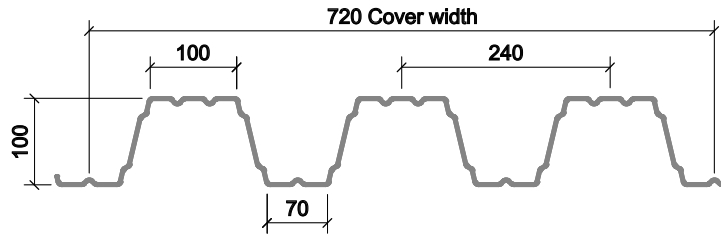


SR100⁺™



Description

Deck profile typically used as the structural deck for single ply membrane, double skin built-up, standing seam, green roof and asphalt systems. Also available as part of the Protex Insulated System.

Benefits

- Long-spanning shallow deck
- Can be manually installed with limited need for additional lifting plant
- Perforated option available for enhanced acoustic performance

Gauges

- 0.7mm
- 0.9mm
- 1.2mm

Specification

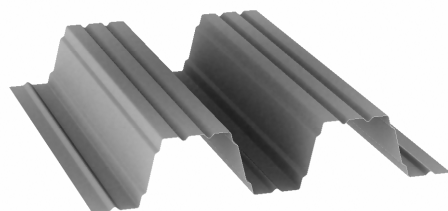
- 720mm cover width
- 100mm deep

Steel Grade

- S350

Coatings and Finishes

- Galvanised
- Interior liner
- Perforated



Profile Properties

Nominal Thickness mm	Weight kg/m ²	Weight kN/m ²	Top Flange in Compression		Bottom Flange in Compression	
			Moment Capacity kNm/m	Moment of Inertia cm ⁴ /m	Moment Capacity kNm/m	Moment of Inertia cm ⁴ /m
0.7	9.24	0.09	7.46	179.06	8.41	154.04
0.9	11.91	0.12	11.62	211.3	10.74	196.21
1.2	15.9	0.16	21.77	349.87	17.73	351.59

Section properties are calculated assisted by testing in accordance with Eurocode 3.

Load Tables

Positive Imposed Load (Gravity) kN/m²

Span Condition	Gauge	Span m Unfactored Applied Load (kN/m ²)																
		3.0	3.2	3.4	3.6	3.8	4.0	4.2	4.4	4.6	4.8	5.0	5.2	5.4	5.6	5.8	6.0	6.2
Single	0.7	3.20	3.00	2.83	2.67	2.53	2.26	1.95	1.70	1.48	1.31	1.16	1.03	0.92	0.82	0.74	0.67	0.61
	0.9	5.43	5.09	4.34	3.65	3.11	2.66	2.30	2.00	1.75	1.54	1.36	1.21	1.08	0.97	0.87	0.79	0.71
	1.2	9.76	8.61	7.18	6.05	5.14	4.41	3.81	3.31	2.90	2.55	2.26	2.01	1.79	1.61	1.45	1.31	1.18
Double	0.7	2.91	2.65	2.42	2.22	2.04	1.89	1.75	1.63	1.52	1.42	1.33	1.25	1.18	1.11	1.05	0.99	0.94
	0.9	4.22	3.82	3.48	3.18	2.92	2.69	2.49	2.31	2.15	2.00	1.87	1.75	1.65	1.55	1.46	1.31	1.19
	1.2	7.17	6.49	5.90	5.39	4.94	4.55	4.20	3.90	3.62	3.38	3.15	2.95	2.77	2.61	2.46	2.32	2.19
Multi	0.7	3.45	3.14	2.88	2.64	2.44	2.26	2.09	1.95	1.82	1.70	1.60	1.50	1.42	1.34	1.26	1.20	1.13
	0.9	5.04	4.57	4.16	3.81	3.50	3.23	2.99	2.78	2.59	2.42	2.26	2.02	1.80	1.62	1.46	1.31	1.19
	1.2	8.57	7.77	7.07	6.47	5.94	5.48	5.07	4.70	4.37	4.08	3.82	3.58	3.36	3.07	2.76	2.50	2.26

Load Tables

Negative Imposed Load (Uplift) kN/m²

Span Condition	Gauge	Span m Unfactored Applied Load (kN/m ²)																
		3.0	3.2	3.4	3.6	3.8	4.0	4.2	4.4	4.6	4.8	5.0	5.2	5.4	5.6	5.8	6.0	6.2
Single	0.7	3.20	3.00	2.83	2.67	2.53	2.40	2.24	1.94	1.70	1.50	1.32	1.18	1.05	0.94	0.85	0.77	0.69
	0.9	5.43	5.09	4.79	4.42	3.84	3.30	2.85	2.48	2.17	1.91	1.69	1.50	1.34	1.20	1.08	0.98	0.89
	1.2	9.76	9.15	8.18	7.30	6.55	5.91	5.10	4.44	3.88	3.42	3.02	2.69	2.40	2.15	1.94	1.75	1.59
Double	0.7	2.75	2.49	2.27	2.08	1.91	1.77	1.64	1.52	1.42	1.32	1.24	1.16	1.09	1.03	0.97	0.92	0.87
	0.9	4.40	3.99	3.63	3.32	3.06	2.82	2.61	2.42	2.25	2.10	1.97	1.85	1.73	1.63	1.54	1.46	1.38
	1.2	7.98	7.24	6.60	6.05	5.56	5.14	4.76	4.42	4.12	3.85	3.60	3.38	3.18	2.99	2.82	2.67	2.53
Multi	0.7	3.27	2.97	2.71	2.49	2.29	2.12	1.96	1.83	1.70	1.59	1.49	1.40	1.32	1.24	1.17	1.11	1.05
	0.9	5.24	4.76	4.34	3.98	3.66	3.38	3.13	2.91	2.71	2.53	2.37	2.23	2.09	1.97	1.80	1.63	1.48
	1.2	9.49	8.63	7.88	7.23	6.66	6.15	5.71	5.31	4.95	4.63	4.33	4.07	3.83	3.59	3.23	2.92	2.64

Tables consider deflection limits of:
 Positive load (Gravity) - Span /200
 Negative loads (Uplift) - Span /150

These tables do not consider loads applied during construction of the roof finish - additional load-distributing measures may be required in some situations.
 All loads within table consider a partial factor of 1.5.

Fixing checks for uplift must be considered separately.
 Tables based on bearing width (steel beam) of 100mm.
 Numbers shown red exceed maximum Health and Safety manual handling guidelines, additional lifting plant is recommended for these situations.

These load/span tables do not consider plastic design (moment redistribution). Improved loadings may be possible for some double and multi-span configurations. Contact SMD Technical Team for further guidance.



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