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Sandwich panels

Span tables for sandwich panels

Ruukki SPF PU/PIR, Ruukki SP2B PU/PIR, Ruukki SP2D PU/PIR, Ruukki SP2E PU/PIR, Ruukki SP2C PU/PIR

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
- cold stores
- freezers

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.

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Maximum allowed span for uniform (wind) characetristic load [kN/m²] Ruukki SPF98/80PU/PIR

Table 1

External facing thickness: 0.63 mm
Internal facing thickness: 0.55 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: 40 mm
Min. intermediate support width: 60 mm
Min. number of fasteners at end support: 1 *

Min. number of fasteners at intermediate support: 1*
* – 1 set includes 1 pc. of L04 or L04C/N or L12 fastener and 2 pcs. of L01 or L02 fasteners
ULS – Ultimate Limit State
SLS – Serviceability Limit State

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**	4,99	5,47	6,11	7,06	7,74	8,64	9,98	14,89	12,89	11,52	10,51	8,95	7,15	5,97
		SLS	**L/100**	6,14	6,63	7,26	8,02	8,54	9,18	10,06	9,70	8,98	8,36	7,87	7,13	6,58	6,14
			L/150	5,07	5,44	5,92	6,55	6,97	7,40	7,89	7,37	6,96	6,63	6,35	5,78	5,33	4,96
			L/200	4,31	4,63	5,05	5,54	5,77	6,07	6,42	5,94	5,64	5,40	5,19	4,85	4,51	4,19
	II		**ULS**	5,00	5,47	6,12	7,06	7,73	8,64	9,98	14,89	12,89	11,52	10,51	8,95	7,16	5,97
		SLS	**L/100**	6,06	6,48	7,01	7,72	8,19	8,66	9,22	9,70	8,99	8,36	7,87	7,13	6,59	6,14
			L/150	4,86	5,21	5,62	6,02	6,26	6,55	6,90	7,38	6,96	6,63	6,35	5,78	5,32	4,96
			L/200	4,09	4,33	4,57	4,88	5,05	5,26	5,51	5,94	5,65	5,40	5,20	4,84	4,51	4,20
	III		**ULS**	5,01	5,48	6,12	7,07	7,74	8,65	9,99	14,89	12,89	11,52	10,51	8,94	7,15	5,97
		SLS	**L/100**	5,78	6,16	6,53	6,96	7,23	7,53	7,91	9,70	8,98	8,36	7,87	7,13	6,58	6,14
			L/150	4,44	4,64	4,88	5,15	5,32	5,50	5,71	6,66	6,67	6,63	6,35	5,78	5,33	4,96
			L/200	3,56	3,71	3,88	4,08	4,19	4,31	4,46	5,01	5,02	5,02	5,01	4,85	4,51	4,19
Two span	**I**		**ULS**	3,04	3,64	4,58	6,20	7,54	8,64	9,97	6,37	5,93	5,62	5,38	5,03	4,77	4,57
		SLS	**L/100**	7,70	8,39	9,27	10,50	11,33	12,40	13,89	13,89	12,40	11,33	10,50	9,28	8,39	7,70
			L/150	6,28	6,90	7,70	8,80	9,54	10,50	11,82	11,82	10,50	9,54	8,80	7,70	6,90	6,28
			L/200	5,37	5,94	6,67	7,70	8,39	9,28	10,50	10,39	9,27	8,39	7,70	6,68	5,94	5,37
	II		**ULS**	2,85	3,42	4,33	5,93	7,26	8,64	9,98	6,37	5,94	5,63	5,38	5,03	4,77	4,57
		SLS	**L/100**	7,70	8,39	9,28	10,50	11,33	12,40	13,89	13,89	12,40	11,33	10,50	9,28	8,39	7,70
			L/150	6,28	6,90	7,70	8,80	9,54	10,50	11,81	11,82	10,50	9,54	8,80	7,70	6,90	6,28
			L/200	5,37	5,94	6,68	7,70	8,36	9,14	10,21	10,39	9,28	8,39	7,70	6,68	5,94	5,37
	III		**ULS**	2,56	3,07	3,92	5,47	6,78	8,19	9,99	6,36	5,93	5,63	5,38	5,03	4,77	4,57
		SLS	**L/100**	7,70	8,39	9,28	10,50	11,33	12,40	13,84	13,88	12,40	11,33	10,50	9,27	8,39	7,71
			L/150	6,28	6,90	7,70	8,73	9,38	10,21	11,33	11,82	10,50	9,54	8,80	7,70	6,90	6,28
			L/200	5,37	5,89	6,52	7,39	7,97	8,70	9,62	10,39	9,28	8,39	7,70	6,67	5,94	5,37
Multi span	**I**		**ULS**	3,64	4,42	5,58	7,05	7,73	8,64	9,97	8,37	7,46	6,86	6,40	5,77	5,33	5,00
		SLS	**L/100**	7,34	7,97	8,78	9,90	10,66	11,64	13,01	13,01	11,65	10,66	9,90	8,78	7,97	7,34
			L/150	6,05	6,61	7,34	8,35	9,02	9,90	11,11	10,94	9,88	9,02	8,34	7,34	6,61	6,05
			L/200	5,22	5,74	6,41	7,34	7,97	8,72	9,68	9,47	8,56	7,87	7,33	6,41	5,74	5,22
	II		**ULS**	3,55	4,31	5,47	7,06	7,73	8,64	9,98	8,37	7,47	6,85	6,40	5,77	5,33	5,01
		SLS	**L/100**	7,34	7,97	8,78	9,90	10,66	11,64	13,01	13,01	11,65	10,66	9,90	8,78	7,97	7,34
			L/150	6,05	6,61	7,34	8,35	8,98	9,73	10,75	10,93	9,88	9,02	8,35	7,34	6,61	6,05
			L/200	5,22	5,74	6,41	7,21	7,73	8,39	9,27	9,47	8,55	7,87	7,33	6,41	5,74	5,22
	III		**ULS**	3,38	4,15	5,30	7,06	7,74	8,65	9,99	8,37	7,46	6,85	6,40	5,76	5,33	5,00
		SLS	**L/100**	7,34	7,97	8,78	9,88	10,54	11,38	12,52	13,01	11,65	10,66	9,90	8,78	7,97	7,34
			L/150	6,05	6,59	7,21	8,04	8,58	9,27	10,02	10,93	9,88	9,02	8,35	7,34	6,61	6,05
			L/200	5,13	5,57	6,10	6,83	7,22	7,63	8,15	9,47	8,55	7,87	7,33	6,41	5,74	5,22

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SP2B40PU/PIR

Table 2

External facing thickness: 0.50 mm
Internal facing thickness: 0.40 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: 40 mm
Min. intermediate support width: 60 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

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 system	**I**	**ULS 3/0**	2.95	3.24	3.63	4.18	4.58	5.12	5.92	6.69	5.79	5.18	4.73	4.09	3.66	3.13
		ULS 2/0	2.95	3.24	3.63	4.18	4.58	5.12	5.92	6.69	5.79	5.18	4.73	4.09	3.66	3.13
		L/100	2.95	3.19	3.47	3.83	4.08	4.38	4.76	4.49	4.22	3.98	3.75	3.39	3.13	2.92
		SLS L/150	2.39	2.57	2.79	3.10	3.24	3.41	3.62	3.36	3.18	3.04	2.92	2.72	2.50	2.33
		L/200	2.01	2.17	2.35	2.53	2.64	2.76	2.91	2.67	2.55	2.44	2.35	2.20	2.08	1.95
	II	**ULS 3/0**	2.95	3.24	3.63	4.18	4.58	5.12	5.92	6.69	5.79	5.18	4.73	4.09	3.66	3.13
		ULS 2/0	2.95	3.24	3.63	4.18	4.58	5.12	5.92	6.69	5.79	5.18	4.73	4.09	3.66	3.13
		L/100	2.87	3.07	3.33	3.65	3.81	4.00	4.24	4.49	4.22	3.98	3.75	3.40	3.13	2.92
		SLS L/150	2.28	2.43	2.57	2.75	2.85	2.98	3.12	3.36	3.19	3.04	2.92	2.72	2.50	2.33
		L/200	1.86	1.96	2.07	2.20	2.27	2.36	2.46	2.67	2.55	2.45	2.35	2.20	2.08	1.95
	III	**ULS 3/0**	2.95	3.24	3.63	4.18	4.58	5.12	5.92	6.69	5.79	5.18	4.73	4.09	3.66	3.13
		ULS 2/0	2.95	3.24	3.63	4.18	4.58	5.12	5.92	6.69	5.79	5.18	4.73	4.09	3.66	3.13
		L/100	2.72	2.84	3.00	3.18	3.29	3.43	3.58	4.34	4.22	3.98	3.75	3.39	3.13	2.92
		SLS L/150	2.01	2.10	2.19	2.32	2.38	2.46	2.54	2.89	2.89	2.89	2.89	2.72	2.50	2.33
		L/200	1.58	1.65	1.73	1.81	1.84	1.90	1.96	2.17	2.17	2.17	2.17	2.17	2.08	1.95
Double-span system	**I**	**ULS 2/4**	2.89	3.24	3.62	4.18	4.58	5.13	5.91	6.26	5.47	4.94	4.54	4.00	3.62	3.12
		ULS 2/3	2.13	2.55	3.21	4.18	4.58	5.12	5.91	6.26	5.47	4.94	4.54	4.00	3.62	3.12
		L/100	3.62	3.97	4.43	5.04	5.45	5.99	6.72	6.72	5.99	5.45	5.04	4.43	3.98	3.63
		SLS L/150	2.91	3.22	3.63	4.19	4.56	5.05	5.71	5.69	5.05	4.56	4.19	3.63	3.22	2.91
		L/200	2.45	2.73	3.11	3.62	3.98	4.43	5.00	4.89	4.36	3.97	3.63	3.11	2.74	2.45
	II	**ULS 2/4**	2.82	3.24	3.62	4.18	4.58	5.13	5.91	6.26	5.47	4.94	4.54	4.00	3.62	3.12
		ULS 2/3	2.04	2.45	3.07	4.16	4.58	5.12	5.91	6.26	5.47	4.94	4.54	4.00	3.62	3.12
		L/100	3.62	3.97	4.43	5.04	5.45	5.99	6.72	6.72	5.99	5.45	5.04	4.43	3.98	3.63
		SLS L/150	2.91	3.22	3.63	4.19	4.56	5.02	5.60	5.70	5.05	4.56	4.19	3.63	3.22	2.91
		L/200	2.45	2.73	3.11	3.59	3.89	4.27	4.79	4.89	4.36	3.97	3.63	3.11	2.74	2.45
	III	**ULS 2/4**	2.71	3.24	3.62	4.18	4.54	4.98	5.61	6.26	5.47	4.94	4.54	4.00	3.62	3.12
		ULS 2/3	1.91	2.27	2.90	3.99	4.55	4.98	5.62	6.26	5.47	4.94	4.54	4.00	3.62	3.12
		L/100	3.62	3.97	4.43	5.04	5.45	5.95	6.60	6.72	5.99	5.45	5.04	4.43	3.98	3.63
		SLS L/150	2.91	3.22	3.59	4.07	4.39	4.80	5.33	5.69	5.05	4.56	4.19	3.63	3.22	2.91
		L/200	2.39	2.64	2.96	3.39	3.67	3.97	4.31	4.89	4.36	3.97	3.63	3.11	2.74	2.45
Multi-span system	**I**	**ULS 2/4**	2.95	3.24	3.63	4.18	4.58	5.12	5.92	6.69	5.79	5.18	4.73	4.09	3.66	3.13
		ULS 2/3	2.47	2.99	3.62	4.18	4.58	5.13	5.91	6.69	5.79	5.18	4.73	4.09	3.66	3.13
		L/100	3.49	3.80	4.20	4.77	5.14	5.64	6.32	6.31	5.63	5.14	4.77	4.21	3.80	3.48
		SLS L/150	2.83	3.12	3.48	3.99	4.33	4.76	5.30	5.20	4.69	4.32	3.99	3.49	3.12	2.84
		L/200	2.41	2.67	3.02	3.48	3.77	4.12	4.58	4.47	4.02	3.69	3.43	3.01	2.67	2.41
	II	**ULS 2/4**	2.95	3.24	3.63	4.18	4.58	5.12	5.92	6.69	5.79	5.18	4.73	4.09	3.66	3.13
		ULS 2/3	2.44	2.94	3.62	4.18	4.58	5.13	5.91	6.69	5.79	5.18	4.73	4.09	3.66	3.13
		L/100	3.49	3.80	4.20	4.77	5.14	5.64	6.23	6.31	5.63	5.14	4.77	4.21	3.80	3.48
		SLS L/150	2.83	3.12	3.48	3.96	4.24	4.61	5.10	5.20	4.69	4.32	3.99	3.49	3.12	2.84
		L/200	2.41	2.67	2.97	3.36	3.62	3.94	4.29	4.47	4.02	3.69	3.43	3.01	2.67	2.41
	III	**ULS 2/4**	2.95	3.24	3.63	4.18	4.58	5.12	5.92	6.69	5.79	5.18	4.73	4.09	3.66	3.13
		ULS 2/3	2.36	2.88	3.62	4.18	4.58	5.13	5.91	6.69	5.79	5.18	4.73	4.09	3.66	3.13
		L/100	3.49	3.80	4.20	4.70	5.01	5.41	5.96	6.31	5.63	5.14	4.77	4.21	3.80	3.48
		SLS L/150	2.81	3.05	3.36	3.77	4.03	4.29	4.58	5.20	4.69	4.32	3.99	3.49	3.12	2.84
		L/200	2.32	2.53	2.80	3.09	3.25	3.44	3.66	4.47	4.02	3.69	3.43	3.01	2.67	2.41

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SP2B60PU/PIR

Table 3

External facing thickness: 0.50 mm
Internal facing thickness: 0.40 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: 40 mm
Min. intermediate support width: 60 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

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 system	**I**	**ULS 3/0**	3.69	4.05	4.53	5.23	5.72	6.40	7.39	8.35	7.24	6.47	5.91	5.12	4.58	4.18
		ULS 2/0	3.40	4.05	4.53	5.23	5.72	6.40	7.39	8.35	7.24	6.47	5.91	5.12	4.58	4.18
		L/100	3.99	4.31	4.72	5.22	5.55	5.97	6.54	6.33	5.85	5.45	5.13	4.64	4.29	3.99
		SLS L/150	3.30	3.54	3.85	4.27	4.54	4.84	5.15	4.83	4.56	4.33	4.15	3.77	3.47	3.23
		L/200	2.81	3.02	3.29	3.61	3.78	3.97	4.21	3.89	3.69	3.54	3.39	3.16	2.94	2.74
	II	**ULS 3/0**	3.69	4.05	4.53	5.23	5.72	6.40	7.39	8.35	7.24	6.47	5.91	5.12	4.58	4.18
		ULS 2/0	3.40	4.05	4.53	5.23	5.72	6.40	7.39	8.35	7.24	6.47	5.91	5.12	4.58	4.18
		L/100	3.94	4.22	4.56	5.03	5.33	5.66	6.02	6.33	5.85	5.44	5.13	4.65	4.28	3.99
		SLS L/150	3.17	3.40	3.68	3.94	4.10	4.29	4.52	4.83	4.55	4.33	4.15	3.76	3.47	3.23
		L/200	2.67	2.83	2.99	3.19	3.31	3.44	3.61	3.89	3.70	3.54	3.39	3.16	2.94	2.74
	III	**ULS 3/0**	3.69	4.05	4.53	5.23	5.72	6.40	7.39	8.35	7.24	6.47	5.91	5.12	4.58	4.18
		ULS 2/0	3.40	4.05	4.53	5.23	5.72	6.40	7.39	8.35	7.24	6.47	5.91	5.12	4.58	4.18
		L/100	3.77	4.01	4.27	4.55	4.73	4.93	5.18	6.33	5.85	5.45	5.13	4.64	4.29	3.99
		SLS L/150	2.90	3.04	3.19	3.37	3.48	3.60	3.75	4.39	4.39	4.33	4.15	3.77	3.47	3.24
		L/200	2.32	2.42	2.53	2.67	2.74	2.82	2.92	3.29	3.29	3.29	3.29	3.16	2.94	2.74
Double-span system	**I**	**ULS 2/4**	2.87	3.44	4.27	5.23	5.72	6.40	7.39	7.71	6.74	6.08	5.60	4.92	4.46	3.94
		ULS 2/3	2.07	2.47	3.10	4.18	5.02	6.35	7.39	7.71	6.74	6.08	5.60	4.92	4.46	3.94
		L/100	4.95	5.42	6.00	6.79	7.33	8.02	8.99	8.99	8.03	7.33	6.79	6.00	5.42	4.96
		SLS L/150	4.02	4.43	4.96	5.70	6.17	6.79	7.65	7.65	6.79	6.17	5.69	4.96	4.43	4.03
		L/200	3.42	3.80	4.28	4.97	5.42	6.00	6.79	6.73	6.00	5.42	4.96	4.29	3.80	3.42
	II	**ULS 2/4**	2.76	3.29	4.16	5.23	5.72	6.40	7.39	7.71	6.74	6.08	5.60	4.92	4.46	3.94
		ULS 2/3	1.96	2.34	2.95	3.96	4.84	6.17	7.39	7.71	6.74	6.08	5.60	4.92	4.46	3.94
		L/100	4.95	5.42	6.00	6.79	7.33	8.02	8.99	8.99	8.02	7.33	6.79	6.00	5.42	4.96
		SLS L/150	4.02	4.43	4.96	5.70	6.17	6.79	7.65	7.65	6.79	6.17	5.69	4.96	4.43	4.03
		L/200	3.42	3.80	4.28	4.97	5.42	5.93	6.62	6.73	6.00	5.42	4.96	4.28	3.80	3.42
	III	**ULS 2/4**	2.57	3.11	3.96	4.94	5.30	5.79	6.50	7.71	6.74	6.08	5.60	4.92	4.46	3.94
		ULS 2/3	1.78	2.13	2.66	3.68	4.55	5.79	6.51	7.71	6.74	6.08	5.60	4.92	4.46	3.94
		L/100	4.95	5.42	6.00	6.79	7.33	8.02	8.98	8.99	8.02	7.33	6.79	6.00	5.42	4.96
		SLS L/150	4.02	4.43	4.96	5.65	6.08	6.62	7.35	7.65	6.79	6.17	5.69	4.96	4.43	4.02
		L/200	3.42	3.78	4.20	4.78	5.16	5.64	6.27	6.74	6.00	5.42	4.96	4.28	3.80	3.42
Multi-span system	**I**	**ULS 2/4**	3.36	4.00	4.53	5.23	5.72	6.40	7.39	8.36	7.24	6.47	5.91	5.12	4.58	3.94
		ULS 2/3	2.45	2.96	3.73	4.98	5.72	6.40	7.39	8.36	7.24	6.47	5.91	5.12	4.58	3.94
		L/100	4.73	5.15	5.68	6.41	6.90	7.54	8.43	8.42	7.54	6.90	6.41	5.67	5.15	4.73
		SLS L/150	3.89	4.26	4.74	5.40	5.83	6.41	7.19	7.10	6.41	5.84	5.39	4.74	4.26	3.89
		L/200	3.34	3.69	4.13	4.74	5.14	5.66	6.29	6.15	5.55	5.10	4.74	4.13	3.68	3.34
	II	**ULS 2/4**	3.27	3.96	4.53	5.23	5.72	6.40	7.39	8.36	7.24	6.47	5.91	5.12	4.58	3.94
		ULS 2/3	2.39	2.89	3.67	4.91	5.72	6.40	7.39	8.36	7.24	6.47	5.91	5.12	4.58	3.94
		L/100	4.73	5.15	5.68	6.41	6.90	7.54	8.43	8.42	7.54	6.90	6.41	5.68	5.14	4.74
		SLS L/150	3.89	4.26	4.74	5.40	5.82	6.31	6.98	7.10	6.41	5.83	5.39	4.74	4.26	3.90
		L/200	3.34	3.69	4.13	4.67	5.02	5.44	6.03	6.15	5.55	5.10	4.74	4.13	3.68	3.34
	III	**ULS 2/4**	3.20	3.88	4.53	5.23	5.72	6.40	7.39	8.36	7.24	6.47	5.91	5.12	4.58	3.94
		ULS 2/3	2.26	2.76	3.52	4.81	5.72	6.40	7.39	8.36	7.24	6.47	5.91	5.12	4.58	3.94
		L/100	4.73	5.15	5.68	6.41	6.85	7.39	8.13	8.42	7.54	6.90	6.41	5.67	5.15	4.74
		SLS L/150	3.89	4.26	4.67	5.22	5.58	6.02	6.54	7.10	6.41	5.83	5.39	4.74	4.26	3.90
		L/200	3.29	3.58	3.95	4.43	4.70	4.98	5.32	6.16	5.55	5.10	4.74	4.13	3.68	3.34

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SP2B80PU/PIR

Table 4

External facing thickness: 0.50 mm
Internal facing thickness: 0.40 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: 40 mm
Min. intermediate support width: 60 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

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 system		**ULS 3/0**	4.28	4.69	5.24	6.05	6.63	7.41	8.56	9.67	8.38	7.49	6.84	5.92	5.30	4.83
		ULS 2/0	3.40	4.08	5.09	6.05	6.63	7.41	8.56	9.67	8.38	7.49	6.84	5.92	5.30	4.83
	I	**L/100**	4.92	5.31	5.81	6.48	6.88	7.40	8.12	7.95	7.26	6.77	6.37	5.77	5.31	4.92
		SLS L/150	4.13	4.43	4.82	5.33	5.67	6.10	6.57	6.19	5.82	5.53	5.21	4.72	4.35	4.06
		L/200	3.54	3.80	4.14	4.59	4.83	5.10	5.42	5.04	4.77	4.55	4.36	4.04	3.71	3.46
		ULS 3/0	4.28	4.69	5.24	6.05	6.63	7.41	8.56	9.67	8.38	7.49	6.84	5.92	5.30	4.83
		ULS 2/0	3.40	4.08	5.09	6.05	6.63	7.41	8.56	9.67	8.38	7.49	6.84	5.92	5.30	4.83
	II	**L/100**	4.92	5.25	5.68	6.25	6.64	7.12	7.67	7.94	7.26	6.76	6.37	5.77	5.30	4.92
		SLS L/150	3.98	4.26	4.62	5.04	5.25	5.52	5.83	6.19	5.82	5.53	5.21	4.72	4.35	4.06
		L/200	3.38	3.62	3.85	4.12	4.29	4.47	4.70	5.04	4.78	4.56	4.37	4.03	3.71	3.46
		ULS 3/0	4.28	4.69	5.24	6.05	6.63	7.41	8.56	9.67	8.38	7.49	6.84	5.92	5.30	4.83
		ULS 2/0	3.40	4.08	5.09	6.05	6.63	7.41	8.56	9.67	8.38	7.49	6.84	5.92	5.30	4.83
	III	**L/100**	4.72	5.03	5.41	5.83	6.06	6.34	6.69	7.95	7.26	6.77	6.36	5.77	5.31	4.92
		SLS L/150	3.74	3.92	4.12	4.37	4.52	4.70	4.91	5.89	5.82	5.53	5.21	4.72	4.35	4.06
		L/200	3.02	3.16	3.31	3.49	3.59	3.71	3.85	4.42	4.42	4.41	4.37	4.04	3.71	3.46
Double-span system		**ULS 2/4**	2.81	3.37	4.23	5.64	6.63	7.41	8.55	8.93	7.80	7.04	6.48	5.70	5.17	4.38
		ULS 2/3	2.02	2.40	3.00	4.05	4.92	6.19	8.42	8.93	7.80	7.04	6.48	5.70	5.17	4.38
	I	**L/100**	6.16	6.71	7.41	8.36	9.01	9.85	11.02	11.02	9.85	9.01	8.36	7.41	6.71	6.17
		SLS L/150	5.04	5.53	6.17	7.03	7.62	8.36	9.40	9.40	8.37	7.61	7.03	6.17	5.53	5.05
		L/200	4.31	4.77	5.35	6.17	6.71	7.40	8.36	8.36	7.40	6.71	6.17	5.35	4.77	4.31
		ULS 2/4	2.69	3.23	4.03	5.47	6.63	7.41	8.56	8.93	7.80	7.04	6.48	5.70	5.17	4.38
		ULS 2/3	1.89	2.24	2.81	3.77	4.63	5.94	8.18	8.93	7.80	7.04	6.48	5.70	5.17	4.38
	II	**L/100**	6.16	6.71	7.41	8.36	9.01	9.85	11.02	11.02	9.85	9.01	8.36	7.41	6.71	6.17
		SLS L/150	5.04	5.53	6.17	7.03	7.62	8.37	9.40	9.40	8.37	7.61	7.03	6.17	5.53	5.04
		L/200	4.31	4.77	5.35	6.17	6.71	7.40	8.27	8.36	7.40	6.71	6.17	5.35	4.77	4.31
		ULS 2/4	2.49	2.96	3.77	5.21	5.79	6.29	7.03	8.93	7.80	7.04	6.48	5.70	5.17	4.38
		ULS 2/3	1.70	2.00	2.50	3.39	4.22	5.53	7.03	8.93	7.80	7.04	6.48	5.70	5.17	4.38
	III	**L/100**	6.16	6.71	7.41	8.36	9.01	9.85	11.02	11.01	9.85	9.01	8.36	7.41	6.71	6.17
		SLS L/150	5.04	5.53	6.17	7.03	7.61	8.27	9.18	9.40	8.36	7.61	7.03	6.17	5.53	5.04
		L/200	4.31	4.77	5.34	6.04	6.51	7.10	7.90	8.36	7.41	6.71	6.17	5.35	4.76	4.31
Multi-span system		**ULS 2/4**	3.31	4.00	4.99	6.05	6.63	7.41	8.56	9.67	8.38	7.49	6.84	5.92	5.26	4.38
		ULS 2/3	2.40	2.90	3.67	4.96	6.00	7.41	8.56	9.67	8.38	7.49	6.84	5.92	5.26	4.38
	I	**L/100**	5.87	6.36	7.00	7.88	8.47	9.24	10.31	10.31	9.24	8.47	7.88	7.00	6.36	5.87
		SLS L/150	4.85	5.29	5.87	6.66	7.19	7.88	8.83	8.81	7.88	7.19	6.66	5.87	5.29	4.85
		L/200	4.19	4.60	5.14	5.87	6.36	7.00	7.82	7.67	6.93	6.36	5.87	5.14	4.60	4.19
		ULS 2/4	3.25	3.90	4.92	6.05	6.63	7.41	8.56	9.67	8.38	7.49	6.84	5.92	5.26	4.38
		ULS 2/3	2.32	2.82	3.58	4.82	5.85	7.40	8.56	9.67	8.38	7.49	6.84	5.92	5.26	4.38
	II	**L/100**	5.87	6.36	7.00	7.88	8.47	9.24	10.31	10.31	9.24	8.47	7.87	7.00	6.36	5.87
		SLS L/150	4.85	5.29	5.87	6.66	7.19	7.85	8.68	8.81	7.87	7.19	6.65	5.87	5.29	4.85
		L/200	4.19	4.60	5.14	5.86	6.28	6.81	7.53	7.67	6.93	6.36	5.87	5.14	4.60	4.19
		ULS 2/4	3.12	3.79	4.82	6.05	6.63	7.41	8.56	9.67	8.38	7.49	6.84	5.92	5.26	4.38
		ULS 2/3	2.19	2.65	3.40	4.67	5.71	7.26	8.56	9.67	8.38	7.49	6.84	5.92	5.26	4.38
	III	**L/100**	5.87	6.36	7.00	7.88	8.47	9.17	10.09	10.31	9.24	8.47	7.88	7.00	6.36	5.87
		SLS L/150	4.85	5.29	5.85	6.53	6.97	7.53	8.28	8.81	7.88	7.19	6.65	5.87	5.29	4.85
		L/200	4.18	4.54	4.99	5.58	5.97	6.40	6.86	7.67	6.93	6.36	5.87	5.14	4.60	4.19

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SP2B100PU/PIR

Table 5

External facing thickness: 0.50 mm
Internal facing thickness: 0.40 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: 40 mm
Min. intermediate support width: 60 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

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 system	**I**	**ULS 3/0**	4.79	5.25	5.87	6.78	7.43	8.30	9.58	10.83	9.38	8.39	7.67	6.63	5.93	5.42
		ULS 2/0	3.40	4.08	5.09	6.78	7.43	8.30	9.58	10.83	9.38	8.39	7.67	6.63	5.93	5.42
		L/100	5.77	6.23	6.80	7.60	8.11	8.73	9.57	9.39	8.58	7.98	7.51	6.80	6.22	5.77
		SLS L/150	4.86	5.26	5.71	6.31	6.71	7.22	7.91	7.48	7.02	6.56	6.18	5.60	5.17	4.83
		L/200	4.22	4.53	4.93	5.46	5.81	6.16	6.56	6.14	5.79	5.52	5.29	4.81	4.43	4.13
	II	**ULS 3/0**	4.79	5.25	5.87	6.78	7.43	8.30	9.58	10.83	9.38	8.39	7.67	6.63	5.93	5.42
		ULS 2/0	3.40	4.08	5.09	6.78	7.43	8.30	9.58	10.83	9.38	8.39	7.67	6.63	5.93	5.42
		L/100	5.77	6.21	6.71	7.40	7.85	8.42	9.20	9.38	8.58	7.98	7.51	6.80	6.22	5.77
		SLS L/150	4.74	5.07	5.49	6.05	6.35	6.67	7.08	7.48	7.02	6.56	6.18	5.60	5.17	4.83
		L/200	4.05	4.34	4.68	5.01	5.21	5.45	5.75	6.14	5.80	5.52	5.29	4.81	4.43	4.13
	III	**ULS 3/0**	4.79	5.25	5.87	6.78	7.43	8.30	9.58	10.83	9.38	8.39	7.67	6.63	5.93	5.42
		ULS 2/0	3.40	4.08	5.09	6.78	7.43	8.30	9.58	10.83	9.38	8.39	7.67	6.63	5.93	5.42
		L/100	5.60	5.96	6.43	7.02	7.31	7.67	8.11	9.39	8.58	7.98	7.51	6.80	6.22	5.77
		SLS L/150	4.51	4.75	5.01	5.33	5.52	5.74	6.01	7.38	7.02	6.56	6.18	5.60	5.17	4.83
		L/200	3.69	3.86	4.05	4.28	4.42	4.57	4.75	5.54	5.54	5.52	5.29	4.81	4.43	4.13
Double-span system	**I**	**ULS 2/4**	2.77	3.31	4.15	5.55	6.72	8.30	9.58	9.34	8.18	7.39	6.81	6.00	5.46	4.83
		ULS 2/3	1.99	2.35	2.92	3.93	4.78	6.10	8.25	9.34	8.18	7.39	6.81	6.00	5.46	4.83
		L/100	7.28	7.91	8.71	9.82	10.56	11.53	12.88	12.88	11.53	10.56	9.82	8.71	7.90	7.28
		SLS L/150	5.99	6.55	7.28	8.28	8.95	9.81	11.01	11.01	9.82	8.95	8.28	7.29	6.55	5.99
		L/200	5.14	5.67	6.35	7.28	7.90	8.71	9.81	9.81	8.71	7.91	7.28	6.35	5.67	5.14
	II	**ULS 2/4**	2.62	3.14	3.93	5.33	6.50	8.28	9.58	9.34	8.18	7.39	6.81	6.00	5.46	4.83
		ULS 2/3	1.85	2.16	2.69	3.65	4.43	5.70	7.93	9.34	8.18	7.39	6.81	6.00	5.46	4.83
		L/100	7.28	7.91	8.71	9.82	10.56	11.53	12.88	12.88	11.53	10.56	9.82	8.71	7.90	7.28
		SLS L/150	5.99	6.55	7.29	8.28	8.95	9.81	11.01	11.01	9.82	8.95	8.28	7.29	6.55	5.99
		L/200	5.14	5.67	6.35	7.29	7.90	8.71	9.80	9.81	8.71	7.91	7.28	6.35	5.67	5.14
	III	**ULS 2/4**	2.40	2.86	3.59	4.98	6.14	7.04	7.88	9.34	8.18	7.39	6.81	6.00	5.46	4.83
		ULS 2/3	1.64	1.87	2.30	3.13	3.89	5.16	7.41	9.34	8.18	7.39	6.81	6.00	5.46	4.83
		L/100	7.28	7.91	8.71	9.82	10.56	11.53	12.88	12.88	11.53	10.56	9.82	8.71	7.90	7.28
		SLS L/150	5.99	6.55	7.28	8.28	8.95	9.80	10.87	11.01	9.82	8.95	8.28	7.29	6.55	5.99
		L/200	5.14	5.67	6.35	7.22	7.77	8.46	9.40	9.81	8.71	7.91	7.28	6.35	5.67	5.14
Multi-span system	**I**	**ULS 2/4**	3.27	3.96	4.99	6.65	7.43	8.30	9.58	10.76	9.35	8.39	7.68	6.65	5.80	4.83
		ULS 2/3	2.35	2.85	3.61	4.89	5.93	7.48	9.58	10.76	9.35	8.39	7.68	6.65	5.80	4.83
		L/100	6.91	7.48	8.21	9.23	9.92	10.81	12.05	12.05	10.81	9.92	9.23	8.21	7.48	6.91
		SLS L/150	5.74	6.25	6.91	7.82	8.44	9.23	10.33	10.33	9.23	8.44	7.82	6.91	6.25	5.74
		L/200	4.98	5.45	6.06	6.91	7.48	8.21	9.23	9.09	8.21	7.48	6.91	6.07	5.45	4.98
	II	**ULS 2/4**	3.20	3.88	4.86	6.57	7.43	8.30	9.58	10.76	9.35	8.39	7.68	6.65	5.80	4.83
		ULS 2/3	2.25	2.74	3.50	4.78	5.75	7.30	9.58	10.76	9.35	8.39	7.68	6.65	5.80	4.83
		L/100	6.91	7.48	8.21	9.23	9.92	10.81	11.90	12.05	10.81	9.92	9.23	8.21	7.48	6.91
		SLS L/150	5.74	6.25	6.91	7.74	8.27	8.93	9.82	10.33	9.23	8.43	7.82	6.91	6.25	5.74
		L/200	4.98	5.44	5.96	6.66	7.12	7.69	8.32	9.08	8.21	7.48	6.91	6.07	5.45	4.98
	III	**ULS 2/4**	3.04	3.70	4.73	6.44	7.43	8.30	9.58	10.76	9.35	8.39	7.68	6.65	5.80	4.83
		ULS 2/3	2.10	2.57	3.28	4.55	5.57	7.12	9.58	10.76	9.35	8.39	7.68	6.65	5.80	4.83
		L/100	6.91	7.48	8.21	9.23	9.92	10.81	11.90	12.05	10.81	9.92	9.23	8.21	7.48	6.91
		SLS L/150	5.74	6.25	6.91	7.74	8.27	8.93	9.82	10.33	9.23	8.43	7.82	6.91	6.25	5.74
		L/200	4.98	5.44	5.96	6.66	7.12	7.69	8.32	9.08	8.21	7.48	6.91	6.07	5.45	4.98

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SP2B100PU/PIR (Cold stores)

Table 6

External facing thickness: 0.50 mm
Internal facing thickness: 0.50 mm
External temperature: +55 °C; +65 °C; +80 °C/-20 °C (summer/winter)
Internal temperature: 0 °C (summer/winter)
Min. end support width: 40 mm
Min. intermediate support width: 60 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

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 system	**I**	**ULS 3/0**	5.09	5.59	6.26	7.22	7.91	8.84	10.21	10.83	9.38	8.39	7.66	6.63	5.94	5.42
		ULS 2/0	3.40	4.08	5.09	6.78	7.91	8.84	10.21	10.83	9.38	8.39	7.66	6.63	5.94	5.42
		L/100	5.83	6.23	6.71	7.37	7.74	8.13	8.62	10.19	9.17	8.43	7.87	7.04	6.43	5.97
		SLS L/150	4.70	5.02	5.30	5.66	5.87	6.12	6.42	8.05	7.87	7.21	6.71	5.97	5.43	5.02
		L/200	3.90	4.09	4.31	4.57	4.72	4.90	5.10	6.04	6.04	6.04	5.97	5.28	4.78	4.40
	II	**ULS 3/0**	5.09	5.59	6.26	7.22	7.91	8.84	10.21	10.83	9.38	8.39	7.66	6.63	5.94	5.42
		ULS 2/0	3.40	4.08	5.09	6.78	7.91	8.84	10.21	10.83	9.38	8.39	7.66	6.63	5.94	5.42
		L/100	5.68	6.05	6.48	6.92	7.19	7.51	7.90	10.19	9.17	8.43	7.87	7.04	6.43	5.97
		SLS L/150	4.45	4.65	4.88	5.17	5.34	5.53	5.75	6.81	6.81	6.81	6.71	5.97	5.43	5.02
		L/200	3.58	3.74	3.90	4.11	4.22	4.35	4.51	5.11	5.11	5.11	5.11	5.11	4.78	4.40
Double-span system	**I**	**ULS 2/4**	2.42	2.86	3.60	4.97	5.38	5.73	6.24	10.69	9.33	8.39	7.66	6.63	5.78	4.82
		ULS 2/3	1.67	1.95	2.37	3.14	3.89	5.12	6.23	10.69	9.33	8.39	7.66	6.63	5.78	4.82
		L/100	7.51	8.16	8.99	10.15	10.93	11.94	13.34	13.35	11.94	10.93	10.15	8.99	8.16	7.51
		SLS L/150	6.15	6.74	7.51	8.55	9.25	10.15	11.32	11.40	10.15	9.24	8.55	7.51	6.74	6.15
		L/200	5.27	5.82	6.53	7.49	8.07	8.80	9.80	10.15	9.00	8.16	7.51	6.53	5.82	5.27
	II	**ULS 2/4**	2.24	2.65	3.36	4.16	4.30	4.47	4.68	6.34	6.34	6.34	6.34	6.34	5.79	4.82
		ULS 2/3	1.43	1.57	1.79	2.21	2.64	4.46	4.68	6.33	6.33	6.33	6.33	6.33	5.79	4.82
		L/100	7.51	8.16	8.99	10.15	10.93	11.94	13.34	13.34	11.94	10.93	10.15	9.00	8.16	7.51
		SLS L/150	6.15	6.74	7.51	8.55	9.18	9.98	11.06	11.40	10.15	9.24	8.55	7.51	6.74	6.15
		L/200	5.27	5.82	6.46	7.30	7.86	8.56	9.51	10.15	8.99	8.16	7.51	6.53	5.82	5.27
Multi-span system	**I**	**ULS 2/4**	3.03	3.69	4.71	6.34	6.86	7.56	8.62	10.83	9.38	8.39	7.66	6.63	5.78	4.82
		ULS 2/3	2.10	2.53	3.26	4.52	5.54	7.09	8.61	10.83	9.38	8.39	7.66	6.63	5.78	4.82
		L/100	7.13	7.73	8.49	9.55	10.27	11.19	12.41	12.49	11.20	10.27	9.55	8.49	7.72	7.13
		SLS L/150	5.91	6.44	7.13	8.06	8.61	9.31	10.26	10.70	9.55	8.72	8.08	7.13	6.44	5.91
		L/200	5.11	5.61	6.20	6.93	7.42	8.03	8.80	9.55	8.49	7.72	7.13	6.25	5.62	5.11
	II	**ULS 2/4**	2.93	3.60	4.53	5.00	5.34	5.79	6.45	10.83	9.38	8.39	7.66	6.63	5.78	4.82
		ULS 2/3	1.95	2.40	3.12	4.37	5.34	5.79	6.45	10.83	9.38	8.39	7.66	6.63	5.78	4.82
		L/100	7.13	7.73	8.49	9.55	10.24	11.05	12.15	12.49	11.2	10.27	9.55	8.49	7.72	7.13
		SLS L/150	5.91	6.44	7.06	7.87	8.39	9.06	9.93	10.70	9.55	8.72	8.08	7.13	6.44	5.91
		L/200	5.07	5.50	6.03	6.72	7.18	7.62	8.15	9.55	8.49	7.72	7.13	6.25	5.62	5.11

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SP2D60PU/PIR

Table 7

External facing thickness: 0.50 mm
Internal facing thickness: 0.40 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: 40 mm
Min. intermediate support width: 60 mm
Min. number of fasteners at end support: 1 *
Min. number of fasteners at intermediate support: 1*

* – 1 set includes 1 pc. of L16 fastener and 2 pcs. of L01 or L02 fasteners
ULS – Ultimate Limit State
SLS – Serviceability Limit State
ULS 1 – Ultimate Limit State for external facing thickness 0,55 mm
ULS 2 – Ultimate Limit State for external facing thickness 0,50 mm

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 system	**I**	**ULS 1**	3.71	4.06	4.54	5.24	5.74	6.42	7.41	7.97	6.90	6.17	5.64	4.88	4.37	3.99
		ULS 2	3.72	4.07	4.56	5.26	5.76	6.44	7.44	7.59	6.58	5.88	5.37	4.65	4.16	3.80
		L/100	4.00	4.33	4.74	5.25	5.58	6.00	6.58	6.38	5.87	5.47	5.15	4.67	4.31	4.01
		SLS L/150	3.32	3.57	3.88	4.29	4.57	4.87	5.19	4.87	4.59	4.37	4.18	3.79	3.49	3.25
		L/200	2.82	3.04	3.31	3.64	3.81	4.00	4.24	3.92	3.73	3.56	3.42	3.19	2.96	2.76
	II	**ULS 1**	3.71	4.06	4.54	5.24	5.74	6.42	7.41	7.97	6.90	6.17	5.64	4.88	4.37	3.99
		ULS 2	3.72	4.07	4.56	5.26	5.76	6.44	7.44	7.59	6.58	5.88	5.37	4.65	4.16	3.80
		L/100	3.97	4.24	4.59	5.06	5.36	5.70	6.07	6.38	5.87	5.47	5.15	4.67	4.31	4.01
		SLS L/150	3.19	3.42	3.70	3.97	4.13	4.33	4.56	4.87	4.59	4.37	4.18	3.79	3.49	3.25
		L/200	2.68	2.85	3.01	3.22	3.34	3.47	3.64	3.92	3.73	3.56	3.42	3.19	2.96	2.75
	III	**ULS 1**	3.71	4.06	4.54	5.24	5.74	6.42	7.41	7.97	6.90	6.17	5.64	4.88	4.37	3.99
		ULS 2	3.72	4.07	4.56	5.26	5.76	6.44	7.44	7.59	6.58	5.88	5.37	4.65	4.16	3.80
		L/100	3.78	4.04	4.30	4.59	4.77	4.97	5.22	6.38	5.88	5.47	5.15	4.66	4.31	4.01
		SLS L/150	2.93	3.06	3.22	3.40	3.51	3.64	3.78	4.44	4.44	4.36	4.18	3.79	3.49	3.26
		L/200	2.34	2.44	2.56	2.69	2.77	2.85	2.95	3.33	3.33	3.33	3.33	3.19	2.96	2.76
Double-span system	**I**	**ULS 1**	3.71	4.06	4.54	5.24	5.74	6.42	7.41	7.85	6.86	6.17	5.64	4.88	4.37	3.95
		ULS 2	3.71	4.07	4.56	5.26	5.76	6.44	7.44	7.59	6.58	5.88	5.37	4.65	4.16	3.80
		L/100	4.98	5.44	6.03	6.82	7.36	8.06	9.02	9.02	8.05	7.36	6.82	6.03	5.44	4.99
		SLS L/150	4.04	4.46	4.99	5.71	6.20	6.82	7.69	7.68	6.82	6.20	5.71	4.99	4.46	4.05
		L/200	3.44	3.82	4.31	4.99	5.44	6.02	6.82	6.77	6.03	5.44	4.99	4.31	3.82	3.44
	II	**ULS 1**	3.62	4.06	4.54	5.24	5.74	6.42	7.42	7.85	6.86	6.17	5.63	4.88	4.37	3.95
		ULS 2	3.62	4.07	4.55	5.26	5.76	6.44	7.44	7.59	6.57	5.88	5.37	4.65	4.16	3.80
		L/100	4.98	5.44	6.03	6.82	7.36	8.06	9.02	9.02	8.05	7.36	6.82	6.03	5.44	4.98
		SLS L/150	4.04	4.46	4.99	5.71	6.20	6.82	7.69	7.68	6.82	6.20	5.72	4.98	4.46	4.05
		L/200	3.44	3.82	4.31	4.99	5.44	5.96	6.66	6.77	6.03	5.44	4.99	4.31	3.82	3.44
	III	**ULS 1**	3.47	4.06	4.41	4.89	5.23	5.70	6.38	7.85	6.86	6.17	5.63	4.88	4.37	3.95
		ULS 2	3.49	3.73	4.02	4.42	4.71	5.10	5.66	7.59	6.58	5.88	5.37	4.65	4.16	3.80
		L/100	4.98	5.44	6.03	6.82	7.36	8.06	9.02	9.02	8.06	7.36	6.82	6.03	5.45	4.98
		SLS L/150	4.04	4.46	4.99	5.69	6.12	6.66	7.39	7.68	6.82	6.20	5.71	4.99	4.46	4.05
		L/200	3.44	3.81	4.23	4.81	5.19	5.67	6.32	6.77	6.03	5.44	4.99	4.31	3.82	3.44
Multi-span system	**I**	**ULS 1**	3.71	4.06	4.54	5.24	5.74	6.42	7.41	7.97	6.90	6.17	5.64	4.88	4.36	3.95
		ULS 2	3.72	4.07	4.56	5.26	5.76	6.44	7.44	7.59	6.58	5.88	5.37	4.65	4.16	3.80
		L/100	4.76	5.17	5.70	6.43	6.93	7.57	8.45	8.45	7.57	6.92	6.43	5.71	5.17	4.76
		SLS L/150	3.91	4.28	4.76	5.42	5.86	6.44	7.23	7.13	6.43	5.86	5.42	4.76	4.28	3.92
		L/200	3.36	3.70	4.15	4.76	5.17	5.69	6.32	6.19	5.58	5.13	4.76	4.15	3.71	3.36
	II	**ULS 1**	3.71	4.06	4.54	5.24	5.74	6.42	7.41	7.97	6.90	6.17	5.63	4.88	4.37	3.95
		ULS 2	3.72	4.07	4.56	5.26	5.76	6.44	7.44	7.59	6.58	5.88	5.37	4.65	4.16	3.80
		L/100	4.76	5.17	5.70	6.43	6.93	7.57	8.45	8.45	7.57	6.93	6.44	5.70	5.17	4.76
		SLS L/150	3.91	4.28	4.76	5.42	5.85	6.35	7.02	7.13	6.44	5.86	5.41	4.76	4.28	3.91
		L/200	3.36	3.70	4.15	4.70	5.04	5.48	6.06	6.18	5.58	5.13	4.76	4.15	3.70	3.36
	III	**ULS 1**	3.71	4.06	4.54	5.24	5.74	6.42	7.41	7.97	6.90	6.17	5.64	4.88	4.36	3.95
		ULS 2	3.72	4.07	4.56	5.26	5.76	6.44	7.44	7.59	6.58	5.88	5.37	4.65	4.16	3.80
		L/100	4.76	5.17	5.70	6.43	6.88	7.43	8.17	8.45	7.57	6.92	6.44	5.71	5.17	4.76
		SLS L/150	3.91	4.28	4.70	5.24	5.61	6.06	6.59	7.13	6.43	5.86	5.42	4.76	4.28	3.92
		L/200	3.31	3.61	3.97	4.45	4.74	5.02	5.37	6.18	5.58	5.13	4.76	4.15	3.71	3.36

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SP2D80PU/PIR

Table 8

External facing thickness: 0.50 mm
Internal facing thickness: 0.40 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: 40 mm
Min. intermediate support width: 60 mm
Min. number of fasteners at end support: 1 *
Min. number of fasteners at intermediate support: 1*

* – 1 set includes 1 pc. of L16 fastener and 2 pcs. of L01 or L02 fasteners
ULS – Ultimate Limit State
SLS – Serviceability Limit State
ULS 1 – Ultimate Limit State for external facing thickness 0,55 mm
ULS 2 – Ultimate Limit State for external facing thickness 0,50 mm

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 system	**I**	**ULS 1**	4.29	4.70	5.25	6.06	6.65	7.43	8.57	9.32	8.07	7.22	6.59	5.71	5.10	4.66
		ULS 2	4.30	4.71	5.27	6.08	6.66	7.44	8.59	8.87	7.68	6.87	6.27	5.43	4.86	4.44
		L/100	4.93	5.31	5.81	6.49	6.90	7.42	8.13	7.97	7.28	6.78	6.38	5.78	5.31	4.93
		SLS L/150	4.13	4.45	4.83	5.35	5.68	6.11	6.60	6.22	5.85	5.55	5.22	4.73	4.36	4.07
		L/200	3.55	3.82	4.15	4.60	4.86	5.12	5.44	5.07	4.80	4.58	4.39	4.05	3.73	3.47
	II	**ULS 1**	4.29	4.70	5.25	6.06	6.65	7.43	8.57	9.32	8.07	7.22	6.59	5.71	5.10	4.66
		ULS 2	4.30	4.71	5.27	6.08	6.66	7.44	8.59	8.87	7.68	6.87	6.27	5.43	4.86	4.44
		L/100	4.93	5.26	5.69	6.27	6.66	7.14	7.70	7.96	7.28	6.78	6.38	5.78	5.31	4.93
		SLS L/150	4.00	4.28	4.63	5.07	5.28	5.54	5.86	6.23	5.85	5.55	5.23	4.73	4.36	4.07
		L/200	3.39	3.64	3.88	4.14	4.31	4.50	4.72	5.07	4.80	4.57	4.39	4.05	3.73	3.47
	III	**ULS 1**	4.29	4.70	5.25	6.06	6.65	7.43	8.57	9.32	8.07	7.22	6.59	5.71	5.10	4.66
		ULS 2	4.30	4.71	5.27	6.08	6.66	7.44	8.59	8.87	7.68	6.87	6.27	5.43	4.86	4.44
		L/100	4.73	5.04	5.43	5.85	6.09	6.37	6.73	7.96	7.29	6.78	6.38	5.78	5.31	4.93
		SLS L/150	3.76	3.94	4.14	4.40	4.55	4.73	4.93	5.94	5.85	5.55	5.23	4.73	4.36	4.07
		L/200	3.03	3.17	3.33	3.51	3.62	3.74	3.87	4.45	4.45	4.45	4.39	4.05	3.73	3.47
Double-span system	**I**	**ULS 1**	3.66	4.39	5.25	6.06	6.65	7.43	8.57	9.16	8.00	7.22	6.59	5.70	5.10	4.39
		ULS 2	3.67	4.40	5.26	6.08	6.66	7.44	8.59	8.87	7.68	6.87	6.27	5.43	4.86	4.40
		L/100	6.19	6.73	7.42	8.39	9.03	9.87	11.03	11.03	9.87	9.03	8.39	7.42	6.73	6.18
		SLS L/150	5.05	5.55	6.19	7.05	7.63	8.39	9.42	9.42	8.39	7.63	7.05	6.19	5.55	5.05
		L/200	4.32	4.78	5.37	6.18	6.73	7.42	8.38	8.38	7.43	6.73	6.19	5.37	4.78	4.32
	II	**ULS 1**	3.54	4.28	5.26	6.07	6.64	7.43	8.58	9.16	8.00	7.22	6.59	5.70	5.10	4.39
		ULS 2	3.56	4.29	5.26	6.00	6.47	7.11	8.05	8.87	7.68	6.87	6.27	5.43	4.86	4.40
		L/100	6.19	6.73	7.42	8.39	9.03	9.87	11.03	11.03	9.87	9.03	8.39	7.42	6.73	6.18
		SLS L/150	5.05	5.55	6.19	7.05	7.63	8.39	9.42	9.42	8.38	7.63	7.05	6.18	5.55	5.05
		L/200	4.32	4.78	5.37	6.18	6.73	7.43	8.30	8.38	7.43	6.72	6.19	5.37	4.78	4.32
	III	**ULS 1**	3.36	4.08	4.67	5.14	5.47	5.91	6.55	9.16	8.00	7.22	6.59	5.70	5.10	4.39
		ULS 2	3.38	3.98	4.25	4.63	4.90	5.25	5.75	8.87	7.68	6.87	6.27	5.43	4.86	4.40
		L/100	6.19	6.73	7.42	8.39	9.03	9.87	11.03	11.03	9.87	9.03	8.39	7.42	6.73	6.18
		SLS L/150	5.05	5.55	6.19	7.05	7.63	8.30	9.20	9.42	8.39	7.63	7.05	6.19	5.55	5.05
		L/200	4.32	4.78	5.36	6.07	6.54	7.13	7.93	8.38	7.43	6.72	6.19	5.37	4.78	4.32
Multi-span system	**I**	**ULS 1**	4.28	4.70	5.25	6.06	6.65	7.43	8.57	9.31	8.07	7.22	6.59	5.71	5.11	4.39
		ULS 2	4.28	4.71	5.27	6.08	6.66	7.44	8.59	8.87	7.68	6.87	6.27	5.43	4.86	4.40
		L/100	5.88	6.37	7.01	7.90	8.48	9.25	10.33	10.33	9.26	8.49	7.89	7.01	6.37	5.88
		SLS L/150	4.86	5.31	5.88	6.67	7.20	7.89	8.84	8.83	7.89	7.20	6.67	5.88	5.31	4.86
		L/200	4.20	4.62	5.15	5.88	6.37	7.01	7.85	7.70	6.95	6.37	5.88	5.15	4.61	4.20
	II	**ULS 1**	4.22	4.70	5.25	6.06	6.65	7.43	8.57	9.31	8.07	7.22	6.59	5.71	5.10	4.39
		ULS 2	4.23	4.71	5.27	6.08	6.66	7.44	8.59	8.87	7.68	6.87	6.27	5.43	4.86	4.40
		L/100	5.88	6.37	7.01	7.90	8.48	9.25	10.33	10.33	9.26	8.49	7.89	7.01	6.38	5.88
		SLS L/150	4.86	5.31	5.88	6.67	7.20	7.87	8.71	8.83	7.89	7.20	6.67	5.88	5.31	4.86
		L/200	4.20	4.62	5.15	5.87	6.30	6.84	7.55	7.69	6.95	6.37	5.88	5.15	4.61	4.20
	III	**ULS 1**	4.14	4.70	5.25	6.06	6.65	7.43	8.57	9.31	8.07	7.22	6.59	5.71	5.11	4.39
		ULS 2	4.16	4.67	5.15	5.83	6.33	7.01	8.00	8.87	7.68	6.87	6.27	5.43	4.86	4.40
		L/100	5.88	6.37	7.01	7.90	8.48	9.19	10.12	10.33	9.25	8.49	7.89	7.01	6.37	5.88
		SLS L/150	4.86	5.31	5.88	6.54	6.99	7.56	8.31	8.83	7.89	7.20	6.67	5.88	5.31	4.86
		L/200	4.20	4.56	5.01	5.60	5.99	6.44	6.91	7.70	6.95	6.37	5.88	5.15	4.62	4.20

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SP2D100PU/PIR

Table 9

External facing thickness: 0.50 mm
Internal facing thickness: 0.40 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: 40 mm
Min. intermediate support width: 60 mm
Min. number of fasteners at end support: 1 *
Min. number of fasteners at intermediate support: 1*

* – 1 set includes 1 pc. of L16 fastener and 2 pcs. of L01 or L02 fasteners
ULS – Ultimate Limit State
SLS – Serviceability Limit State
ULS 1 – Ultimate Limit State for external facing thickness 0,55 mm
ULS 2 – Ultimate Limit State for external facing thickness 0,50 mm

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 system	**I**	**ULS 1**	4.80	5.26	5.88	6.79	7.43	8.31	9.60	10.43	9.03	8.09	7.37	6.39	5.71	5.22
		ULS 2	4.81	5.27	5.89	6.80	7.45	8.33	9.62	9.92	8.59	7.68	7.02	6.08	5.43	4.96
		L/100	5.78	6.23	6.80	7.60	8.12	8.74	9.58	9.40	8.59	7.99	7.52	6.80	6.23	5.78
		SLS L/150	4.86	5.26	5.72	6.32	6.72	7.23	7.92	7.50	7.04	6.58	6.19	5.61	5.18	4.83
		L/200	4.23	4.54	4.94	5.47	5.81	6.18	6.58	6.16	5.82	5.53	5.30	4.82	4.44	4.14
	II	**ULS 1**	4.80	5.26	5.88	6.79	7.43	8.31	9.60	10.43	9.03	8.09	7.37	6.39	5.71	5.22
		ULS 2	4.81	5.27	5.89	6.80	7.45	8.33	9.62	9.92	8.59	7.68	7.02	6.08	5.43	4.96
		L/100	5.78	6.22	6.72	7.40	7.86	8.43	9.21	9.40	8.59	7.99	7.52	6.80	6.23	5.77
		SLS L/150	4.76	5.08	5.50	6.06	6.37	6.69	7.10	7.50	7.04	6.58	6.19	5.61	5.18	4.83
		L/200	4.05	4.35	4.69	5.03	5.23	5.47	5.77	6.16	5.81	5.53	5.30	4.82	4.44	4.14
	III	**ULS 1**	4.80	5.26	5.88	6.79	7.43	8.31	9.60	10.43	9.03	8.09	7.37	6.39	5.71	5.22
		ULS 2	4.81	5.27	5.89	6.80	7.45	8.33	9.62	9.92	8.59	7.68	7.02	6.08	5.43	4.96
		L/100	5.61	5.97	6.44	7.04	7.34	7.69	8.14	9.40	8.59	7.99	7.52	6.80	6.23	5.78
		SLS L/150	4.52	4.77	5.03	5.35	5.54	5.77	6.04	7.44	7.04	6.58	6.19	5.61	5.17	4.83
		L/200	3.71	3.87	4.07	4.30	4.44	4.60	4.77	5.58	5.58	5.54	5.30	4.82	4.45	4.14
Double-span system	**I**	**ULS 1**	3.65	4.34	5.44	6.79	7.44	8.31	9.60	9.24	8.10	7.32	6.75	5.96	5.42	4.83
		ULS 2	3.66	4.34	5.46	6.80	7.45	8.33	9.61	9.35	8.19	7.40	6.82	6.01	5.44	4.84
		L/100	7.29	7.91	8.71	9.82	10.57	11.54	12.88	12.88	11.54	10.57	9.82	8.71	7.91	7.30
		SLS L/150	6.00	6.56	7.29	8.29	8.95	9.82	11.02	11.02	9.82	8.95	8.29	7.29	6.56	5.99
		L/200	5.15	5.67	6.36	7.30	7.91	8.71	9.82	9.82	8.71	7.91	7.29	6.36	5.68	5.15
	II	**ULS 1**	3.47	4.19	5.28	6.79	7.44	8.31	9.60	9.24	8.10	7.32	6.76	5.97	5.43	4.83
		ULS 2	3.49	4.20	5.30	6.72	7.24	7.95	9.01	9.36	8.19	7.40	6.82	6.01	5.43	4.84
		L/100	7.29	7.91	8.71	9.82	10.57	11.54	12.88	12.88	11.54	10.57	9.82	8.71	7.91	7.30
		SLS L/150	6.00	6.56	7.29	8.29	8.95	9.82	11.02	11.02	9.82	8.95	8.28	7.29	6.56	6.00
		L/200	5.15	5.67	6.36	7.30	7.91	8.71	9.82	9.82	8.71	7.91	7.29	6.36	5.68	5.15
	III	**ULS 1**	3.25	3.94	5.02	5.75	6.12	6.61	7.33	9.25	8.10	7.33	6.75	5.96	5.43	4.83
		ULS 2	3.28	3.97	4.75	5.18	5.48	5.87	6.44	9.35	8.19	7.40	6.82	6.01	5.44	4.84
		L/100	7.29	7.91	8.71	9.82	10.57	11.54	12.88	12.89	11.54	10.57	9.82	8.71	7.91	7.29
		SLS L/150	6.00	6.56	7.29	8.28	8.95	9.82	10.88	11.02	9.82	8.95	8.29	7.29	6.56	5.99
		L/200	5.15	5.68	6.35	7.23	7.78	8.48	9.42	9.82	8.71	7.91	7.29	6.36	5.68	5.15
Multi-span system	**I**	**ULS 1**	4.28	5.12	5.88	6.79	7.44	8.31	9.60	10.43	9.03	8.08	7.37	6.39	5.71	4.83
		ULS 2	4.25	5.12	5.89	6.80	7.45	8.33	9.62	9.92	8.59	7.68	7.02	6.08	5.43	4.84
		L/100	6.92	7.48	8.22	9.23	9.92	10.81	12.05	12.05	10.81	9.92	9.23	8.22	7.48	6.92
		SLS L/150	5.75	6.26	6.91	7.83	8.44	9.23	10.33	10.34	9.23	8.44	7.83	6.91	6.25	5.74
		L/200	4.98	5.46	6.07	6.92	7.48	8.22	9.23	9.10	8.22	7.48	6.92	6.08	5.46	4.99
	II	**ULS 1**	4.28	5.12	5.88	6.79	7.44	8.31	9.60	10.43	9.03	8.08	7.37	6.39	5.71	4.83
		ULS 2	4.19	5.06	5.89	6.80	7.45	8.33	9.62	9.92	8.59	7.68	7.02	6.08	5.43	4.84
		L/100	6.92	7.48	8.22	9.23	9.92	10.81	12.05	12.05	10.81	9.92	9.24	8.22	7.49	6.92
		SLS L/150	5.75	6.26	6.91	7.83	8.44	9.23	10.26	10.33	9.23	8.44	7.83	6.92	6.26	5.75
		L/200	4.98	5.46	6.07	6.91	7.46	8.10	8.94	9.10	8.22	7.48	6.92	6.08	5.46	4.98
	III	**ULS 1**	4.07	4.95	5.88	6.79	7.44	8.31	9.60	10.43	9.03	8.08	7.37	6.39	5.71	4.83
		ULS 2	4.09	4.96	5.76	6.52	7.09	7.84	8.95	9.92	8.59	7.68	7.02	6.08	5.43	4.84
		L/100	6.92	7.48	8.22	9.23	9.92	10.81	11.91	12.05	10.81	9.92	9.23	8.22	7.48	6.92
		SLS L/150	5.75	6.26	6.91	7.76	8.28	8.94	9.84	10.34	9.23	8.44	7.83	6.91	6.25	5.74
		L/200	4.98	5.45	5.97	6.67	7.13	7.71	8.36	9.10	8.22	7.48	6.92	6.07	5.46	4.99

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SP2E120PU/PIR

Table 10

External facing thickness: 0.50 mm
Internal facing thickness: 0.50 mm
External temperature: +55 °C; +65 °C/-20 °C (summer/winter)
Internal temperature: 0 °C (summer/winter)
Min. end support width: 40 mm
Min. intermediate support width: 60 mm
Min. number of fasteners at the 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

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 system	**I**	**ULS 3/0**	5.32	6.13	6.86	7.92	8.67	9.70	11.20	11.88	10.28	9.20	8.40	7.27	6.51	5.73
		ULS 2/0	3.56	4.26	5.32	7.09	8.49	9.70	11.20	11.87	10.29	9.20	8.40	7.27	6.50	5.73
		SLS L/100	6.70	7.15	7.70	8.46	8.96	9.46	10.05	11.56	10.40	9.58	8.94	8.00	7.32	6.80
		SLS L/150	5.42	5.79	6.19	6.62	6.88	7.19	7.56	9.68	8.94	8.20	7.64	6.80	6.19	5.73
		SLS L/200	4.58	4.80	5.06	5.37	5.56	5.78	6.03	7.26	7.26	7.26	6.80	6.03	5.46	5.03
	II	**ULS 3/0**	5.32	6.13	6.86	7.92	8.67	9.70	11.20	11.88	10.28	9.20	8.40	7.27	6.51	5.73
		ULS 2/0	3.56	4.26	5.32	7.09	8.49	9.70	11.20	11.87	10.29	9.20	8.40	7.27	6.50	5.73
		SLS L/100	6.53	6.95	7.49	8.06	8.38	8.78	9.26	11.56	10.40	9.58	8.94	8.00	7.32	6.80
		SLS L/150	5.21	5.45	5.73	6.08	6.29	6.52	6.81	8.19	8.19	8.19	7.64	6.80	6.19	5.73
		SLS L/200	4.22	4.40	4.61	4.86	5.01	5.17	5.35	6.14	6.14	6.15	6.15	6.03	5.46	5.03
Double-span system	**I**	**ULS 2/4**	2.48	2.95	3.66	5.03	6.22	7.46	8.29	11.28	9.85	8.88	8.17	7.18	5.82	4.85
		ULS 2/3	1.72	1.93	2.28	3.13	3.86	5.11	7.40	11.28	9.85	8.88	8.17	7.18	5.82	4.85
		SLS L/100	8.59	9.32	10.26	11.56	12.44	13.57	15.16	15.16	13.58	12.44	11.56	10.26	9.32	8.59
		SLS L/150	7.07	7.74	8.59	9.76	10.55	11.56	12.97	12.97	11.56	10.54	9.76	8.59	7.74	7.07
		SLS L/200	6.08	6.70	7.50	8.60	9.30	10.14	11.27	11.56	10.26	9.32	8.59	7.50	6.70	6.09
	II	**ULS 2/4**	2.31	2.72	3.38	4.70	5.60	5.91	6.35	11.28	9.85	8.88	8.17	7.18	5.82	4.85
		ULS 2/3	1.45	1.57	1.76	2.06	2.35	2.94	6.34	11.28	9.85	8.88	8.17	7.18	5.82	4.85
		SLS L/100	8.59	9.32	10.26	11.56	12.44	13.57	15.16	15.16	13.58	12.44	11.56	10.26	9.32	8.60
		SLS L/150	7.07	7.74	8.59	9.76	10.55	11.46	12.69	12.96	11.56	10.54	9.76	8.59	7.74	7.07
		SLS L/200	6.08	6.70	7.49	8.44	9.08	9.88	10.96	11.56	10.26	9.32	8.59	7.50	6.70	6.08
Multi-span system	**I**	**ULS 2/4**	3.10	3.79	4.84	6.63	8.05	9.70	11.17	11.87	10.29	9.20	8.40	7.27	5.82	4.85
		ULS 2/3	2.14	2.61	3.32	4.62	5.68	7.29	9.98	11.88	10.29	9.20	8.40	7.27	5.82	4.85
		SLS L/100	8.15	8.82	9.68	10.87	11.67	12.72	14.17	14.17	12.72	11.68	10.87	9.67	8.81	8.15
		SLS L/150	6.77	7.37	8.14	9.21	9.88	10.68	11.77	12.16	10.87	9.93	9.21	8.15	7.37	6.77
		SLS L/200	5.88	6.44	7.15	7.99	8.55	9.25	10.19	10.87	9.68	8.81	8.15	7.16	6.44	5.88
	II	**ULS 2/4**	2.99	3.68	4.73	6.50	7.27	8.00	9.09	11.88	10.28	9.20	8.40	7.27	5.82	4.85
		ULS 2/3	2.01	2.42	3.15	4.45	5.52	7.12	9.07	11.87	10.29	9.20	8.40	7.27	5.82	4.85
		SLS L/100	8.15	8.82	9.68	10.87	11.67	12.64	13.90	14.18	12.72	11.67	10.87	9.67	8.81	8.15
		SLS L/150	6.77	7.37	8.13	9.05	9.65	10.41	11.45	12.16	10.86	9.94	9.21	8.15	7.37	6.77
		SLS L/200	5.88	6.36	6.97	7.77	8.30	8.91	9.54	10.87	9.67	8.81	8.15	7.16	6.44	5.88

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SP2E160PU/PIR

Table 11

External facing thickness: 0.50 mm
Internal facing thickness: 0.50 mm
External temperature: +55 °C; +65 °C/-20 °C (summer/winter)
Internal temperature: -20 °C (summer/winter)
Min. end support width: 40 mm
Min. intermediate support width: 60 mm
Min. number of fasteners at the 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

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 system	**I**	**ULS 3/0**	5.32	6.38	7.93	9.16	10.03	11.21	12.95	13.73	11.89	10.64	9.71	8.41	6.87	5.73
		ULS 2/0	3.56	4.26	5.32	7.09	8.49	10.61	12.95	13.73	11.90	10.64	9.71	8.41	6.88	5.74
		L/100	7.84	8.35	8.96	9.57	9.95	10.40	10.95	14.01	12.61	11.60	10.83	9.69	8.86	8.23
		SLS L/150	6.18	6.45	6.78	7.18	7.41	7.68	8.00	9.50	9.50	9.49	9.25	8.23	7.49	6.92
		L/200	4.98	5.19	5.43	5.71	5.87	6.06	6.26	7.12	7.12	7.12	7.12	7.12	6.60	6.08
	II	**ULS 3/0**	5.32	6.38	7.93	9.16	10.03	11.21	12.95	13.73	11.89	10.64	9.71	8.41	6.87	5.73
		ULS 2/0	3.56	4.26	5.32	7.09	8.49	10.61	12.95	13.73	11.90	10.64	9.71	8.41	6.88	5.74
		L/100	7.67	8.07	8.49	9.02	9.34	9.71	10.17	12.57	12.57	11.60	10.83	9.69	8.87	8.23
		SLS L/150	5.81	6.04	6.32	6.65	6.84	7.06	7.31	8.38	8.38	8.37	8.38	8.23	7.49	6.92
		L/200	4.64	4.81	5.02	5.24	5.37	5.52	5.67	6.28	6.28	6.28	6.28	6.28	6.28	6.07
Double-span system	**I**	**ULS 2/5**	2.84	3.36	4.23	5.01	5.13	5.28	5.45	6.37	6.37	6.37	6.37	6.37	5.82	4.85
		ULS 2/4	1.98	2.18	2.50	3.03	3.94	5.28	5.45	6.37	6.37	6.37	6.37	6.37	5.82	4.85
		L/100	10.37	11.26	12.41	13.99	15.06	16.44	18.37	18.36	16.44	15.06	13.99	12.41	11.27	10.38
		SLS L/150	8.52	9.33	10.38	11.80	12.69	13.78	15.27	15.70	13.99	12.75	11.79	10.38	9.33	8.52
		L/200	7.32	8.07	8.97	10.12	10.88	11.85	13.15	13.99	12.41	11.27	10.38	9.04	8.07	7.32
	II	**ULS 2/5**	2.53	2.89	3.70	4.29	4.35	4.42	4.50	4.80	4.80	4.80	4.80	4.80	4.80	4.80
		ULS 2/4	1.72	1.86	2.04	2.32	2.55	2.83	4.50	4.81	4.81	4.81	4.81	4.81	4.81	4.81
		L/100	10.37	11.26	12.41	13.99	15.06	16.44	18.22	18.36	16.44	15.06	13.99	12.41	11.26	10.38
		SLS L/150	8.52	9.33	10.37	11.63	12.47	13.53	14.96	15.70	13.98	12.75	11.80	10.38	9.33	8.52
		L/200	7.29	7.94	8.78	9.89	10.63	11.56	12.62	13.99	12.41	11.27	10.38	9.04	8.07	7.32
Multi-span system	**I**	**ULS 2/5**	3.56	4.26	5.25	5.69	5.98	6.37	6.92	13.73	11.89	10.64	9.70	7.28	5.82	4.85
		ULS 2/4	2.73	3.35	4.36	5.68	5.99	6.37	6.92	13.73	11.89	10.64	9.70	7.28	5.82	4.85
		ULS 2/3	1.79	2.15	2.71	3.88	4.91	6.38	6.93	13.73	11.90	10.64	9.70	7.27	5.82	4.85
		L/100	9.84	10.66	11.70	13.16	14.12	15.23	16.74	17.17	15.41	14.14	13.16	11.71	10.66	9.85
		SLS L/150	8.17	8.90	9.77	10.87	11.59	12.51	13.74	14.73	13.15	12.02	11.14	9.84	8.90	8.17
		L/200	7.03	7.62	8.34	9.31	9.94	10.57	11.30	13.16	11.70	10.66	9.84	8.64	7.76	7.09
	II	**ULS 2/5**	3.56	4.02	4.18	4.38	4.50	4.65	4.82	5.90	5.90	5.90	5.90	5.90	5.82	4.85
		ULS 2/4	2.58	3.19	4.17	4.37	4.50	4.64	4.82	5.89	5.89	5.89	5.89	5.89	5.82	4.85
		ULS 2/3	1.51	1.72	2.07	3.58	4.50	4.64	4.82	5.89	5.89	5.89	5.89	5.89	5.82	4.85
		L/100	9.84	10.66	11.70	13.05	13.90	14.97	16.43	17.17	15.41	14.14	13.16	11.71	10.66	9.85
		SLS L/150	8.16	8.80	9.58	10.64	11.34	12.17	13.02	14.73	13.15	12.02	11.14	9.84	8.90	8.17
		L/200	6.89	7.45	8.15	9.00	9.43	9.94	10.57	13.16	11.70	10.66	9.84	8.64	7.76	7.09

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SP2E180PU/PIR

Table 12

External facing thickness: 0.50 mm
Internal facing thickness: 0.50 mm
External temperature: +55 °C; +65 °C/-20 °C (summer/winter)
Internal temperature: -30 °C (summer/winter)
Min. end support width: 40 mm
Min. intermediate support width: 60 mm
Min. number of fasteners at the 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

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 system	**I**	**ULS 3/0**	5.32	6.38	7.97	9.72	10.64	11.90	13.74	14.57	12.62	11.29	10.31	8.60	6.88	5.73
		ULS 2/0	3.56	4.26	5.32	7.09	8.49	10.61	13.74	14.57	12.62	11.29	10.31	8.60	6.88	5.73
		L/100	8.33	8.86	9.34	9.94	10.31	10.74	11.26	14.15	13.63	12.54	11.70	10.46	9.56	8.87
		SLS L/150	6.39	6.66	6.98	7.36	7.59	7.85	8.13	9.43	9.43	9.43	9.43	8.87	8.07	7.45
		L/200	5.12	5.32	5.56	5.82	5.97	6.14	6.33	7.08	7.08	7.08	7.07	7.08	7.08	6.53
	II	**ULS 3/0**	5.32	6.38	7.97	9.72	10.64	11.90	13.74	14.57	12.62	11.29	10.31	8.60	6.88	5.73
		ULS 2/0	3.56	4.26	5.32	7.09	8.49	10.61	13.74	14.57	12.62	11.29	10.31	8.60	6.88	5.73
		L/100	8.09	8.44	8.87	9.39	9.71	10.07	10.50	12.66	12.66	12.53	11.69	10.46	9.56	8.87
		SLS L/150	6.03	6.26	6.54	6.86	7.04	7.25	7.48	8.44	8.44	8.44	8.44	8.44	8.07	7.45
		L/200	4.78	4.96	5.15	5.37	5.49	5.63	5.77	6.33	6.33	6.33	6.33	6.33	6.33	6.33
Double-span system	**I**	**ULS 2/5**	2.56	2.83	3.41	4.51	4.57	4.63	4.71	5.01	5.01	5.01	5.01	5.01	5.01	4.85
		ULS 2/4	1.77	1.91	2.08	2.34	2.53	2.79	3.26	5.01	5.01	5.01	5.01	5.01	5.01	4.85
		L/100	11.16	12.13	13.37	15.09	16.25	17.75	19.77	19.83	17.75	16.24	15.09	13.37	12.13	11.17
		SLS L/150	9.15	10.03	11.16	12.60	13.52	14.68	16.25	16.95	15.09	13.75	12.71	11.16	10.03	9.15
		L/200	7.84	8.58	9.49	10.73	11.53	12.56	13.87	15.09	13.37	12.13	11.17	9.71	8.66	7.84
	II	**ULS 2/5**	2.22	2.44	2.71	3.37	4.02	4.05	4.09	4.23	4.23	4.23	4.23	4.23	4.23	4.23
		ULS 2/4	1.58	1.68	1.80	1.95	2.05	2.18	2.34	4.23	4.23	4.23	4.23	4.23	4.23	4.23
		L/100	11.16	12.13	13.37	15.09	16.25	17.66	19.50	19.83	17.75	16.24	15.09	13.37	12.13	11.17
		SLS L/150	9.15	10.03	11.04	12.40	13.28	14.42	15.94	16.95	15.09	13.75	12.71	11.16	10.03	9.15
		L/200	7.71	8.41	9.29	10.49	11.27	12.15	13.12	15.09	13.37	12.13	11.17	9.71	8.66	7.84
Multi-span system	**I**	**ULS 2/5**	3.55	4.14	4.28	4.45	4.56	4.69	4.83	5.58	5.58	5.58	5.58	5.58	5.58	4.85
		ULS 2/4	2.53	3.10	4.05	4.45	4.56	4.69	4.83	5.58	5.58	5.58	5.58	5.58	5.58	4.85
		ULS 2/3	1.51	1.69	2.01	3.00	4.38	4.68	4.83	5.58	5.58	5.58	5.58	5.58	5.58	4.85
		L/100	10.60	11.48	12.62	14.16	15.08	16.26	17.86	18.56	16.64	15.26	14.20	12.62	11.49	10.60
		SLS L/150	8.79	9.53	10.39	11.56	12.33	13.30	14.32	15.90	14.20	12.96	12.02	10.60	9.58	8.79
		L/200	7.45	8.07	8.84	9.86	10.36	10.94	11.67	14.19	12.62	11.49	10.60	9.29	8.34	7.60
	II	**ULS 2/5**	3.41	3.48	3.55	3.63	3.67	3.72	3.77	3.96	3.96	3.96	3.96	3.96	3.96	3.96
		ULS 2/4	2.39	2.92	3.55	3.62	3.67	3.71	3.77	3.96	3.96	3.96	3.96	3.96	3.96	3.96
		ULS 2/3	1.31	1.43	1.59	1.90	2.14	3.71	3.77	3.96	3.96	3.96	3.96	3.96	3.96	3.96
		L/100	10.60	11.48	12.60	13.96	14.85	16.00	17.54	18.56	16.64	15.26	14.20	12.63	11.49	10.60
		SLS L/150	8.69	9.36	10.20	11.33	12.06	12.74	13.60	15.90	14.20	12.97	12.02	10.60	9.58	8.79
		L/200	7.30	7.89	8.63	9.38	9.80	10.32	10.94	14.19	12.62	11.48	10.60	9.29	8.34	7.60

Maximum allowed span for uniform (wind) characteristic load [kN/m²] Ruukki SP2E200PU/PIR

Table 13

External facing thickness: 0.50 mm
Internal facing thickness: 0.50 mm
External temperature: +55 °C; +65 °C/-20 °C (summer/winter)
Internal temperature: -30 °C (summer/winter)
Min. end support width: 40 mm
Min. intermediate support width: 60 mm
Min. number of fasteners at the 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

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 system	**I**	**ULS 3/0**	5.32	6.38	7.97	10.24	11.22	12.55	14.49	15.37	13.31	11.90	10.87	8.60	6.88	5.73
		ULS 2/0	3.56	4.26	5.32	7.09	8.49	10.61	14.13	15.37	13.31	11.90	10.87	8.60	6.88	5.73
		L/100	8.97	9.55	10.16	10.83	11.25	11.73	12.33	15.73	14.60	13.42	12.52	11.19	10.22	9.48
		SLS L/150	6.96	7.26	7.62	8.06	8.32	8.60	8.95	10.49	10.48	10.48	10.48	9.48	8.62	7.95
		L/200	5.58	5.81	6.08	6.38	6.56	6.76	6.98	7.87	7.87	7.87	7.87	7.86	7.58	6.96
	II	**ULS 3/0**	5.32	6.38	7.97	10.24	11.22	12.55	14.49	15.37	13.31	11.90	10.87	8.60	6.88	5.73
		ULS 2/0	3.56	4.26	5.32	7.09	8.49	10.61	14.13	15.37	13.31	11.90	10.87	8.60	6.88	5.73
		L/100	8.78	9.18	9.66	10.25	10.61	11.02	11.52	14.07	14.07	13.42	12.52	11.18	10.22	9.48
		SLS L/150	6.57	6.84	7.15	7.51	7.73	7.97	8.24	9.38	9.38	9.39	9.38	9.38	8.62	7.95
		L/200	5.23	5.43	5.65	5.90	6.04	6.20	6.38	7.04	7.04	7.04	7.04	7.04	7.04	6.96
Double-span system	**I**	**ULS 2/5**	2.59	2.90	3.32	4.59	4.82	4.89	4.97	5.27	5.27	5.27	5.27	5.27	5.27	4.85
		ULS 2/4	1.84	1.97	2.15	2.40	2.57	2.82	3.12	5.26	5.26	5.26	5.26	5.26	5.26	4.85
		L/100	11.89	12.94	14.28	16.13	17.38	18.99	21.23	21.23	18.99	17.38	16.12	14.28	12.94	11.89
		SLS L/150	9.72	10.67	11.89	13.52	14.51	15.77	17.48	18.12	16.12	14.68	13.56	11.89	10.67	9.72
		L/200	8.31	9.17	10.16	11.50	12.38	13.49	14.99	16.12	14.28	12.94	11.90	10.33	9.19	8.31
	II	**ULS 2/5**	2.28	2.49	2.74	3.25	3.82	4.30	4.34	4.49	4.49	4.49	4.49	4.49	4.49	4.49
		ULS 2/4	1.64	1.75	1.87	2.03	2.13	2.25	2.41	4.49	4.49	4.49	4.49	4.49	4.49	4.49
		L/100	11.89	12.94	14.28	16.13	17.38	18.98	20.97	21.24	18.99	17.37	16.12	14.28	12.94	11.89
		SLS L/150	9.72	10.67	11.83	13.30	14.27	15.50	17.16	18.12	16.13	14.68	13.56	11.89	10.67	9.72
		L/200	8.23	8.99	9.96	11.25	12.11	13.18	14.27	16.13	14.28	12.94	11.90	10.33	9.19	8.32
Multi-span system	**I**	**ULS 2/5**	3.50	4.26	4.43	4.60	4.70	4.81	4.94	5.57	5.57	5.57	5.57	5.57	5.57	4.85
		ULS 2/4	2.51	3.04	3.94	4.60	4.70	4.81	4.94	5.56	5.56	5.56	5.56	5.56	5.56	4.85
		ULS 2/3	1.53	1.70	1.97	2.49	4.16	4.81	4.95	5.58	5.58	5.58	5.58	5.58	5.58	4.85
		L/100	11.31	12.26	13.48	15.18	16.22	17.50	19.24	19.87	17.81	16.33	15.18	13.49	12.26	11.31
		SLS L/150	9.35	10.21	11.16	12.42	13.26	14.32	15.57	17.01	15.18	13.85	12.83	11.31	10.21	9.35
		L/200	7.97	8.64	9.48	10.59	11.26	11.91	12.72	15.18	13.49	12.26	11.31	9.90	8.87	8.08
	II	**ULS 2/5**	3.35	3.64	3.71	3.79	3.83	3.88	3.92	4.10	4.10	4.10	4.10	4.10	4.10	4.10
		ULS 2/4	2.36	2.86	3.71	3.79	3.83	3.87	3.92	4.09	4.09	4.09	4.09	4.09	4.09	4.09
		ULS 2/3	1.35	1.46	1.62	1.88	2.09	3.87	3.92	4.09	4.09	4.09	4.09	4.09	4.09	4.09
		L/100	11.31	12.26	13.48	15.00	15.98	17.22	18.90	19.88	17.81	16.33	15.18	13.48	12.26	11.31
		SLS L/150	9.31	10.04	10.96	12.18	12.99	13.85	14.80	17.02	15.18	13.85	12.83	11.31	10.21	9.35
		L/200	7.81	8.46	9.27	10.19	10.67	11.25	11.96	15.18	13.48	12.26	11.31	9.90	8.87	8.08

Maximum allowed span for uniform (snow) characteristic load [kN/m²] Ruukki SP2C80/40 PU/PIR

Table 14

External facing thickness: 0.50 mm
Internal facing thickness: 0.40 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: 40 mm
Min. intermediate support width: 60 mm
Min. number of fasteners at end support: 1, 2 or 3
Min. number of fasteners at intermediate support: 2 or 3

ULS – Ultimate Limit State
ULS 1/0 – Ultimate Limit State; 1 fastener at the end support
ULS 2/0 – Ultimate Limit State; 2 fasteners at the end support
ULS 1/2 – Ultimate Limit State; 1 fastener at the end support / 2 fasteners at intermediate support
ULS 1/3 – Ultimate Limit State; 1 fastener at the end support / 3 fasteners at intermediate support
ULS 2/2 – Ultimate Limit State; 2 fasteners at the end support / 2 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

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 system	**I**	**ULS 1/0**	1.99	2.41	3.06	4.20	6.35	3.85	3.24	2.80	2.35	2.04	1.51	1.29	1.02	0.74
		ULS 2/0	3.18	3.57	4.11	4.92	6.35	3.85	3.24	2.80	2.35	2.04	1.51	1.29	1.02	0.74
		L/100	4.07	4.40	4.84	5.50	6.61	4.37	3.91	3.58	3.21	2.93	2.67	2.55	2.38	2.11
		SLS L/150	3.45	3.75	4.10	4.60	5.17	3.65	3.26	2.98	2.66	2.44	2.21	2.13	1.97	1.77
		L/200	3.04	3.27	3.57	3.99	4.24	3.21	2.86	2.61	2.34	2.14	1.94	1.87	1.75	1.57
	II	**ULS 1/0**	1.99	2.41	3.06	4.20	6.35	3.85	3.24	2.80	2.35	2.04	1.51	1.29	1.02	0.74
		ULS 2/0	3.18	3.57	4.11	4.92	6.35	3.85	3.24	2.80	2.35	2.04	1.51	1.29	1.02	0.74
		L/100	4.07	4.39	4.78	5.35	6.32	4.37	3.91	3.58	3.21	2.93	2.67	2.55	2.38	2.11
		SLS L/150	3.37	3.62	3.93	4.39	5.01	3.65	3.26	2.98	2.66	2.44	2.21	2.13	1.97	1.77
		L/200	2.92	3.13	3.40	3.66	4.06	3.21	2.86	2.61	2.34	2.14	1.94	1.87	1.75	1.57
	III	**ULS 1/0**	1.99	2.41	3.06	4.20	6.35	3.85	3.24	2.80	2.35	2.04	1.51	1.29	1.02	0.74
		ULS 2/0	3.18	3.57	4.11	4.92	6.35	3.85	3.24	2.80	2.35	2.04	1.51	1.29	1.02	0.74
		L/100	3.93	4.20	4.56	5.05	5.67	4.37	3.91	3.58	3.21	2.93	2.67	2.55	2.38	2.11
		SLS L/150	3.20	3.39	3.58	3.83	4.17	3.65	3.26	2.98	2.66	2.44	2.21	2.13	1.97	1.77
		L/200	2.71	2.82	2.96	3.12	3.34	3.21	2.86	2.61	2.34	2.14	1.94	1.87	1.75	1.57
Double-span system	**I**	**ULS 1/2**	1.37	1.69	2.20	3.16	5.37	3.85	3.24	2.80	2.35	2.02	1.50	1.28	1.01	0.73
		ULS 1/3	1.79	2.25	3.04	4.20	6.07	3.85	3.24	2.80	2.35	2.02	1.50	1.28	1.01	0.73
		ULS 2/3	2.34	2.88	3.65	4.47	6.08	3.85	3.24	2.80	2.35	2.02	1.50	1.28	1.01	0.73
		L/100	5.29	5.74	6.34	7.22	8.75	5.62	5.02	4.59	4.11	3.77	3.43	3.29	3.07	2.74
		SLS L/150	4.46	4.86	5.38	6.17	7.52	4.69	4.18	3.82	3.43	3.15	2.87	2.76	2.58	2.31
		L/200	3.94	4.30	4.78	5.50	6.73	4.11	3.67	3.36	3.02	2.78	2.54	2.45	2.29	2.05
	II	**ULS 1/2**	1.26	1.53	2.00	2.93	5.15	3.85	3.24	2.80	2.35	2.02	1.50	1.28	1.01	0.73
		ULS 1/3	1.79	2.25	3.04	4.19	5.78	3.85	3.24	2.80	2.35	2.02	1.50	1.28	1.01	0.73
		ULS 2/3	2.21	2.75	3.40	4.18	5.78	3.85	3.24	2.80	2.35	2.02	1.50	1.28	1.01	0.73
		L/100	5.29	5.74	6.34	7.22	8.75	5.62	5.02	4.59	4.11	3.77	3.43	3.29	3.07	2.74
		SLS L/150	4.46	4.86	5.38	6.17	7.52	4.69	4.18	3.82	3.43	3.15	2.87	2.76	2.58	2.31
		L/200	3.94	4.30	4.78	5.50	6.73	4.11	3.67	3.36	3.02	2.78	2.54	2.45	2.29	2.05
	III	**ULS 1/3**	1.79	2.25	3.02	3.67	5.02	3.85	3.24	2.80	2.35	2.02	1.50	1.28	1.01	0.73
		ULS 2/3	2.03	2.54	3.02	3.67	5.02	3.85	3.24	2.80	2.35	2.02	1.50	1.28	1.01	0.73
		L/100	5.29	5.74	6.34	7.22	8.75	5.62	5.02	4.59	4.11	3.77	3.43	3.29	3.07	2.74
		SLS L/150	4.46	4.86	5.38	6.17	7.52	4.69	4.18	3.82	3.43	3.15	2.87	2.76	2.58	2.31
		L/200	3.94	4.30	4.78	5.49	6.63	4.11	3.67	3.36	3.02	2.78	2.54	2.45	2.29	2.05
Multi-span system	**I**	**ULS 1/2**	1.68	2.18	2.86	4.01	6.35	3.85	3.24	2.80	2.35	2.04	1.50	1.28	1.01	0.73
		ULS 2/2	1.78	2.20	2.86	4.01	6.35	3.85	3.24	2.80	2.35	2.04	1.50	1.28	1.01	0.73
		ULS 2/3	2.86	3.50	4.11	4.92	6.35	3.85	3.24	2.80	2.35	2.04	1.50	1.28	1.01	0.73
		L/100	4.99	5.40	5.95	6.77	8.18	5.36	4.80	4.40	3.95	3.62	3.29	3.17	2.95	2.63
		SLS L/150	4.23	4.60	5.08	5.80	7.04	4.49	4.02	3.67	3.30	3.03	2.75	2.65	2.47	2.21
		L/200	3.75	4.08	4.53	5.18	6.31	3.95	3.53	3.23	2.90	2.66	2.43	2.34	2.18	1.95
	II	**ULS 1/2**	1.68	2.12	2.78	3.93	6.19	3.85	3.24	2.80	2.35	2.04	1.50	1.28	1.01	0.73
		ULS 2/2	1.71	2.13	2.77	3.93	6.19	3.85	3.24	2.80	2.35	2.04	1.50	1.28	1.01	0.73
		ULS 2/3	2.81	3.45	4.00	4.79	6.19	3.85	3.24	2.80	2.35	2.04	1.50	1.28	1.01	0.73
		L/100	4.99	5.40	5.95	6.77	8.18	5.36	4.80	4.40	3.95	3.62	3.29	3.17	2.95	2.63
		SLS L/150	4.23	4.60	5.08	5.80	7.04	4.49	4.02	3.67	3.30	3.03	2.75	2.65	2.47	2.21
		L/200	3.75	4.08	4.53	5.18	6.25	3.95	3.53	3.23	2.90	2.66	2.43	2.34	2.18	1.95
	III	**ULS 1/2**	1.60	2.00	2.65	3.80	5.94	3.85	3.24	2.80	2.35	2.04	1.50	1.28	1.01	0.73
		ULS 2/2	1.60	2.00	2.65	3.80	5.94	3.85	3.24	2.80	2.35	2.04	1.50	1.28	1.01	0.73
		ULS 2/3	2.72	3.23	3.78	4.60	5.95	3.85	3.24	2.80	2.35	2.04	1.50	1.28	1.01	0.73
		L/100	4.99	5.40	5.95	6.77	8.18	5.36	4.80	4.40	3.95	3.62	3.29	3.17	2.95	2.63
		SLS L/150	4.23	4.60	5.08	5.74	6.83	4.49	4.02	3.67	3.30	3.03	2.75	2.65	2.47	2.21
		L/200	3.75	4.04	4.42	4.98	5.90	3.95	3.53	3.23	2.90	2.66	2.43	2.34	2.18	1.95

Maximum allowed span for uniform (snow) characteristic load [kN/m²] Ruukki SP2C100/60 PU/PIR

Table 15

External facing thickness: 0.50 mm
Internal facing thickness: 0.40 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: 40 mm
Min. intermediate support width: 60 mm
Min. number of fasteners at end support: 1, 2 or 3
Min. number of fasteners at intermediate support: 2 or 3

ULS – Ultimate Limit State
ULS 1/0 – Ultimate Limit State; 1 fastener at the end support
ULS 2/0 – Ultimate Limit State; 2 fasteners at the end support
ULS 1/2 – Ultimate Limit State; 1 fastener at the end support / 2 fasteners at intermediate support
ULS 1/3 – Ultimate Limit State; 1 fastener at the end support / 3 fasteners at intermediate support
ULS 2/2 – Ultimate Limit State; 2 fasteners at the end support / 2 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

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 system	**I**	**ULS 1/0**	2.00	2.42	3.08	4.23	6.78	4.76	3.96	3.39	2.78	2.35	1.97	1.82	1.61	1.33
		ULS 2/0	3.97	4.39	4.93	5.77	7.27	4.76	3.96	3.39	2.78	2.35	1.97	1.82	1.61	1.33
		L/100	4.94	5.35	5.91	6.72	8.12	5.21	4.64	4.21	3.74	3.40	3.05	2.91	2.68	2.35
		SLS L/150	4.18	4.54	5.01	5.65	6.34	4.31	3.81	3.44	3.05	2.76	2.48	2.36	2.18	1.92
		L/200	3.67	3.96	4.34	4.89	5.19	3.74	3.29	2.97	2.63	2.38	2.14	2.05	1.89	1.68
	II	**ULS 1/0**	2.00	2.42	3.08	4.23	6.78	4.76	3.96	3.39	2.78	2.35	1.97	1.82	1.61	1.33
		ULS 2/0	3.97	4.39	4.93	5.77	7.27	4.76	3.96	3.39	2.78	2.35	1.97	1.82	1.61	1.33
		L/100	4.94	5.35	5.86	6.58	7.81	5.21	4.64	4.21	3.74	3.40	3.05	2.91	2.68	2.35
		SLS L/150	4.09	4.40	4.80	5.38	6.27	4.31	3.81	3.44	3.05	2.76	2.48	2.36	2.18	1.92
		L/200	3.52	3.78	4.13	4.51	5.03	3.74	3.29	2.97	2.63	2.38	2.14	2.05	1.89	1.68
	III	**ULS 1/0**	2.00	2.42	3.08	4.23	6.78	4.76	3.96	3.39	2.78	2.35	1.97	1.82	1.61	1.33
		ULS 2/0	3.97	4.39	4.93	5.77	7.27	4.76	3.96	3.39	2.78	2.35	1.97	1.82	1.61	1.33
		L/100	4.80	5.14	5.59	6.23	7.13	5.21	4.64	4.21	3.74	3.40	3.05	2.91	2.68	2.35
		SLS L/150	3.88	4.14	4.39	4.72	5.19	4.31	3.81	3.44	3.05	2.76	2.48	2.36	2.18	1.92
		L/200	3.25	3.40	3.58	3.80	4.10	3.74	3.29	2.97	2.63	2.38	2.14	2.05	1.89	1.68
Double-span system	**I**	**ULS 1/2**	1.35	1.63	2.10	2.97	5.16	4.65	3.95	3.39	2.78	2.36	1.97	1.83	1.61	1.33
		ULS 1/3	1.62	1.99	2.63	4.07	6.77	4.65	3.95	3.39	2.78	2.36	1.97	1.83	1.61	1.33
		ULS 2/3	2.27	2.79	3.63	4.98	6.93	4.65	3.95	3.39	2.78	2.36	1.97	1.83	1.61	1.33
		L/100	6.38	6.94	7.69	8.79	10.70	6.60	5.85	5.30	4.70	4.27	3.84	3.67	3.40	2.99
		SLS L/150	5.35	5.85	6.52	7.48	9.18	5.42	4.79	4.33	3.84	3.49	3.15	3.02	2.79	2.48
		L/200	4.70	5.15	5.76	6.65	8.20	4.69	4.14	3.75	3.33	3.03	2.74	2.63	2.45	2.18
	II	**ULS 1/2**	1.22	1.46	1.86	2.65	4.81	4.65	3.95	3.39	2.78	2.36	1.97	1.83	1.61	1.33
		ULS 1/3	1.62	1.96	2.63	4.06	6.47	4.65	3.95	3.39	2.78	2.36	1.97	1.83	1.61	1.33
		ULS 2/3	2.12	2.62	3.44	4.55	6.47	4.65	3.95	3.39	2.78	2.36	1.97	1.83	1.61	1.33
		L/100	6.38	6.94	7.69	8.79	10.70	6.60	5.85	5.30	4.70	4.27	3.84	3.67	3.40	2.99
		SLS L/150	5.35	5.85	6.52	7.48	9.18	5.42	4.79	4.33	3.84	3.49	3.15	3.02	2.79	2.48
		L/200	4.70	5.15	5.76	6.65	8.20	4.69	4.14	3.75	3.33	3.03	2.74	2.63	2.45	2.18
	III	**ULS 1/3**	1.60	1.96	2.63	3.91	5.50	4.65	3.95	3.39	2.78	2.36	1.97	1.83	1.61	1.33
		ULS 2/3	1.88	2.35	3.12	3.91	5.50	4.65	3.95	3.39	2.78	2.36	1.97	1.83	1.61	1.33
		L/100	6.38	6.94	7.69	8.79	10.70	6.60	5.85	5.30	4.70	4.27	3.84	3.67	3.40	2.99
		SLS L/150	5.35	5.85	6.52	7.48	9.18	5.42	4.79	4.33	3.84	3.49	3.15	3.02	2.79	2.48
		L/200	4.70	5.15	5.76	6.65	8.15	4.69	4.14	3.75	3.33	3.03	2.74	2.63	2.45	2.18
Multi-span system	**I**	**ULS 1/2**	1.18	1.85	2.58	3.94	6.54	4.76	3.96	3.39	2.78	2.35	1.97	1.83	1.61	1.33
		ULS 2/2	1.74	2.16	2.78	3.94	6.54	4.76	3.96	3.39	2.78	2.35	1.97	1.83	1.61	1.33
		ULS 2/3	2.81	3.45	4.45	5.76	7.27	4.76	3.96	3.39	2.78	2.35	1.97	1.83	1.61	1.33
		L/100	6.03	6.54	7.24	8.24	10.00	6.33	5.63	5.12	4.55	4.15	3.73	3.57	3.30	2.91
		SLS L/150	5.08	5.54	6.15	7.04	8.60	5.23	4.64	4.20	3.73	3.39	3.06	2.92	2.71	2.39
		L/200	4.48	4.90	5.46	6.29	7.70	4.55	4.02	3.65	3.24	2.94	2.66	2.55	2.36	2.10
	II	**ULS 1/2**	1.18	1.85	2.58	3.82	6.42	4.76	3.96	3.39	2.78	2.35	1.97	1.83	1.61	1.33
		ULS 2/2	1.64	2.04	2.66	3.82	6.41	4.76	3.96	3.39	2.78	2.35	1.97	1.83	1.61	1.33
		ULS 2/3	2.74	3.38	4.38	5.63	7.31	4.76	3.96	3.39	2.78	2.35	1.97	1.83	1.61	1.33
		L/100	6.03	6.54	7.24	8.24	10.00	6.33	5.63	5.12	4.55	4.15	3.73	3.57	3.30	2.91
		SLS L/150	5.08	5.54	6.15	7.04	8.60	5.23	4.64	4.20	3.73	3.39	3.06	2.92	2.71	2.39
		L/200	4.48	4.90	5.46	6.29	7.69	4.55	4.02	3.65	3.24	2.94	2.66	2.55	2.36	2.10
	III	**ULS 1/2**	1.18	1.84	2.47	3.63	6.23	4.76	3.96	3.39	2.78	2.35	1.97	1.83	1.61	1.33
		ULS 2/2	1.49	1.84	2.47	3.63	6.23	4.76	3.96	3.39	2.78	2.35	1.97	1.83	1.61	1.33
		ULS 2/3	2.63	3.26	4.04	5.11	7.35	4.76	3.96	3.39	2.78	2.35	1.97	1.83	1.61	1.33
		L/100	6.03	6.54	7.24	8.24	10.00	6.33	5.63	5.12	4.55	4.15	3.73	3.57	3.30	2.91
		SLS L/150	5.08	5.54	6.15	7.01	8.42	5.23	4.64	4.20	3.73	3.39	3.06	2.92	2.71	2.39
		L/200	4.48	4.88	5.36	6.07	7.27	4.55	4.02	3.65	3.24	2.94	2.66	2.55	2.36	2.10

Maximum allowed span for uniform (snow) characteristic load [kN/m²] Ruukki SP2C120/80 PU/PIR

Table 16

External facing thickness: 0.50 mm
Internal facing thickness: 0.40 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: 40 mm
Min. intermediate support width: 60 mm
Min. number of fasteners at end support: 1, 2 or 3
Min. number of fasteners at intermediate support: 2 or 3

ULS – Ultimate Limit State
ULS 1/0 – Ultimate Limit State; 1 fastener at the end support
ULS 2/0 – Ultimate Limit State; 2 fasteners at the end support
ULS 1/2 – Ultimate Limit State; 1 fastener at the end support / 2 fasteners at intermediate support
ULS 1/3 – Ultimate Limit State; 1 fastener at the end support / 3 fasteners at intermediate support
ULS 2/2 – Ultimate Limit State; 2 fasteners at the end support / 2 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

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 system	**I**	**ULS 1/0**	2.01	2.44	3.11	4.29	6.91	5.61	4.70	4.03	3.28	2.73	2.23	2.04	1.76	1.40
		ULS 2/0	3.99	4.75	5.35	6.27	7.95	5.61	4.70	4.03	3.28	2.73	2.23	2.04	1.76	1.40
		L/100	5.81	6.30	6.96	7.93	9.61	6.05	5.38	4.87	4.31	3.89	3.47	3.30	3.02	2.61
		SLS L/150	4.91	5.35	5.94	6.73	7.48	4.97	4.38	3.94	3.46	3.11	2.77	2.63	2.41	2.09
		L/200	4.34	4.69	5.15	5.82	6.13	4.29	3.75	3.37	2.95	2.65	2.36	2.25	2.06	1.80
	II	**ULS 1/0**	2.01	2.44	3.11	4.29	6.91	5.61	4.70	4.03	3.28	2.73	2.23	2.04	1.76	1.40
		ULS 2/0	3.99	4.75	5.35	6.27	7.95	5.61	4.70	4.03	3.28	2.73	2.23	2.04	1.76	1.40
		L/100	5.81	6.30	6.96	7.84	9.38	6.05	5.38	4.87	4.31	3.89	3.47	3.30	3.02	2.61
		SLS L/150	4.84	5.22	5.71	6.42	7.47	4.97	4.38	3.94	3.46	3.11	2.77	2.63	2.41	2.09
		L/200	4.16	4.48	4.91	5.45	6.13	4.29	3.75	3.37	2.95	2.65	2.36	2.25	2.06	1.80
	III	**ULS 1/0**	2.01	2.44	3.11	4.29	6.91	5.61	4.70	4.03	3.28	2.73	2.23	2.04	1.76	1.40
		ULS 2/0	3.99	4.75	5.35	6.27	7.95	5.61	4.70	4.03	3.28	2.73	2.23	2.04	1.76	1.40
		L/100	5.68	6.09	6.64	7.44	8.78	6.05	5.38	4.87	4.31	3.89	3.47	3.30	3.02	2.61
		SLS L/150	4.60	4.93	5.29	5.72	6.36	4.97	4.38	3.94	3.46	3.11	2.77	2.63	2.41	2.09
		L/200	3.87	4.06	4.28	4.58	4.99	4.29	3.75	3.37	2.95	2.65	2.36	2.25	2.06	1.80
Double-span system	**I**	**ULS 1/2**	1.33	1.59	2.03	2.84	5.02	5.04	4.26	3.73	3.17	2.73	2.23	2.04	1.76	1.41
		ULS 1/3	1.48	1.75	2.36	3.61	6.91	5.04	4.26	3.73	3.17	2.73	2.23	2.04	1.76	1.41
		ULS 2/3	2.22	2.73	3.55	5.06	6.98	5.04	4.26	3.73	3.17	2.73	2.23	2.04	1.76	1.41
		L/100	7.48	8.15	9.04	10.37	12.69	7.59	6.70	6.05	5.34	4.81	4.29	4.09	3.75	3.27
		SLS L/150	6.26	6.86	7.65	8.83	10.88	6.18	5.42	4.88	4.29	3.87	3.45	3.29	3.03	2.66
		L/200	5.49	6.03	6.76	7.84	9.73	5.31	4.65	4.17	3.67	3.31	2.97	2.83	2.62	2.31
	II	**ULS 1/2**	1.19	1.40	1.75	2.45	4.52	5.04	4.26	3.73	3.17	2.73	2.23	2.04	1.76	1.41
		ULS 1/3	1.48	1.75	2.32	3.61	6.92	5.04	4.26	3.73	3.17	2.73	2.23	2.04	1.76	1.41
		ULS 2/3	2.05	2.53	3.31	4.80	6.99	5.04	4.26	3.73	3.17	2.73	2.23	2.04	1.76	1.41
		L/100	7.48	8.15	9.04	10.37	12.69	7.59	6.70	6.05	5.34	4.81	4.29	4.09	3.75	3.27
		SLS L/150	6.26	6.86	7.65	8.83	10.88	6.18	5.42	4.88	4.29	3.87	3.45	3.29	3.03	2.66
		L/200	5.49	6.03	6.76	7.84	9.73	5.31	4.65	4.17	3.67	3.31	2.97	2.83	2.62	2.31
	III	**ULS 1/3**	1.48	1.70	2.32	3.60	5.94	5.04	4.26	3.73	3.17	2.73	2.23	2.04	1.76	1.41
		ULS 2/3	1.79	2.21	2.91	4.12	5.94	5.04	4.26	3.73	3.17	2.73	2.23	2.04	1.76	1.41
		L/100	7.48	8.15	9.04	10.37	12.69	7.59	6.70	6.05	5.34	4.81	4.29	4.09	3.75	3.27
		SLS L/150	6.26	6.86	7.65	8.83	10.88	6.18	5.42	4.88	4.29	3.87	3.45	3.29	3.03	2.66
		L/200	5.49	6.03	6.76	7.84	9.73	5.31	4.65	4.17	3.67	3.31	2.97	2.83	2.62	2.31
Multi-span system	**I**	**ULS 1/2**	0.90	1.00	1.18	3.64	6.56	5.47	4.61	4.02	3.28	2.73	2.23	2.04	1.76	1.40
		ULS 2/2	1.69	2.09	2.71	3.89	6.56	5.47	4.61	4.02	3.28	2.73	2.23	2.04	1.76	1.40
		ULS 2/3	2.78	3.42	4.43	6.22	7.95	5.47	4.61	4.02	3.28	2.73	2.23	2.04	1.76	1.40
		L/100	7.07	7.68	8.51	9.72	11.86	7.29	6.46	5.85	5.18	4.69	4.19	3.99	3.67	3.20
		SLS L/150	5.95	6.49	7.23	8.30	10.20	5.97	5.26	4.75	4.18	3.78	3.38	3.22	2.96	2.59
		L/200	5.24	5.74	6.41	7.40	9.14	5.15	4.53	4.08	3.59	3.24	2.90	2.77	2.55	2.24
	II	**ULS 1/2**	0.90	1.00	1.18	3.64	6.41	5.47	4.61	4.02	3.28	2.73	2.23	2.04	1.76	1.40
		ULS 2/2	1.58	1.96	2.56	3.73	6.41	5.47	4.61	4.02	3.28	2.73	2.23	2.04	1.76	1.40
		ULS 2/3	2.68	3.32	4.33	6.11	7.98	5.47	4.61	4.02	3.28	2.73	2.23	2.04	1.76	1.40
		L/100	7.07	7.68	8.51	9.72	11.86	7.29	6.46	5.85	5.18	4.69	4.19	3.99	3.67	3.20
		SLS L/150	5.95	6.49	7.23	8.30	10.20	5.97	5.26	4.75	4.18	3.78	3.38	3.22	2.96	2.59
		L/200	5.24	5.74	6.41	7.40	9.14	5.15	4.53	4.08	3.59	3.24	2.90	2.77	2.55	2.24
	III	**ULS 1/2**	0.90	1.00	1.18	3.47	6.17	5.47	4.61	4.02	3.28	2.73	2.23	2.04	1.76	1.40
		ULS 2/2	1.39	1.74	2.31	3.47	6.17	5.47	4.61	4.02	3.28	2.73	2.23	2.04	1.76	1.40
		ULS 2/3	2.53	3.17	4.18	5.48	8.02	5.47	4.61	4.02	3.28	2.73	2.23	2.04	1.76	1.40
		L/100	7.07	7.68	8.51	9.72	11.86	7.29	6.46	5.85	5.18	4.69	4.19	3.99	3.67	3.20
		SLS L/150	5.95	6.49	7.23	8.30	10.11	5.97	5.26	4.75	4.18	3.78	3.38	3.22	2.96	2.59
		L/200	5.24	5.74	6.36	7.23	8.74	5.15	4.53	4.08	3.59	3.24	2.90	2.77	2.55	2.24

Maximum allowed span for uniform (snow) characteristic load [kN/m²] Ruukki SP2C140/100 PU/PIR

Table 17

External facing thickness: 0.50 mm
Internal facing thickness: 0.40 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: 40 mm
Min. intermediate support width: 60 mm
Min. number of fasteners at end support: 1, 2 or 3
Min. number of fasteners at intermediate support: 2 or 3

ULS – Ultimate Limit State
ULS 1/0 – Ultimate Limit State; 1 fastener at the end support
ULS 2/0 – Ultimate Limit State; 2 fasteners at the end support
ULS 1/2 – Ultimate Limit State; 1 fastener at the end support / 2 fasteners at intermediate support
ULS 1/3 – Ultimate Limit State; 1 fastener at the end support / 3 fasteners at intermediate support
ULS 2/2 – Ultimate Limit State; 2 fasteners at the end support / 2 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

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 system	**I**	**ULS 1/0**	2.02	2.45	3.12	4.31	6.99	6.42	5.41	4.66	3.82	3.17	2.55	2.31	1.94	1.49
		ULS 2/0	4.01	4.87	5.72	6.72	8.55	6.42	5.41	4.66	3.82	3.17	2.55	2.31	1.94	1.49
		L/100	6.64	7.20	7.96	9.07	11.03	6.89	6.12	5.55	4.90	4.41	3.91	3.72	3.38	2.90
		SLS L/150	5.62	6.13	6.79	7.76	8.63	5.65	4.97	4.47	3.91	3.49	3.08	2.92	2.66	2.28
		L/200	4.96	5.40	5.95	6.73	7.11	4.86	4.25	3.79	3.30	2.94	2.60	2.46	2.25	1.94
	II	**ULS 1/0**	2.02	2.45	3.12	4.31	6.99	6.42	5.41	4.66	3.82	3.17	2.55	2.31	1.94	1.49
		ULS 2/0	4.01	4.87	5.72	6.72	8.55	6.42	5.41	4.66	3.82	3.17	2.55	2.31	1.94	1.49
		L/100	6.64	7.20	7.95	9.04	10.88	6.89	6.12	5.55	4.90	4.41	3.91	3.72	3.38	2.90
		SLS L/150	5.57	6.01	6.59	7.43	8.63	5.65	4.97	4.47	3.91	3.49	3.08	2.92	2.66	2.28
		L/200	4.80	5.17	5.67	6.38	7.11	4.86	4.25	3.79	3.30	2.94	2.60	2.46	2.25	1.94
	III	**ULS 1/0**	2.02	2.45	3.12	4.31	6.99	6.42	5.41	4.66	3.82	3.17	2.55	2.31	1.94	1.49
		ULS 2/0	4.01	4.87	5.72	6.72	8.55	6.42	5.41	4.66	3.82	3.17	2.55	2.31	1.94	1.49
		L/100	6.54	7.03	7.67	8.60	10.22	6.89	6.12	5.55	4.90	4.41	3.91	3.72	3.38	2.90
		SLS L/150	5.30	5.70	6.19	6.73	7.57	5.65	4.97	4.47	3.91	3.49	3.08	2.92	2.66	2.28
		L/200	4.49	4.73	5.02	5.40	5.92	4.86	4.25	3.79	3.30	2.94	2.60	2.46	2.25	1.94
Double-span system	**I**	**ULS 1/2**	1.30	1.52	1.82	2.74	4.80	5.43	4.57	3.98	3.37	2.94	2.54	2.30	1.94	1.50
		ULS 1/3	1.36	1.52	1.81	2.87	6.71	5.43	4.57	3.98	3.37	2.94	2.54	2.30	1.94	1.50
		ULS 2/3	2.18	2.67	3.46	4.95	6.96	5.43	4.57	3.98	3.37	2.94	2.54	2.30	1.94	1.50
		L/100	8.55	9.31	10.34	11.86	14.55	8.59	7.57	6.82	5.98	5.37	4.77	4.53	4.14	3.57
		SLS L/150	7.15	7.83	8.75	10.11	12.49	6.95	6.08	5.44	4.76	4.26	3.78	3.59	3.29	2.85
		L/200	6.26	6.89	7.73	8.98	11.17	5.93	5.18	4.62	4.04	3.62	3.22	3.06	2.81	2.45
	II	**ULS 1/2**	1.17	1.33	1.55	2.03	4.16	5.43	4.57	3.98	3.37	2.94	2.54	2.30	1.94	1.50
		ULS 1/3	1.36	1.52	1.82	2.86	6.70	5.43	4.57	3.98	3.37	2.94	2.54	2.30	1.94	1.50
		ULS 2/3	2.00	2.44	3.18	4.62	6.96	5.43	4.57	3.98	3.37	2.94	2.54	2.30	1.94	1.50
		L/100	8.55	9.31	10.34	11.86	14.55	8.59	7.57	6.82	5.98	5.37	4.77	4.53	4.14	3.57
		SLS L/150	7.15	7.83	8.75	10.11	12.49	6.95	6.08	5.44	4.76	4.26	3.78	3.59	3.29	2.85
		L/200	6.26	6.89	7.73	8.98	11.17	5.93	5.18	4.62	4.04	3.62	3.22	3.06	2.81	2.45
	III	**ULS 1/3**	1.36	1.52	1.77	2.87	6.18	5.43	4.57	3.98	3.37	2.94	2.54	2.30	1.94	1.50
		ULS 2/3	1.73	2.09	2.71	4.05	6.18	5.43	4.57	3.98	3.37	2.94	2.54	2.30	1.94	1.50
		L/100	8.55	9.31	10.34	11.86	14.55	8.59	7.57	6.82	5.98	5.37	4.77	4.53	4.14	3.57
		SLS L/150	7.15	7.83	8.75	10.11	12.49	6.95	6.08	5.44	4.76	4.26	3.78	3.59	3.29	2.85
		L/200	6.26	6.89	7.73	8.98	11.17	5.93	5.18	4.62	4.04	3.62	3.22	3.06	2.81	2.45
Multi-span system	**I**	**ULS 1/2**	0.81	0.87	0.95	1.06	6.53	5.86	4.92	4.27	3.61	3.16	2.55	2.31	1.94	1.49
		ULS 2/2	1.65	2.03	2.64	3.81	6.53	5.86	4.92	4.27	3.61	3.16	2.55	2.31	1.94	1.49
		ULS 2/3	2.73	3.37	4.39	6.19	8.55	5.86	4.92	4.27	3.61	3.16	2.55	2.31	1.94	1.49
		L/100	8.07	8.78	9.72	11.12	13.59	8.25	7.31	6.61	5.83	5.25	4.67	4.44	4.06	3.51
		SLS L/150	6.79	7.42	8.26	9.50	11.70	6.74	5.92	5.32	4.66	4.18	3.72	3.53	3.23	2.80
		L/200	5.98	6.55	7.33	8.47	10.48	5.78	5.06	4.54	3.97	3.56	3.16	3.01	2.75	2.39
	II	**ULS 1/2**	0.60	0.65	0.71	0.81	0.98	5.86	4.92	4.27	3.61	3.16	2.55	2.31	1.94	1.49
		ULS 2/2	1.52	1.88	2.49	3.61	6.33	5.86	4.92	4.27	3.61	3.16	2.55	2.31	1.94	1.49
		ULS 2/3	2.62	3.26	4.27	6.08	8.57	5.86	4.92	4.27	3.61	3.16	2.55	2.31	1.94	1.49
		L/100	8.07	8.78	9.72	11.12	13.59	8.25	7.31	6.61	5.83	5.25	4.67	4.44	4.06	3.51
		SLS L/150	6.79	7.42	8.26	9.50	11.70	6.74	5.92	5.32	4.66	4.18	3.72	3.53	3.23	2.80
		L/200	5.98	6.55	7.33	8.47	10.48	5.78	5.06	4.54	3.97	3.56	3.16	3.01	2.75	2.39
	III	**ULS 1/2**	0.82	0.87	0.95	3.09	6.01	5.86	4.92	4.27	3.61	3.16	2.55	2.31	1.94	1.49
		ULS 2/2	1.33	1.63	2.14	3.27	6.01	5.86	4.92	4.27	3.61	3.16	2.55	2.31	1.94	1.49
		ULS 2/3	2.44	3.07	4.07	5.71	8.60	5.86	4.92	4.27	3.61	3.16	2.55	2.31	1.94	1.49
		L/100	8.07	8.78	9.72	11.12	13.59	8.25	7.31	6.61	5.83	5.25	4.67	4.44	4.06	3.51
		SLS L/150	6.79	7.42	8.26	9.50	11.70	6.74	5.92	5.32	4.66	4.18	3.72	3.53	3.23	2.80
		L/200	5.98	6.55	7.32	8.35	10.15	5.78	5.06	4.54	3.97	3.56	3.16	3.01	2.75	2.39

Notes

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