

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)					
	0.457	0.497	4.65	4.18	3.50	0.129	0.454	0.173	0.909	0.082
	0.610	0.650	6.11	5.75	4.84	0.172	0.808	0.307	1.62	0.145
	0.762	0.802	7.57	7.17	6.19	0.214	1.26	0.480	2.52	0.227
	0.914	0.954	9.02	8.59	7.56	0.257	1.82	0.690	3.63	0.327
	1.22	1.26	11.9	11.4	10.4	0.344	3.23	1.23	6.46	0.581

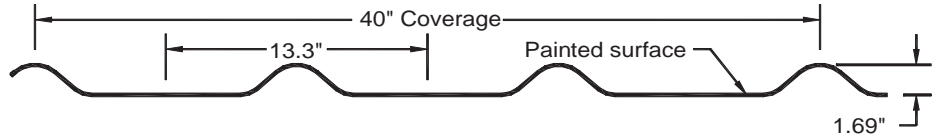
MAXIMUM UNIFORMLY DISTRIBUTED SPECIFIED LOAD (kPa)

SPAN LENGTH (m)		1-SPAN					2-SPAN					3-SPAN				
		BASE STEEL THICKNESS (mm)					BASE STEEL THICKNESS (mm)					BASE STEEL THICKNESS (mm)				
		0.457	0.610	0.762	0.914	1.22	0.457	0.610	0.762	0.914	1.22	0.457	0.610	0.762	0.914	1.22
0.5	S	18.5	25.4	31.7	37.9	50.3	15.4	21.4	27.3	33.4	45.9	19.3	26.7	34.1	41.7	57.3
	D	89.1	119	149	178	238	214	285	357	428	571	168	225	281	337	450
0.6	S	12.8	17.6	22.0	26.3	35.0	10.7	14.9	19.0	23.2	31.8	13.4	18.6	23.7	29.0	39.8
	D	51.6	68.8	86.0	103	138	124	165	206	248	331	97.5	130	163	195	260
0.8	S	7.22	9.91	12.4	14.8	19.7	6.03	8.35	10.7	13.0	17.9	7.54	10.4	13.3	16.3	22.4
	D	21.8	29.0	36.3	43.6	58.1	52.2	69.6	87.1	105	139	41.1	54.8	68.6	82.3	110
1.0	S	4.62	6.34	7.91	9.48	12.6	3.86	5.35	6.83	8.35	11.5	4.82	6.68	8.54	10.4	14.3
	D	11.1	14.9	18.6	22.3	29.8	26.7	35.7	44.6	53.5	71.4	21.1	28.1	35.1	42.2	56.2
1.2	S	3.21	4.41	5.50	6.58	8.74	2.68	3.71	4.74	5.80	7.96	3.35	4.64	5.93	7.25	9.95
	D	6.45	8.60	10.8	12.9	17.2	15.5	20.6	25.8	31.0	41.3	12.2	16.3	20.3	24.4	32.6
1.4	S	2.36	3.24	4.04	4.84	6.42	1.97	2.73	3.48	4.26	5.85	2.46	3.41	4.36	5.32	7.31
	D	4.06	5.41	6.77	8.13	10.9	9.74	13.0	16.3	19.5	26.0	7.67	10.2	12.8	15.4	20.5
1.5	S	2.05	2.82	3.52	4.21	5.59	1.72	2.38	3.04	3.71	5.09	2.14	2.97	3.79	4.64	6.37
	D	3.30	4.40	5.50	6.61	8.82	7.92	10.6	13.2	15.9	21.2	6.24	8.32	10.4	12.5	16.7
1.6	S	1.80	2.48	3.09	3.70	4.92	1.51	2.09	2.67	3.26	4.48	1.88	2.61	3.33	4.08	5.60
	D	2.72	3.63	4.54	5.44	7.27	6.53	8.70	10.9	13.1	17.4	5.14	6.86	8.57	10.3	13.7
1.8	S	1.43	1.96	2.44	2.93	3.88	1.19	1.65	2.11	2.58	3.54	1.49	2.06	2.63	3.22	4.42
	D	1.91	2.55	3.19	3.82	5.10	4.58	6.11	7.65	9.18	12.3	3.61	4.81	6.02	7.23	9.64
2.0	S	1.15	1.59	1.98	2.37	3.15	0.96	1.34	1.71	2.09	2.87	1.21	1.67	2.13	2.61	3.58
	D	1.39	1.86	2.32	2.79	3.72	3.34	4.46	5.57	6.69	8.93	2.63	3.51	4.39	5.27	7.03
2.2	S	0.95	1.31	1.64	1.96	2.60	0.80	1.10	1.41	1.72	2.37	1.00	1.38	1.76	2.16	2.96
	D	1.05	1.40	1.74	2.09	2.79	2.51	3.35	4.19	5.03	6.71	1.98	2.64	3.30	3.96	5.28
2.4	S	0.80	1.10	1.37	1.65	2.18	0.67	0.93	1.19	1.45	1.99	0.84	1.16	1.48	1.81	2.49
	D	0.81	1.07	1.34	1.61	2.15	1.93	2.58	3.23	3.87	5.17	1.52	2.03	2.54	3.05	4.07
2.5	S	0.74	1.02	1.27	1.52	2.01	0.62	0.86	1.09	1.34	1.83	0.77	1.07	1.37	1.67	2.29
	D	0.71	0.95	1.19	1.43	1.90	1.71	2.28	2.85	3.43	4.57	1.35	1.80	2.25	2.70	3.60
2.6	S	0.68	0.94	1.17	1.40	1.86	0.57	0.79	1.01	1.23	1.70	0.71	0.99	1.26	1.54	2.12
	D	0.63	0.85	1.06	1.27	1.69	1.52	2.03	2.54	3.05	4.06	1.20	1.60	2.00	2.40	3.20
2.8	S	0.59	0.81	1.01	1.21	1.61	0.49	0.68	0.87	1.06	1.46	0.62	0.85	1.09	1.33	1.83
	D	0.51	0.68	0.85	1.02	1.36	1.22	1.62	2.03	2.44	3.25	0.96	1.28	1.60	1.92	2.56

- Notes:**
- 1 Based on ASTM A 653 Grade 275 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)					
	0.018	0.0195	0.952	0.0634	0.0512	0.0814	37.3	14.2	74.6	6.72
	0.024	0.0255	1.25	0.0843	0.0702	0.109	66.4	25.2	132.7	11.94
	0.030	0.0315	1.55	0.105	0.0899	0.136	103.7	39.4	207.4	18.66
	0.036	0.0375	1.85	0.126	0.110	0.163	149.3	56.7	298.6	26.87
	0.048	0.0495	2.45	0.168	0.152	0.218	265.4	100.9	530.8	47.78

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)				
		0.018	0.024	0.030	0.036	0.048	0.018	0.024	0.030	0.036	0.048	0.018	0.024	0.030	0.036	0.048
2.0	S	253	337	421	504	670	205	281	360	441	607	256	351	450	551	758
	D	888	1184	1481	1778	2374	2131	2842	3555	4268	5697	1678	2238	2800	3361	4487
2.5	S	102	216	269	323	429	131	180	230	282	388	164	225	288	352	485
	D	455	606	758	911	1215	1091	1455	1820	2185	2917	859	1146	1433	1721	2297
3.0	S	113	150	187	224	298	91	125	160	195	270	114	156	200	245	337
	D	263	351	439	527	703	631	842	1053	1265	1688	497	663	829	996	1329
3.5	S	83	110	137	165	219	67	92	117	144	198	84	115	147	180	248
	D	166	221	276	332	443	398	530	663	796	1063	313	418	522	627	837
4.0	S	63	84	105	126	168	51	70	90	110	152	64	88	112	138	190
	D	111	148	185	222	297	266	355	444	534	712	210	280	350	420	561
4.5	S	50	67	83	100	132	40	55	71	87	120	51	69	89	109	150
	D	78	104	130	156	208	187	250	312	375	500	147	197	246	295	394
5.0	S	41	54	67	81	107	33	45	58	70	97	41	56	72	88	121
	D	57	76	95	114	152	136	182	228	273	365	107	143	179	215	287
5.5	S	34	45	56	67	89	27	37	48	58	80	36	46	59	73	100
	D	43	57	71	86	114	102	137	171	205	274	81	108	135	162	216
6.0	S	28	37	47	56	74	23	31	40	49	67	28	39	50	61	84
	D	33	44	55	66	88	79	105	132	158	211	62	83	104	124	166
6.5	S	24	32	40	48	63	19	27	34	42	57	24	33	43	52	72
	D	26	35	43	52	69	62	83	104	124	166	49	65	82	98	131
7.0	S	21	28	34	41	55	17	23	29	36	50	21	29	37	45	62
	D	21	28	35	41	55	50	66	83	100	133	39	52	65	78	105
7.5	S	18	24	30	36	48	15	20	26	31	43	18	25	32	39	54
	D	17	22	28	34	45	40	54	67	81	108	32	42	53	64	85
8.0	S	16	21	26	32	42	13	18	22	28	38	16	22	28	34	47
	D	14	19	23	28	37	33	44	56	67	89	26	35	44	53	70
8.5	S	14	19	23	28	37	11	16	20	24	34	14	19	25	30	42
	D	12	15	19	23	31	28	37	46	56	74	22	29	36	44	58
9.0	S	13	17	21	25	33	10	14	18	22	30	13	17	22	27	37
	D	10	13	16	20	26	23	31	39	47	63	18	25	31	37	49

- Notes:**
- 1 Based on ASTM A 653 Grade 40 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