



Section Properties

(Per Metre of Width)

Base Steel Thickness (mm)	Mass Z275 (kg/m ²)	Yield Stress (MPa)	Section Modulus (x 10 ³ mm ³)		Deflection Moment of Inertia Mid Span (x 10 ⁶ mm ⁴)	Specified Web Crippling Data (kN)			
			Mid Span	Support		End Pe1	End Pe2	Interior Pi1	Interior Pi2
0.305	3.11	230	1.09	1.19	0.0133	0.322	0.081	0.642	0.109
0.343	3.46	550	1.12	1.25	0.0140	0.782	0.196	1.55	0.264
0.457	4.52	230	1.94	2.04	0.0248	0.780	0.195	1.53	0.261
0.610	5.94	230	2.68	2.96	0.0366	1.45	0.361	2.82	0.480

Load Table

Live Load Factor = 1.4; Importance Factor (I_{w-SLS}) = 0.75; Importance Factor (I_{w-ULS}) = 1.0

Maximum Specified Uniformly Distributed Loads in kPa

Span (mm)		1-Span Base Steel Thickness (mm)				2-Span Base Steel Thickness (mm)				3-Span Base Steel Thickness (mm)			
		0.305	0.343	0.457	0.610	0.305	0.343	0.457	0.610	0.305	0.343	0.457	0.610
400	S	8.03	15.5	14.4	19.8	8.78	17.3	15.1	21.9	11.0	21.6	18.9	27.3
	D	24.1	25.2	44.7	66.0	57.8	60.5	107	158	45.5	47.7	84.5	125
500	S	5.14	9.92	9.19	12.7	5.62	11.1	9.67	14.0	7.02	13.8	12.1	17.5
	D	12.3	12.9	22.9	33.8	29.6	31.0	54.9	81.1	23.3	24.4	43.2	63.8
600	S	3.57	6.89	6.38	8.80	3.90	7.69	6.72	9.72	4.88	9.61	8.40	12.2
	D	7.13	7.47	13.2	19.6	17.1	17.9	31.8	46.9	13.5	14.1	25.0	36.9
800	S	2.01	3.88	3.59	4.95	2.20	4.32	3.78	5.47	2.74	5.40	4.72	6.83
	D	3.01	3.15	5.59	8.25	7.22	7.57	13.4	19.8	5.69	5.96	10.6	15.6
1000	S	1.28	2.48	2.30	3.17	1.40	2.77	2.42	3.50	1.76	3.46	3.02	4.37
	D	1.54	1.61	2.86	4.22	3.70	3.87	6.86	10.1	2.91	3.05	5.41	7.98
1200	S	0.89	1.72	1.60	2.20	0.98	1.92	1.68	2.43	1.22	2.40	2.10	3.04
	D	0.89	0.93	1.66	2.44	2.14	2.24	3.97	5.86	1.68	1.77	3.13	4.62
1400	S	0.66	1.27	1.17	1.62	0.72	1.41	1.23	1.78	0.90	1.76	1.54	2.23
	D	0.56	0.59	1.04	1.54	1.35	1.41	2.50	3.69	1.06	1.11	1.97	2.91
1500	S			1.02	1.41	0.62	1.23	1.07	1.55	0.78	1.54	1.34	1.94
	D			0.85	1.25	1.10	1.15	2.03	3.00	0.86	0.90	1.60	2.36
1600	S			0.90	1.24	0.55	1.08	0.94	1.37	0.69	1.35	1.18	1.71
	D			0.70	1.03	0.90	0.95	1.68	2.47	0.71	0.74	1.32	1.95
1800	S				0.98		0.85	0.75	1.08		1.07	0.93	1.35
	D				0.72		0.66	1.18	1.74		0.52	0.93	1.37

Notes:

- Steel conforms to ASTM A653M.
- Section properties are in accordance with CSA-S136-07.
- Values in row "S" are based on strength.
- Values in row "D" are based on a deflection limit of 1/180 of the span.
- Web crippling not included in strength values. See example calculation in notes to designer.
- Contact the sales department for stocked colours and gauges.
- The load table contained on this data sheet was prepared by Dr. R.M. Schuster P.Eng. Professor Emeritus of Structural Engineering, University of Waterloo, Ontario, Canada.

