6000 mm may deflect by 60 mm. This should be verified against the **characteristic value of wind load**.
- SLS L/200: Serviceability limit state described by allowable deflection (expressed in mm) of a span whose length is marked by L. Allowable deflection equals 1/200 of span length, e.g. a panel with a span of 6000 mm may deflect by 30 mm. This should be verified against the **characteristic value of wind load**.

The panel system must be verified against the values shown in the load tables, i.e. the contemplated static system must meet both the ULS and SLS criteria. In the load tables for ULS the **design value of wind load** and for SLS the **characteristic value of wind load** is presented. Using load tables is possible only when wind loads are determined according to **EN 1991-1-4**.

Please note that the load values given in the tables are valid only for panels with the informed profiling and when all the initial data matches. Using load span tables is possible only when fasteners according to Ruukki catalogue are used. Use TrayPan for more detailed design or other profiling options.

Colour groups

The division of panels into colour groups shown in the table is connected with the influence of thermal load on cladding made of sandwich panels. When exposed to solar radiation steel facade cladding in dark colours absorbs more heat. This causes thermal deflections, which may limit the design in SLS for single span panels.

Colour group	Colours
Group I - very light colours	RAL: 1015, 1016, 1018, 6019, 7035, 9001, 9002, 9010 RR: 10, 20
Group II - light colours	RAL: 1002, 1003, 1004, 1014, 1017, 1019, 1021, 1023, 1035, 2000, 2003, 2004, 2008, 2009, 5012, 5018, 5024, 6021, 6033, 7000, 7037, 7040, 9006, 9022 RR: 21, 24, 30
Group III - dark colours	RAL: 3000, 3002, 3003, 3005, 3009, 3011, 3013, 5002, 5003, 5005, 5009, 5010, 5011, 5022, 6000, 6003, 6005, 6011, 6018, 6020, 6029, 7015, 7016, 7022, 7024, 8016, 8017, 8023, 9005, 9007 RR: 22, 23, 29, 34, 35, 36, 41

Initial data used in the load table values

Colour group I (summer external): 55 °C

Colour group II (summer external): 65 °C

Colour group III (summer external): 80 °C

Internal temperature (summer/winter): 20 °C / 20 °C

External temperature (winter): -20 °C

Support material: Steel

Steel grade of support (minimum): S235JR (235/360)

Support thickness (minimum): 5 mm

Support width (minimum): 80 mm

Selected fastener: self-drilling screw (according to Ruukki accessories catalogue)

Washer: stainless steel 19.0 mm, with seal (according to Ruukki accessories catalogue)

Related dimensions used in the design are presented in Figure 1.

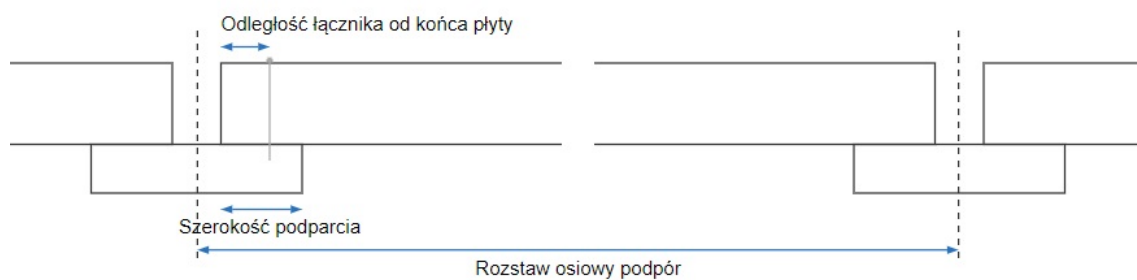


Figure 1: Dimensions of panel structure.

SPB 80 WE



Single span static scheme

	Minimum thickness [mm]
External facing	0.6
Internal facing	0.5

Maximum uniformly distributed load for wind pressure [kN/m ²]														
Colour group	Limit state (number of fasteners at each panel end)	Frame spacing [m]												
		2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
I	ULS (2 fasteners)	3.36	2.64	2.17	1.84	1.60	1.41	1.27	1.04	0.87	0.74	0.63	0.55	0.48
	ULS (3 fasteners)	3.36	2.64	2.17	1.84	1.60	1.41	1.27	1.04	0.87	0.74	0.63	0.55	0.48
	SLS L/100	7.80	5.40	3.90	2.90	2.20	1.70	1.34	1.07	0.85	0.67	0.54	0.43	0.35
	SLS L/200	3.90	2.70	1.95	1.37	0.97	0.69	0.43	0.25	0.13	0.04	0.00	0.00	0.00
II	ULS (2 fasteners)	3.36	2.64	2.17	1.84	1.60	1.41	1.27	1.04	0.87	0.74	0.63	0.55	0.48
	ULS (3 fasteners)	3.36	2.64	2.17	1.84	1.60	1.41	1.27	1.04	0.87	0.74	0.63	0.55	0.48
	SLS L/100	7.80	5.40	3.90	2.90	2.20	1.70	1.34	1.07	0.85	0.67	0.54	0.43	0.35
	SLS L/200	3.90	2.70	1.95	1.37	0.97	0.69	0.43	0.25	0.00	0.00	0.00	0.00	0.00
III	ULS (2 fasteners)	3.36	2.64	2.17	1.84	1.60	1.41	1.27	1.04	0.87	0.74	0.63	0.55	0.48
	ULS (3 fasteners)	3.36	2.64	2.17	1.84	1.60	1.41	1.27	1.04	0.87	0.74	0.63	0.55	0.48
	SLS L/100	7.80	5.40	3.90	2.90	2.20	1.70	1.34	1.07	0.85	0.67	0.54	0.43	0.35
	SLS L/200	3.90	2.70	1.95	1.37	0.50	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Maximum uniformly distributed load for wind suction [kN/m ²]														
Colour group	Limit state (number of fasteners at each panel end)	Frame spacing [m]												
		2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
I	ULS (2 fasteners)	-3.19	-2.53	-2.09	-1.79	-1.56	-1.23	-0.99	-0.82	-0.68	-0.58	-0.50	-0.43	-0.38
	ULS (3 fasteners)	-3.19	-2.53	-2.09	-1.79	-1.56	-1.23	-0.99	-0.82	-0.68	-0.58	-0.50	-0.43	-0.38
	SLS L/100	-6.87	-4.85	-3.55	-2.66	-2.04	-1.58	-1.25	-1.00	-0.81	-0.66	-0.53	-0.43	-0.35
	SLS L/200	-3.43	-2.42	-1.77	-1.30	-0.94	-0.69	-0.49	-0.32	-0.20	-0.11	0.00	0.00	0.00
II	ULS (2 fasteners)	-3.19	-2.53	-2.09	-1.79	-1.56	-1.23	-0.99	-0.82	-0.68	-0.58	-0.50	-0.43	-0.38
	ULS (3 fasteners)	-3.19	-2.53	-2.09	-1.79	-1.56	-1.23	-0.99	-0.82	-0.68	-0.58	-0.50	-0.43	-0.38
	SLS L/100	-6.87	-4.85	-3.55	-2.66	-2.04	-1.58	-1.25	-0.97	-0.76	-0.60	-0.48	-0.38	-0.28
	SLS L/200	-3.43	-2.42	-1.67	-1.16	-0.77	-0.45	-0.23	-0.09	0.00	0.00	0.00	0.00	0.00
III	ULS (2 fasteners)	-3.19	-2.53	-2.09	-1.79	-1.56	-1.23	-0.99	-0.82	-0.68	-0.58	-0.50	-0.43	-0.38
	ULS (3 fasteners)	-3.19	-2.53	-2.09	-1.79	-1.56	-1.23	-0.99	-0.82	-0.68	-0.58	-0.50	-0.43	-0.38
	SLS L/100	-6.87	-4.85	-3.55	-2.66	-2.00	-1.48	-1.11	-0.85	-0.60	-0.40	-0.26	-0.16	-0.08
	SLS L/200	-3.42	-2.19	-1.37	-0.69	-0.27	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Fastener distance from panel end (minimum): 30 mm

SPB 100 WE



Single span static scheme

	Minimum thickness [mm]
External facing	0.6
Internal facing	0.5

Maximum uniformly distributed load for wind pressure [kN/m ²]														
Colour group	Limit state (number of fasteners at each panel end)	Frame spacing [m]												
		2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
I	ULS (2 fasteners)	4.24	3.33	2.74	2.32	2.02	1.79	1.60	1.31	1.09	0.93	0.80	0.69	0.60
	ULS (3 fasteners)	4.24	3.33	2.74	2.32	2.02	1.79	1.60	1.31	1.09	0.93	0.80	0.69	0.60
	SLS L/100	10.16	7.15	5.26	3.97	3.07	2.41	1.91	1.54	1.26	1.04	0.86	0.71	0.59
	SLS L/200	5.08	3.57	2.63	1.98	1.50	1.12	0.84	0.64	0.43	0.29	0.18	0.10	0.04
II	ULS (2 fasteners)	4.24	3.33	2.74	2.32	2.02	1.79	1.60	1.31	1.09	0.93	0.80	0.69	0.60
	ULS (3 fasteners)	4.24	3.33	2.74	2.32	2.02	1.79	1.60	1.31	1.09	0.93	0.80	0.69	0.60
	SLS L/100	10.16	7.15	5.26	3.97	3.07	2.41	1.91	1.54	1.26	1.04	0.86	0.71	0.59
	SLS L/200	5.08	3.57	2.63	1.98	1.50	1.12	0.84	0.64	0.43	0.29	0.18	0.00	0.00
III	ULS (2 fasteners)	4.24	3.33	2.74	2.32	2.02	1.79	1.60	1.31	1.09	0.93	0.80	0.69	0.60
	ULS (3 fasteners)	4.24	3.33	2.74	2.32	2.02	1.79	1.60	1.31	1.09	0.93	0.80	0.69	0.60
	SLS L/100	10.16	7.15	5.26	3.97	3.07	2.41	1.91	1.54	1.26	1.04	0.86	0.71	0.59
	SLS L/200	5.08	3.57	2.63	1.98	1.50	1.12	0.84	0.64	0.00	0.00	0.00	0.00	0.00

Maximum uniformly distributed load for wind suction [kN/m ²]														
Colour group	Limit state (number of fasteners at each panel end)	Frame spacing [m]												
		2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
I	ULS (2 fasteners)	-3.41	-2.73	-2.27	-1.95	-1.70	-1.51	-1.25	-1.03	-0.86	-0.73	-0.63	-0.55	-0.48
	ULS (3 fasteners)	-4.02	-3.19	-2.64	-2.26	-1.97	-1.54	-1.25	-1.03	-0.86	-0.73	-0.63	-0.55	-0.48
	SLS L/100	-8.97	-6.45	-4.80	-3.66	-2.84	-2.25	-1.79	-1.45	-1.19	-0.98	-0.82	-0.69	-0.58
	SLS L/200	-4.48	-3.22	-2.40	-1.83	-1.42	-1.08	-0.82	-0.64	-0.49	-0.35	-0.24	-0.16	-0.10
II	ULS (2 fasteners)	-3.41	-2.73	-2.27	-1.95	-1.70	-1.51	-1.25	-1.03	-0.86	-0.73	-0.63	-0.55	-0.48
	ULS (3 fasteners)	-4.02	-3.19	-2.64	-2.26	-1.97	-1.54	-1.25	-1.03	-0.86	-0.73	-0.63	-0.55	-0.48
	SLS L/100	-8.97	-6.45	-4.80	-3.66	-2.84	-2.25	-1.79	-1.45	-1.19	-0.97	-0.79	-0.64	-0.53
	SLS L/200	-4.48	-3.22	-2.40	-1.77	-1.30	-0.96	-0.67	-0.43	-0.26	-0.14	-0.05	0.00	0.00
III	ULS (2 fasteners)	-3.41	-2.73	-2.27	-1.95	-1.70	-1.51	-1.25	-1.03	-0.86	-0.73	-0.63	-0.55	-0.48
	ULS (3 fasteners)	-4.02	-3.19	-2.64	-2.26	-1.97	-1.54	-1.25	-1.03	-0.86	-0.73	-0.63	-0.55	-0.48
	SLS L/100	-8.97	-6.45	-4.80	-3.66	-2.84	-2.25	-1.76	-1.37	-1.08	-0.85	-0.68	-0.50	-0.37
	SLS L/200	-4.48	-3.19	-2.20	-1.54	-0.94	-0.51	-0.23	-0.04	0.00	0.00	0.00	0.00	0.00

Fastener distance from panel end (minimum): 30 mm

SPB 120 WE



Single span static scheme

	Minimum thickness [mm]
External facing	0.6
Internal facing	0.5

Maximum uniformly distributed load for wind pressure [kN/m ²]														
Colour group	Limit state (number of fasteners at each panel end)	Frame spacing [m]												
		2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
I	ULS (2 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.58	1.32	1.12	0.96	0.83	0.73
	ULS (3 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.58	1.32	1.12	0.96	0.83	0.73
	SLS L/100	12.53	8.93	6.65	5.09	3.98	3.16	2.54	2.06	1.70	1.41	1.18	0.99	0.84
	SLS L/200	6.26	4.46	3.32	2.54	1.99	1.57	1.21	0.94	0.74	0.59	0.43	0.30	0.21
II	ULS (2 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.58	1.32	1.12	0.96	0.83	0.73
	ULS (3 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.58	1.32	1.12	0.96	0.83	0.73
	SLS L/100	12.53	8.93	6.65	5.09	3.98	3.16	2.54	2.06	1.70	1.41	1.18	0.99	0.84
	SLS L/200	6.26	4.46	3.32	2.54	1.99	1.57	1.21	0.94	0.74	0.59	0.43	0.30	0.21
III	ULS (2 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.58	1.32	1.12	0.96	0.83	0.73
	ULS (3 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.58	1.32	1.12	0.96	0.83	0.73
	SLS L/100	12.53	8.93	6.65	5.09	3.98	3.16	2.54	2.06	1.70	1.41	1.18	0.99	0.84
	SLS L/200	6.26	4.46	3.32	2.54	1.99	1.57	1.21	0.94	0.74	0.59	0.00	0.00	0.00

Maximum uniformly distributed load for wind suction [kN/m ²]														
Colour group	Limit state (number of fasteners at each panel end)	Frame spacing [m]												
		2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
I	ULS (2 fasteners)	-3.41	-2.73	-2.27	-1.95	-1.70	-1.51	-1.36	-1.23	-1.03	-0.88	-0.76	-0.66	-0.58
	ULS (3 fasteners)	-4.86	-3.85	-3.19	-2.72	-2.37	-1.86	-1.50	-1.23	-1.03	-0.88	-0.76	-0.66	-0.58
	SLS L/100	-11.10	-8.07	-6.09	-4.70	-3.70	-2.95	-2.38	-1.95	-1.61	-1.34	-1.12	-0.95	-0.81
	SLS L/200	-5.55	-4.03	-3.04	-2.35	-1.85	-1.47	-1.18	-0.93	-0.74	-0.59	-0.47	-0.37	-0.27
II	ULS (2 fasteners)	-3.41	-2.73	-2.27	-1.95	-1.70	-1.51	-1.36	-1.23	-1.03	-0.88	-0.76	-0.66	-0.58
	ULS (3 fasteners)	-4.86	-3.85	-3.19	-2.72	-2.37	-1.86	-1.50	-1.23	-1.03	-0.88	-0.76	-0.66	-0.58
	SLS L/100	-11.10	-8.07	-6.09	-4.70	-3.70	-2.95	-2.38	-1.95	-1.61	-1.34	-1.12	-0.95	-0.79
	SLS L/200	-5.55	-4.03	-3.04	-2.35	-1.82	-1.38	-1.06	-0.82	-0.60	-0.41	-0.27	-0.17	-0.09
III	ULS (2 fasteners)	-3.41	-2.73	-2.27	-1.95	-1.70	-1.51	-1.36	-1.23	-1.03	-0.88	-0.76	-0.66	-0.58
	ULS (3 fasteners)	-4.86	-3.85	-3.19	-2.72	-2.37	-1.86	-1.50	-1.23	-1.03	-0.88	-0.76	-0.66	-0.58
	SLS L/100	-11.10	-8.07	-6.09	-4.70	-3.70	-2.95	-2.38	-1.95	-1.57	-1.27	-1.03	-0.84	-0.69
	SLS L/200	-5.55	-4.03	-3.01	-2.18	-1.60	-1.12	-0.70	-0.41	-0.20	-0.05	0.00	0.00	0.00

Fastener distance from panel end (minimum): 30 mm

SPB 140 WE



Single span static scheme

	Minimum thickness [mm]
External facing	0.6
Internal facing	0.5

Maximum uniformly distributed load for wind pressure [kN/m ²]														
Colour group	Limit state (number of fasteners at each panel end)	Frame spacing [m]												
		2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
I	ULS (3 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.31	1.12	0.97	0.85
	ULS (4 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.31	1.12	0.97	0.85
	SLS L/100	14.90	10.73	8.07	6.24	4.92	3.94	3.20	2.62	2.17	1.81	1.52	1.29	1.10
	SLS L/200	7.45	5.36	4.03	3.12	2.46	1.97	1.60	1.28	1.02	0.82	0.66	0.54	0.41
II	ULS (3 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.31	1.12	0.97	0.85
	ULS (4 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.31	1.12	0.97	0.85
	SLS L/100	14.90	10.73	8.07	6.24	4.92	3.94	3.20	2.62	2.17	1.81	1.52	1.29	1.10
	SLS L/200	7.45	5.36	4.03	3.12	2.46	1.97	1.60	1.28	1.02	0.82	0.66	0.54	0.41
III	ULS (3 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.31	1.12	0.97	0.85
	ULS (4 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.31	1.12	0.97	0.85
	SLS L/100	14.90	10.73	8.07	6.24	4.92	3.94	3.20	2.62	2.17	1.81	1.52	1.29	1.10
	SLS L/200	7.45	5.36	4.03	3.12	2.46	1.97	1.60	1.28	1.02	0.82	0.66	0.54	0.00

Maximum uniformly distributed load for wind suction [kN/m ²]														
Colour group	Limit state (number of fasteners at each panel end)	Frame spacing [m]												
		2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
I	ULS (3 fasteners)	-5.12	-4.09	-3.41	-2.92	-2.56	-2.17	-1.75	-1.44	-1.21	-1.03	-0.88	-0.77	-0.67
	ULS (4 fasteners)	-5.69	-4.51	-3.74	-3.19	-2.77	-2.17	-1.75	-1.44	-1.21	-1.03	-0.88	-0.77	-0.67
	SLS L/100	-13.23	-9.71	-7.41	-5.78	-4.59	-3.70	-3.01	-2.48	-2.06	-1.72	-1.45	-1.23	-1.06
	SLS L/200	-6.61	-4.85	-3.70	-2.89	-2.29	-1.85	-1.50	-1.24	-1.00	-0.81	-0.66	-0.55	-0.45
II	ULS (3 fasteners)	-5.12	-4.09	-3.41	-2.92	-2.56	-2.17	-1.75	-1.44	-1.21	-1.03	-0.88	-0.77	-0.67
	ULS (4 fasteners)	-5.69	-4.51	-3.74	-3.19	-2.77	-2.17	-1.75	-1.44	-1.21	-1.03	-0.88	-0.77	-0.67
	SLS L/100	-13.23	-9.71	-7.41	-5.78	-4.59	-3.70	-3.01	-2.48	-2.06	-1.72	-1.45	-1.23	-1.06
	SLS L/200	-6.61	-4.85	-3.70	-2.89	-2.29	-1.84	-1.44	-1.13	-0.90	-0.72	-0.54	-0.39	-0.27
III	ULS (3 fasteners)	-5.12	-4.09	-3.41	-2.92	-2.56	-2.17	-1.75	-1.44	-1.21	-1.03	-0.88	-0.77	-0.67
	ULS (4 fasteners)	-5.69	-4.51	-3.74	-3.19	-2.77	-2.17	-1.75	-1.44	-1.21	-1.03	-0.88	-0.77	-0.67
	SLS L/100	-13.23	-9.71	-7.41	-5.78	-4.59	-3.70	-3.01	-2.48	-2.06	-1.72	-1.42	-1.18	-0.98
	SLS L/200	-6.61	-4.85	-3.70	-2.85	-2.14	-1.63	-1.24	-0.84	-0.55	-0.33	-0.18	-0.06	0.00

Fastener distance from panel end (minimum): 30 mm

SPB 150 WE & WEF



Single span static scheme

	Minimum thickness [mm]
External facing	0.6
Internal facing	0.5

Maximum uniformly distributed load for wind pressure [kN/m ²]														
Colour group	Limit state (number of fasteners at each panel end)	Frame spacing [m]												
		2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
I	ULS (3 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.40	1.20	1.04	0.91
	ULS (4 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.40	1.20	1.04	0.91
	SLS L/100	16.00	11.63	8.78	6.82	5.41	4.35	3.54	2.91	2.41	2.02	1.71	1.45	1.24
	SLS L/200	8.04	5.81	4.39	3.41	2.70	2.17	1.77	1.45	1.17	0.94	0.77	0.63	0.52
II	ULS (3 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.40	1.20	1.04	0.91
	ULS (4 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.40	1.20	1.04	0.91
	SLS L/100	16.00	11.63	8.78	6.82	5.41	4.35	3.54	2.91	2.41	2.02	1.71	1.45	1.24
	SLS L/200	8.04	5.81	4.39	3.41	2.70	2.17	1.77	1.45	1.17	0.94	0.77	0.63	0.52
III	ULS (3 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.40	1.20	1.04	0.91
	ULS (4 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.40	1.20	1.04	0.91
	SLS L/100	16.00	11.63	8.78	6.82	5.41	4.35	3.54	2.91	2.41	2.02	1.71	1.45	1.24
	SLS L/200	8.04	5.81	4.39	3.41	2.70	2.17	1.77	1.45	1.17	0.94	0.77	0.63	0.52

Maximum uniformly distributed load for wind suction [kN/m ²]														
Colour group	Limit state (number of fasteners at each panel end)	Frame spacing [m]												
		2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
I	ULS (3 fasteners)	-5.12	-4.09	-3.41	-2.92	-2.56	-2.27	-1.88	-1.55	-1.30	-1.10	-0.95	-0.82	-0.72
	ULS (4 fasteners)	-6.10	-4.84	-4.01	-3.43	-2.96	-2.33	-1.88	-1.55	-1.30	-1.10	-0.95	-0.82	-0.72
	SLS L/100	-14.28	-10.54	-8.07	-6.32	-5.04	-4.07	-3.33	-2.75	-2.29	-1.92	-1.63	-1.39	-1.19
	SLS L/200	-7.14	-5.27	-4.03	-3.16	-2.52	-2.03	-1.66	-1.37	-1.14	-0.94	-0.77	-0.63	-0.53
II	ULS (3 fasteners)	-5.12	-4.09	-3.41	-2.92	-2.56	-2.27	-1.88	-1.55	-1.30	-1.10	-0.95	-0.82	-0.72
	ULS (4 fasteners)	-6.10	-4.84	-4.01	-3.43	-2.96	-2.33	-1.88	-1.55	-1.30	-1.10	-0.95	-0.82	-0.72
	SLS L/100	-14.28	-10.54	-8.07	-6.32	-5.04	-4.07	-3.33	-2.75	-2.29	-1.92	-1.63	-1.39	-1.19
	SLS L/200	-7.14	-5.27	-4.03	-3.16	-2.52	-2.03	-1.63	-1.30	-1.04	-0.84	-0.68	-0.51	-0.38
III	ULS (3 fasteners)	-5.12	-4.09	-3.41	-2.92	-2.56	-2.27	-1.88	-1.55	-1.30	-1.10	-0.95	-0.82	-0.72
	ULS (4 fasteners)	-6.10	-4.84	-4.01	-3.43	-2.96	-2.33	-1.88	-1.55	-1.30	-1.10	-0.95	-0.82	-0.72
	SLS L/100	-14.28	-10.54	-8.07	-6.32	-5.04	-4.07	-3.33	-2.75	-2.29	-1.92	-1.63	-1.36	-1.13
	SLS L/200	-7.14	-5.27	-4.03	-3.16	-2.42	-1.86	-1.44	-1.08	-0.74	-0.49	-0.31	-0.17	-0.06

Fastener distance from panel end (minimum): 30 mm

SPB 160 WE & WEF



Single span static scheme

	Minimum thickness [mm]
External facing	0.6
Internal facing	0.5

Maximum uniformly distributed load for wind pressure [kN/m ²]														
Colour group	Limit state (number of fasteners at each panel end)	Frame spacing [m]												
		2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
I	ULS (3 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.28	1.11	0.97
	ULS (4 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.28	1.11	0.97
	SLS L/100	17.25	12.54	9.51	7.42	5.90	4.76	3.89	3.21	2.67	2.24	1.90	1.62	1.38
	SLS L/200	8.64	6.27	4.75	3.71	2.95	2.38	1.94	1.60	1.32	1.08	0.88	0.72	0.60
II	ULS (3 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.28	1.11	0.97
	ULS (4 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.28	1.11	0.97
	SLS L/100	17.25	12.54	9.51	7.42	5.90	4.76	3.89	3.21	2.67	2.24	1.90	1.62	1.38
	SLS L/200	8.64	6.27	4.75	3.71	2.95	2.38	1.94	1.60	1.32	1.08	0.88	0.72	0.60
III	ULS (3 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.28	1.11	0.97
	ULS (4 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.28	1.11	0.97
	SLS L/100	17.25	12.54	9.51	7.42	5.90	4.76	3.89	3.21	2.67	2.24	1.90	1.62	1.38
	SLS L/200	8.64	6.27	4.75	3.71	2.95	2.38	1.94	1.60	1.32	1.08	0.88	0.72	0.60

Maximum uniformly distributed load for wind suction [kN/m ²]														
Colour group	Limit state (number of fasteners at each panel end)	Frame spacing [m]												
		2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
I	ULS (3 fasteners)	-5.12	-4.09	-3.41	-2.92	-2.56	-2.27	-2.02	-1.66	-1.39	-1.18	-1.02	-0.88	-0.78
	ULS (4 fasteners)	-6.59	-5.22	-4.32	-3.68	-3.20	-2.51	-2.02	-1.66	-1.39	-1.18	-1.02	-0.88	-0.78
	SLS L/100	-15.68	-11.60	-8.89	-6.98	-5.58	-4.52	-3.71	-3.07	-2.56	-2.16	-1.83	-1.56	-1.34
	SLS L/200	-7.86	-5.80	-4.44	-3.49	-2.79	-2.26	-1.85	-1.53	-1.28	-1.08	-0.89	-0.74	-0.61
II	ULS (3 fasteners)	-5.12	-4.09	-3.41	-2.92	-2.56	-2.27	-2.02	-1.66	-1.39	-1.18	-1.02	-0.88	-0.78
	ULS (4 fasteners)	-6.59	-5.22	-4.32	-3.68	-3.20	-2.51	-2.02	-1.66	-1.39	-1.18	-1.02	-0.88	-0.78
	SLS L/100	-15.68	-11.60	-8.89	-6.98	-5.58	-4.52	-3.71	-3.07	-2.56	-2.16	-1.83	-1.56	-1.34
	SLS L/200	-7.86	-5.80	-4.44	-3.49	-2.79	-2.26	-1.85	-1.49	-1.20	-0.97	-0.79	-0.65	-0.50
III	ULS (3 fasteners)	-5.12	-4.09	-3.41	-2.92	-2.56	-2.27	-2.02	-1.66	-1.39	-1.18	-1.02	-0.88	-0.78
	ULS (4 fasteners)	-6.59	-5.22	-4.32	-3.68	-3.20	-2.51	-2.02	-1.66	-1.39	-1.18	-1.02	-0.88	-0.78
	SLS L/100	-15.68	-11.60	-8.89	-6.98	-5.58	-4.52	-3.71	-3.07	-2.56	-2.16	-1.83	-1.56	-1.31
	SLS L/200	-7.86	-5.80	-4.44	-3.49	-2.75	-2.13	-1.66	-1.30	-0.97	-0.68	-0.46	-0.29	-0.17

Fastener distance from panel end (minimum): 40 mm

SPB 170 WE & WEF



Single span static scheme

	Minimum thickness [mm]
External facing	0.6
Internal facing	0.5

Maximum uniformly distributed load for wind pressure [kN/m ²]														
Colour group	Limit state (number of fasteners at each panel end)	Frame spacing [m]												
		2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
I	ULS (3 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.18	1.04
	ULS (4 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.18	1.04
	SLS L/100	18.00	13.45	10.23	8.00	6.39	5.17	4.24	3.51	2.93	2.47	2.09	1.78	1.53
	SLS L/200	9.24	6.72	5.11	4.00	3.19	2.58	2.12	1.75	1.46	1.21	1.00	0.82	0.69
II	ULS (3 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.18	1.04
	ULS (4 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.18	1.04
	SLS L/100	18.00	13.45	10.23	8.00	6.39	5.17	4.24	3.51	2.93	2.47	2.09	1.78	1.53
	SLS L/200	9.24	6.72	5.11	4.00	3.19	2.58	2.12	1.75	1.46	1.21	1.00	0.82	0.69
III	ULS (3 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.18	1.04
	ULS (4 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.18	1.04
	SLS L/100	18.00	13.45	10.23	8.00	6.39	5.17	4.24	3.51	2.93	2.47	2.09	1.78	1.53
	SLS L/200	9.24	6.72	5.11	4.00	3.19	2.58	2.12	1.75	1.46	1.21	1.00	0.82	0.69

Maximum uniformly distributed load for wind suction [kN/m ²]														
Colour group	Limit state (number of fasteners at each panel end)	Frame spacing [m]												
		2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
I	ULS (3 fasteners)	-5.12	-4.09	-3.41	-2.92	-2.56	-2.27	-2.04	-1.77	-1.48	-1.26	-1.08	-0.94	-0.82
	ULS (4 fasteners)	-6.83	-5.46	-4.55	-3.90	-3.40	-2.67	-2.15	-1.77	-1.48	-1.26	-1.08	-0.94	-0.82
	SLS L/100	-16.75	-12.44	-9.57	-7.54	-6.05	-4.92	-4.04	-3.36	-2.81	-2.37	-2.01	-1.72	-1.48
	SLS L/200	-8.41	-6.22	-4.78	-3.77	-3.02	-2.46	-2.02	-1.68	-1.40	-1.18	-1.00	-0.83	-0.70
II	ULS (3 fasteners)	-5.12	-4.09	-3.41	-2.92	-2.56	-2.27	-2.04	-1.77	-1.48	-1.26	-1.08	-0.94	-0.82
	ULS (4 fasteners)	-6.83	-5.46	-4.55	-3.90	-3.40	-2.67	-2.15	-1.77	-1.48	-1.26	-1.08	-0.94	-0.82
	SLS L/100	-16.75	-12.44	-9.57	-7.54	-6.05	-4.92	-4.04	-3.36	-2.81	-2.37	-2.01	-1.72	-1.48
	SLS L/200	-8.41	-6.22	-4.78	-3.77	-3.02	-2.46	-2.02	-1.66	-1.35	-1.10	-0.90	-0.74	-0.61
III	ULS (3 fasteners)	-5.12	-4.09	-3.41	-2.92	-2.56	-2.27	-2.04	-1.77	-1.48	-1.26	-1.08	-0.94	-0.82
	ULS (4 fasteners)	-6.83	-5.46	-4.55	-3.90	-3.40	-2.67	-2.15	-1.77	-1.48	-1.26	-1.08	-0.94	-0.82
	SLS L/100	-16.75	-12.44	-9.57	-7.54	-6.05	-4.92	-4.04	-3.36	-2.81	-2.37	-2.01	-1.72	-1.48
	SLS L/200	-8.41	-6.22	-4.78	-3.77	-3.02	-2.37	-1.86	-1.48	-1.17	-0.86	-0.61	-0.42	-0.27

Fastener distance from panel end (minimum): 40 mm

SPB 180 WE & WEF



Single span static scheme

	Minimum thickness [mm]
External facing	0.6
Internal facing	0.5

Maximum uniformly distributed load for wind pressure [kN/m ²]														
Colour group	Limit state (number of fasteners at each panel end)	Frame spacing [m]												
		2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
I	ULS (3 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.22	1.10
	ULS (4 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.22	1.10
	SLS L/100	19.00	14.34	10.96	8.60	6.89	5.60	4.60	3.82	3.20	2.70	2.29	1.96	1.69
	SLS L/200	9.84	7.18	5.48	4.30	3.44	2.80	2.30	1.91	1.60	1.35	1.12	0.93	0.77
II	ULS (3 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.22	1.10
	ULS (4 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.22	1.10
	SLS L/100	19.00	14.34	10.96	8.60	6.89	5.60	4.60	3.82	3.20	2.70	2.29	1.96	1.69
	SLS L/200	9.84	7.18	5.48	4.30	3.44	2.80	2.30	1.91	1.60	1.35	1.12	0.93	0.77
III	ULS (3 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.22	1.10
	ULS (4 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.22	1.10
	SLS L/100	19.00	14.34	10.96	8.60	6.89	5.60	4.60	3.82	3.20	2.70	2.29	1.96	1.69
	SLS L/200	9.84	7.18	5.48	4.30	3.44	2.80	2.30	1.91	1.60	1.35	1.12	0.93	0.77

Maximum uniformly distributed load for wind suction [kN/m ²]														
Colour group	Limit state (number of fasteners at each panel end)	Frame spacing [m]												
		2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
I	ULS (3 fasteners)	-5.12	-4.09	-3.41	-2.92	-2.56	-2.27	-2.04	-1.86	-1.57	-1.33	-1.15	-1.00	-0.87
	ULS (4 fasteners)	-6.83	-5.46	-4.55	-3.90	-3.41	-2.83	-2.28	-1.88	-1.57	-1.33	-1.15	-1.00	-0.87
	SLS L/100	-17.75	-13.29	-10.25	-8.10	-6.53	-5.32	-4.39	-3.66	-3.07	-2.59	-2.21	-1.89	-1.63
	SLS L/200	-8.96	-6.64	-5.12	-4.05	-3.26	-2.66	-2.19	-1.83	-1.53	-1.29	-1.10	-0.93	-0.79
II	ULS (3 fasteners)	-5.12	-4.09	-3.41	-2.92	-2.56	-2.27	-2.04	-1.86	-1.57	-1.33	-1.15	-1.00	-0.87
	ULS (4 fasteners)	-6.83	-5.46	-4.55	-3.90	-3.41	-2.83	-2.28	-1.88	-1.57	-1.33	-1.15	-1.00	-0.87
	SLS L/100	-17.75	-13.29	-10.25	-8.10	-6.53	-5.32	-4.39	-3.66	-3.07	-2.59	-2.21	-1.89	-1.63
	SLS L/200	-8.96	-6.64	-5.12	-4.05	-3.26	-2.66	-2.19	-1.83	-1.50	-1.23	-1.02	-0.84	-0.70
III	ULS (3 fasteners)	-5.12	-4.09	-3.41	-2.92	-2.56	-2.27	-2.04	-1.86	-1.57	-1.33	-1.15	-1.00	-0.87
	ULS (4 fasteners)	-6.83	-5.46	-4.55	-3.90	-3.41	-2.83	-2.28	-1.88	-1.57	-1.33	-1.15	-1.00	-0.87
	SLS L/100	-17.75	-13.29	-10.25	-8.10	-6.53	-5.32	-4.39	-3.66	-3.07	-2.59	-2.21	-1.89	-1.63
	SLS L/200	-8.96	-6.64	-5.12	-4.05	-3.26	-2.62	-2.08	-1.65	-1.33	-1.05	-0.77	-0.55	-0.38

Fastener distance from panel end (minimum): 40 mm

SPB 200 WE & WEF



Single span static scheme

	Minimum thickness [mm]
External facing	0.6
Internal facing	0.5

Maximum uniformly distributed load for wind pressure [kN/m ²]														
Colour group	Limit state (number of fasteners at each panel end)	Frame spacing [m]												
		2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
I	ULS (3 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.22	1.15
	ULS (4 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.22	1.15
	SLS L/100	20.00	16.12	12.42	9.81	7.89	6.45	5.33	4.44	3.74	3.17	2.70	2.32	2.00
	SLS L/200	11.04	8.09	6.21	4.90	3.94	3.22	2.66	2.22	1.87	1.58	1.35	1.14	0.96
II	ULS (3 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.22	1.15
	ULS (4 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.22	1.15
	SLS L/100	20.00	16.12	12.42	9.81	7.89	6.45	5.33	4.44	3.74	3.17	2.70	2.32	2.00
	SLS L/200	11.04	8.09	6.21	4.90	3.94	3.22	2.66	2.22	1.87	1.58	1.35	1.14	0.96
III	ULS (3 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.22	1.15
	ULS (4 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.22	1.15
	SLS L/100	20.00	16.12	12.42	9.81	7.89	6.45	5.33	4.44	3.74	3.17	2.70	2.32	2.00
	SLS L/200	11.04	8.09	6.21	4.90	3.94	3.22	2.66	2.22	1.87	1.58	1.35	1.14	0.96

Maximum uniformly distributed load for wind suction [kN/m ²]														
Colour group	Limit state (number of fasteners at each panel end)	Frame spacing [m]												
		2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
I	ULS (3 fasteners)	-5.12	-4.09	-3.41	-2.92	-2.56	-2.27	-2.04	-1.86	-1.70	-1.48	-1.28	-1.11	-0.97
	ULS (4 fasteners)	-6.83	-5.46	-4.55	-3.90	-3.41	-3.03	-2.54	-2.09	-1.75	-1.48	-1.28	-1.11	-0.97
	SLS L/100	-20.00	-15.00	-11.63	-9.25	-7.49	-6.14	-5.09	-4.26	-3.59	-3.05	-2.61	-2.24	-1.94
	SLS L/200	-10.06	-7.50	-5.81	-4.62	-3.74	-3.07	-2.54	-2.13	-1.79	-1.52	-1.30	-1.12	-0.97
II	ULS (3 fasteners)	-5.12	-4.09	-3.41	-2.92	-2.56	-2.27	-2.04	-1.86	-1.70	-1.48	-1.28	-1.11	-0.97
	ULS (4 fasteners)	-6.83	-5.46	-4.55	-3.90	-3.41	-3.03	-2.54	-2.09	-1.75	-1.48	-1.28	-1.11	-0.97
	SLS L/100	-20.00	-15.00	-11.63	-9.25	-7.49	-6.14	-5.09	-4.26	-3.59	-3.05	-2.61	-2.24	-1.94
	SLS L/200	-10.06	-7.50	-5.81	-4.62	-3.74	-3.07	-2.54	-2.13	-1.79	-1.51	-1.25	-1.05	-0.88
III	ULS (3 fasteners)	-5.12	-4.09	-3.41	-2.92	-2.56	-2.27	-2.04	-1.86	-1.70	-1.48	-1.28	-1.11	-0.97
	ULS (4 fasteners)	-6.83	-5.46	-4.55	-3.90	-3.41	-3.03	-2.54	-2.09	-1.75	-1.48	-1.28	-1.11	-0.97
	SLS L/100	-20.00	-15.00	-11.63	-9.25	-7.49	-6.14	-5.09	-4.26	-3.59	-3.05	-2.61	-2.24	-1.94
	SLS L/200	-10.06	-7.50	-5.81	-4.62	-3.74	-3.07	-2.51	-2.02	-1.64	-1.33	-1.09	-0.84	-0.63

Fastener distance from panel end (minimum): 40 mm

SPB 210 WE



Single span static scheme

	Minimum thickness [mm]
External facing	0.6
Internal facing	0.5

Maximum uniformly distributed load for wind pressure [kN/m ²]														
Colour group	Limit state (number of fasteners at each panel end)	Frame spacing [m]												
		2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
I	ULS (3 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.22	1.15
	ULS (4 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.22	1.15
	SLS L/100	20.00	17.00	13.20	10.46	8.44	6.91	5.73	4.79	4.04	3.43	2.93	2.52	2.18
	SLS L/200	11.68	8.58	6.60	5.23	4.22	3.45	2.86	2.39	2.02	1.71	1.46	1.26	1.07
II	ULS (3 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.22	1.15
	ULS (4 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.22	1.15
	SLS L/100	20.00	17.00	13.20	10.46	8.44	6.91	5.73	4.79	4.04	3.43	2.93	2.52	2.18
	SLS L/200	11.68	8.58	6.60	5.23	4.22	3.45	2.86	2.39	2.02	1.71	1.46	1.26	1.07
III	ULS (3 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.22	1.15
	ULS (4 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.22	1.15
	SLS L/100	20.00	17.00	13.20	10.46	8.44	6.91	5.73	4.79	4.04	3.43	2.93	2.52	2.18
	SLS L/200	11.68	8.58	6.60	5.23	4.22	3.45	2.86	2.39	2.02	1.71	1.46	1.26	1.07

Maximum uniformly distributed load for wind suction [kN/m ²]														
Colour group	Limit state (number of fasteners at each panel end)	Frame spacing [m]												
		2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
I	ULS (3 fasteners)	-5.12	-4.09	-3.41	-2.92	-2.56	-2.27	-2.04	-1.86	-1.70	-1.56	-1.34	-1.17	-1.02
	ULS (4 fasteners)	-6.83	-5.46	-4.55	-3.90	-3.41	-3.03	-2.67	-2.20	-1.84	-1.56	-1.34	-1.17	-1.02
	SLS L/100	-20.00	-15.87	-12.37	-9.86	-8.00	-6.58	-5.48	-4.59	-3.88	-3.30	-2.83	-2.44	-2.11
	SLS L/200	-10.65	-7.96	-6.18	-4.93	-4.00	-3.29	-2.74	-2.29	-1.94	-1.65	-1.41	-1.22	-1.05
II	ULS (3 fasteners)	-5.12	-4.09	-3.41	-2.92	-2.56	-2.27	-2.04	-1.86	-1.70	-1.56	-1.34	-1.17	-1.02
	ULS (4 fasteners)	-6.83	-5.46	-4.55	-3.90	-3.41	-3.03	-2.67	-2.20	-1.84	-1.56	-1.34	-1.17	-1.02
	SLS L/100	-20.00	-15.87	-12.37	-9.86	-8.00	-6.58	-5.48	-4.59	-3.88	-3.30	-2.83	-2.44	-2.11
	SLS L/200	-10.65	-7.96	-6.18	-4.93	-4.00	-3.29	-2.74	-2.29	-1.94	-1.65	-1.39	-1.16	-0.98
III	ULS (3 fasteners)	-5.12	-4.09	-3.41	-2.92	-2.56	-2.27	-2.04	-1.86	-1.70	-1.56	-1.34	-1.17	-1.02
	ULS (4 fasteners)	-6.83	-5.46	-4.55	-3.90	-3.41	-3.03	-2.67	-2.20	-1.84	-1.56	-1.34	-1.17	-1.02
	SLS L/100	-20.00	-15.87	-12.37	-9.86	-8.00	-6.58	-5.48	-4.59	-3.88	-3.30	-2.83	-2.44	-2.11
	SLS L/200	-10.65	-7.96	-6.18	-4.93	-4.00	-3.29	-2.74	-2.22	-1.81	-1.48	-1.22	-1.00	-0.77

Fastener distance from panel end (minimum): 40 mm

SPB 230 WE & WEF



Single span static scheme

	Minimum thickness [mm]
External facing	0.6
Internal facing	0.5

Maximum uniformly distributed load for wind pressure [kN/m ²]														
Colour group	Limit state (number of fasteners at each panel end)	Frame spacing [m]												
		2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
I	ULS (3 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.22	1.15
	ULS (4 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.22	1.15
	SLS L/100	20.00	18.50	14.62	11.62	9.42	7.75	6.45	5.41	4.58	3.91	3.35	2.89	2.51
	SLS L/200	12.84	9.46	7.31	5.81	4.71	3.87	3.22	2.70	2.29	1.95	1.67	1.44	1.25
II	ULS (3 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.22	1.15
	ULS (4 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.22	1.15
	SLS L/100	20.00	18.50	14.62	11.62	9.42	7.75	6.45	5.41	4.58	3.91	3.35	2.89	2.51
	SLS L/200	12.84	9.46	7.31	5.81	4.71	3.87	3.22	2.70	2.29	1.95	1.67	1.44	1.25
III	ULS (3 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.22	1.15
	ULS (4 fasteners)	4.60	3.68	3.07	2.63	2.30	2.04	1.84	1.67	1.53	1.41	1.31	1.22	1.15
	SLS L/100	20.00	18.50	14.62	11.62	9.42	7.75	6.45	5.41	4.58	3.91	3.35	2.89	2.51
	SLS L/200	12.84	9.46	7.31	5.81	4.71	3.87	3.22	2.70	2.29	1.95	1.67	1.44	1.25

Maximum uniformly distributed load for wind suction [kN/m ²]														
Colour group	Limit state (number of fasteners at each panel end)	Frame spacing [m]												
		2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
I	ULS (3 fasteners)	-5.12	-4.09	-3.41	-2.92	-2.56	-2.27	-2.04	-1.86	-1.70	-1.57	-1.40	-1.22	-1.07
	ULS (4 fasteners)	-6.83	-5.46	-4.55	-3.90	-3.41	-3.03	-2.73	-2.29	-1.92	-1.63	-1.40	-1.22	-1.07
	SLS L/100	-20.00	-17.50	-13.70	-10.97	-8.94	-7.39	-6.17	-5.19	-4.41	-3.76	-3.23	-2.79	-2.43
	SLS L/200	-11.71	-8.78	-6.85	-5.48	-4.47	-3.69	-3.08	-2.59	-2.20	-1.88	-1.61	-1.39	-1.21
II	ULS (3 fasteners)	-5.12	-4.09	-3.41	-2.92	-2.56	-2.27	-2.04	-1.86	-1.70	-1.57	-1.40	-1.22	-1.07
	ULS (4 fasteners)	-6.83	-5.46	-4.55	-3.90	-3.41	-3.03	-2.73	-2.29	-1.92	-1.63	-1.40	-1.22	-1.07
	SLS L/100	-20.00	-17.50	-13.70	-10.97	-8.94	-7.39	-6.17	-5.19	-4.41	-3.76	-3.23	-2.79	-2.43
	SLS L/200	-11.71	-8.78	-6.85	-5.48	-4.47	-3.69	-3.08	-2.59	-2.20	-1.88	-1.61	-1.38	-1.17
III	ULS (3 fasteners)	-5.12	-4.09	-3.41	-2.92	-2.56	-2.27	-2.04	-1.86	-1.70	-1.57	-1.40	-1.22	-1.07
	ULS (4 fasteners)	-6.83	-5.46	-4.55	-3.90	-3.41	-3.03	-2.73	-2.29	-1.92	-1.63	-1.40	-1.22	-1.07
	SLS L/100	-20.00	-17.50	-13.70	-10.97	-8.94	-7.39	-6.17	-5.19	-4.41	-3.76	-3.23	-2.79	-2.43
	SLS L/200	-11.71	-8.78	-6.85	-5.48	-4.47	-3.69	-3.08	-2.59	-2.13	-1.76	-1.46	-1.22	-1.02

Fastener distance from panel end (minimum): 40 mm