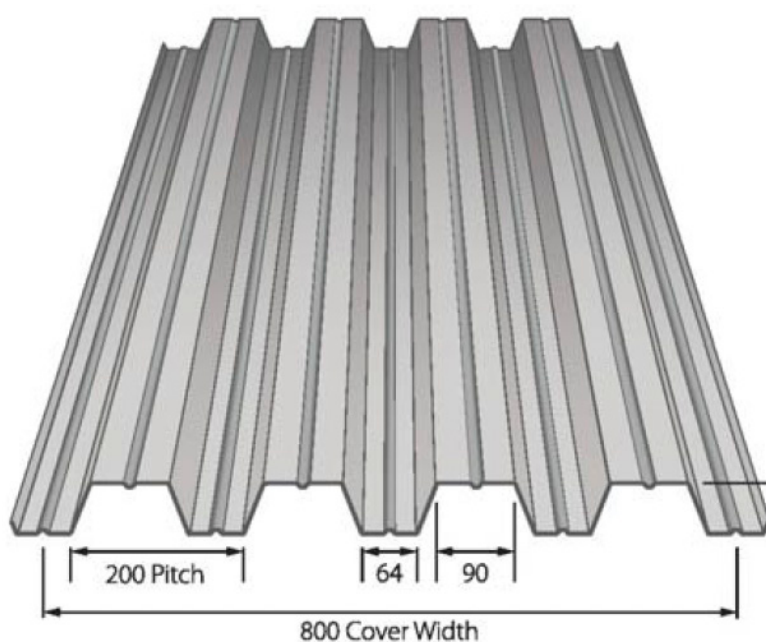


RoofDek D60 - Steel 280 N/mm²

Interior Liner and Galvanised finish



Ultimate Section Properties to Eurocode3

			Broad flange in compression		Narrow flange in compression		100mm Bearing on steel beam		
Nominal Thickness mm	Design Thickness mm	Weight kg/m ²	Moment Capacity kNm/m	Moment of Inertia cm ⁴ /m	Moment Capacity kNm/m	Moment of Inertia cm ⁴ /m	Transverse Resistance		Shear Capacity kNm/m
							Web Crushing kNm/m	Shear Capacity kNm/m	
0.70	0.66	8.34	4.42	54.13	4.65	57.35	25.29	5.93	47.11
0.90	0.86	10.73	6.46	74.69	6.34	74.69	40.38	9.79	79.99
1.20	1.16	14.32	9.60	100.68	8.62	100.68	68.28	17.23	121.05

RoofDek D60 - Steel 280 N/mm²

Safe Imposed (positive) Loads (kN/m²) - Imposed load - deflection limit span / 200

Span condition	Thickness mm	Span (metres)															
		2.00	2.20	2.40	2.60	2.80	3.00	3.20	3.40	3.60	3.80	4.00	4.20	4.40	4.60	4.80	5.00
Single	0.70	3.90	3.54	3.08	2.40	1.91	1.54	1.25	1.03	-	-	-	-	-	-	-	-
	0.90	6.46	5.55	4.25	3.32	2.64	2.13	1.73	1.43	1.19	0.99	-	-	-	-	-	-
	1.20	10.01	7.48	5.73	4.48	3.56	2.87	2.34	1.93	1.60	1.34	1.13	0.96	-	-	-	-
Double	0.70	3.98	3.43	2.99	2.63	2.33	2.08	1.87	1.69	1.53	1.39	1.27	1.17	1.07	0.99	-	-
	0.90	5.85	5.03	4.37	3.83	3.38	3.01	2.70	2.43	2.20	2.00	1.83	1.67	1.54	1.39	1.21	1.06
	1.20	8.71	7.45	6.44	5.63	4.96	4.40	3.93	3.53	3.19	2.89	2.64	2.41	2.16	1.87	1.63	1.43
Multi	0.70	4.34	3.94	3.60	3.17	2.81	2.52	2.26	2.05	1.86	1.70	1.55	1.34	1.15	1.00	-	-
	0.90	7.02	6.04	5.26	4.63	4.10	3.65	3.28	2.96	2.68	2.44	2.16	1.86	1.60	1.39	1.21	1.06
	1.20	10.50	9.00	7.80	6.83	6.03	5.36	4.80	4.32	3.90	3.43	2.92	2.50	2.16	1.87	1.63	1.43

Safe Imposed (negative) Loads (kN/m²) - Wind suction load - deflection limit span / 90

Span condition	Thickness mm	Span (metres)															
		2.00	2.20	2.40	2.60	2.80	3.00	3.20	3.40	3.60	3.80	4.00	4.20	4.40	4.60	4.80	5.00
Single	0.70	6.25	5.18	4.36	3.72	3.22	2.81	2.48	2.20	-	-	-	-	-	-	-	-
	0.90	8.52	7.06	5.94	5.07	4.38	3.83	3.37	2.99	2.68	2.41	-	-	-	-	-	-
	1.20	11.58	9.59	8.07	6.89	5.95	5.20	4.58	4.07	3.64	3.28	2.96	2.58	-	-	-	-
Double	0.70	5.95	4.92	4.15	3.54	3.06	2.67	2.36	2.09	1.87	1.69	1.53	1.39	1.27	1.17	-	-
	0.90	8.68	7.19	6.05	5.17	4.46	3.90	3.43	3.05	2.73	2.46	2.22	2.02	1.85	1.70	1.57	1.45
	1.20	12.89	10.67	8.98	7.67	6.62	5.78	5.09	4.52	4.04	3.64	3.29	3.00	2.74	2.51	2.32	2.14
Multi	0.70	7.42	6.14	5.17	4.41	3.81	3.33	2.93	2.60	2.33	2.09	1.90	1.72	1.58	1.45	-	-
	0.90	10.84	8.97	7.55	6.44	5.56	4.86	4.28	3.80	3.39	3.05	2.76	2.51	2.29	2.11	1.94	1.79
	1.20	16.09	13.31	11.20	9.56	8.26	7.20	6.34	5.63	5.03	4.52	4.09	3.72	3.40	3.12	2.87	2.65

Notes:

Black figures are stress limited, the load shown is the ultimate load divided by 1.5.

Blue figures are deflection limited.

Red figures indicate that deck length exceeds 12m the maximum advisable. Consider extended end laps

Calculations are to Eurocode, however additional checks such as fixings are required

A construction line load 2kN/m has been allowed for.

Deck self-weight has been allowed for, so does not have to be included in applied loads.