ruukki
more with metals

Sandwich panels

Span tables for sandwich panels

Ruukki SPB W, Ruukki SP2D W, Ruukki SPC W, Ruukki SPB WE, Ruukki SP2D WE

Ruukki panels, thanks to their high quality core and cladding materials, and innovative glueing system, boast excellent durability, corrosion resistance, thermal insulation and mechanical properties. Our calculated strength tables allow the quick and easy selection of panels suitable for a particular building. With Ruukki panels even dark colours can be successfully used. Our panels have achieved the highest class of sound insulation and absorption based on European norms. With our panels customers' buildings will live longer.

Product application

- production halls
- storehouse halls
- sport halls
- trade buildings
- exhibition objects
- office buildings
- administration buildings

Ruukki is a metal expert you can rely on all the way, whenever you need metal based materials, components, systems or total solutions. We constantly develop our product range and operating models to match your needs.

Contents

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SPB80W

Table 1

External facing thickness: 0.60 mm
Internal facing thickness: 0.50 mm
External temperature: +55 °C; +65 °C; +80 °C/-20 °C (summer/winter)
Internal temperature: +20 °C/+20 °C (summer/winter)
Min. end support width: 60 mm
Min. intermediate support width: 120 mm
Min. number of fasteners at end support: 2 or 3
Min. number of fasteners at intermediate support: 3 or 4

ULS – Ultimate Limit State
ULS 3/0 – Ultimate Limit State; 3 fasteners at the end support
ULS 2/0 – Ultimate Limit State; 2 fasteners at the end support
ULS 2/4 – Ultimate Limit State; 2 fasteners at the end support / 4 fasteners at intermediate support
ULS 2/3 – Ultimate Limit State; 2 fasteners at the end support / 3 fasteners at intermediate support
SLS – Serviceability Limit State, to find span length put characteristic load

Static scheme	*Colour group*	*Criterion*	*Characteristic load [kN/m²]*													
			-1.2	*-1.0*	*-0.8*	*-0.6*	*-0.5*	*-0.4*	*-0.3*	*0.3*	*0.4*	*0.5*	*0.6*	*0.8*	*1.0*	*1.2*
Single span	**I**	**ULS 3/0**	3.32	3.97	4.88	5.63	6.17	6.89	7.96	8.43	7.30	6.53	5.96	4.96	3.61	3.31
		ULS 2/0	3.32	3.97	4.88	5.63	6.17	6.89	7.96	8.43	7.30	6.53	5.96	4.96	3.61	3.31
		L/100	5.23	5.66	6.22	6.91	7.36	7.93	8.70	8.44	7.76	7.21	6.78	6.13	5.43	5.23
		SLS L/150	4.31	4.64	5.06	5.62	6.00	6.42	6.86	6.42	6.05	5.75	5.48	4.95	4.37	4.22
		L/200	3.64	3.94	4.31	4.78	5.00	5.26	5.59	5.17	4.90	4.68	4.48	4.17	3.68	3.55
	II	**ULS 3/0**	3.32	3.97	4.88	5.63	6.17	6.90	7.96	8.41	7.28	6.51	5.95	4.96	3.61	3.31
		ULS 2/0	3.32	3.97	4.88	5.63	6.17	6.89	7.96	8.41	7.28	6.51	5.94	4.96	3.61	3.31
		L/100	5.23	5.64	6.13	6.78	7.21	7.76	8.44	8.44	7.76	7.21	6.78	6.13	5.43	5.23
		SLS L/150	4.22	4.54	4.95	5.48	5.75	6.05	6.42	6.42	6.05	5.75	5.48	4.95	4.37	4.22
		L/200	3.55	3.83	4.17	4.48	4.67	4.90	5.17	5.17	4.90	4.68	4.48	4.17	3.68	3.55
	III	**ULS 3/0**	3.32	3.97	4.88	5.63	6.17	6.89	7.96	8.33	7.21	6.44	5.89	4.96	3.62	3.31
		ULS 2/0	3.32	3.97	4.88	5.63	6.17	6.89	7.96	8.33	7.21	6.45	5.89	4.95	3.61	3.31
		L/100	4.95	5.28	5.66	6.05	6.28	6.57	6.91	8.44	7.76	7.21	6.78	6.13	5.43	5.23
		SLS L/150	3.82	4.00	4.21	4.47	4.62	4.79	4.99	5.89	5.89	5.75	5.49	4.95	4.37	4.22
		L/200	3.05	3.18	3.34	3.53	3.63	3.75	3.88	4.41	4.42	4.42	4.42	4.17	3.68	3.55
Two span	**I**	**ULS 2/4**	2.77	3.30	3.97	4.26	4.46	4.72	5.07	5.62	5.19	4.89	4.65	4.30	3.61	3.31
		ULS 2/3	2.03	2.39	2.92	3.88	4.46	4.72	5.07	5.63	5.19	4.88	4.65	4.30	3.61	3.31
		L/100	6.41	7.03	7.83	8.91	9.64	10.58	11.89	11.89	10.59	9.64	8.91	7.83	6.70	6.41
		SLS L/150	5.13	5.69	6.41	7.40	8.07	8.91	10.08	10.08	8.92	8.07	7.40	6.41	5.40	5.13
		L/200	4.32	4.83	5.49	6.41	7.03	7.83	8.91	8.84	7.83	7.03	6.41	5.49	4.56	4.32
	II	**ULS 2/4**	2.70	3.21	3.54	3.74	3.87	4.03	4.23	5.62	5.19	4.89	4.65	4.30	3.62	3.32
		ULS 2/3	1.96	2.30	2.80	3.74	3.88	4.03	4.23	5.63	5.19	4.88	4.65	4.30	3.61	3.31
		L/100	6.41	7.03	7.83	8.92	9.64	10.59	11.89	11.89	10.59	9.64	8.91	7.83	6.70	6.41
		SLS L/150	5.13	5.69	6.41	7.40	8.07	8.91	10.08	10.08	8.91	8.07	7.40	6.41	5.39	5.13
		L/200	4.32	4.83	5.49	6.41	7.03	7.74	8.68	8.84	7.83	7.03	6.41	5.49	4.55	4.32
	III	**ULS 2/4**	2.36	2.39	2.42	2.47	2.49	2.52	2.53	2.62	2.62	2.62	2.62	2.62	2.62	2.62
		ULS 2/3	1.70	1.95	2.36	2.46	2.49	2.51	2.54	2.62	2.62	2.62	2.62	2.62	2.62	2.62
		L/100	6.41	7.03	7.83	8.91	9.64	10.59	11.88	11.89	10.59	9.64	8.91	7.83	6.70	6.41
		SLS L/150	5.13	5.69	6.41	7.36	7.94	8.68	9.68	10.08	8.91	8.07	7.40	6.41	5.40	5.13
		L/200	4.32	4.81	5.38	6.18	6.69	7.34	8.21	8.84	7.83	7.03	6.41	5.49	4.56	4.32
Multi span	**I**	**ULS 2/4**	3.23	3.91	4.31	4.80	5.14	5.62	6.32	7.22	6.38	5.80	5.39	4.81	3.61	3.31
		ULS 2/3	2.33	2.82	3.55	4.80	5.15	5.62	6.32	7.22	6.37	5.81	5.39	4.80	3.61	3.31
		L/100	6.16	6.71	7.43	8.43	9.10	9.96	11.16	11.16	9.96	9.10	8.43	7.44	6.42	6.16
		SLS L/150	5.01	5.50	6.16	7.05	7.65	8.43	9.50	9.39	8.43	7.65	7.05	6.16	5.24	5.01
		L/200	4.26	4.72	5.33	6.16	6.72	7.44	8.28	8.11	7.29	6.68	6.16	5.33	4.48	4.26
	II	**ULS 2/4**	3.19	3.51	3.76	4.11	4.35	4.68	5.15	7.21	6.38	5.81	5.39	4.81	3.61	3.31
		ULS 2/3	2.28	2.76	3.49	4.11	4.36	4.69	5.15	7.22	6.37	5.81	5.39	4.81	3.62	3.31
		L/100	6.16	6.72	7.43	8.42	9.09	9.96	11.16	11.16	9.96	9.09	8.43	7.43	6.42	6.16
		SLS L/150	5.00	5.51	6.16	7.05	7.65	8.33	9.23	9.39	8.43	7.65	7.05	6.16	5.24	5.01
		L/200	4.26	4.72	5.33	6.08	6.56	7.15	7.94	8.11	7.29	6.68	6.16	5.33	4.48	4.26
	III	**ULS 2/4**	2.01	2.04	2.08	2.11	2.14	2.16	2.18	2.26	2.26	2.26	2.26	2.26	2.26	2.26
		ULS 2/3	2.02	2.05	2.08	2.12	2.13	2.16	2.18	2.26	2.26	2.26	2.26	2.26	2.26	2.26
		L/100	6.16	6.71	7.43	8.42	9.04	9.78	10.79	11.16	9.96	9.10	8.43	7.44	6.42	6.16
		SLS L/150	5.00	5.51	6.09	6.84	7.32	7.94	8.67	9.39	8.43	7.65	7.05	6.16	5.24	5.01
		L/200	4.20	4.60	5.10	5.77	6.18	6.55	7.03	8.11	7.29	6.68	6.16	5.33	4.48	4.26

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SPB100W

Table 2

External facing thickness: 0.60 mm
Internal facing thickness: 0.50 mm
External temperature: +55 °C; +65 °C; +80 °C/-20 °C (summer/winter)
Internal temperature: +20 °C/+20 °C (summer/winter)
Min. end support width: 60 mm
Min. intermediate support width: 120 mm
Min. number of fasteners at end support: 2 or 3
Min. number of fasteners at intermediate support: 3 or 4

ULS – Ultimate Limit State, to find span length put characteristic load (during span length calculation characteristic load is automatically corrected by safety factor)
ULS 3/0 – Ultimate Limit State; 3 fasteners at the end support
ULS 2/0 – Ultimate Limit State; 2 fasteners at the end support
ULS 2/4 – Ultimate Limit State; 2 fasteners at the end support / 4 fasteners at intermediate support
ULS 2/3 – Ultimate Limit State; 2 fasteners at the end support / 3 fasteners at intermediate support
SLS – Serviceability Limit State, to find span length put characteristic load

Static scheme	*Colour group*	*Criterion*	*Characteristic load [kN/m²]*													
			-1.2	*-1.0*	*-0.8*	*-0.6*	*-0.5*	*-0.4*	*-0.3*	*0.3*	*0.4*	*0.5*	*0.6*	*0.8*	*1.0*	*1.2*
Single span	I	ULS 3/0	3.94	4.72	5.46	6.30	6.91	7.73	8.92	9.43	8.17	7.31	6.67	5.78	4.29	3.94
		ULS 2/0	3.94	4.72	5.46	6.31	6.90	7.72	8.92	9.44	8.17	7.31	6.67	5.78	4.29	3.94
		L/100	6.11	6.62	7.27	8.14	8.67	9.34	10.26	10.04	9.17	8.52	8.00	7.23	6.35	6.12
		SLS L/150	5.07	5.49	5.99	6.66	7.10	7.65	8.26	7.77	7.30	6.92	6.50	5.86	5.18	5.00
		L/200	4.33	4.67	5.11	5.69	6.04	6.37	6.78	6.30	5.96	5.67	5.43	4.97	4.39	4.22
	II	ULS 3/0	3.94	4.72	5.46	6.30	6.91	7.72	8.91	9.41	8.15	7.30	6.65	5.77	4.29	3.94
		ULS 2/0	3.94	4.72	5.46	6.30	6.91	7.73	8.92	9.41	8.15	7.30	6.66	5.77	4.29	3.94
		L/100	6.11	6.62	7.23	8.00	8.51	9.16	10.04	10.04	9.16	8.51	8.00	7.23	6.36	6.11
		SLS L/150	5.00	5.38	5.86	6.50	6.92	7.30	7.77	7.77	7.30	6.92	6.50	5.86	5.18	5.00
		L/200	4.23	4.56	4.97	5.42	5.67	5.96	6.30	6.31	5.96	5.67	5.43	4.98	4.39	4.23
	III	ULS 3/0	3.94	4.72	5.46	6.30	6.91	7.73	8.92	9.32	8.08	7.22	6.59	5.71	4.29	3.94
		ULS 2/0	3.94	4.72	5.46	6.30	6.91	7.72	8.92	9.33	8.07	7.23	6.60	5.71	4.29	3.94
		L/100	5.86	6.26	6.77	7.30	7.61	7.96	8.40	10.04	9.17	8.52	8.00	7.23	6.35	6.11
		SLS L/150	4.62	4.85	5.12	5.45	5.64	5.87	6.13	7.38	7.30	6.92	6.50	5.86	5.18	5.01
		L/200	3.71	3.89	4.09	4.33	4.46	4.62	4.80	5.54	5.54	5.54	5.42	4.97	4.39	4.23
Two span	I	ULS 2/4	2.78	3.26	4.05	4.82	5.05	5.34	5.73	6.06	5.63	5.32	5.07	4.71	4.29	3.94
		ULS 2/3	2.02	2.36	2.89	3.77	4.56	5.33	5.73	6.06	5.62	5.32	5.07	4.71	4.29	3.94
		L/100	7.53	8.24	9.17	10.42	11.27	12.36	13.88	13.88	12.36	11.27	10.42	9.17	7.87	7.53
		SLS L/150	6.05	6.70	7.52	8.68	9.44	10.42	11.78	11.78	10.42	9.44	8.68	7.52	6.36	6.05
		L/200	5.10	5.69	6.46	7.53	8.24	9.17	10.42	10.42	9.17	8.25	7.53	6.46	5.38	5.11
	II	ULS 2/4	2.67	3.16	3.93	4.25	4.40	4.57	4.81	6.07	5.63	5.31	5.07	4.71	4.29	3.94
		ULS 2/3	1.95	2.28	2.74	3.61	4.37	4.57	4.80	6.06	5.63	5.32	5.07	4.71	4.29	3.94
		L/100	7.52	8.24	9.16	10.42	11.27	12.36	13.88	13.88	12.36	11.27	10.43	9.17	7.86	7.52
		SLS L/150	6.05	6.69	7.52	8.68	9.45	10.42	11.78	11.78	10.43	9.44	8.67	7.53	6.35	6.05
		L/200	5.11	5.69	6.46	7.53	8.24	9.16	10.28	10.42	9.17	8.24	7.53	6.46	5.38	5.11
	III	ULS 2/4	2.36	2.72	2.76	2.81	2.84	2.86	2.89	2.99	2.99	2.99	2.99	2.99	2.99	2.99
		ULS 2/3	1.68	1.88	2.12	2.64	2.83	2.86	2.89	2.99	2.99	2.99	2.99	2.99	2.99	2.99
		L/100	7.53	8.24	9.17	10.42	11.27	12.36	13.87	13.88	12.36	11.27	10.42	9.17	7.86	7.52
		SLS L/150	6.05	6.69	7.52	8.68	9.41	10.27	11.45	11.78	10.43	9.45	8.68	7.53	6.35	6.05
		L/200	5.10	5.69	6.44	7.35	7.97	8.74	9.77	10.42	9.17	8.24	7.53	6.46	5.38	5.11
Multi span	I	ULS 2/4	3.19	3.85	4.85	5.40	5.79	6.32	7.10	7.69	6.83	6.23	5.80	5.19	4.29	3.94
		ULS 2/3	2.31	2.76	3.49	4.73	5.75	6.32	7.10	7.70	6.82	6.23	5.80	5.19	4.29	3.94
		L/100	7.21	7.86	8.70	9.85	10.63	11.63	13.02	13.02	11.63	10.63	9.85	8.70	7.52	7.22
		SLS L/150	5.88	6.47	7.22	8.25	8.95	9.85	11.09	11.06	9.85	8.95	8.25	7.22	6.16	5.88
		L/200	5.02	5.55	6.26	7.22	7.87	8.70	9.78	9.59	8.62	7.87	7.22	6.26	5.27	5.02
	II	ULS 2/4	3.14	3.80	4.24	4.63	4.91	5.28	5.81	7.70	6.83	6.24	5.80	5.19	4.29	3.94
		ULS 2/3	2.25	2.69	3.42	4.63	4.91	5.28	5.81	7.70	6.82	6.24	5.81	5.19	4.29	3.94
		L/100	7.22	7.87	8.69	9.85	10.62	11.63	13.02	13.02	11.63	10.63	9.85	8.70	7.52	7.22
		SLS L/150	5.89	6.47	7.22	8.25	8.95	9.83	10.89	11.07	9.85	8.95	8.25	7.22	6.16	5.88
		L/200	5.02	5.55	6.26	7.21	7.77	8.46	9.40	9.59	8.62	7.87	7.22	6.26	5.27	5.02
	III	ULS 2/4	2.30	2.33	2.37	2.41	2.43	2.46	2.49	2.58	2.58	2.58	2.58	2.58	2.58	2.58
		ULS 2/3	2.00	2.33	2.37	2.41	2.44	2.46	2.48	2.58	2.58	2.58	2.58	2.58	2.58	2.58
		L/100	7.21	7.86	8.70	9.85	10.62	11.53	12.72	13.02	11.63	10.62	9.85	8.70	7.52	7.22
		SLS L/150	5.88	6.47	7.21	8.10	8.67	9.40	10.39	11.06	9.85	8.95	8.25	7.22	6.16	5.88
		L/200	5.02	5.49	6.07	6.87	7.37	7.95	8.54	9.59	8.62	7.86	7.22	6.26	5.27	5.02

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SPB120W

Table 3

External facing thickness: 0.60 mm
Internal facing thickness: 0.50 mm
External temperature: +55 °C; +65 °C; +80 °C/-20 °C (summer/winter)
Internal temperature: +20 °C/+20 °C (summer/winter)
Min. end support width: 60 mm
Min. intermediate support width: 120 mm
Min. number of fasteners at end support: 2 or 3
Min. number of fasteners at intermediate support: 3 or 4

ULS – Ultimate Limit State, to find span length put characteristic load (during span length calculation characteristic load is automatically corrected by safety factor)
ULS 3/0 – Ultimate Limit State; 3 fasteners at the end support
ULS 2/0 – Ultimate Limit State; 2 fasteners at the end support
ULS 2/4 – Ultimate Limit State; 2 fasteners at the end support / 4 fasteners at intermediate support
ULS 2/3 – Ultimate Limit State; 2 fasteners at the end support / 3 fasteners at intermediate support
SLS – Serviceability Limit State, to find span length put characteristic load

Static scheme	*Colour group*	*Criterion*	*Characteristic load [kN/m²]*													
			-1.2	*-1.0*	*-0.8*	*-0.6*	*-0.5*	*-0.4*	*-0.3*	*0.3*	*0.4*	*0.5*	*0.6*	*0.8*	*1.0*	*1.2*
Single span		**ULS 3/0**	4.39	5.25	5.99	6.91	7.57	8.47	9.78	10.35	8.96	8.01	7.32	6.34	4.78	4.39
		ULS 2/0	4.39	5.25	5.99	6.91	7.57	8.47	9.78	10.35	8.96	8.01	7.32	6.34	4.78	4.39
	I	**L/100**	6.94	7.50	8.24	9.26	9.90	10.67	11.72	11.49	10.47	9.73	9.14	8.24	7.21	6.94
		SLS L/150	5.76	6.28	6.85	7.62	8.13	8.77	9.60	9.06	8.49	7.94	7.46	6.72	5.94	5.73
		L/200	4.97	5.36	5.87	6.54	6.98	7.42	7.92	7.39	6.96	6.62	6.33	5.72	5.04	4.85
		ULS 3/0	4.39	5.25	5.99	6.91	7.58	8.47	9.78	10.33	8.94	8.00	7.30	6.33	4.78	4.39
		ULS 2/0	4.39	5.25	5.99	6.91	7.58	8.47	9.78	10.33	8.94	8.00	7.30	6.32	4.78	4.39
	II	**L/100**	6.94	7.51	8.24	9.14	9.72	10.47	11.49	11.49	10.47	9.73	9.14	8.24	7.21	6.94
		SLS L/150	5.73	6.17	6.72	7.46	7.94	8.49	9.06	9.06	8.49	7.94	7.46	6.72	5.94	5.73
		L/200	4.86	5.24	5.72	6.33	6.62	6.97	7.39	7.39	6.96	6.62	6.33	5.72	5.04	4.86
		ULS 3/0	4.39	5.25	5.99	6.91	7.58	8.47	9.78	10.23	8.86	7.92	7.23	6.27	4.78	4.39
		ULS 2/0	4.39	5.25	5.99	6.91	7.57	8.47	9.78	10.23	8.86	7.92	7.23	6.26	4.78	4.39
	III	**L/100**	6.72	7.18	7.77	8.49	8.85	9.29	9.83	11.48	10.48	9.72	9.14	8.24	7.21	6.94
		SLS L/150	5.34	5.66	5.99	6.39	6.63	6.91	7.23	8.89	8.49	7.94	7.46	6.72	5.94	5.73
		L/200	4.35	4.56	4.81	5.10	5.27	5.46	5.69	6.66	6.66	6.62	6.33	5.72	5.04	4.86
Two span		**ULS 2/4**	2.77	3.27	3.99	5.33	5.59	5.91	6.35	6.72	6.23	5.89	5.62	5.22	4.78	4.39
		ULS 2/3	2.02	2.35	2.86	3.69	4.44	5.63	6.35	6.71	6.23	5.89	5.61	5.22	4.78	4.39
	I	**L/100**	8.56	9.37	10.41	11.82	12.78	14.01	15.72	15.72	14.02	12.78	11.83	10.41	8.94	8.56
		SLS L/150	6.89	7.62	8.56	9.85	10.72	11.82	13.35	13.35	11.82	10.72	9.86	8.56	7.23	6.89
		L/200	5.82	6.49	7.36	8.56	9.37	10.41	11.83	11.83	10.41	9.37	8.56	7.36	6.14	5.82
		ULS 2/4	2.69	3.13	3.86	4.72	4.88	5.08	5.34	6.72	6.23	5.88	5.62	5.22	4.78	4.39
		ULS 2/3	1.95	2.26	2.74	3.52	4.23	5.08	5.34	6.71	6.23	5.89	5.61	5.22	4.78	4.39
	II	**L/100**	8.55	9.36	10.41	11.82	12.78	14.01	15.72	15.72	14.01	12.78	11.83	10.41	8.94	8.56
		SLS L/150	6.89	7.62	8.56	9.85	10.72	11.82	13.35	13.36	11.82	10.72	9.85	8.56	7.23	6.89
		L/200	5.82	6.49	7.36	8.56	9.37	10.41	11.76	11.83	10.41	9.37	8.56	7.36	6.14	5.82
		ULS 2/4	2.33	2.73	3.09	3.14	3.17	3.20	3.23	3.35	3.35	3.35	3.35	3.35	3.35	3.35
		ULS 2/3	1.67	1.83	2.06	2.39	2.70	3.19	3.23	3.35	3.35	3.35	3.35	3.35	3.35	3.35
	III	**L/100**	8.56	9.37	10.41	11.83	12.78	14.01	15.72	15.72	14.01	12.78	11.83	10.41	8.94	8.56
		SLS L/150	6.89	7.62	8.56	9.85	10.72	11.76	13.10	13.36	11.82	10.72	9.85	8.56	7.23	6.89
		L/200	5.82	6.49	7.36	8.46	9.15	10.03	11.22	11.83	10.41	9.37	8.56	7.36	6.14	5.82
Multi span		**ULS 2/4**	3.15	3.81	4.80	5.95	6.38	6.95	7.81	8.47	7.52	6.86	6.39	5.73	4.78	4.39
		ULS 2/3	2.28	2.74	3.42	4.66	5.66	6.96	7.82	8.47	7.51	6.86	6.39	5.73	4.78	4.39
	I	**L/100**	8.20	8.93	9.87	11.17	12.04	13.18	14.75	14.74	13.18	12.04	11.17	9.87	8.55	8.20
		SLS L/150	6.70	7.35	8.20	9.37	10.15	11.17	12.57	12.57	11.17	10.15	9.37	8.20	7.00	6.70
		L/200	5.72	6.33	7.12	8.20	8.93	9.87	11.17	10.98	9.86	8.93	8.20	7.12	6.00	5.72
		ULS 2/4	3.10	3.75	4.68	5.12	5.42	5.83	6.42	8.47	7.52	6.87	6.39	5.73	4.78	4.39
		ULS 2/3	2.22	2.64	3.34	4.56	5.43	5.83	6.42	8.46	7.51	6.87	6.39	5.72	4.78	4.38
	II	**L/100**	8.20	8.93	9.87	11.17	12.04	13.17	14.75	14.75	13.18	12.04	11.17	9.87	8.55	8.20
		SLS L/150	6.69	7.35	8.20	9.37	10.15	11.17	12.45	12.57	11.17	10.15	9.37	8.20	7.00	6.69
		L/200	5.72	6.33	7.12	8.20	8.90	9.70	10.78	10.97	9.86	8.93	8.20	7.12	6.00	5.72
		ULS 2/4	2.56	2.60	2.65	2.70	2.72	2.75	2.78	2.89	2.89	2.89	2.89	2.89	2.89	2.89
		ULS 2/3	1.95	2.34	2.64	2.69	2.72	2.75	2.78	2.89	2.89	2.89	2.89	2.89	2.89	2.89
	III	**L/100**	8.20	8.93	9.87	11.17	12.04	13.16	14.53	14.74	13.18	12.04	11.17	9.87	8.54	8.20
		SLS L/150	6.70	7.35	8.20	9.27	9.93	10.77	11.91	12.57	11.17	10.15	9.37	8.20	7.01	6.70
		L/200	5.72	6.31	6.99	7.89	8.47	9.21	9.97	10.98	9.86	8.93	8.20	7.12	6.00	5.72

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SPB140W

Table 4

External facing thickness: 0.60 mm
Internal facing thickness: 0.50 mm
External temperature: +55 °C; +65 °C; +80 °C/-20 °C (summer/winter)
Internal temperature: +20 °C/+20 °C (summer/winter)
Min. end support width: 60 mm
Min. intermediate support width: 120 mm
Min. number of fasteners at end support: 2 or 3
Min. number of fasteners at intermediate support: 3 or 4

ULS – Ultimate Limit State, to find span length put characteristic load (during span length calculation characteristic load is automatically corrected by safety factor)
ULS 3/0 – Ultimate Limit State; 3 fasteners at the end support
ULS 2/0 – Ultimate Limit State; 2 fasteners at the end support
ULS 2/4 – Ultimate Limit State; 2 fasteners at the end support / 4 fasteners at intermediate support
ULS 2/3 – Ultimate Limit State; 2 fasteners at the end support / 3 fasteners at intermediate support
SLS – Serviceability Limit State, to find span length put characteristic load

Static scheme	*Colour group*	*Criterion*	*Characteristic load [kN/m²]*													
			-1.2	*-1.0*	*-0.8*	*-0.6*	*-0.5*	*-0.4*	*-0.3*	*0.3*	*0.4*	*0.5*	*0.6*	*0.8*	*1.0*	*1.2*
Single span	I	ULS 3/0	4.09	4.90	6.11	7.47	8.19	9.15	10.57	11.19	9.69	8.66	7.91	6.11	4.45	4.09
		ULS 2/0	4.09	4.90	6.11	7.47	8.18	9.16	10.57	11.19	9.68	8.66	7.91	6.11	4.46	4.09
		L/100	7.57	8.21	9.03	10.17	10.94	11.83	13.02	12.78	11.63	10.78	10.11	9.03	7.87	7.57
		SLS L/150	6.25	6.83	7.55	8.42	9.00	9.72	10.70	10.23	9.50	8.80	8.25	7.40	6.52	6.25
		L/200	5.39	5.87	6.45	7.21	7.72	8.35	8.94	8.37	7.86	7.45	7.03	6.30	5.52	5.30
	II	ULS 3/0	4.09	4.90	6.11	7.47	8.19	9.15	10.57	11.16	9.66	8.64	7.89	6.11	4.46	4.09
		ULS 2/0	4.09	4.90	6.11	7.47	8.19	9.15	10.57	11.16	9.66	8.64	7.89	6.11	4.45	4.09
		L/100	7.57	8.21	9.03	10.12	10.78	11.63	12.77	12.78	11.63	10.78	10.11	9.03	7.87	7.57
		SLS L/150	6.25	6.78	7.41	8.24	8.80	9.49	10.23	10.23	9.50	8.80	8.24	7.40	6.52	6.25
		L/200	5.30	5.74	6.30	7.03	7.45	7.86	8.37	8.37	7.86	7.45	7.03	6.30	5.52	5.30
	III	ULS 3/0	4.09	4.90	6.11	7.47	8.19	9.15	10.57	11.06	9.58	8.56	7.82	6.11	4.46	4.09
		ULS 2/0	4.09	4.90	6.11	7.47	8.19	9.15	10.57	11.06	9.57	8.57	7.82	6.11	4.45	4.09
		L/100	7.41	7.93	8.60	9.49	9.99	10.50	11.15	12.78	11.63	10.78	10.12	9.03	7.87	7.57
		SLS L/150	5.87	6.30	6.74	7.22	7.51	7.85	8.25	10.23	9.49	8.80	8.25	7.40	6.52	6.25
		L/200	4.87	5.13	5.42	5.78	5.99	6.24	6.52	7.78	7.78	7.45	7.03	6.30	5.51	5.30
Two span	I	ULS 2/4	2.83	3.31	4.02	5.31	6.28	6.64	7.13	7.53	6.99	6.61	6.30	5.85	4.45	4.09
		ULS 2/3	2.08	2.42	2.91	3.77	4.43	5.56	7.13	7.53	6.99	6.60	6.30	5.85	4.45	4.09
		L/100	9.24	10.14	11.31	12.92	13.98	15.36	17.28	17.28	15.36	13.98	12.92	11.32	9.66	9.23
		SLS L/150	7.37	8.18	9.23	10.69	11.67	12.91	14.62	14.62	12.92	11.67	10.69	9.24	7.75	7.37
		L/200	6.18	6.92	7.89	9.23	10.14	11.32	12.91	12.91	11.31	10.14	9.24	7.89	6.53	6.18
	II	ULS 2/4	2.74	3.21	3.89	5.15	5.53	5.77	6.07	7.53	6.99	6.60	6.30	5.85	4.45	4.09
		ULS 2/3	2.01	2.33	2.79	3.60	4.22	5.30	6.07	7.53	6.99	6.60	6.30	5.85	4.45	4.09
		L/100	9.23	10.14	11.31	12.91	13.98	15.37	17.27	17.28	15.36	13.98	12.92	11.32	9.66	9.23
		SLS L/150	7.37	8.18	9.23	10.69	11.67	12.92	14.63	14.62	12.92	11.67	10.69	9.24	7.75	7.37
		L/200	6.18	6.92	7.89	9.23	10.14	11.31	12.91	12.91	11.31	10.14	9.24	7.89	6.53	6.18
	III	ULS 2/4	2.44	2.80	3.39	3.63	3.66	3.70	3.75	3.91	3.91	3.91	3.91	3.91	3.91	3.91
		ULS 2/3	1.75	1.98	2.22	2.59	2.83	3.31	3.75	3.90	3.90	3.90	3.90	3.90	3.90	3.90
		L/100	9.24	10.14	11.31	12.91	13.98	15.36	17.27	17.27	15.37	13.98	12.91	11.31	9.66	9.24
		SLS L/150	7.37	8.18	9.23	10.69	11.67	12.92	14.45	14.63	12.91	11.67	10.69	9.23	7.75	7.37
		L/200	6.19	6.92	7.89	9.21	10.00	11.01	12.36	12.91	11.32	10.14	9.23	7.89	6.53	6.18
Multi span	I	ULS 2/4	3.15	3.79	4.78	6.45	7.01	7.65	8.56	9.27	8.24	7.54	7.03	6.11	4.46	4.09
		ULS 2/3	2.30	2.74	3.44	4.61	5.59	7.12	8.57	9.28	8.24	7.55	7.03	6.11	4.45	4.09
		L/100	8.89	9.71	10.77	12.22	13.20	14.46	16.22	16.22	14.47	13.20	12.22	10.77	9.28	8.89
		SLS L/150	7.20	7.94	8.89	10.20	11.08	12.22	13.79	13.79	12.22	11.08	10.20	8.89	7.55	7.20
		L/200	6.11	6.79	7.67	8.89	9.71	10.77	12.22	12.11	10.77	9.71	8.89	7.67	6.43	6.11
	II	ULS 2/4	3.08	3.72	4.70	5.70	6.03	6.47	7.11	9.27	8.24	7.54	7.03	6.11	4.45	4.09
		ULS 2/3	2.23	2.67	3.31	4.50	5.49	6.47	7.12	9.27	8.24	7.54	7.03	6.11	4.45	4.09
		L/100	8.89	9.71	10.76	12.22	13.20	14.47	16.22	16.22	14.47	13.20	12.22	10.77	9.28	8.89
		SLS L/150	7.20	7.94	8.89	10.20	11.08	12.22	13.76	13.79	12.22	11.08	10.20	8.89	7.55	7.20
		L/200	6.11	6.79	7.67	8.89	9.71	10.68	11.90	12.11	10.77	9.71	8.89	7.67	6.43	6.11
	III	ULS 2/4	2.85	2.99	3.05	3.11	3.15	3.19	3.23	3.37	3.37	3.37	3.37	3.37	3.37	3.37
		ULS 2/3	1.97	2.33	2.94	3.11	3.14	3.18	3.22	3.37	3.37	3.37	3.37	3.37	3.37	3.37
		L/100	8.89	9.71	10.76	12.22	13.20	14.47	16.11	16.22	14.46	13.20	12.22	10.77	9.28	8.89
		SLS L/150	7.20	7.94	8.89	10.19	10.95	11.91	13.19	13.79	12.22	11.08	10.20	8.89	7.55	7.20
		L/200	6.11	6.79	7.61	8.65	9.32	10.16	11.21	12.12	10.77	9.71	8.89	7.68	6.43	6.11

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SPB160W

Table 5

External facing thickness: 0.60 mm
Internal facing thickness: 0.50 mm
External temperature: +55 °C; +65 °C; +80 °C/-20 °C (summer/winter)
Internal temperature: +20 °C/+20 °C (summer/winter)
Min. end support width: 60 mm
Min. intermediate support width: 120 mm
Min. number of fasteners at end support: 2 or 3
Min. number of fasteners at intermediate support: 3 or 4

ULS – Ultimate Limit State, to find span length put characteristic load (during span length calculation characteristic load is automatically corrected by safety factor)
ULS 3/0 – Ultimate Limit State; 3 fasteners at the end support
ULS 2/0 – Ultimate Limit State; 2 fasteners at the end support
ULS 2/4 – Ultimate Limit State; 2 fasteners at the end support / 4 fasteners at intermediate support
ULS 2/3 – Ultimate Limit State; 2 fasteners at the end support / 3 fasteners at intermediate support
SLS – Serviceability Limit State, to find span length put characteristic load

Static scheme	*Colour group*	*Criterion*	*Characteristic load [kN/m²]*													
			-1.2	*-1.0*	*-0.8*	*-0.6*	*-0.5*	*-0.4*	*-0.3*	*0.3*	*0.4*	*0.5*	*0.6*	*0.8*	*1.0*	*1.2*
Single span	I	ULS 3/0	4.67	5.60	6.93	7.99	8.76	9.79	11.31	11.97	10.36	9.26	8.46	6.99	5.09	4.67
		ULS 2/0	4.67	5.60	6.93	7.99	8.75	9.79	11.31	11.97	10.36	9.26	8.46	6.99	5.09	4.67
		SLS L/100	8.15	8.82	9.69	10.89	11.71	12.76	14.04	13.79	12.55	11.63	10.89	9.70	8.46	8.15
		SLS L/150	6.76	7.36	8.15	9.13	9.75	10.53	11.59	11.27	10.30	9.55	8.95	8.05	7.05	6.76
		SLS L/200	5.86	6.41	7.03	7.86	8.40	9.09	9.87	9.29	8.70	8.19	7.67	6.88	6.04	5.80
	II	ULS 3/0	4.67	5.60	6.92	8.00	8.76	9.79	11.31	11.94	10.34	9.25	8.44	6.98	5.09	4.67
		ULS 2/0	4.67	5.60	6.92	7.99	8.76	9.79	11.31	11.94	10.34	9.24	8.44	6.98	5.09	4.67
		SLS L/100	8.15	8.82	9.69	10.89	11.64	12.55	13.79	13.79	12.55	11.64	10.90	9.69	8.47	8.15
		SLS L/150	6.76	7.37	8.04	8.95	9.55	10.30	11.27	11.27	10.30	9.55	8.95	8.05	7.04	6.76
		SLS L/200	5.81	6.28	6.87	7.67	8.19	8.70	9.29	9.29	8.70	8.19	7.67	6.88	6.03	5.81
	III	ULS 3/0	4.67	5.60	6.92	8.00	8.76	9.79	11.31	11.83	10.24	9.16	8.36	6.98	5.09	4.67
		ULS 2/0	4.67	5.60	6.93	7.99	8.76	9.79	11.31	11.83	10.24	9.16	8.36	6.99	5.09	4.67
		SLS L/100	8.04	8.62	9.33	10.30	10.94	11.57	12.32	13.79	12.55	11.64	10.90	9.69	8.47	8.15
		SLS L/150	6.42	6.90	7.47	8.01	8.35	8.74	9.21	11.27	10.30	9.55	8.95	8.05	7.04	6.76
		SLS L/200	5.37	5.72	6.06	6.47	6.71	7.00	7.32	8.91	8.70	8.19	7.67	6.88	6.03	5.81
Two span	I	ULS 2/4	2.82	3.31	4.05	5.29	6.36	7.54	8.20	8.71	7.98	7.47	7.08	6.52	5.09	4.67
		ULS 2/3	2.08	2.41	2.90	3.75	4.46	5.51	7.54	8.71	7.98	7.47	7.08	6.52	5.09	4.67
		SLS L/100	10.02	10.98	12.21	13.89	15.02	16.48	18.50	18.50	16.48	15.02	13.89	12.22	10.47	10.02
		SLS L/150	8.05	8.91	10.02	11.55	12.58	13.89	15.69	15.70	13.89	12.58	11.55	10.02	8.46	8.05
		SLS L/200	6.79	7.58	8.60	10.02	10.98	12.21	13.89	13.89	12.21	10.98	10.02	8.60	7.16	6.79
	II	ULS 2/4	2.74	3.20	3.87	5.12	6.17	6.58	7.01	8.71	7.98	7.47	7.08	6.51	5.09	4.67
		ULS 2/3	2.01	2.32	2.78	3.57	4.18	5.24	7.01	8.70	7.98	7.47	7.08	6.51	5.09	4.67
		SLS L/100	10.02	10.98	12.22	13.89	15.02	16.47	18.50	18.50	16.48	15.02	13.89	12.22	10.48	10.02
		SLS L/150	8.05	8.91	10.02	11.55	12.58	13.89	15.69	15.70	13.89	12.58	11.55	10.02	8.46	8.05
		SLS L/200	6.79	7.58	8.60	10.02	10.98	12.22	13.89	13.89	12.21	10.98	10.02	8.60	7.16	6.79
	III	ULS 2/4	2.43	2.78	3.35	4.04	4.09	4.15	4.21	4.45	4.45	4.45	4.45	4.45	4.45	4.45
		ULS 2/3	1.75	1.96	2.18	2.53	2.80	3.15	4.21	4.45	4.45	4.45	4.45	4.45	4.45	4.45
		SLS L/100	10.02	10.98	12.21	13.89	15.02	16.48	18.50	18.50	16.48	15.02	13.89	12.22	10.48	10.02
		SLS L/150	8.05	8.91	10.02	11.55	12.58	13.89	15.67	15.70	13.89	12.58	11.55	10.02	8.46	8.05
		SLS L/200	6.79	7.58	8.60	10.02	10.94	12.02	13.48	13.89	12.21	10.98	10.02	8.60	7.16	6.79
Multi span	I	ULS 2/4	3.17	3.82	4.76	6.43	7.79	8.86	10.01	10.84	9.56	8.69	8.06	6.99	5.09	4.67
		ULS 2/3	2.28	2.73	3.42	4.58	5.57	7.08	9.65	10.84	9.57	8.70	8.06	6.98	5.09	4.67
		SLS L/100	9.61	10.48	11.59	13.12	14.16	15.50	17.36	17.35	15.50	14.16	13.12	11.59	10.02	9.62
		SLS L/150	7.83	8.61	9.62	11.00	11.92	13.13	14.78	14.78	13.12	11.92	11.00	9.61	8.20	7.83
		SLS L/200	6.68	7.40	8.33	9.62	10.48	11.59	13.13	13.13	11.59	10.48	9.61	8.33	7.02	6.68
	II	ULS 2/4	3.02	3.64	4.60	5.62	5.92	6.31	6.87	10.85	9.56	8.70	8.07	6.98	5.09	4.67
		ULS 2/3	2.16	2.58	3.20	4.36	5.34	6.31	6.87	10.85	9.57	8.70	8.06	6.99	5.09	4.67
		SLS L/100	9.61	10.48	11.59	13.12	14.16	15.50	17.36	17.36	15.50	14.16	13.13	11.59	10.02	9.62
		SLS L/150	7.83	8.61	9.62	11.00	11.92	13.13	14.78	14.78	13.12	11.93	11.00	9.62	8.20	7.83
		SLS L/200	6.68	7.40	8.33	9.62	10.48	11.59	12.92	13.12	11.59	10.48	9.62	8.33	7.02	6.68
	III	ULS 2/4	2.82	3.41	3.51	3.60	3.65	3.72	3.79	4.08	4.08	4.08	4.08	4.08	4.08	4.08
		ULS 2/3	1.97	2.31	2.91	3.60	3.66	3.72	3.79	4.08	4.08	4.08	4.08	4.08	4.08	4.08
		SLS L/100	9.61	10.48	11.59	13.12	14.16	15.50	17.36	17.35	15.50	14.16	13.12	11.59	10.02	9.62
		SLS L/150	7.83	8.61	9.62	10.99	11.89	12.92	14.31	14.78	13.13	11.92	11.00	9.61	8.20	7.84
		SLS L/200	6.68	7.40	8.33	9.46	10.18	11.08	12.29	13.13	11.59	10.48	9.61	8.33	7.02	6.68

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SP2D100W

Table 6

External facing thickness 0.60 mm
Internal facing thickness 0.50 mm
External temperature +55 °C; +65 °C; +80 °C/-20 °C (summer/winter)
Internal temperature +20 °C/+20 °C (summer/winter)
Min. end support width: 60 mm
Min. intermediate support width: 120 mm
Min. number of fasteners at end support 1 *
Min. number of fasteners at intermediate support 1*

* – set includes 1 pc. of L15 fastener and 2 pcs. of L01 or L02 fasteners
ULS – Ultimate Limit State, to find span length put characteristic load (during span length calculation characteristic load is automatically corrected by safety factor)
SLS – Serviceability Limit State, to find span length put characteristic load

Static scheme	Colour group	Criterion	Characteristic load [kN/m²]													
			-1.2	-1.0	-0.8	-0.6	-0.5	-0.4	-0.3	0.3	0.4	0.5	0.6	0.8	1.0	1.2
Single span	I	ULS	3.94	4.72	5.46	6.31	6.91	7.72	8.92	9.44	8.18	7.31	6.68	5.78	4.72	3.93
		L/100	6.11	6.62	7.27	8.14	8.67	9.34	10.26	10.04	9.17	8.52	8.00	7.23	6.62	6.12
		SLS L/150	5.07	5.49	5.99	6.66	7.10	7.65	8.27	7.77	7.30	6.92	6.50	5.86	5.39	5.00
		L/200	4.32	4.67	5.11	5.69	6.04	6.37	6.78	6.30	5.96	5.67	5.42	4.97	4.56	4.22
	II	ULS	3.94	4.72	5.46	6.31	6.91	7.72	8.92	9.42	8.16	7.29	6.66	5.77	4.72	3.93
		L/100	6.11	6.55	7.11	7.85	8.35	8.98	9.66	10.04	9.16	8.51	8.00	7.23	6.62	6.11
		SLS L/150	4.91	5.28	5.74	6.30	6.58	6.91	7.32	7.77	7.30	6.92	6.51	5.86	5.39	5.00
		L/200	4.13	4.44	4.77	5.12	5.34	5.57	5.87	6.31	5.96	5.67	5.43	4.98	4.56	4.23
	III	ULS	3.93	4.72	5.46	6.30	6.91	7.72	8.92	9.33	8.08	7.23	6.60	5.71	4.72	3.94
		L/100	5.86	6.26	6.77	7.30	7.60	7.96	8.40	10.04	9.17	8.51	8.00	7.23	6.62	6.12
		SLS L/150	4.62	4.86	5.13	5.45	5.65	5.87	6.13	7.38	7.30	6.92	6.50	5.86	5.38	5.00
		L/200	3.71	3.89	4.09	4.33	4.46	4.62	4.80	5.54	5.54	5.54	5.43	4.97	4.56	4.22
Two span	I	ULS	3.62	4.24	4.49	4.82	5.04	5.34	5.73	6.06	5.63	5.31	5.07	4.71	4.45	3.93
		L/100	7.53	8.24	9.16	10.42	11.27	12.36	13.87	13.88	12.36	11.27	10.43	9.17	8.24	7.52
		SLS L/150	6.05	6.69	7.52	8.68	9.45	10.42	11.78	11.78	10.43	9.44	8.67	7.53	6.69	6.05
		L/200	5.11	5.69	6.46	7.53	8.24	9.17	10.43	10.42	9.17	8.24	7.53	6.46	5.69	5.11
	II	ULS	3.54	3.84	4.02	4.25	4.39	4.57	4.81	6.06	5.63	5.31	5.07	4.71	4.45	3.94
		L/100	7.53	8.24	9.17	10.42	11.27	12.36	13.88	13.88	12.36	11.27	10.42	9.17	8.24	7.53
		SLS L/150	6.05	6.70	7.52	8.68	9.44	10.43	11.78	11.78	10.42	9.45	8.68	7.53	6.69	6.05
		L/200	5.10	5.69	6.46	7.53	8.25	9.17	10.42	10.42	9.17	8.24	7.53	6.46	5.69	5.11
	III	ULS	2.68	2.72	2.76	2.81	2.84	2.86	2.89	2.99	2.99	2.99	2.99	2.99	2.99	2.99
		L/100	7.53	8.24	9.17	10.42	11.27	12.36	13.87	13.88	12.36	11.27	10.42	9.17	8.24	7.52
		SLS L/150	6.05	6.69	7.52	8.68	9.41	10.27	11.45	11.78	10.43	9.45	8.68	7.53	6.69	6.05
		L/200	5.10	5.69	6.44	7.35	7.97	8.74	9.77	10.42	9.17	8.24	7.53	6.46	5.69	5.11
Multi span	I	ULS	3.94	4.47	4.85	5.39	5.78	6.32	7.10	7.70	6.83	6.24	5.80	5.19	4.72	3.94
		L/100	7.22	7.87	8.70	9.85	10.62	11.63	13.02	13.02	11.63	10.62	9.85	8.70	7.86	7.22
		SLS L/150	5.88	6.47	7.22	8.25	8.95	9.85	11.09	11.06	9.85	8.95	8.25	7.22	6.47	5.88
		L/200	5.02	5.55	6.26	7.22	7.87	8.70	9.78	9.59	8.62	7.86	7.22	6.26	5.55	5.02
	II	ULS	3.71	3.92	4.18	4.57	4.83	5.19	5.71	7.70	6.83	6.24	5.80	5.19	4.72	3.94
		L/100	7.22	7.86	8.70	9.85	10.62	11.63	13.02	13.02	11.63	10.63	9.85	8.70	7.87	7.22
		SLS L/150	5.89	6.47	7.22	8.25	8.95	9.82	10.89	11.06	9.85	8.95	8.25	7.22	6.47	5.88
		L/200	5.02	5.55	6.26	7.21	7.77	8.47	9.40	9.59	8.62	7.87	7.22	6.26	5.55	5.02
	III	ULS	2.29	2.33	2.37	2.41	2.43	2.46	2.49	2.58	2.58	2.58	2.58	2.58	2.58	2.58
		L/100	7.22	7.86	8.70	9.85	10.62	11.53	12.72	13.02	11.63	10.63	9.85	8.70	7.87	7.22
		SLS L/150	5.89	6.47	7.21	8.10	8.67	9.40	10.38	11.07	9.85	8.95	8.25	7.22	6.47	5.88
		L/200	5.02	5.49	6.07	6.87	7.37	7.95	8.54	9.59	8.62	7.87	7.22	6.26	5.55	5.02

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SP2D120W

Table 7

External facing thickness 0.60 mm
Internal facing thickness 0.50 mm
External temperature +55 °C; +65 °C; +80 °C/-20 °C (summer/winter)
Internal temperature +20 °C/+20 °C (summer/winter)
Min. end support width: 60 mm
Min. intermediate support width: 120 mm
Min. number of fasteners at end support 1 *
Min. number of fasteners at intermediate support 1*

* – set includes 1 pc. of L15 fastener and 2 pcs. of L01 or L02 fasteners
ULS – Ultimate Limit State, to find span length put characteristic load (during span length calculation characteristic load is automatically corrected by safety factor)
SLS – Serviceability Limit State, to find span length put characteristic load

Static scheme	Colour group	Criterion	Characteristic load [kN/m²] -1.2	-1.0	-0.8	-0.6	-0.5	-0.4	-0.3	0.3	0.4	0.5	0.6	0.8	1.0	1.2
Single span	I	ULS	4.39	5.26	5.98	6.91	7.56	8.46	9.77	10.34	8.95	8.01	7.31	6.33	5.25	4.39
		L/100	6.92	7.50	8.23	9.24	9.88	10.65	11.71	11.47	10.46	9.72	9.13	8.23	7.50	6.93
		SLS L/150	5.76	6.27	6.84	7.61	8.11	8.75	9.58	9.04	8.48	7.93	7.44	6.71	6.16	5.72
		L/200	4.95	5.36	5.86	6.53	6.97	7.41	7.90	7.37	6.95	6.61	6.32	5.71	5.23	4.84
	II	ULS	4.39	5.26	5.98	6.91	7.56	8.46	9.77	10.32	8.93	7.99	7.29	6.32	5.26	4.39
		L/100	6.93	7.48	8.12	8.98	9.54	10.26	11.19	11.47	10.46	9.71	9.12	8.23	7.50	6.93
		SLS L/150	5.62	6.05	6.57	7.28	7.64	8.04	8.54	9.04	8.47	7.93	7.44	6.71	6.16	5.72
		L/200	4.74	5.11	5.56	5.98	6.23	6.53	6.89	7.38	6.96	6.61	6.32	5.71	5.23	4.84
	III	ULS	4.38	5.25	5.98	6.91	7.57	8.46	9.77	10.22	8.85	7.91	7.22	6.26	5.26	4.39
		L/100	6.71	7.17	7.76	8.47	8.84	9.27	9.81	11.47	10.46	9.72	9.13	8.23	7.50	6.93
		SLS L/150	5.32	5.65	5.98	6.38	6.62	6.89	7.22	8.86	8.47	7.93	7.44	6.71	6.16	5.72
		L/200	4.35	4.55	4.80	5.09	5.26	5.45	5.68	6.64	6.65	6.61	6.32	5.71	5.23	4.84
Two span	I	ULS	3.60	4.28	4.97	5.34	5.59	5.91	6.35	6.71	6.23	5.88	5.61	5.21	4.92	4.39
		L/100	8.54	9.35	10.39	11.81	12.76	13.99	15.70	15.70	14.00	12.76	11.81	10.40	9.35	8.55
		SLS L/150	6.88	7.60	8.54	9.84	10.70	11.81	13.33	13.33	11.81	10.70	9.84	8.55	7.61	6.88
		L/200	5.81	6.48	7.35	8.54	9.35	10.39	11.81	11.80	10.39	9.35	8.54	7.34	6.48	5.81
	II	ULS	3.52	4.18	4.45	4.71	4.87	5.08	5.33	6.71	6.23	5.88	5.61	5.21	4.92	4.38
		L/100	8.54	9.35	10.40	11.81	12.76	13.99	15.70	15.70	14.00	12.76	11.81	10.40	9.35	8.55
		SLS L/150	6.88	7.61	8.54	9.84	10.70	11.81	13.34	13.33	11.81	10.70	9.84	8.54	7.61	6.88
		L/200	5.81	6.48	7.35	8.54	9.35	10.40	11.81	11.80	10.40	9.35	8.54	7.35	6.48	5.81
	III	ULS	2.99	3.04	3.09	3.14	3.16	3.19	3.23	3.34	3.34	3.34	3.34	3.34	3.34	3.34
		L/100	8.54	9.35	10.39	11.81	12.76	13.99	15.70	15.70	13.99	12.76	11.81	10.39	9.35	8.55
		SLS L/150	6.88	7.61	8.54	9.84	10.70	11.74	13.08	13.34	11.80	10.70	9.84	8.55	7.61	6.88
		L/200	5.81	6.48	7.35	8.44	9.14	10.02	11.21	11.81	10.40	9.35	8.54	7.34	6.48	5.81
Multi span	I	ULS	4.17	4.93	5.34	5.94	6.37	6.95	7.81	8.46	7.51	6.86	6.38	5.72	5.26	4.39
		L/100	8.18	8.92	9.85	11.15	12.03	13.16	14.73	14.72	13.16	12.03	11.15	9.86	8.92	8.19
		SLS L/150	6.68	7.34	8.19	9.35	10.14	11.15	12.55	12.55	11.15	10.14	9.35	8.19	7.34	6.68
		L/200	5.71	6.32	7.11	8.19	8.92	9.86	11.15	10.96	9.85	8.92	8.19	7.11	6.32	5.71
	II	ULS	4.10	4.32	4.62	5.04	5.34	5.73	6.29	8.46	7.51	6.86	6.38	5.72	5.26	4.39
		L/100	8.19	8.92	9.85	11.15	12.03	13.16	14.72	14.73	13.16	12.03	11.15	9.86	8.92	8.19
		SLS L/150	6.69	7.34	8.19	9.35	10.14	11.15	12.43	12.55	11.15	10.14	9.35	8.19	7.34	6.69
		L/200	5.71	6.32	7.11	8.19	8.88	9.68	10.76	10.96	9.85	8.92	8.19	7.11	6.32	5.71
	III	ULS	2.56	2.59	2.64	2.69	2.72	2.74	2.77	2.89	2.89	2.89	2.89	2.89	2.89	2.89
		L/100	8.19	8.92	9.85	11.15	12.03	13.14	14.51	14.72	13.16	12.03	11.15	9.86	8.92	8.19
		SLS L/150	6.69	7.34	8.19	9.26	9.92	10.76	11.88	12.55	11.15	10.14	9.35	8.19	7.34	6.68
		L/200	5.71	6.30	6.98	7.88	8.46	9.19	9.95	10.96	9.85	8.92	8.19	7.10	6.32	5.71

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SP2D160W

Table 8

External facing thickness 0.60 mm
Internal facing thickness 0.50 mm
External temperature +55 °C; +65 °C; +80 °C/-20 °C (summer/winter)
Internal temperature +20 °C/+20 °C (summer/winter)
Min. end support width: 60 mm
Min. intermediate support width: 120 mm
Min. number of fasteners at end support 1 *
Min. number of fasteners at intermediate support 1*

* – set includes 1 pc. of L15 fastener and 2 pcs. of L01 or L02 fasteners
ULS – Ultimate Limit State, to find span length put characteristic load (during span length calculation characteristic load is automatically corrected by safety factor)
SLS – Serviceability Limit State, to find span length put characteristic load

Static scheme	Colour group	Criterion	Characteristic load [kN/m²]													
			-1.2	-1.0	-0.8	-0.6	-0.5	-0.4	-0.3	0.3	0.4	0.5	0.6	0.8	1.0	1.2
Single span	I	ULS	5.65	6.19	6.92	7.99	8.75	9.79	11.30	11.96	10.36	9.27	8.45	7.22	5.77	4.81
		SLS L/100	8.33	9.00	9.85	11.04	11.85	12.87	14.14	13.89	12.67	11.76	11.04	9.85	9.00	8.33
		SLS L/150	6.97	7.57	8.33	9.27	9.88	10.66	11.71	11.35	10.43	9.69	9.10	8.20	7.55	6.97
		SLS L/200	6.09	6.60	7.20	8.02	8.55	9.22	9.96	9.37	8.79	8.34	7.82	7.05	6.46	6.00
	II	ULS	5.65	6.19	6.92	7.99	8.75	9.79	11.30	11.93	10.33	9.24	8.43	7.21	5.77	4.81
		SLS L/100	8.33	9.00	9.86	10.90	11.58	12.46	13.64	13.89	12.67	11.76	11.04	9.85	9.00	8.33
		SLS L/150	6.92	7.42	8.06	8.92	9.49	10.12	10.79	11.35	10.43	9.69	9.10	8.20	7.55	6.97
		SLS L/200	5.88	6.33	6.90	7.58	7.92	8.32	8.81	9.37	8.79	8.34	7.82	7.05	6.46	6.00
	III	ULS	5.65	6.19	6.92	7.99	8.75	9.78	11.30	11.82	10.24	9.16	8.36	7.21	5.77	4.81
		SLS L/100	8.20	8.76	9.47	10.43	11.05	11.65	12.38	13.89	12.66	11.76	11.05	9.86	9.00	8.33
		SLS L/150	6.60	7.06	7.58	8.10	8.43	8.81	9.27	11.35	10.43	9.69	9.10	8.21	7.55	6.97
		SLS L/200	5.56	5.83	6.16	6.55	6.79	7.06	7.38	8.89	8.79	8.34	7.83	7.05	6.47	6.00
Two span	I	ULS	3.60	4.22	5.25	6.47	6.82	7.28	7.92	8.43	7.71	7.22	6.84	6.29	5.77	4.81
		SLS L/100	10.40	11.34	12.54	14.19	15.30	16.74	18.74	18.74	16.74	15.30	14.19	12.54	11.34	10.40
		SLS L/150	8.46	9.31	10.40	11.90	12.90	14.19	15.97	15.97	14.19	12.90	11.90	10.40	9.31	8.46
		SLS L/200	7.21	7.99	9.01	10.40	11.35	12.54	14.19	14.19	12.54	11.34	10.40	9.00	7.99	7.21
	II	ULS	3.47	4.11	5.11	5.74	5.98	6.28	6.69	8.42	7.71	7.22	6.84	6.29	5.77	4.81
		SLS L/100	10.40	11.34	12.54	14.19	15.30	16.74	18.74	18.74	16.75	15.30	14.19	12.54	11.34	10.40
		SLS L/150	8.46	9.31	10.40	11.90	12.90	14.19	15.97	15.97	14.19	12.90	11.90	10.40	9.31	8.46
		SLS L/200	7.21	7.99	9.00	10.40	11.34	12.54	14.18	14.19	12.54	11.34	10.40	9.00	7.99	7.21
	III	ULS	3.09	3.63	3.69	3.77	3.82	3.87	3.92	4.11	4.11	4.11	4.11	4.11	4.11	4.11
		SLS L/100	10.40	11.34	12.54	14.19	15.30	16.74	18.74	18.74	16.74	15.30	14.19	12.54	11.35	10.40
		SLS L/150	8.46	9.31	10.40	11.90	12.90	14.19	15.93	15.97	14.19	12.90	11.90	10.40	9.31	8.46
		SLS L/200	7.21	7.99	9.00	10.40	11.29	12.35	13.78	14.19	12.54	11.35	10.40	9.00	7.99	7.21
Multi span	I	ULS	4.12	4.97	6.27	7.37	7.94	8.72	9.88	10.71	9.43	8.57	7.94	7.05	5.77	4.81
		SLS L/100	9.91	10.77	11.86	13.37	14.39	15.72	17.55	17.56	15.71	14.39	13.37	11.86	10.77	9.91
		SLS L/150	8.17	8.93	9.92	11.27	12.19	13.37	15.00	15.00	13.37	12.19	11.27	9.91	8.93	8.17
		SLS L/200	7.03	7.74	8.66	9.92	10.76	11.86	13.37	13.34	11.86	10.76	9.92	8.66	7.74	7.03
	II	ULS	4.06	4.92	5.77	6.38	6.81	7.40	8.26	10.71	9.43	8.57	7.94	7.05	5.77	4.81
		SLS L/100	9.92	10.76	11.86	13.37	14.39	15.72	17.55	17.55	15.71	14.39	13.37	11.86	10.76	9.91
		SLS L/150	8.17	8.93	9.91	11.28	12.19	13.37	15.01	15.00	13.37	12.19	11.27	9.92	8.93	8.17
		SLS L/200	7.03	7.74	8.66	9.91	10.76	11.83	13.13	13.34	11.86	10.76	9.92	8.66	7.74	7.03
	III	ULS	3.14	3.21	3.28	3.36	3.42	3.47	3.53	3.75	3.75	3.75	3.75	3.75	3.75	3.75
		SLS L/100	9.91	10.76	11.86	13.37	14.39	15.72	17.54	17.55	15.71	14.39	13.37	11.86	10.77	9.91
		SLS L/150	8.17	8.93	9.91	11.27	12.12	13.13	14.49	15.00	13.37	12.19	11.27	9.91	8.93	8.17
		SLS L/200	7.03	7.74	8.64	9.72	10.43	11.32	12.51	13.34	11.86	10.77	9.92	8.66	7.74	7.03

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SPB80WE

Table 9

External facing thickness: 0.60 mm
Internal facing thickness: 0.50 mm
External temperature: +55 °C; +65 °C; +80 °C/-20 °C (summer/winter)
Internal temperature: +20 °C/+20 °C (summer/winter)
Min. end support width: 60 mm
Min. intermediate support width: 120 mm
Min. number of fasteners at end support: 2 or 3
Min. number of fasteners at intermediate support: 3 or 4

ULS – Ultimate Limit State, to find span length put characteristic load (during span length calculation characteristic load is automatically corrected by safety factor)
ULS 3/0 – Ultimate Limit State; 3 fasteners at the end support
ULS 2/0 – Ultimate Limit State; 2 fasteners at the end support
ULS 2/4 – Ultimate Limit State; 2 fasteners at the end support / 4 fasteners at intermediate support
ULS 2/3 – Ultimate Limit State; 2 fasteners at the end support / 3 fasteners at intermediate support
SLS – Serviceability Limit State, to find span length put characteristic load

Static scheme	*Colour group*	*Criterion*	*Characteristic load [kN/m²]*													
			-1.2	*-1.0*	*-0.8*	*-0.6*	*-0.5*	*-0.4*	*-0.3*	*0.3*	*0.4*	*0.5*	*0.6*	*0.8*	*1.0*	*1.2*
Single span	**I**	**ULS 3/0**	3.98	4.36	4.87	5.63	6.17	6.89	7.96	8.43	7.30	6.53	5.96	5.05	4.04	3.37
		ULS 2/0	3.98	4.36	4.88	5.63	6.17	6.89	7.96	8.43	7.30	6.53	5.96	5.05	4.04	3.37
		L/100	5.19	5.63	6.19	6.89	7.33	7.91	8.68	8.43	7.74	7.19	6.76	6.10	5.62	5.19
		SLS L/150	4.28	4.61	5.03	5.60	5.97	6.40	6.84	6.41	6.03	5.73	5.46	4.91	4.51	4.19
		L/200	3.61	3.90	4.27	4.75	4.98	5.24	5.57	5.16	4.88	4.66	4.47	4.15	3.80	3.52
	II	**ULS 3/0**	3.98	4.36	4.87	5.63	6.17	6.89	7.96	8.41	7.28	6.51	5.95	5.05	4.04	3.37
		ULS 2/0	3.98	4.36	4.88	5.63	6.17	6.90	7.96	8.41	7.28	6.51	5.95	5.05	4.04	3.37
		L/100	5.19	5.62	6.10	6.76	7.19	7.74	8.42	8.43	7.74	7.19	6.76	6.10	5.62	5.19
		SLS L/150	4.19	4.51	4.91	5.45	5.73	6.03	6.41	6.41	6.03	5.73	5.45	4.91	4.51	4.19
		L/200	3.52	3.80	4.15	4.47	4.66	4.88	5.15	5.16	4.88	4.66	4.47	4.15	3.80	3.52
	III	**ULS 3/0**	3.98	4.36	4.87	5.63	6.17	6.89	7.96	8.33	7.21	6.45	5.89	5.05	4.04	3.37
		ULS 2/0	3.98	4.36	4.87	5.63	6.17	6.89	7.96	8.33	7.21	6.45	5.89	5.05	4.04	3.37
		L/100	4.92	5.26	5.64	6.03	6.27	6.56	6.90	8.43	7.74	7.19	6.76	6.10	5.62	5.19
		SLS L/150	3.80	3.98	4.19	4.46	4.61	4.78	4.98	5.89	5.89	5.73	5.46	4.91	4.51	4.19
		L/200	3.03	3.17	3.32	3.51	3.62	3.74	3.87	4.42	4.41	4.41	4.42	4.15	3.80	3.51
Two span	**I**	**ULS 2/4**	2.78	3.31	3.65	3.88	4.03	4.22	4.46	4.12	3.93	3.80	3.68	3.49	3.35	3.23
		ULS 2/3	2.05	2.41	2.94	3.88	4.03	4.22	4.47	4.12	3.93	3.79	3.67	3.49	3.34	3.23
		L/100	6.34	6.96	7.76	8.85	9.59	10.54	11.85	11.85	10.54	9.59	8.86	7.76	6.96	6.34
		SLS L/150	5.06	5.62	6.34	7.33	8.00	8.86	10.03	10.03	8.86	8.00	7.33	6.34	5.62	5.06
		L/200	4.24	4.76	5.42	6.34	6.96	7.76	8.86	8.78	7.76	6.96	6.34	5.42	4.75	4.24
	II	**ULS 2/4**	2.71	3.14	3.26	3.41	3.50	3.61	3.75	4.12	3.93	3.80	3.67	3.49	3.34	3.22
		ULS 2/3	1.98	2.29	2.83	3.41	3.50	3.61	3.75	4.12	3.93	3.80	3.67	3.49	3.34	3.22
		L/100	6.34	6.96	7.76	8.85	9.59	10.54	11.85	11.84	10.54	9.59	8.86	7.77	6.96	6.34
		SLS L/150	5.06	5.62	6.34	7.33	8.00	8.86	10.03	10.03	8.86	8.00	7.33	6.34	5.62	5.06
		L/200	4.24	4.76	5.42	6.34	6.96	7.76	8.78	8.78	7.76	6.96	6.34	5.42	4.75	4.24
	III	**ULS 2/4**	2.20	2.23	2.26	2.29	2.31	2.32	2.34	2.40	2.40	2.40	2.40	2.40	2.40	2.40
		ULS 2/3	1.70	1.98	2.26	2.29	2.30	2.32	2.34	2.40	2.40	2.40	2.40	2.40	2.40	2.40
		L/100	6.34	6.96	7.76	8.86	9.58	10.54	11.83	11.84	10.54	9.59	8.86	7.77	6.96	6.34
		SLS L/150	5.06	5.62	6.34	7.30	7.89	8.63	9.63	10.03	8.86	8.00	7.33	6.34	5.62	5.06
		L/200	4.24	4.74	5.32	6.10	6.62	7.28	8.15	8.78	7.76	6.96	6.34	5.42	4.75	4.24
Multi span	**I**	**ULS 2/4**	3.25	3.56	3.82	4.19	4.46	4.82	5.33	4.79	4.39	4.11	3.90	3.58	3.37	3.20
		ULS 2/3	2.33	2.82	3.56	4.19	4.46	4.81	5.33	4.79	4.39	4.11	3.89	3.59	3.37	3.20
		L/100	6.10	6.66	7.38	8.38	9.05	9.91	11.13	11.12	9.92	9.05	8.38	7.39	6.66	6.10
		SLS L/150	4.94	5.45	6.10	7.00	7.60	8.38	9.45	9.35	8.38	7.60	7.00	6.10	5.45	4.94
		L/200	4.19	4.66	5.26	6.10	6.66	7.39	8.24	8.07	7.25	6.63	6.09	5.26	4.66	4.19
	II	**ULS 2/4**	2.94	3.07	3.24	3.47	3.63	3.83	4.11	4.79	4.39	4.11	3.89	3.58	3.37	3.20
		ULS 2/3	2.28	2.76	3.24	3.48	3.63	3.84	4.11	4.79	4.39	4.11	3.90	3.58	3.37	3.20
		L/100	6.10	6.66	7.38	8.38	9.05	9.92	11.12	11.13	9.92	9.05	8.38	7.39	6.66	6.10
		SLS L/150	4.94	5.45	6.10	7.00	7.60	8.38	9.35	9.35	8.38	7.60	7.00	6.10	5.45	4.94
		L/200	4.19	4.66	5.27	6.10	6.63	7.25	8.07	8.07	7.25	6.63	6.09	5.26	4.66	4.19
	III	**ULS 2/4**	1.83	1.85	1.87	1.90	1.91	1.92	1.93	1.98	1.98	1.98	1.98	1.98	1.98	1.98
		ULS 2/3	1.83	1.85	1.87	1.90	1.91	1.92	1.93	1.98	1.98	1.98	1.98	1.98	1.98	1.98
		L/100	6.10	6.66	7.38	8.38	9.00	9.75	10.76	11.12	9.92	9.05	8.38	7.39	6.66	6.10
		SLS L/150	4.94	5.45	6.04	6.79	7.28	7.90	8.64	9.35	8.38	7.60	7.00	6.10	5.45	4.94
		L/200	4.15	4.54	5.05	5.72	6.13	6.52	6.99	8.07	7.25	6.63	6.09	5.26	4.66	4.19

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SPB100WE

Table 10

External facing thickness: 0.60 mm
Internal facing thickness: 0.50 mm
External temperature: +55 °C; +65 °C; +80 °C/-20 °C (summer/winter)
Internal temperature: +20 °C/+20 °C (summer/winter)
Min. end support width: 60 mm
Min. intermediate support width: 120 mm
Min. number of fasteners at end support: 2 or 3
Min. number of fasteners at intermediate support: 3 or 4

ULS – Ultimate Limit State, to find span length put characteristic load (during span length calculation characteristic load is automatically corrected by safety factor)
ULS 3/0 – Ultimate Limit State; 3 fasteners at the end support
ULS 2/0 – Ultimate Limit State; 2 fasteners at the end support
ULS 2/4 – Ultimate Limit State; 2 fasteners at the end support / 4 fasteners at intermediate support
ULS 2/3 – Ultimate Limit State; 2 fasteners at the end support / 3 fasteners at intermediate support
SLS – Serviceability Limit State, to find span length put characteristic load

Static scheme	*Colour group*	*Criterion*	*Characteristic load [kN/m²]*													
			-1.2	*-1.0*	*-0.8*	*-0.6*	*-0.5*	*-0.4*	*-0.3*	*0.3*	*0.4*	*0.5*	*0.6*	*0.8*	*1.0*	*1.2*
Single span	I	ULS 3/0	4.46	4.88	5.46	6.30	6.91	7.73	8.92	9.43	8.17	7.31	6.67	5.05	4.04	3.37
		ULS 2/0	4.46	4.88	5.46	6.30	6.90	7.72	8.92	9.44	8.17	7.31	6.67	5.05	4.04	3.37
		L/100	6.12	6.62	7.27	8.14	8.67	9.35	10.26	10.04	9.16	8.51	8.00	7.23	6.62	6.12
		SLS L/150	5.08	5.49	5.99	6.66	7.10	7.65	8.26	7.77	7.30	6.92	6.50	5.86	5.38	5.00
		L/200	4.33	4.67	5.11	5.69	6.04	6.37	6.78	6.31	5.96	5.67	5.43	4.98	4.56	4.23
	II	ULS 3/0	4.46	4.88	5.46	6.30	6.91	7.72	8.92	9.41	8.15	7.29	6.66	5.05	4.04	3.37
		ULS 2/0	4.46	4.89	5.46	6.31	6.91	7.72	8.92	9.41	8.15	7.30	6.66	5.05	4.04	3.37
		L/100	6.11	6.62	7.22	8.00	8.51	9.16	10.03	10.04	9.16	8.51	8.00	7.23	6.62	6.11
		SLS L/150	5.01	5.38	5.86	6.50	6.92	7.30	7.78	7.78	7.30	6.92	6.50	5.86	5.39	5.01
		L/200	4.23	4.56	4.97	5.42	5.67	5.96	6.30	6.30	5.96	5.67	5.42	4.97	4.56	4.23
	III	ULS 3/0	4.46	4.88	5.46	6.30	6.91	7.73	8.92	9.33	8.07	7.23	6.60	5.05	4.04	3.37
		ULS 2/0	4.46	4.89	5.46	6.30	6.90	7.72	8.92	9.32	8.07	7.22	6.60	5.05	4.04	3.37
		L/100	5.86	6.26	6.77	7.30	7.60	7.96	8.41	10.04	9.16	8.51	8.00	7.23	6.62	6.12
		SLS L/150	4.62	4.86	5.12	5.45	5.64	5.87	6.13	7.39	7.30	6.92	6.50	5.86	5.39	5.00
		L/200	3.71	3.89	4.09	4.33	4.46	4.62	4.80	5.54	5.54	5.53	5.43	4.98	4.56	4.23
Two span	I	ULS 2/4	2.75	3.26	4.04	4.34	4.52	4.73	5.00	4.62	4.41	4.25	4.12	3.91	3.74	3.37
		ULS 2/3	2.02	2.37	2.85	3.78	4.51	4.72	5.00	4.62	4.41	4.25	4.12	3.91	3.74	3.37
		L/100	7.52	8.24	9.16	10.42	11.27	12.36	13.88	13.88	12.36	11.27	10.42	9.17	8.24	7.53
		SLS L/150	6.05	6.69	7.53	8.67	9.44	10.42	11.77	11.77	10.42	9.44	8.68	7.52	6.69	6.05
		L/200	5.11	5.69	6.46	7.53	8.25	9.17	10.42	10.42	9.17	8.24	7.53	6.46	5.69	5.10
	II	ULS 2/4	2.67	3.17	3.65	3.82	3.92	4.05	4.20	4.62	4.41	4.25	4.12	3.91	3.74	3.37
		ULS 2/3	1.95	2.28	2.74	3.61	3.93	4.05	4.20	4.62	4.41	4.25	4.12	3.91	3.74	3.37
		L/100	7.53	8.25	9.17	10.42	11.27	12.36	13.88	13.88	12.36	11.27	10.42	9.17	8.24	7.53
		SLS L/150	6.05	6.69	7.53	8.68	9.44	10.43	11.78	11.78	10.42	9.44	8.68	7.53	6.69	6.05
		L/200	5.10	5.69	6.46	7.53	8.24	9.17	10.42	10.42	9.17	8.24	7.53	6.46	5.69	5.11
	III	ULS 2/4	2.37	2.50	2.53	2.56	2.58	2.61	2.62	2.69	2.69	2.69	2.69	2.69	2.69	2.69
		ULS 2/3	1.68	1.85	2.13	2.57	2.58	2.60	2.62	2.69	2.69	2.69	2.69	2.69	2.69	2.69
		L/100	7.52	8.24	9.17	10.42	11.27	12.36	13.87	13.88	12.36	11.27	10.42	9.17	8.24	7.53
		SLS L/150	6.05	6.69	7.53	8.67	9.41	10.28	11.45	11.78	10.42	9.45	8.68	7.53	6.69	6.05
		L/200	5.10	5.69	6.43	7.36	7.97	8.74	9.77	10.42	9.17	8.24	7.53	6.46	5.69	5.11
Multi span	I	ULS 2/4	3.19	3.85	4.28	4.70	4.99	5.39	5.97	5.37	4.92	4.61	4.36	4.02	3.77	3.37
		ULS 2/3	2.31	2.75	3.48	4.70	4.99	5.39	5.97	5.36	4.92	4.60	4.37	4.02	3.77	3.37
		L/100	7.21	7.86	8.70	9.84	10.62	11.63	13.02	13.02	11.63	10.63	9.85	8.70	7.87	7.22
		SLS L/150	5.88	6.47	7.22	8.25	8.95	9.85	11.09	11.07	9.85	8.95	8.25	7.22	6.47	5.88
		L/200	5.01	5.55	6.26	7.22	7.87	8.70	9.78	9.59	8.62	7.87	7.22	6.26	5.56	5.02
	II	ULS 2/4	3.15	3.44	3.63	3.89	4.07	4.29	4.60	5.36	4.92	4.60	4.36	4.02	3.77	3.37
		ULS 2/3	2.23	2.69	3.41	3.89	4.07	4.29	4.60	5.37	4.91	4.60	4.37	4.02	3.77	3.37
		L/100	7.21	7.86	8.70	9.84	10.62	11.63	13.02	13.02	11.63	10.63	9.85	8.70	7.87	7.22
		SLS L/150	5.88	6.47	7.22	8.25	8.95	9.85	11.07	11.07	9.85	8.95	8.25	7.22	6.47	5.88
		L/200	5.01	5.55	6.26	7.22	7.87	8.62	9.59	9.59	8.62	7.87	7.22	6.26	5.55	5.02
	III	ULS 2/4	2.05	2.07	2.09	2.12	2.14	2.15	2.16	2.22	2.22	2.22	2.22	2.22	2.22	2.22
		ULS 2/3	2.00	2.07	2.09	2.12	2.14	2.15	2.16	2.22	2.22	2.22	2.22	2.22	2.22	2.22
		L/100	7.21	7.86	8.70	9.84	10.62	11.53	12.72	13.02	11.63	10.63	9.85	8.70	7.86	7.22
		SLS L/150	5.88	6.47	7.21	8.09	8.68	9.40	10.38	11.06	9.85	8.95	8.25	7.22	6.47	5.89
		L/200	5.01	5.49	6.07	6.87	7.37	7.95	8.54	9.59	8.62	7.87	7.22	6.26	5.55	5.02

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SPB120WE

Table 11

External facing thickness: 0.60 mm
Internal facing thickness: 0.50 mm
External temperature: +55 °C; +65 °C; +80 °C/-20 °C (summer/winter)
Internal temperature: +20 °C/+20 °C (summer/winter)
Min. end support width: 60 mm
Min. intermediate support width: 120 mm
Min. number of fasteners at end support: 2 or 3
Min. number of fasteners at intermediate support: 3 or 4

ULS – Ultimate Limit State, to find span length put characteristic load (during span length calculation characteristic load is automatically corrected by safety factor)
ULS 3/0 – Ultimate Limit State; 3 fasteners at the end support
ULS 2/0 – Ultimate Limit State; 2 fasteners at the end support
ULS 2/4 – Ultimate Limit State; 2 fasteners at the end support / 4 fasteners at intermediate support
ULS 2/3 – Ultimate Limit State; 2 fasteners at the end support / 3 fasteners at intermediate support
SLS – Serviceability Limit State, to find span length put characteristic load

Static scheme	*Colour group*	*Criterion*	*Characteristic load [kN/m²]*													
			-1.2	*-1.0*	*-0.8*	*-0.6*	*-0.5*	*-0.4*	*-0.3*	*0.3*	*0.4*	*0.5*	*0.6*	*0.8*	*1.0*	*1.2*
Single span	I	ULS 3/0	4.89	5.36	5.99	6.91	7.57	8.47	9.78	10.35	8.96	8.01	6.73	5.05	4.04	3.37
		ULS 2/0	4.89	5.36	5.99	6.91	7.57	8.47	9.78	10.35	8.96	8.02	6.73	5.05	4.04	3.37
		L/100	6.98	7.55	8.28	9.29	9.92	10.70	11.75	11.51	10.50	9.76	9.17	8.28	7.55	6.98
		SLS L/150	5.81	6.33	6.89	7.66	8.16	8.80	9.62	9.08	8.51	7.97	7.49	6.76	6.21	5.78
		L/200	5.01	5.41	5.91	6.58	7.01	7.44	7.94	7.41	6.99	6.64	6.36	5.76	5.28	4.90
	II	ULS 3/0	4.89	5.36	5.99	6.91	7.57	8.47	9.78	10.33	8.94	8.00	6.73	5.05	4.04	3.37
		ULS 2/0	4.89	5.36	5.99	6.92	7.58	8.47	9.78	10.33	8.94	8.00	6.74	5.05	4.04	3.37
		L/100	6.98	7.55	8.28	9.17	9.75	10.50	11.51	11.51	10.50	9.76	9.17	8.28	7.55	6.98
		SLS L/150	5.78	6.21	6.76	7.49	7.97	8.51	9.08	9.08	8.51	7.97	7.49	6.76	6.21	5.78
		L/200	4.90	5.28	5.76	6.36	6.64	6.99	7.41	7.41	6.99	6.64	6.36	5.76	5.28	4.90
	III	ULS 3/0	4.89	5.36	5.99	6.91	7.58	8.47	9.78	10.23	8.85	7.92	6.73	5.05	4.04	3.37
		ULS 2/0	4.89	5.36	5.99	6.91	7.57	8.47	9.78	10.22	8.85	7.92	6.73	5.05	4.04	3.37
		L/100	6.76	7.21	7.80	8.51	8.87	9.30	9.85	11.51	10.50	9.75	9.17	8.28	7.55	6.98
		SLS L/150	5.37	5.69	6.02	6.41	6.65	6.92	7.25	8.88	8.51	7.97	7.49	6.76	6.21	5.78
		L/200	4.38	4.59	4.83	5.12	5.29	5.49	5.70	6.66	6.66	6.64	6.36	5.76	5.28	4.90
Two span	I	ULS 2/4	2.76	3.21	3.97	4.76	4.95	5.18	5.48	5.06	4.84	4.66	4.51	4.28	4.04	3.37
		ULS 2/3	2.01	2.33	2.84	3.67	4.41	5.18	5.49	5.06	4.84	4.66	4.51	4.28	4.04	3.37
		L/100	8.65	9.45	10.49	11.90	12.84	14.07	15.78	15.78	14.08	12.85	11.90	10.49	9.46	8.65
		SLS L/150	6.99	7.71	8.65	9.94	10.79	11.90	13.42	13.42	11.89	10.79	9.94	8.65	7.71	6.99
		L/200	5.91	6.59	7.45	8.65	9.45	10.49	11.89	11.89	10.49	9.45	8.65	7.45	6.59	5.91
	II	ULS 2/4	2.67	3.11	3.84	4.19	4.30	4.44	4.60	5.06	4.84	4.66	4.51	4.29	4.04	3.37
		ULS 2/3	1.93	2.24	2.70	3.49	4.20	4.44	4.60	5.06	4.84	4.66	4.51	4.28	4.04	3.37
		L/100	8.65	9.45	10.49	11.90	12.84	14.07	15.78	15.78	14.07	12.85	11.90	10.49	9.46	8.65
		SLS L/150	6.99	7.71	8.65	9.94	10.79	11.89	13.42	13.42	11.90	10.79	9.94	8.65	7.71	6.99
		L/200	5.91	6.59	7.45	8.65	9.45	10.49	11.90	11.90	10.49	9.45	8.65	7.45	6.59	5.91
	III	ULS 2/4	2.32	2.69	2.77	2.81	2.83	2.85	2.88	2.95	2.95	2.95	2.95	2.95	2.95	2.95
		ULS 2/3	1.62	1.78	1.99	2.29	2.57	2.85	2.88	2.95	2.95	2.95	2.95	2.95	2.95	2.95
		L/100	8.65	9.45	10.49	11.89	12.85	14.08	15.78	15.78	14.08	12.85	11.90	10.49	9.46	8.65
		SLS L/150	6.99	7.71	8.64	9.94	10.79	11.83	13.17	13.42	11.89	10.79	9.94	8.65	7.71	6.99
		L/200	5.92	6.59	7.45	8.54	9.23	10.12	11.30	11.89	10.49	9.45	8.65	7.45	6.59	5.91
Multi span	I	ULS 2/4	3.15	3.80	4.69	5.15	5.47	5.91	6.55	5.89	5.39	5.05	4.78	4.41	4.04	3.37
		ULS 2/3	2.27	2.70	3.42	4.65	5.48	5.91	6.54	5.89	5.39	5.04	4.79	4.41	4.04	3.37
		L/100	8.27	8.99	9.93	11.22	12.10	13.23	14.79	14.79	13.23	12.10	11.23	9.94	9.00	8.27
		SLS L/150	6.77	7.43	8.27	9.43	10.21	11.22	12.62	12.62	11.23	10.22	9.43	8.27	7.43	6.77
		L/200	5.80	6.41	7.19	8.27	9.00	9.93	11.23	11.02	9.92	9.00	8.27	7.19	6.41	5.80
	II	ULS 2/4	3.10	3.74	3.98	4.27	4.47	4.71	5.05	5.89	5.39	5.05	4.78	4.41	4.04	3.37
		ULS 2/3	2.21	2.63	3.33	4.27	4.46	4.71	5.04	5.88	5.39	5.05	4.79	4.41	4.04	3.37
		L/100	8.27	8.99	9.93	11.23	12.10	13.23	14.79	14.79	13.23	12.09	11.23	9.93	9.00	8.27
		SLS L/150	6.77	7.43	8.27	9.43	10.21	11.22	12.63	12.62	11.22	10.22	9.43	8.27	7.43	6.77
		L/200	5.80	6.41	7.19	8.27	9.00	9.92	11.02	11.03	9.92	9.00	8.27	7.19	6.41	5.80
	III	ULS 2/4	2.25	2.27	2.30	2.33	2.34	2.36	2.38	2.43	2.43	2.43	2.43	2.43	2.43	2.43
		ULS 2/3	1.93	2.27	2.30	2.33	2.34	2.36	2.38	2.43	2.43	2.43	2.43	2.43	2.43	2.43
		L/100	8.27	8.99	9.93	11.23	12.10	13.21	14.57	14.80	13.23	12.10	11.22	9.93	9.00	8.27
		SLS L/150	6.77	7.43	8.27	9.33	9.99	10.82	11.95	12.62	11.22	10.21	9.43	8.27	7.43	6.77
		L/200	5.80	6.38	7.06	7.95	8.53	9.26	10.01	11.03	9.92	9.00	8.27	7.19	6.41	5.80

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SPB140WE

Table 12

External facing thickness: 0.60 mm
Internal facing thickness: 0.50 mm
External temperature: +55 °C; +65 °C; +80 °C/-20 °C (summer/winter)
Internal temperature: +20 °C/+20 °C (summer/winter)
Min. end support width: 60 mm
Min. intermediate support width: 120 mm
Min. number of fasteners at end support: 2 or 3
Min. number of fasteners at intermediate support: 3 or 4

ULS – Ultimate Limit State, to find span length put characteristic load (during span length calculation characteristic load is automatically corrected by safety factor)
ULS 3/0 – Ultimate Limit State; 3 fasteners at the end support
ULS 2/0 – Ultimate Limit State; 2 fasteners at the end support
ULS 2/4 – Ultimate Limit State; 2 fasteners at the end support / 4 fasteners at intermediate support
ULS 2/3 – Ultimate Limit State; 2 fasteners at the end support / 3 fasteners at intermediate support
SLS – Serviceability Limit State, to find span length put characteristic load

Static scheme	*Colour group*	*Criterion*	*Characteristic load [kN/m²]*													
			-1.2	*-1.0*	*-0.8*	*-0.6*	*-0.5*	*-0.4*	*-0.3*	*0.3*	*0.4*	*0.5*	*0.6*	*0.8*	*1.0*	*1.2*
Single span	**I**	**ULS 3/0**	5.10	5.79	6.47	7.47	8.19	9.15	10.57	11.19	9.69	8.08	6.73	5.05	4.04	3.37
		ULS 2/0	5.10	5.79	6.47	7.47	8.18	9.15	10.57	11.19	9.69	8.08	6.73	5.05	4.04	3.37
		L/100	7.80	8.43	9.24	10.36	11.12	11.98	13.16	12.91	11.78	10.94	10.28	9.24	8.43	7.80
		SLS L/150	6.52	7.08	7.75	8.61	9.17	9.89	10.86	10.34	9.66	8.97	8.43	7.61	7.00	6.51
		L/200	5.66	6.11	6.67	7.42	7.91	8.48	9.05	8.48	7.98	7.58	7.23	6.51	5.98	5.54
	II	**ULS 3/0**	5.10	5.79	6.47	7.47	8.19	9.15	10.57	11.16	9.66	8.08	6.73	5.05	4.04	3.37
		ULS 2/0	5.10	5.79	6.47	7.47	8.19	9.15	10.57	11.16	9.66	8.08	6.74	5.05	4.04	3.37
		L/100	7.81	8.43	9.24	10.28	10.94	11.77	12.91	12.91	11.77	10.94	10.29	9.24	8.44	7.81
		SLS L/150	6.51	7.00	7.61	8.43	8.97	9.66	10.34	10.34	9.66	8.97	8.43	7.61	7.00	6.51
		L/200	5.54	5.97	6.51	7.23	7.58	7.98	8.48	8.48	7.98	7.58	7.23	6.51	5.97	5.55
	III	**ULS 3/0**	5.10	5.79	6.47	7.47	8.19	9.15	10.57	11.06	9.57	8.08	6.73	5.05	4.04	3.37
		ULS 2/0	5.10	5.79	6.47	7.47	8.18	9.15	10.57	11.06	9.57	8.08	6.73	5.05	4.04	3.37
		L/100	7.60	8.12	8.78	9.66	10.10	10.61	11.24	12.91	11.77	10.94	10.29	9.24	8.44	7.81
		SLS L/150	6.09	6.50	6.88	7.34	7.62	7.94	8.34	10.34	9.66	8.97	8.43	7.61	6.99	6.51
		L/200	5.03	5.27	5.55	5.89	6.10	6.33	6.59	7.78	7.78	7.58	7.23	6.51	5.97	5.55
Two span	**I**	**ULS 2/4**	2.73	3.21	3.91	5.15	5.35	5.60	5.93	5.47	5.23	5.04	4.88	4.63	4.04	3.37
		ULS 2/3	1.99	2.31	2.79	3.58	4.28	5.42	5.93	5.47	5.23	5.04	4.88	4.63	4.04	3.37
		L/100	9.72	10.60	11.74	13.29	14.34	15.70	17.58	17.58	15.70	14.34	13.29	11.73	10.60	9.71
		SLS L/150	7.88	8.68	9.72	11.13	12.08	13.29	14.97	14.97	13.29	12.08	11.14	9.71	8.68	7.88
		L/200	6.70	7.44	8.40	9.72	10.60	11.74	13.29	13.29	11.73	10.60	9.72	8.39	7.44	6.70
	II	**ULS 2/4**	2.64	3.06	3.76	4.53	4.65	4.80	4.98	5.47	5.23	5.04	4.88	4.63	4.04	3.37
		ULS 2/3	1.91	2.21	2.66	3.38	4.05	4.80	4.98	5.47	5.23	5.04	4.88	4.63	4.04	3.37
		L/100	9.72	10.60	11.74	13.29	14.34	15.70	17.58	17.58	15.70	14.34	13.29	11.73	10.60	9.71
		SLS L/150	7.88	8.68	9.72	11.13	12.08	13.29	14.97	14.97	13.29	12.08	11.14	9.71	8.68	7.88
		L/200	6.70	7.44	8.40	9.71	10.60	11.74	13.29	13.29	11.73	10.60	9.72	8.39	7.44	6.70
	III	**ULS 2/4**	2.27	2.63	3.00	3.04	3.06	3.09	3.11	3.18	3.18	3.18	3.18	3.18	3.18	3.18
		ULS 2/3	1.58	1.72	1.89	2.16	2.30	2.57	3.11	3.19	3.19	3.19	3.19	3.19	3.19	3.19
		L/100	9.72	10.60	11.74	13.29	14.34	15.70	17.58	17.58	15.70	14.34	13.29	11.73	10.61	9.72
		SLS L/150	7.88	8.68	9.72	11.14	12.08	13.29	14.80	14.97	13.29	12.08	11.14	9.71	8.68	7.88
		L/200	6.70	7.44	8.40	9.67	10.44	11.43	12.75	13.29	11.74	10.60	9.71	8.39	7.44	6.70
Multi span	**I**	**ULS 2/4**	3.11	3.76	4.74	5.57	5.92	6.39	7.08	6.36	5.83	5.45	5.18	4.76	4.04	3.37
		ULS 2/3	2.24	2.69	3.34	4.57	5.57	6.39	7.08	6.36	5.83	5.46	5.17	4.76	4.04	3.37
		L/100	9.27	10.07	11.11	12.53	13.49	14.74	16.47	16.47	14.74	13.49	12.53	11.11	10.07	9.27
		SLS L/150	7.62	8.34	9.27	10.55	11.42	12.53	14.07	14.07	12.53	11.42	10.55	9.27	8.34	7.62
		L/200	6.55	7.22	8.08	9.27	10.07	11.11	12.53	12.39	11.11	10.07	9.27	8.08	7.22	6.55
	II	**ULS 2/4**	3.05	3.69	4.31	4.62	4.82	5.09	5.45	6.36	5.83	5.45	5.17	4.76	4.04	3.37
		ULS 2/3	2.17	2.57	3.26	4.46	4.82	5.09	5.45	6.36	5.83	5.46	5.17	4.76	4.04	3.37
		L/100	9.27	10.07	11.11	12.53	13.49	14.74	16.47	16.47	14.74	13.49	12.53	11.11	10.07	9.27
		SLS L/150	7.62	8.34	9.27	10.55	11.42	12.53	14.07	14.07	12.53	11.42	10.55	9.27	8.34	7.62
		L/200	6.55	7.22	8.08	9.27	10.07	11.11	12.39	12.39	11.11	10.07	9.27	8.08	7.22	6.55
	III	**ULS 2/4**	2.43	2.45	2.48	2.51	2.53	2.55	2.57	2.63	2.63	2.63	2.63	2.63	2.63	2.63
		ULS 2/3	1.88	2.24	2.48	2.51	2.53	2.55	2.57	2.63	2.63	2.63	2.63	2.63	2.63	2.63
		L/100	9.27	10.07	11.11	12.53	13.49	14.74	16.33	16.47	14.74	13.49	12.53	11.11	10.07	9.27
		SLS L/150	7.62	8.34	9.27	10.50	11.24	12.17	13.44	14.07	12.53	11.42	10.55	9.27	8.34	7.62
		L/200	6.55	7.22	7.99	8.99	9.64	10.46	11.43	12.39	11.11	10.07	9.27	8.08	7.22	6.55

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SPB160WE

Table 13

External facing thickness: 0.60 mm
Internal facing thickness: 0.50 mm
External temperature: +55 °C; +65 °C; +80 °C/-20 °C (summer/winter)
Internal temperature: +20 °C/+20 °C (summer/winter)
Min. end support width: 60 mm
Min. intermediate support width: 120 mm
Min. number of fasteners at end support: 2 or 3
Min. number of fasteners at intermediate support: 3 or 4

ULS – Ultimate Limit State, to find span length put characteristic load (during span length calculation characteristic load is automatically corrected by safety factor)
ULS 3/0 – Ultimate Limit State; 3 fasteners at the end support
ULS 2/0 – Ultimate Limit State; 2 fasteners at the end support
ULS 2/4 – Ultimate Limit State; 2 fasteners at the end support / 4 fasteners at intermediate support
ULS 2/3 – Ultimate Limit State; 2 fasteners at the end support / 3 fasteners at intermediate support
SLS – Serviceability Limit State, to find span length put characteristic load

Static scheme	*Colour group*	*Criterion*	*Characteristic load [kN/m²]*													
			-1.2	*-1.0*	*-0.8*	*-0.6*	*-0.5*	*-0.4*	*-0.3*	*0.3*	*0.4*	*0.5*	*0.6*	*0.8*	*1.0*	*1.2*
Single span	I	ULS 3/0	5.10	6.12	6.92	7.99	8.76	9.79	11.31	11.97	10.10	8.08	6.73	5.05	4.04	3.37
		ULS 2/0	5.10	6.11	6.92	7.99	8.76	9.79	11.31	11.97	10.10	8.08	6.73	5.05	4.04	3.37
		L/100	8.39	9.04	9.90	11.08	11.88	12.90	14.17	13.93	12.70	11.80	11.08	9.90	9.04	8.38
		SLS L/150	7.03	7.62	8.38	9.31	9.92	10.70	11.74	11.38	10.47	9.72	9.14	8.25	7.59	7.03
		L/200	6.14	6.65	7.25	8.06	8.59	9.26	9.99	9.39	8.82	8.37	7.87	7.09	6.51	6.06
	II	ULS 3/0	5.10	6.12	6.92	7.99	8.76	9.79	11.31	11.94	10.10	8.08	6.73	5.05	4.04	3.37
		ULS 2/0	5.10	6.11	6.92	7.99	8.76	9.79	11.31	11.94	10.10	8.08	6.74	5.05	4.04	3.37
		L/100	8.38	9.04	9.90	11.08	11.80	12.70	13.93	13.92	12.70	11.79	11.08	9.90	9.04	8.38
		SLS L/150	7.03	7.59	8.25	9.14	9.72	10.47	11.38	11.37	10.47	9.72	9.14	8.25	7.59	7.02
		L/200	6.06	6.51	7.10	7.87	8.37	8.83	9.39	9.40	8.82	8.37	7.87	7.10	6.51	6.06
	III	ULS 3/0	5.10	6.12	6.92	7.99	8.76	9.79	11.31	11.83	10.10	8.08	6.73	5.05	4.04	3.37
		ULS 2/0	5.10	6.12	6.92	7.99	8.76	9.79	11.31	11.82	10.10	8.08	6.73	5.05	4.04	3.37
		L/100	8.25	8.81	9.51	10.47	11.09	11.68	12.41	13.93	12.70	11.80	11.08	9.90	9.04	8.38
		SLS L/150	6.65	7.10	7.61	8.14	8.46	8.84	9.30	11.38	10.47	9.72	9.14	8.25	7.59	7.02
		L/200	5.59	5.87	6.19	6.58	6.82	7.09	7.40	8.90	8.83	8.37	7.87	7.09	6.51	6.06
Two span	I	ULS 2/4	2.72	3.20	3.88	5.17	6.07	6.41	6.88	6.36	6.01	5.73	5.52	5.05	4.04	3.37
		ULS 2/3	1.99	2.30	2.77	3.60	4.23	5.36	6.88	6.37	6.00	5.73	5.52	5.05	4.04	3.37
		L/100	10.50	11.43	12.62	14.26	15.37	16.81	18.80	18.80	16.81	15.37	14.26	12.62	11.44	10.50
		SLS L/150	8.57	9.41	10.50	11.98	12.98	14.26	16.04	16.04	14.27	12.98	11.99	10.50	9.41	8.57
		L/200	7.32	8.10	9.11	10.50	11.44	12.62	14.27	14.26	12.62	11.44	10.50	9.11	8.10	7.32
	II	ULS 2/4	2.63	3.09	3.75	4.99	5.27	5.49	5.75	6.36	6.01	5.73	5.52	5.05	4.04	3.37
		ULS 2/3	1.91	2.20	2.64	3.37	4.00	5.07	5.75	6.37	6.01	5.73	5.52	5.05	4.04	3.37
		L/100	10.50	11.43	12.62	14.26	15.37	16.81	18.80	18.80	16.81	15.37	14.26	12.62	11.44	10.50
		SLS L/150	8.57	9.41	10.50	11.98	12.98	14.26	16.04	16.04	14.26	12.98	11.99	10.50	9.41	8.57
		L/200	7.32	8.10	9.11	10.50	11.44	12.62	14.27	14.26	12.62	11.43	10.50	9.11	8.10	7.32
	III	ULS 2/4	2.29	2.61	3.16	3.38	3.40	3.43	3.47	3.58	3.58	3.58	3.58	3.58	3.58	3.37
		ULS 2/3	1.57	1.70	1.87	2.11	2.28	2.47	2.88	3.58	3.58	3.58	3.58	3.58	3.58	3.37
		L/100	10.50	11.44	12.62	14.26	15.37	16.81	18.80	18.80	16.81	15.37	14.27	12.62	11.44	10.50
		SLS L/150	8.57	9.41	10.50	11.99	12.98	14.26	16.01	16.04	14.27	12.98	11.99	10.50	9.41	8.57
		L/200	7.32	8.10	9.11	10.50	11.38	12.43	13.86	14.26	12.62	11.43	10.50	9.11	8.10	7.32
Multi span	I	ULS 2/4	3.13	3.74	4.73	6.41	6.94	7.57	8.50	7.83	7.04	6.50	6.10	5.05	4.04	3.37
		ULS 2/3	2.23	2.68	3.33	4.54	5.54	7.06	8.49	7.83	7.04	6.50	6.10	5.05	4.04	3.37
		L/100	9.99	10.84	11.93	13.43	14.45	15.77	17.60	17.60	15.77	14.45	13.43	11.93	10.84	10.00
		SLS L/150	8.25	9.02	9.99	11.34	12.26	13.43	15.06	15.06	13.43	12.26	11.34	10.00	9.01	8.25
		L/200	7.12	7.83	8.74	9.99	10.84	11.93	13.43	13.40	11.93	10.84	9.99	8.74	7.83	7.12
	II	ULS 2/4	3.03	3.67	4.65	5.46	5.78	6.19	6.78	7.83	7.04	6.50	6.09	5.05	4.04	3.37
		ULS 2/3	2.16	2.59	3.23	4.42	5.42	6.19	6.79	7.83	7.03	6.50	6.10	5.05	4.04	3.37
		L/100	9.99	10.84	11.93	13.43	14.45	15.77	17.60	17.60	15.77	14.45	13.43	11.93	10.84	9.99
		SLS L/150	8.25	9.01	9.99	11.34	12.25	13.43	15.06	15.06	13.43	12.25	11.35	9.99	9.01	8.25
		L/200	7.12	7.83	8.74	9.99	10.84	11.93	13.40	13.40	11.93	10.84	9.99	8.74	7.83	7.12
	III	ULS 2/4	2.74	2.79	2.83	2.88	2.91	2.93	2.97	3.07	3.07	3.07	3.07	3.07	3.07	3.07
		ULS 2/3	1.86	2.21	2.81	2.88	2.91	2.93	2.97	3.07	3.07	3.07	3.07	3.07	3.07	3.07
		L/100	9.99	10.84	11.93	13.43	14.45	15.77	17.59	17.60	15.77	14.45	13.43	11.93	10.84	10.00
		SLS L/150	8.25	9.01	9.99	11.34	12.18	13.18	14.55	15.06	13.43	12.26	11.34	9.99	9.01	8.25
		L/200	7.12	7.83	8.72	9.79	10.50	11.38	12.56	13.40	11.93	10.84	9.99	8.74	7.83	7.12

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SP2D100WE

Table 14

External facing thickness: 0.60 mm
Internal facing thickness: 0.50 mm
External temperature: +55 °C; +65 °C; +80 °C/-20 °C (summer/winter)
Internal temperature: +20 °C/+20 °C (summer/winter)
Min. end support width: 60 mm
Min. intermediate support width: 120 mm
Min. number of fasteners at end support: 2 or 3
Min. number of fasteners at intermediate support: 3 or 4

ULS – Ultimate Limit State, to find span length put characteristic load (during span length calculation characteristic load is automatically corrected by safety factor)
ULS 3/0 – Ultimate Limit State; 3 fasteners at the end support
ULS 2/0 – Ultimate Limit State; 2 fasteners at the end support
ULS 2/4 – Ultimate Limit State; 2 fasteners at the end support / 4 fasteners at intermediate support
ULS 2/3 – Ultimate Limit State; 2 fasteners at the end support / 3 fasteners at intermediate support
SLS – Serviceability Limit State, to find span length put characteristic load

Static scheme	*Colour group*	*Criterion*		*Characteristic load [kN/m²]*												
				-1.2	*-1.0*	*-0.8*	*-0.6*	*-0.5*	*-0.4*	*-0.3*	*0.3*	*0.4*	*0.5*	*0.6*	*0.8*	*1.0*	*1.2*
Single span	**I**		**ULS**	4.46	4.88	5.46	6.31	6.91	7.72	8.92	9.44	8.18	7.31	6.68	5.05	4.04	3.37
			L/100	6.12	6.62	7.27	8.14	8.67	9.35	10.26	10.04	9.17	8.51	8.00	7.23	6.62	6.12
		SLS	**L/150**	5.08	5.49	5.99	6.66	7.10	7.65	8.26	7.77	7.30	6.92	6.50	5.86	5.38	5.00
			L/200	4.33	4.67	5.11	5.69	6.04	6.37	6.78	6.30	5.96	5.68	5.43	4.98	4.56	4.23
	II		**ULS**	4.46	4.88	5.46	6.31	6.91	7.72	8.92	9.42	8.16	7.30	6.66	5.05	4.04	3.37
			L/100	6.12	6.62	7.22	8.00	8.51	9.16	10.03	10.04	9.16	8.51	8.00	7.23	6.62	6.11
		SLS	**L/150**	5.00	5.38	5.86	6.50	6.92	7.30	7.78	7.78	7.30	6.92	6.50	5.86	5.39	5.00
			L/200	4.22	4.56	4.97	5.42	5.67	5.96	6.30	6.30	5.96	5.67	5.42	4.97	4.56	4.23
	III		**ULS**	4.46	4.89	5.46	6.31	6.91	7.72	8.92	9.33	8.08	7.23	6.60	5.05	4.04	3.37
			L/100	5.86	6.27	6.77	7.30	7.61	7.96	8.40	10.04	9.16	8.51	8.00	7.23	6.62	6.11
		SLS	**L/150**	4.62	4.85	5.12	5.45	5.64	5.87	6.13	7.39	7.30	6.92	6.50	5.86	5.39	5.00
			L/200	3.71	3.89	4.09	4.33	4.46	4.62	4.80	5.54	5.54	5.54	5.43	4.97	4.56	4.23
Two span	**I**		**ULS**	3.62	3.89	4.09	4.35	4.52	4.73	5.00	4.62	4.41	4.25	4.12	3.90	3.75	3.36
			L/100	7.53	8.24	9.17	10.42	11.27	12.36	13.88	13.88	12.36	11.27	10.42	9.17	8.24	7.52
		SLS	**L/150**	6.05	6.70	7.53	8.68	9.44	10.43	11.78	11.78	10.43	9.45	8.68	7.53	6.69	6.05
			L/200	5.10	5.69	6.46	7.53	8.25	9.17	10.42	10.42	9.17	8.24	7.53	6.46	5.69	5.11
	II		**ULS**	3.40	3.52	3.65	3.82	3.92	4.05	4.20	4.61	4.41	4.25	4.11	3.91	3.74	3.37
			L/100	7.52	8.24	9.16	10.43	11.27	12.36	13.87	13.88	12.36	11.27	10.42	9.17	8.24	7.53
		SLS	**L/150**	6.05	6.69	7.53	8.67	9.44	10.42	11.78	11.78	10.42	9.45	8.68	7.53	6.69	6.05
			L/200	5.11	5.69	6.46	7.53	8.24	9.17	10.43	10.42	9.17	8.24	7.53	6.46	5.69	5.11
	III		**ULS**	2.47	2.50	2.53	2.57	2.59	2.60	2.62	2.69	2.69	2.69	2.69	2.69	2.69	2.69
			L/100	7.53	8.25	9.17	10.42	11.27	12.36	13.87	13.88	12.36	11.27	10.43	9.17	8.24	7.52
		SLS	**L/150**	6.05	6.69	7.53	8.68	9.41	10.28	11.45	11.78	10.43	9.44	8.67	7.53	6.69	6.05
			L/200	5.10	5.69	6.43	7.36	7.97	8.74	9.77	10.43	9.17	8.24	7.53	6.46	5.69	5.11
Multi span	**I**		**ULS**	3.76	3.98	4.27	4.70	4.99	5.39	5.97	5.37	4.91	4.60	4.36	4.01	3.77	3.36
			L/100	7.22	7.86	8.70	9.85	10.62	11.63	13.02	13.02	11.63	10.63	9.85	8.70	7.87	7.22
		SLS	**L/150**	5.88	6.47	7.22	8.25	8.95	9.85	11.09	11.06	9.85	8.95	8.25	7.22	6.47	5.88
			L/200	5.02	5.55	6.26	7.22	7.86	8.70	9.78	9.59	8.62	7.87	7.22	6.26	5.55	5.02
	II		**ULS**	3.28	3.44	3.63	3.89	4.07	4.30	4.60	5.36	4.91	4.60	4.36	4.01	3.77	3.36
			L/100	7.22	7.87	8.70	9.85	10.62	11.63	13.02	13.02	11.63	10.63	9.85	8.70	7.87	7.22
		SLS	**L/150**	5.88	6.47	7.22	8.25	8.95	9.85	11.07	11.07	9.85	8.95	8.25	7.22	6.47	5.88
			L/200	5.02	5.55	6.26	7.22	7.86	8.62	9.59	9.59	8.62	7.87	7.22	6.26	5.55	5.02
	III		**ULS**	2.05	2.07	2.10	2.13	2.14	2.15	2.17	2.22	2.22	2.22	2.22	2.22	2.22	2.22
			L/100	7.22	7.87	8.69	9.84	10.62	11.53	12.72	13.02	11.63	10.63	9.85	8.70	7.87	7.22
		SLS	**L/150**	5.89	6.47	7.21	8.09	8.67	9.41	10.38	11.07	9.85	8.95	8.25	7.22	6.47	5.88
			L/200	5.02	5.49	6.08	6.87	7.37	7.94	8.54	9.59	8.62	7.87	7.22	6.26	5.55	5.02

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SP2D120WE

Table 15

External facing thickness: 0.60 mm
Internal facing thickness: 0.50 mm
External temperature: +55 °C; +65 °C; +80 °C/-20 °C (summer/winter)
Internal temperature: +20 °C/+20 °C (summer/winter)
Min. end support width: 60 mm
Min. intermediate support width: 120 mm
Min. number of fasteners at end support: 2 or 3
Min. number of fasteners at intermediate support: 3 or 4

ULS – Ultimate Limit State, to find span length put characteristic load (during span length calculation characteristic load is automatically corrected by safety factor)
ULS 3/0 – Ultimate Limit State; 3 fasteners at the end support
ULS 2/0 – Ultimate Limit State; 2 fasteners at the end support
ULS 2/4 – Ultimate Limit State; 2 fasteners at the end support / 4 fasteners at intermediate support
ULS 2/3 – Ultimate Limit State; 2 fasteners at the end support / 3 fasteners at intermediate support
SLS – Serviceability Limit State, to find span length put characteristic load

Static scheme	*Colour group*	*Criterion*		*Characteristic load [kN/m²]*													
				-1.2	*-1.0*	*-0.8*	*-0.6*	*-0.5*	*-0.4*	*-0.3*	*0.3*	*0.4*	*0.5*	*0.6*	*0.8*	*1.0*	*1.2*
Single span	**I**		**ULS**	4.89	5.35	5.98	6.91	7.56	8.46	9.77	10.34	8.95	8.01	6.73	5.05	4.04	3.37
			L/100	6.97	7.54	8.26	9.28	9.91	10.68	11.73	11.49	10.49	9.74	9.16	8.27	7.54	6.97
		SLS	**L/150**	5.80	6.31	6.88	7.64	8.15	8.79	9.60	9.07	8.50	7.96	7.48	6.75	6.20	5.77
			L/200	5.00	5.40	5.90	6.56	7.00	7.43	7.92	7.40	6.98	6.63	6.34	5.75	5.27	4.90
	II		**ULS**	4.88	5.35	5.98	6.91	7.57	8.46	9.77	10.32	8.93	7.99	6.73	5.05	4.04	3.37
			L/100	6.97	7.54	8.27	9.15	9.74	10.48	11.49	11.49	10.48	9.74	9.16	8.27	7.54	6.97
		SLS	**L/150**	5.77	6.20	6.75	7.48	7.96	8.50	9.07	9.07	8.50	7.96	7.48	6.75	6.20	5.77
			L/200	4.89	5.27	5.75	6.35	6.63	6.98	7.40	7.40	6.98	6.63	6.35	5.75	5.27	4.89
	III		**ULS**	4.89	5.35	5.98	6.91	7.56	8.46	9.77	10.21	8.85	7.91	6.74	5.05	4.04	3.37
			L/100	6.75	7.20	7.79	8.50	8.86	9.29	9.83	11.49	10.49	9.75	9.15	8.27	7.54	6.97
		SLS	**L/150**	5.36	5.68	6.01	6.40	6.63	6.91	7.23	8.87	8.50	7.96	7.48	6.75	6.20	5.77
			L/200	4.37	4.58	4.82	5.11	5.28	5.47	5.69	6.65	6.64	6.63	6.34	5.75	5.27	4.89
Two span	**I**		**ULS**	3.58	4.26	4.48	4.76	4.94	5.17	5.48	5.05	4.83	4.65	4.51	4.28	4.04	3.37
			L/100	8.63	9.44	10.47	11.88	12.82	14.05	15.76	15.75	14.06	12.83	11.88	10.47	9.44	8.63
		SLS	**L/150**	6.98	7.70	8.63	9.92	10.77	11.88	13.40	13.40	11.88	10.78	9.92	8.63	7.70	6.98
			L/200	5.90	6.58	7.44	8.63	9.44	10.47	11.88	11.88	10.47	9.44	8.63	7.44	6.58	5.91
	II		**ULS**	3.49	3.85	4.00	4.18	4.30	4.43	4.60	5.06	4.83	4.66	4.51	4.28	4.04	3.37
			L/100	8.63	9.44	10.47	11.88	12.82	14.05	15.76	15.76	14.06	12.83	11.88	10.47	9.44	8.63
		SLS	**L/150**	6.98	7.70	8.63	9.92	10.78	11.87	13.40	13.40	11.88	10.78	9.92	8.63	7.70	6.98
			L/200	5.90	6.58	7.44	8.63	9.44	10.47	11.88	11.88	10.47	9.44	8.63	7.44	6.58	5.91
	III		**ULS**	2.71	2.73	2.77	2.81	2.83	2.85	2.88	2.94	2.94	2.94	2.94	2.94	2.94	2.94
			L/100	8.63	9.44	10.47	11.88	12.83	14.05	15.76	15.76	14.06	12.83	11.88	10.47	9.44	8.63
		SLS	**L/150**	6.98	7.70	8.63	9.92	10.78	11.81	13.15	13.40	11.88	10.78	9.92	8.63	7.70	6.97
			L/200	5.90	6.58	7.44	8.53	9.22	10.10	11.28	11.88	10.47	9.44	8.63	7.44	6.58	5.91
Multi span	**I**		**ULS**	4.12	4.36	4.68	5.15	5.47	5.90	6.53	5.87	5.39	5.04	4.78	4.40	4.04	3.37
			L/100	8.26	8.98	9.92	11.21	12.08	13.21	14.77	14.77	13.21	12.08	11.21	9.92	8.99	8.26
		SLS	**L/150**	6.76	7.42	8.26	9.42	10.20	11.21	12.61	12.60	11.21	10.20	9.42	8.26	7.42	6.76
			L/200	5.79	6.40	7.18	8.26	8.99	9.92	11.21	11.00	9.90	8.98	8.26	7.18	6.40	5.79
	II		**ULS**	3.60	3.76	3.98	4.27	4.46	4.70	5.03	5.88	5.39	5.04	4.78	4.40	4.04	3.36
			L/100	8.26	8.98	9.92	11.21	12.08	13.21	14.77	14.77	13.21	12.08	11.21	9.92	8.99	8.26
		SLS	**L/150**	6.76	7.42	8.26	9.42	10.20	11.21	12.60	12.60	11.21	10.20	9.42	8.26	7.42	6.76
			L/200	5.79	6.40	7.18	8.26	8.98	9.90	11.00	11.01	9.90	8.99	8.26	7.18	6.40	5.79
	III		**ULS**	2.24	2.27	2.29	2.32	2.34	2.35	2.37	2.43	2.43	2.43	2.43	2.43	2.43	2.43
			L/100	8.26	8.98	9.92	11.21	12.08	13.19	14.54	14.77	13.21	12.08	11.21	9.92	8.99	8.26
		SLS	**L/150**	6.76	7.42	8.26	9.31	9.97	10.81	11.93	12.61	11.21	10.20	9.42	8.26	7.42	6.76
			L/200	5.79	6.37	7.05	7.94	8.52	9.24	9.99	11.01	9.90	8.98	8.26	7.18	6.40	5.79

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SP2D160WE

Table 16

External facing thickness: 0.60 mm
Internal facing thickness: 0.50 mm
External temperature: +55 °C; +65 °C; +80 °C/-20 °C (summer/winter)
Internal temperature: +20 °C/+20 °C (summer/winter)
Min. end support width: 60 mm
Min. intermediate support width: 120 mm
Min. number of fasteners at end support: 2 or 3
Min. number of fasteners at intermediate support: 3 or 4

ULS – Ultimate Limit State, to find span length put characteristic load (during span length calculation characteristic load is automatically corrected by safety factor)
ULS 3/0 – Ultimate Limit State; 3 fasteners at the end support
ULS 2/0 – Ultimate Limit State; 2 fasteners at the end support
ULS 2/4 – Ultimate Limit State; 2 fasteners at the end support / 4 fasteners at intermediate support
ULS 2/3 – Ultimate Limit State; 2 fasteners at the end support / 3 fasteners at intermediate support
SLS – Serviceability Limit State, to find span length put characteristic load

Static scheme	*Colour group*	*Criterion*		*Characteristic load [kN/m²]*													
				-1.2	*-1.0*	*-0.8*	*-0.6*	*-0.5*	*-0.4*	*-0.3*	*0.3*	*0.4*	*0.5*	*0.6*	*0.8*	*1.0*	*1.2*
Single span	**I**		**ULS**	5.65	6.19	6.92	7.99	8.75	9.78	11.30	11.96	10.10	8.08	6.73	5.05	4.04	3.37
			L/100	8.37	9.04	9.89	11.07	11.87	12.89	14.16	13.91	12.68	11.78	11.07	9.89	9.03	8.38
		SLS	**L/150**	7.02	7.61	8.37	9.30	9.91	10.69	11.73	11.36	10.45	9.71	9.12	8.24	7.58	7.02
			L/200	6.14	6.64	7.24	8.05	8.58	9.25	9.98	9.38	8.81	8.36	7.86	7.09	6.51	6.04
	II		**ULS**	5.65	6.19	6.92	7.99	8.75	9.79	11.30	11.93	10.10	8.08	6.73	5.05	4.04	3.37
			L/100	8.37	9.03	9.89	11.07	11.78	12.68	13.91	13.91	12.68	11.78	11.07	9.89	9.03	8.38
		SLS	**L/150**	7.02	7.58	8.24	9.13	9.71	10.45	11.36	11.36	10.45	9.71	9.13	8.24	7.58	7.02
			L/200	6.04	6.51	7.09	7.86	8.36	8.81	9.38	9.38	8.82	8.36	7.86	7.09	6.51	6.05
	III		**ULS**	5.65	6.19	6.92	7.99	8.75	9.79	11.30	11.82	10.10	8.08	6.74	5.05	4.04	3.37
			L/100	8.24	8.80	9.50	10.45	11.08	11.66	12.39	13.91	12.68	11.78	11.07	9.89	9.03	8.37
		SLS	**L/150**	6.64	7.10	7.60	8.12	8.45	8.83	9.29	11.36	10.45	9.71	9.12	8.24	7.58	7.02
			L/200	5.59	5.86	6.18	6.58	6.81	7.08	7.39	8.89	8.81	8.36	7.86	7.09	6.51	6.04
Two span	**I**		**ULS**	3.54	4.20	5.23	5.80	6.06	6.41	6.88	6.36	6.00	5.73	5.51	5.05	4.04	3.37
			L/100	10.49	11.42	12.61	14.25	15.35	16.79	18.78	18.78	16.79	15.36	14.25	12.61	11.43	10.49
		SLS	**L/150**	8.56	9.40	10.49	11.97	12.96	14.25	16.02	16.02	14.24	12.97	11.97	10.49	9.40	8.56
			L/200	7.31	8.09	9.10	10.49	11.42	12.61	14.25	14.25	12.61	11.42	10.49	9.10	8.09	7.31
	II		**ULS**	3.44	4.09	4.83	5.10	5.27	5.48	5.75	6.36	6.00	5.73	5.51	5.05	4.04	3.37
			L/100	10.49	11.42	12.61	14.25	15.35	16.79	18.78	18.78	16.79	15.36	14.25	12.61	11.43	10.49
		SLS	**L/150**	8.56	9.40	10.49	11.97	12.96	14.25	16.02	16.02	14.25	12.97	11.97	10.49	9.40	8.56
			L/200	7.31	8.09	9.10	10.49	11.42	12.61	14.25	14.25	12.61	11.42	10.49	9.10	8.09	7.31
	III		**ULS**	3.07	3.27	3.31	3.37	3.40	3.43	3.46	3.58	3.58	3.58	3.58	3.58	3.58	3.37
			L/100	10.49	11.42	12.61	14.25	15.35	16.79	18.78	18.78	16.79	15.36	14.25	12.61	11.42	10.49
		SLS	**L/150**	8.56	9.40	10.49	11.97	12.96	14.25	15.99	16.02	14.25	12.97	11.97	10.49	9.40	8.56
			L/200	7.31	8.09	9.10	10.49	11.36	12.42	13.84	14.25	12.61	11.42	10.49	9.10	8.09	7.31
Multi span	**I**		**ULS**	4.11	4.97	5.82	6.47	6.93	7.57	8.50	7.82	7.03	6.49	6.09	5.05	4.04	3.37
			L/100	9.98	10.82	11.91	13.42	14.44	15.75	17.58	17.58	15.76	14.43	13.41	11.92	10.83	9.99
		SLS	**L/150**	8.24	9.00	9.98	11.33	12.24	13.42	15.05	15.04	13.42	12.24	11.33	9.98	9.00	8.24
			L/200	7.11	7.82	8.73	9.98	10.83	11.92	13.42	13.38	11.92	10.82	9.98	8.73	7.82	7.11
	II		**ULS**	4.06	4.69	5.01	5.46	5.77	6.18	6.77	7.82	7.04	6.49	6.09	5.05	4.04	3.36
			L/100	9.98	10.83	11.91	13.42	14.43	15.75	17.58	17.59	15.75	14.44	13.42	11.92	10.83	9.99
		SLS	**L/150**	8.24	9.00	9.98	11.33	12.24	13.42	15.05	15.05	13.42	12.24	11.33	9.98	9.00	8.24
			L/200	7.11	7.82	8.73	9.98	10.83	11.91	13.38	13.38	11.91	10.82	9.98	8.73	7.82	7.11
	III		**ULS**	2.74	2.78	2.83	2.88	2.90	2.93	2.96	3.07	3.07	3.07	3.07	3.07	3.07	3.07
			L/100	9.98	10.83	11.91	13.42	14.43	15.75	17.57	17.58	15.75	14.44	13.42	11.92	10.83	9.99
		SLS	**L/150**	8.24	9.00	9.98	11.33	12.16	13.17	14.53	15.05	13.42	12.24	11.33	9.98	9.00	8.24
			L/200	7.11	7.82	8.71	9.78	10.48	11.36	12.55	13.38	11.91	10.82	9.98	8.73	7.82	7.11

Maximum allowed span for uniform (snow) characteristic load [kN/m²] Ruukki SPC140/100W

Table 17

External facing thickness: 0.55 mm
Internal facing thickness: 0.50 mm
External temperature: +55 °C; +65 °C; +80 °C/-20 °C (summer/winter)
Internal temperature: +20 °C/+20 °C (summer/winter)
Min. end support width: 60 mm
Min. intermediate support width: 120 mm
Min. number of fasteners at end support: 2 or 3
Min. number of fasteners at intermediate support: 3 or 4

ULS – Ultimate Limit State, to find span length put characteristic load (during span length calculation characteristic load is automatically corrected by safety factor)
ULS 2/0 – Ultimate Limit State; 3 fasteners at the end support
ULS 1/0 – Ultimate Limit State; 2 fasteners at the end support
ULS 2/3 – Ultimate Limit State; 2 fasteners at the end support / 3 fasteners at intermediate support
ULS 1/3 – Ultimate Limit State; 1 fastener at the end support / 3 fasteners at intermediate support
ULS 1/2 – Ultimate Limit State; 1 fastener at the end support / 2 fasteners at intermediate support
SLS – Serviceability Limit State, to find span length put characteristic load

Static scheme	*Colour group*	*Criterion*	*Characteristic load [kN/m²]*													
			-1.2	*-1.0*	*-0.8*	*-0.6*	*-0.4*	*0.6*	*0.8*	*1.0*	*1.3*	*1.6*	*2.0*	*2.2*	*2.6*	*3.4*
Single span	I	ULS 2/0	4.26	5.25	6.21	7.42	9.88	4.68	3.95	3.36	2.65	2.17	1.75	1.59	1.04	0.69
		ULS 1/0	4.26	5.25	6.21	7.42	9.88	4.68	3.95	3.36	2.65	2.17	1.75	1.59	1.04	0.69
		L/100	6.27	7.02	8.05	9.53	9.53	6.85	6.16	5.61	4.99	4.51	4.02	3.82	3.49	3.00
		SLS L/150	5.08	5.73	6.65	7.46	7.46	5.59	4.97	4.50	3.96	3.56	3.16	2.99	2.73	2.35
		L/200	4.32	4.91	5.76	6.17	6.17	4.78	4.23	3.80	3.33	2.99	2.65	2.52	2.30	1.99
	II	ULS 2/0	4.25	5.25	6.21	7.42	9.88	4.68	3.95	3.36	2.65	2.17	1.75	1.59	1.04	0.68
		ULS 1/0	2.14	2.64	3.44	4.94	8.82	4.68	3.95	3.36	2.65	2.17	1.75	1.58	1.03	0.68
		L/100	6.27	7.02	8.05	9.53	9.53	6.85	6.16	5.61	4.99	4.51	4.02	3.82	3.48	3.00
		SLS L/150	5.08	5.73	6.65	7.46	7.46	5.59	4.97	4.50	3.96	3.56	3.16	2.99	2.73	2.35
		L/200	4.32	4.91	5.76	6.17	6.17	4.78	4.23	3.80	3.33	2.99	2.65	2.52	2.30	1.99
	III	ULS 2/0	4.26	5.25	6.21	7.42	9.88	4.68	3.95	3.36	2.65	2.17	1.75	1.59	1.04	0.69
		ULS 1/0	2.14	2.64	3.44	4.94	8.82	4.68	3.95	3.36	2.65	2.17	1.75	1.59	1.04	0.68
		L/100	8.11	9.17	10.68	11.54	11.54	8.28	7.44	6.78	6.01	5.41	4.80	4.54	4.11	3.49
		SLS L/150	6.51	7.45	8.82	9.11	9.11	6.66	5.92	5.34	4.67	4.17	3.66	3.46	3.13	2.65
		L/200	5.49	6.35	7.57	7.57	7.57	5.63	4.96	4.45	3.86	3.43	3.01	2.85	2.58	2.20
Two span	I	ULS 2/3	3.03	3.59	4.42	5.95	8.42	4.68	3.95	3.36	1.97	1.65	1.37	1.26	1.09	0.86
		ULS 1/3	1.89	2.24	2.87	4.32	8.41	4.68	3.95	3.36	1.97	1.65	1.37	1.26	1.09	0.86
		ULS 1/2	1.89	2.24	2.87	4.32	8.08	4.68	3.94	3.36	1.97	1.66	1.37	1.26	1.09	0.86
		L/100	7.72	8.71	10.11	12.32	14.52	8.49	7.56	6.85	6.06	5.47	4.88	4.64	4.25	3.68
		SLS L/150	6.17	7.01	8.22	10.19	11.83	6.82	6.04	5.45	4.81	4.33	3.86	3.67	3.37	2.94
		L/200	5.24	5.97	7.04	8.82	10.04	5.81	5.13	4.62	4.07	3.67	3.28	3.13	2.87	2.52
	II	ULS 2/3	2.95	3.42	4.14	5.58	8.42	4.68	3.95	3.36	1.97	1.65	1.37	1.26	1.09	0.86
		ULS 1/3	1.89	2.24	2.87	4.32	8.41	4.68	3.95	3.36	1.97	1.65	1.37	1.26	1.09	0.86
		ULS 1/2	1.89	2.24	2.88	4.32	8.07	4.68	3.95	3.36	1.97	1.65	1.37	1.26	1.09	0.86
		L/100	7.72	8.71	10.11	12.32	14.52	8.49	7.56	6.85	6.06	5.47	4.88	4.64	4.25	3.68
		SLS L/150	6.17	7.01	8.22	10.19	11.82	6.82	6.04	5.45	4.81	4.33	3.86	3.67	3.37	2.94
		L/200	5.24	5.97	7.04	8.82	10.04	5.81	5.13	4.62	4.07	3.67	3.28	3.13	2.87	2.52
	III	ULS 2/3	2.78	3.18	3.78	4.90	8.41	4.68	3.94	3.36	1.97	1.66	1.37	1.26	1.09	0.86
		ULS 1/3	1.87	2.24	2.88	4.32	8.41	4.68	3.95	3.36	1.97	1.65	1.37	1.26	1.09	0.86
		ULS 1/2	1.86	2.22	2.87	4.32	8.07	4.68	3.95	3.36	1.94	1.62	1.34	1.24	1.07	0.84
		L/100	7.72	8.71	10.11	12.32	14.52	8.49	7.56	6.85	6.06	5.47	4.88	4.64	4.25	3.68
		SLS L/150	6.17	7.01	8.22	10.19	11.82	6.82	6.04	5.45	4.81	4.33	3.86	3.67	3.37	2.94
		L/200	5.24	5.97	7.04	8.82	10.04	5.81	5.13	4.62	4.07	3.67	3.28	3.13	2.87	2.52
Multi span	I	ULS 2/3	3.24	3.82	4.75	6.42	9.88	4.68	3.95	3.36	2.22	1.84	1.50	1.37	1.18	0.91
		ULS 1/3	1.62	1.97	2.63	4.21	8.82	4.68	3.94	3.36	2.22	1.84	1.50	1.38	1.18	0.91
		ULS 1/2	1.62	1.97	2.64	4.21	8.82	4.68	3.95	3.36	2.22	1.84	1.50	1.37	1.18	0.91
		L/100	7.47	8.38	9.66	11.69	13.25	8.18	7.32	6.67	5.92	5.36	4.79	4.56	4.18	3.62
		SLS L/150	6.03	6.81	7.94	9.74	10.76	6.64	5.90	5.35	4.72	4.25	3.80	3.61	3.32	2.88
		L/200	5.14	5.84	6.84	8.49	9.15	5.68	5.02	4.54	4.00	3.61	3.22	3.07	2.82	2.46
	II	ULS 2/3	3.07	3.58	4.45	6.30	9.88	4.68	3.95	3.36	2.21	1.84	1.50	1.38	1.18	0.92
		ULS 1/3	1.62	1.97	2.58	4.21	8.82	4.68	3.94	3.36	2.22	1.84	1.50	1.38	1.18	0.91
		ULS 1/2	1.62	1.97	2.58	4.21	8.82	4.68	3.95	3.36	2.22	1.84	1.50	1.37	1.18	0.91
		L/100	7.47	8.38	9.66	11.69	13.25	8.18	7.32	6.67	5.92	5.36	4.79	4.56	4.17	3.62
		SLS L/150	6.02	6.81	7.94	9.74	10.76	6.64	5.90	5.35	4.72	4.25	3.80	3.61	3.31	2.88
		L/200	5.14	5.83	6.84	8.48	9.14	5.68	5.02	4.54	4.00	3.61	3.22	3.07	2.82	2.46
	III	ULS 2/3	2.84	3.27	3.97	5.43	9.88	4.68	3.94	3.36	2.22	1.84	1.50	1.38	1.18	0.91
		ULS 1/3	1.62	1.94	2.58	4.21	8.82	4.68	3.95	3.36	2.22	1.84	1.50	1.37	1.18	0.91
		ULS 1/2	1.62	1.94	2.58	4.22	8.82	4.67	3.95	3.36	2.22	1.84	1.50	1.37	1.18	0.91
		L/100	7.47	8.38	9.66	11.69	13.25	8.18	7.32	6.67	5.92	5.36	4.79	4.56	4.17	3.62
		SLS L/150	6.03	6.81	7.94	9.74	10.76	6.64	5.90	5.35	4.72	4.25	3.80	3.61	3.31	2.88
		L/200	5.14	5.83	6.84	8.48	9.14	5.68	5.02	4.54	4.00	3.61	3.22	3.07	2.82	2.46

Maximum allowed span for uniform (snow) characteristic load [kN/m²] Ruukki SPC190/150W

Table 18

External facing thickness: 0.55 mm
Internal facing thickness: 0.50 mm
External temperature: +55 °C; +65 °C; +80 °C/-20 °C (summer/winter)
Internal temperature: +20 °C/+20 °C (summer/winter)
Min. end support width: 60 mm
Min. intermediate support width: 120 mm
Min. number of fasteners at end support: 2 or 3
Min. number of fasteners at intermediate support: 3 or 4

ULS – Ultimate Limit State, to find span length put characteristic load (during span length calculation characteristic load is automatically corrected by safety factor)
ULS 2/0 – Ultimate Limit State; 3 fasteners at the end support
ULS 1/0 – Ultimate Limit State; 2 fasteners at the end support
ULS 2/3 – Ultimate Limit State; 2 fasteners at the end support / 3 fasteners at intermediate support
ULS 1/3 – Ultimate Limit State; 1 fastener at the end support / 3 fasteners at intermediate support
ULS 1/2 – Ultimate Limit State; 1 fastener at the end support / 2 fasteners at intermediate support
SLS – Serviceability Limit State, to find span length put characteristic load

Static scheme	*Colour group*	*Criterion*	*Characteristic load [kN/m²]*													
			-1.2	*-1.0*	*-0.8*	*-0.6*	*-0.4*	*0.6*	*0.8*	*1.0*	*1.3*	*1.6*	*2.0*	*2.2*	*2.6*	*3.4*
Single span	I	ULS 2/0	4.43	5.51	7.31	9.27	12.85	6.11	5.18	4.42	3.50	2.79	2.13	1.90	1.58	1.23
		ULS 1/0	2.22	2.77	3.67	5.44	10.55	6.11	5.18	4.42	3.50	2.79	2.13	1.90	1.59	1.23
		L/100	8.11	9.17	10.69	11.54	11.54	8.28	7.44	6.78	6.01	5.41	4.79	4.54	4.11	3.49
		SLS L/150	6.51	7.46	8.82	9.11	9.11	6.66	5.92	5.34	4.67	4.17	3.67	3.46	3.13	2.65
		L/200	5.49	6.35	7.57	7.57	7.57	5.63	4.96	4.45	3.86	3.43	3.01	2.85	2.58	2.20
	II	ULS 2/0	4.43	5.52	7.31	9.27	12.85	6.12	5.18	4.42	3.50	2.79	2.13	1.90	1.58	1.23
		ULS 1/0	2.22	2.77	3.67	5.44	10.55	6.11	5.18	4.42	3.50	2.79	2.13	1.90	1.58	1.23
		L/100	8.11	9.17	10.69	11.54	11.54	8.28	7.44	6.78	6.01	5.41	4.79	4.54	4.11	3.49
		SLS L/150	6.51	7.45	8.82	9.12	9.12	6.66	5.92	5.34	4.67	4.17	3.67	3.46	3.13	2.65
		L/200	5.49	6.36	7.57	7.57	7.57	5.63	4.96	4.45	3.86	3.43	3.01	2.85	2.58	2.20
	III	ULS 2/0	4.43	5.52	7.31	9.27	12.85	6.11	5.18	4.42	3.50	2.79	2.13	1.90	1.59	1.23
		ULS 1/0	2.23	2.77	3.67	5.44	10.55	6.11	5.18	4.42	3.50	2.79	2.13	1.90	1.58	1.23
		L/100	8.11	9.17	10.69	11.54	11.54	8.28	7.44	6.78	6.01	5.41	4.79	4.54	4.11	3.49
		SLS L/150	6.51	7.46	8.82	9.12	9.12	6.66	5.92	5.34	4.67	4.17	3.67	3.46	3.13	2.65
		L/200	5.49	6.35	7.57	7.57	7.57	5.63	4.96	4.45	3.86	3.43	3.01	2.85	2.58	2.20
Two span	I	ULS 2/3	3.22	3.98	5.21	7.59	9.32	5.23	4.55	4.06	3.50	2.79	2.13	1.90	1.58	1.33
		ULS 1/3	1.94	2.31	2.94	4.29	9.32	5.23	4.55	4.06	3.50	2.79	2.13	1.90	1.58	1.33
		ULS 1/2	1.94	2.31	2.94	4.29	9.32	5.23	4.55	4.06	3.50	2.79	2.13	1.90	1.58	1.33
		L/100	9.80	11.22	13.30	16.79	16.91	10.02	8.91	8.06	7.09	6.37	5.64	5.35	4.86	4.16
		SLS L/150	7.72	8.94	10.75	13.70	13.70	7.91	6.98	6.28	5.50	4.92	4.36	4.13	3.77	3.24
		L/200	6.47	7.53	9.14	11.59	11.60	6.63	5.83	5.24	4.58	4.11	3.64	3.46	3.16	2.73
	II	ULS 2/3	3.22	3.98	5.09	7.42	9.32	5.23	4.55	4.06	3.50	2.79	2.13	1.90	1.58	1.33
		ULS 1/3	1.94	2.31	2.90	4.29	9.32	5.23	4.55	4.06	3.50	2.79	2.13	1.90	1.58	1.33
		ULS 1/2	1.94	2.31	2.90	4.28	9.32	5.23	4.55	4.06	3.50	2.79	2.13	1.90	1.58	1.33
		L/100	9.80	11.22	13.30	16.79	16.91	10.03	8.92	8.06	7.09	6.37	5.64	5.35	4.86	4.16
		SLS L/150	7.72	8.94	10.75	13.70	13.71	7.91	6.99	6.28	5.50	4.92	4.36	4.13	3.76	3.24
		L/200	6.47	7.53	9.14	11.59	11.60	6.63	5.83	5.23	4.58	4.11	3.64	3.46	3.16	2.73
	III	ULS 2/3	3.22	3.80	4.65	6.43	9.33	5.23	4.55	4.06	3.50	2.79	2.13	1.90	1.58	1.33
		ULS 1/3	1.94	2.31	2.90	4.29	9.32	5.23	4.55	4.06	3.50	2.79	2.13	1.90	1.58	1.33
		ULS 1/2	1.93	2.31	2.89	4.27	9.32	5.23	4.55	4.06	3.49	2.79	2.13	1.90	1.58	1.23
		L/100	9.80	11.22	13.30	16.79	16.92	10.02	8.92	8.06	7.09	6.37	5.64	5.35	4.86	4.16
		SLS L/150	7.72	8.94	10.75	13.70	13.71	7.91	6.99	6.28	5.50	4.92	4.36	4.13	3.76	3.24
		L/200	6.47	7.53	9.14	11.59	11.59	6.63	5.83	5.23	4.58	4.11	3.64	3.46	3.16	2.73
Multi span	I	ULS 2/3	3.44	4.28	5.65	8.20	10.64	5.86	5.02	4.42	3.50	2.79	2.13	1.90	1.58	1.23
		ULS 1/3	1.64	1.95	2.51	3.92	10.31	5.86	5.02	4.41	3.50	2.79	2.13	1.90	1.58	1.23
		ULS 1/2	1.63	1.95	2.51	3.92	10.31	5.85	5.02	4.42	3.50	2.79	2.13	1.90	1.58	1.23
		L/100	9.54	10.85	12.75	15.61	15.61	9.75	8.72	7.92	7.00	6.30	5.59	5.29	4.81	4.12
		SLS L/150	7.60	8.74	10.42	12.68	12.68	7.77	6.89	6.21	5.45	4.88	4.32	4.09	3.72	3.19
		L/200	6.39	7.41	8.93	10.76	10.76	6.55	5.78	5.19	4.54	4.06	3.59	3.42	3.11	2.69
	II	ULS 2/3	3.44	4.19	5.38	8.20	10.64	5.86	5.02	4.42	3.50	2.79	2.13	1.90	1.58	1.23
		ULS 1/3	1.63	1.95	2.51	3.92	10.31	5.86	5.02	4.41	3.50	2.79	2.13	1.90	1.58	1.23
		ULS 1/2	1.64	1.95	2.51	3.92	10.31	5.85	5.02	4.42	3.50	2.79	2.13	1.90	1.58	1.23
		L/100	9.54	10.85	12.75	15.61	15.61	9.74	8.72	7.92	7.00	6.29	5.58	5.30	4.82	4.12
		SLS L/150	7.60	8.74	10.42	12.68	12.68	7.77	6.89	6.21	5.45	4.88	4.32	4.09	3.73	3.19
		L/200	6.39	7.41	8.93	10.76	10.76	6.55	5.78	5.19	4.54	4.06	3.60	3.41	3.11	2.69
	III	ULS 2/3	3.27	3.83	4.80	7.13	10.63	5.86	5.02	4.41	3.50	2.79	2.13	1.90	1.58	1.23
		ULS 1/3	1.63	1.95	2.51	3.93	10.31	5.85	5.02	4.42	3.50	2.79	2.13	1.90	1.58	1.23
		ULS 1/2	1.63	1.95	2.51	3.93	10.31	5.85	5.02	4.42	3.50	2.79	2.13	1.90	1.58	1.23
		L/100	9.54	10.85	12.75	15.61	15.61	9.74	8.72	7.92	7.00	6.30	5.58	5.30	4.82	4.12
		SLS L/150	7.60	8.74	10.41	12.68	12.68	7.77	6.89	6.21	5.45	4.88	4.32	4.09	3.72	3.19
		L/200	6.39	7.41	8.93	10.76	10.76	6.55	5.78	5.19	4.54	4.06	3.60	3.42	3.11	2.69

Contact

Customer Service Team ph. +48 46 858 16 00, fax +48 46 858 16 47

Ruukki Polska Sp. z o.o., Jaktorowska 13, 96-300 Żyrardów, Poland, www.ruukki.pl