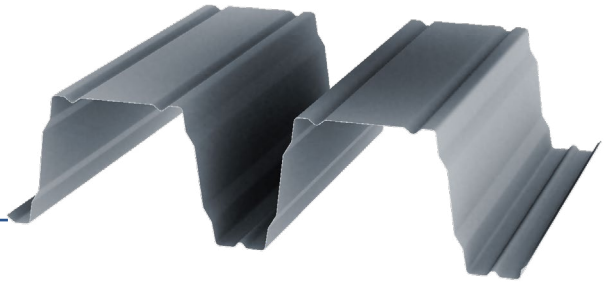
THRUDECKServices
Metal Decking Contractors

Product Data Sheet SMD Profile Details and Sectional Properties

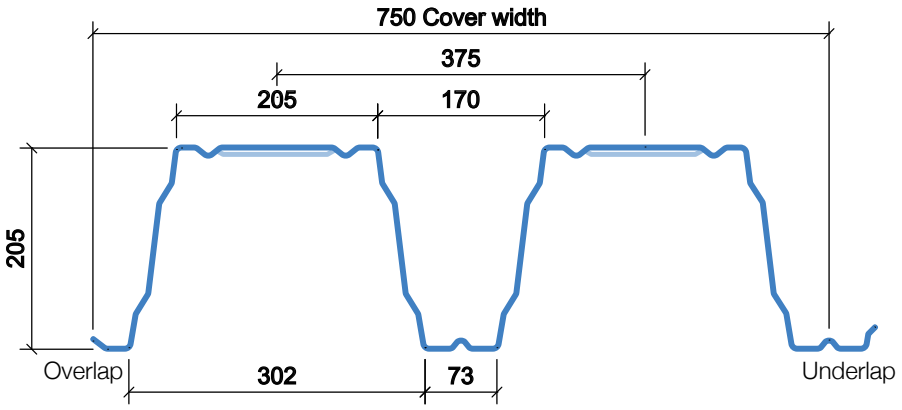
SR200™

Roof deck profile



Deck profile

200mm deck profile typically used as the structural deck for Single Ply Membrane, Double Skin built-up, Standing Seam, Green Roof and Asphalt systems.



Options

- S320 grade steel in accordance with BS EN 10143:2016 and BS EN 10346:2015
- Available in two coating options:-

  Galvanised Hot dip galvanised with a minimum coating mass of 275g/m² (S320GD-Z275)

  Polyester White Hot dip galvanised with a minimum coating mass of 275g/m² (S320GD-Z275) with 25 micron polyester to the interior surface
- 0.75mm, 1.0mm and 1.25mm gauge options available to suit common steel beam spacings.
- Maximum sheet lengths up to 12m in packs of 10-30 sheets to suit project specific details

Profile properties

						Top Flange in Compression		Bottom Flange in Compression	
Nominal Thickness mm	Available Grade N/mm²	Depth of Profile mm	Weight kg/m²	Weight kN/m²	Area of Steel (mm²/m)	Moment Capacity kNm/m	Moment of Inertia cm⁴/m	Moment Capacity kNm/m	Moment of Inertia cm⁴/m
0.75	**S320**	**205**	**12.04**	**0.12**	**1500.0**	**17.4**	**692.6**	**17.7**	**786.7**
1.00	**S320**	**205**	**16.05**	**0.16**	**2000.0**	**26.7**	**984.0**	**26.9**	**1095.8**
1.25	**S320**	**205**	**20.00**	**0.20**	**2500.0**	**35.7**	**1271.0**	**34.7**	**1385.2**

Section properties are calculated in accordance with Eurocode 3.

Load tables

Positive Imposed Load (Gravity) kN/m²

Span Condition	Gauge	Span m 5.50	5.75	6.00	6.25	6.50	6.75	7.00	7.25	7.50	7.75	8.00	8.25	8.50	8.75	9.00	9.25	9.50
Single	0.75	1.44	1.37	1.32	1.26	1.21	1.17	1.13	1.09	1.05	1.02	0.99	0.96	0.93	-	-	-	-
	1.00	2.69	2.57	2.47	2.37	2.28	2.19	2.11	2.04	1.89	1.71	1.56	1.42	1.30	1.19	1.09	1.01	0.93
	1.25	4.28	4.09	3.92	3.77	3.63	3.34	3.00	2.70	2.44	2.21	2.01	1.83	1.67	1.54	1.41	1.30	1.20
Double	0.75	1.54	1.44	1.36	1.28	1.21	1.17	1.13	1.09	1.05	1.02	0.99	0.96	0.93	0.90	-	-	-
	1.00	2.69	2.57	2.47	2.37	2.28	2.19	2.11	2.04	1.97	1.91	1.85	1.79	1.74	1.68	1.60	1.54	1.47
	1.25	4.28	4.09	3.92	3.77	3.63	3.48	3.34	3.16	3.00	2.84	2.70	2.57	2.45	2.34	2.21	2.09	1.98
Multi	0.75	1.79	1.71	1.61	1.52	1.43	1.36	1.29	1.22	1.17	1.11	1.06	1.01	0.97	0.93	-	-	-
	1.00	3.01	2.82	2.64	2.49	2.35	2.22	2.11	2.04	1.97	1.91	1.85	1.79	1.74	1.69	1.64	1.56	1.48
	1.25	4.29	4.09	3.92	3.77	3.63	3.48	3.36	3.25	3.14	2.98	2.80	2.63	2.48	2.34	2.21	2.09	1.98

Negative Imposed Load (Uplift) kN/m²

Span Condition	Gauge	Span m 5.50	5.75	6.00	6.25	6.50	6.75	7.00	7.25	7.50	7.75	8.00	8.25	8.50	8.75	9.00	9.25	9.50
Single	0.75	2.94	2.69	2.47	2.28	2.11	1.95	1.81	1.69	1.58	1.48	1.39	1.31	1.23	1.16	1.10	1.04	0.99
	1.00	4.24	3.87	3.56	3.28	3.03	2.81	2.61	2.44	2.28	2.13	2.00	1.88	1.77	1.67	1.58	1.50	1.42
	1.25	5.49	5.03	4.61	4.25	3.93	3.65	3.39	3.16	2.95	2.77	2.60	2.44	2.30	2.17	2.05	1.94	1.84
Double	0.75	2.51	2.35	2.21	2.07	1.95	1.84	1.74	1.64	1.55	1.46	1.38	1.31	1.24	1.17	1.11	1.05	0.99
	1.00	4.41	4.04	3.72	3.42	3.17	2.94	2.73	2.54	2.38	2.23	2.09	1.97	1.85	1.75	1.65	1.56	1.48
	1.25	5.92	5.41	4.97	4.59	4.24	3.93	3.65	3.41	3.19	2.98	2.80	2.63	2.48	2.34	2.21	2.09	1.98
Multi	0.75	2.80	2.64	2.49	2.35	2.22	2.11	2.00	1.90	1.80	1.71	1.63	1.55	1.48	1.41	1.34	1.28	1.22
	1.00	5.28	4.90	4.55	4.23	3.94	3.66	3.41	3.18	2.97	2.79	2.61	2.46	2.31	2.18	2.06	1.95	1.85
	1.25	7.40	6.76	6.22	5.73	5.29	4.91	4.57	4.26	3.98	3.73	3.50	3.29	3.10	2.93	2.76	2.62	2.48

Tables consider deflection limits of:-

Positive load (Gravity) - Span /200

Negative loads (Uplift) - Span /90

Figures shaded indicate where design is governed by deflection

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 160mm

Numbers shown **RED** are not recommended as sheet lengths exceed maximum for logistic and manual handling reasons.