

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 ⁸ 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	10.4	20.9	19.2	1.09	1.93	0.483	3.98	0.677
	0.914	0.954	12.4	26.2	23.5	1.31	2.89	0.721	5.88	1.00
	1.22	1.26	16.4	35.2	32.4	1.74	5.38	1.35	10.8	1.84
	1.52	1.56	20.5	43.7	41.4	2.16	8.68	2.17	17.3	2.95

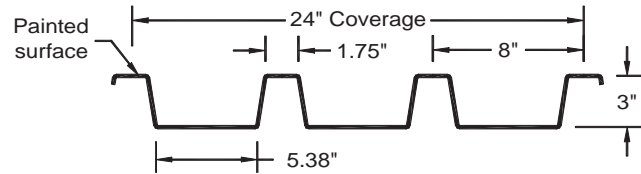
MAXIMUM UNIFORMLY DISTRIBUTED SPECIFIED LOAD (kPa)

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	1.52	0.762	0.914	1.22	1.52	0.762	0.914	1.22	1.52
1.8	S	7.12	8.92	12.0	14.9	6.53	8.01	11.0	14.1	8.17	10.0	13.8	17.6
	D	16.2	19.4	25.8	32.1	39.0	46.7	62.0	77.1	30.7	36.7	48.8	60.8
2.0	S	5.77	7.22	9.71	12.1	5.29	6.49	8.94	11.4	6.62	8.11	11.2	14.3
	D	11.8	14.2	18.8	23.4	28.4	34.0	45.2	56.2	22.4	26.8	35.6	44.3
2.2	S	4.77	5.97	8.03	9.96	4.37	5.36	7.39	9.5	5.47	6.70	9.2	11.8
	D	8.89	10.7	14.1	17.6	21.3	25.6	33.9	42.3	16.8	20.1	26.7	33.3
2.4	S	4.00	5.02	6.74	8.37	3.68	4.51	6.21	7.94	4.59	5.63	7.76	9.9
	D	6.85	8.20	10.9	13.6	16.4	19.7	26.1	32.5	12.9	15.5	20.6	25.6
2.6	S	3.41	4.27	5.75	7.13	3.13	3.84	5.29	6.76	3.91	4.80	6.61	8.46
	D	5.39	6.45	8.57	10.7	12.9	15.5	20.6	25.6	10.2	12.2	16.2	20.2
2.8	S	2.94	3.68	4.96	6.15	2.70	3.31	4.56	5.83	3.38	4.14	5.70	7.29
	D	4.31	5.16	6.86	8.54	10.4	12.4	16.5	20.5	8.15	9.76	13.0	16.1
3.0	S	2.56	3.21	4.32	5.36	2.35	2.88	3.97	5.08	2.94	3.61	4.97	6.35
	D	3.51	4.20	5.58	6.94	8.41	10.1	13.4	16.7	6.63	7.94	10.5	13.1
3.2	S	2.25	2.82	3.79	4.71	2.07	2.54	3.49	4.47	2.58	3.17	4.37	5.58
	D	2.89	3.46	4.59	5.72	6.93	8.30	11.0	13.7	5.46	6.54	8.68	10.8
3.4	S	2.00	2.50	3.36	4.17	1.83	2.25	3.09	3.96	2.29	2.81	3.87	4.94
	D	2.41	2.88	3.83	4.77	5.78	6.92	9.19	11.5	4.55	5.45	7.24	9.01
3.6	S	1.78	2.23	3.00	3.72	1.63	2.00	2.76	3.53	2.04	2.50	3.45	4.41
	D	2.03	2.43	3.23	4.02	4.87	5.83	7.74	9.64	3.83	4.59	6.10	7.59
3.8	S	1.60	2.00	2.69	3.34	1.47	1.80	2.48	3.17	1.83	2.25	3.10	3.96
	D	1.72	2.07	2.74	3.42	4.14	4.96	6.58	8.20	3.26	3.90	5.19	6.46
4.0	S	1.44	1.81	2.43	3.01	1.32	1.62	2.24	2.86	1.65	2.03	2.79	3.57
	D	1.48	1.77	2.35	2.93	3.55	4.25	5.65	7.03	2.80	3.35	4.45	5.54
4.2	S	1.31	1.64	2.20	2.73	1.20	1.47	2.03	2.59	1.50	1.84	2.53	3.24
	D	1.28	1.53	2.03	2.53	3.07	3.67	4.88	6.07	2.41	2.89	3.84	4.78
4.4	S	1.19	1.49	2.01	2.49	1.09	1.34	1.85	2.36	1.37	1.68	2.31	2.95
	D	1.11	1.33	1.77	2.20	2.67	3.19	4.24	5.28	2.10	2.52	3.34	4.16
4.6	S	1.09	1.37	1.84	2.28	1.00	1.23	1.69	2.16	1.25	1.53	2.11	2.70
	D	0.97	1.16	1.55	1.93	2.33	2.80	3.71	4.62	1.84	2.20	2.92	3.64
4.8	S	1.00	1.25	1.69	2.09	0.92	1.13	1.55	1.98	1.15	1.41	1.94	2.48
	D	0.86	1.03	1.36	1.69	2.05	2.46	3.27	4.07	1.62	1.94	2.57	3.20
5.0	S	0.92	1.16	1.55	1.93	0.85	1.04	1.43	1.83	1.06	1.3	1.79	2.29
	D	0.76	0.91	1.20	1.50	1.82	2.18	2.89	3.60	1.43	1.71	2.28	2.83

- 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





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	Support		P _{e1} End (lb)	P _{e2} End (lb)	P _{i1} Interior (lb)	P _{i2} Interior (lb)
				(in. ³)	(in. ³)					
	0.030	0.0315	2.12	0.389	0.357	0.800	131	32.8	270	45.9
	0.036	0.0375	2.54	0.487	0.438	0.958	196	48.9	399	67.8
	0.048	0.0495	3.36	0.655	0.603	1.27	365	91.2	734	125
	0.060	0.0615	4.19	0.812	0.771	1.58	589	147	1174	200

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	0.060	0.030	0.036	0.048	0.060	0.030	0.036	0.048	0.060
6.0	S	143	179	240	298	131	160	221	283	164	201	276	353
	D	323	387	514	640	776	929	1234	1536	611	732	972	1210
6.5	S	122	152	204	254	111	137	188	241	139	171	235	301
	D	254	304	404	503	610	731	970	1208	480	575	764	951
7.0	S	105	131	176	219	96	118	162	208	120	147	203	259
	D	204	244	324	403	488	585	777	967	385	461	612	762
7.5	S	91	114	154	191	84	103	141	181	105	128	177	226
	D	165	198	263	328	397	476	632	787	313	375	497	619
8.0	S	80	101	135	167	74	90	124	159	92	113	155	199
	D	136	163	217	270	327	392	521	648	258	309	410	510
8.5	S	71	89	120	148	65	80	110	141	81	100	138	176
	D	114	136	181	225	273	327	434	540	215	257	342	425
9.0	S	63	79	107	132	58	71	98	126	73	89	123	157
	D	96	115	152	190	230	275	366	455	181	217	288	358
9.5	S	57	71	96	119	52	64	88	113	65	80	110	141
	D	81	98	130	161	195	234	311	387	154	184	245	305
10.0	S	51	64	86	107	47	58	80	102	59	72	99	127
	D	70	84	111	138	168	201	267	332	132	158	210	261
10.5	S	47	58	78	97	43	52	72	92	53	65	90	115
	D	60	72	96	119	145	173	230	287	114	137	181	226
11.0	S	42	53	71	89	39	48	66	84	49	60	82	105
	D	52	63	83	104	126	151	200	249	99	119	158	196
11.5	S	39	49	65	81	36	44	60	77	45	55	75	96
	D	46	55	73	91	110	132	175	218	87	104	138	172
12.0	S	36	45	60	74	33	40	55	71	41	50	69	88
	D	40	48	64	80	97	116	154	192	76	91	121	151
12.5	S	33	41	55	69	30	37	51	65	38	46	64	81
	D	36	43	57	71	86	103	136	170	68	81	107	134
13.0	S	30	38	51	63	28	34	47	60	35	43	59	75
	D	32	38	51	63	76	91	121	151	60	72	96	119
13.5	S	28	35	47	59	26	32	44	56	32	40	55	70
	D	28	34	45	56	68	82	108	135	54	64	85	106
14.0	S	26	33	44	55	24	29	41	52	30	37	51	65
	D	25	30	40	50	61	73	97	121	48	58	76	95

- 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

