

SECTION PROPERTIES (PER METRE OF WIDTH)

METRIC	Base Steel Thickness (mm)	Coated Steel Thickness (Z275) (mm)	Coated Mass (kg/m ²)	Sec. Modulus		Deflection Moment of Inertia (10 ⁶ mm ⁴)	Specified Web Crippling Data			
				Midspan	Support		P _{e1} End (kN)	P _{e2} End (kN)	P _{i1} Interior (kN)	P _{i2} Interior (kN)
				(10 ³ mm ³)	(10 ³ mm ³)					
	0.762	0.802	9.25	25.6	20.1	1.56	0.982	0.246	2.11	0.358
	0.914	0.954	11.0	31.1	25.0	1.87	1.48	0.371	3.14	0.533
	1.22	1.26	14.6	41.5	35.3	2.49	2.81	0.703	5.83	0.991

MAXIMUM UNIFORMLY DISTRIBUTED SPECIFIED LOAD (kPa)

SPAN LENGTH (m)		1-SPAN												2-SPAN						3-SPAN					
		BASE STEEL THICKNESS (mm)						BASE STEEL THICKNESS (mm)						BASE STEEL THICKNESS (mm)											
		0.762	0.914	1.22				0.762	0.914	1.22				0.762	0.914	1.22									
1.5	S	12.6	15.2	20.3			9.87	12.3	17.3				12.3	15.3	21.7										
	D	40.0	48.0	63.9			96.0	115	153				75.6	90.7	121										
1.6	S	11.0	13.4	17.9			8.68	10.8	15.2				10.9	13.5	19.0										
	D	33.0	39.5	52.6			79.1	94.9	126				62.3	74.7	99.4										
1.8	S	8.72	10.6	14.1			6.86	8.51	12.0				8.57	10.6	15.0										
	D	23.2	27.8	37.0			55.6	66.6	88.7				43.7	52.5	69.8										
2.0	S	7.06	8.57	11.4			5.55	6.89	9.75				6.94	8.62	12.2										
	D	16.9	20.2	26.9			40.5	48.6	64.6				31.9	38.3	50.9										
2.2	S	5.84	7.08	9.45			4.59	5.70	8.06				5.74	7.12	10.1										
	D	12.7	15.2	20.2			30.4	36.5	48.6				24.0	28.7	38.3										
2.4	S	4.91	5.95	7.94			3.86	4.79	6.77				4.82	5.98	8.46										
	D	9.76	11.7	15.6			23.4	28.1	37.4				18.5	22.1	29.5										
2.5	S	4.52	5.49	7.32			3.55	4.41	6.24				4.44	5.51	7.80										
	D	8.64	10.4	13.8			20.7	24.9	33.1				16.3	19.6	26.1										
2.6	S	4.18	5.07	6.76			3.29	4.08	5.77				4.11	5.10	7.21										
	D	7.68	9.21	12.3			18.4	22.1	29.4				14.5	17.4	23.2										
2.8	S	3.60	4.37	5.83			2.83	3.52	4.97				3.54	4.40	6.22										
	D	6.15	7.37	9.82			14.8	17.7	23.6				11.6	13.9	18.6										
3.0	S	3.14	3.81	5.08			2.47	3.06	4.33				3.09	3.83	5.41										
	D	5.00	6.00	7.98			12.0	14.4	19.2				9.45	11.3	15.1										
3.2	S	2.76	3.35	4.47			2.17	2.69	3.81				2.71	3.37	4.76										
	D	4.12	4.94	6.58			9.89	11.9	15.8				7.79	9.34	12.4										
3.4	S	2.44	2.97	3.96			1.92	2.38	3.37				2.40	2.98	4.22										
	D	3.43	4.12	5.48			8.24	9.89	13.2				6.49	7.78	10.4										
3.5	S	2.31	2.80	3.73			1.81	2.25	3.18				2.27	2.81	3.98										
	D	3.15	3.78	5.03			7.56	9.06	12.1				5.95	7.14	9.50										
3.6	S	2.18	2.65	3.53			1.71	2.13	3.01				2.14	2.66	3.76										
	D	2.89	3.47	4.62			6.94	8.33	11.1				5.47	6.56	8.73										
3.8	S	1.96	2.37	3.17			1.54	1.91	2.70				1.92	2.39	3.37										
	D	2.46	2.95	3.93			5.90	7.08	9.42				4.65	5.58	7.42										
4.0	S	1.77	2.14	2.86			1.39	1.72	2.44				1.74	2.15	3.05										
	D	2.11	2.53	3.37			5.06	6.07	8.08				3.99	4.78	6.36										

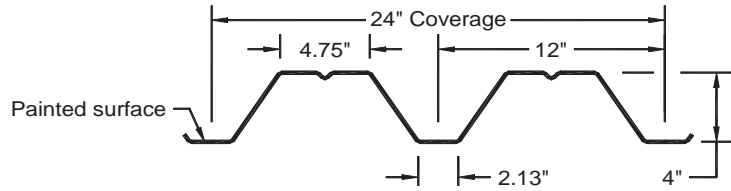
- Notes:**
- 1 Based on ASTM A 653 Grade 230 structural steel.
 - 2 Values in row "S" are based on strength.
 - 3 Values in row "D" are based on deflection of 1/180th span.
 - 4 Web crippling not included in strength calculations. See Example.



Limit States Design principles were used in accordance with CSA Standard S136-01



S-40-SB



SECTION PROPERTIES (PER FOOT OF WIDTH)

IMPERIAL	Base Steel Thickness (in.)	Coated Steel Thickness (G90) (in.)	Coated Weight (psf)	Sec. Modulus		Deflection Moment of Inertia (in. ⁴)	Specified Web Crippling Data													
				Midspan (in. ³)	Support (in. ³)		P _{e1} End (lb)	P _{e2} End (lb)	P _{i1} Interior (lb)	P _{i2} Interior (lb)										
											0.030	0.0315	1.89	0.477	0.375	1.14	66.6	16.6	143	24.3
											0.036	0.0375	2.26	0.579	0.465	1.37	101	25.1	213	36.1
0.048	0.0495	3.00	0.771	0.658	1.82	191	47.7	395	67.2											

MAXIMUM UNIFORMLY DISTRIBUTED SPECIFIED LOAD (PSF)

SPAN LENGTH (ft)		1-SPAN			2-SPAN			3-SPAN		
		BASE STEEL THICKNESS (inches)			BASE STEEL THICKNESS (inches)			BASE STEEL THICKNESS (inches)		
		0.030	0.036	0.048	0.030	0.036	0.048	0.030	0.036	0.048
5.0	S	252	303	404	198	246	347	247	307	434
	D	797	955	1271	912	2292	3051	506	1805	2403
5.5	S	208	251	334	163	203	287	204	254	359
	D	599	718	955	437	1722	2293	131	1356	1805
6.0	S	175	211	281	137	170	241	172	213	301
	D	461	553	736	106	1327	1766	871	1045	1391
6.5	S	149	180	239	117	145	205	146	182	257
	D	363	435	579	870	1043	1389	685	822	1094
7.0	S	128	155	206	101	125	177	126	157	221
	D	290	348	463	697	835	1112	549	658	876
7.5	S	112	135	180	88	109	154	110	136	193
	D	236	283	377	567	679	904	446	535	712
8.0	S	98	119	158	77	96	136	97	120	170
	D	194	233	310	467	560	745	368	441	587
8.5	S	87	105	140	68	85	120	86	106	150
	D	162	194	259	389	467	621	306	367	489
9.0	S	78	94	125	61	76	107	76	95	134
	D	137	164	218	328	393	523	258	310	412
9.5	S	70	84	112	55	68	96	68	85	120
	D	116	139	185	279	334	445	220	263	350
10.0	S	63	76	101	49	61	87	62	77	109
	D	100	119	159	239	287	381	188	226	300
10.5	S	57	69	92	45	56	79	56	70	98
	D	86	103	137	206	248	329	163	195	259
11.0	S	52	63	84	41	51	72	51	63	90
	D	75	90	119	180	215	287	141	170	226
11.5	S	48	57	76	37	46	66	47	58	82
	D	65	79	104	157	188	251	124	148	197
12.0	S	44	53	70	34	43	60	43	53	75
	D	58	69	92	138	166	221	109	131	174
12.5	S	40	49	65	32	39	56	40	49	69
	D	51	61	81	122	147	195	96	116	154
13.0	S	37	45	60	29	36	51	37	45	64
	D	45	54	72	109	130	174	86	103	137

- Notes:**
- 1 Based on ASTM A 653 Grade 33 structural steel.
 - 2 Values in row "S" are based on strength.
 - 3 Values in row "D" are based on deflection of 1/180th span.
 - 4 Web crippling not included in strength calculations. See Example.

Limit States Design principles were used in accordance with CSA Standard S136-01

