

### SECTION PROPERTIES (PER METRE OF WIDTH)

METRIC	Base Steel Thickness (mm)	Coated Steel Thickness (Z275) (mm)	Coated Mass (kg/m <sup>2</sup> )	Sec. Modulus		Deflection Moment of Inertia (10 <sup>6</sup> mm <sup>4</sup> )	Specified Web Crippling Data			
				Midspan	Support		P <sub>e1</sub> End (kN)	P <sub>e2</sub> End (kN)	P <sub>i1</sub> Interior (kN)	P <sub>i2</sub> Interior (kN)
				(10 <sup>3</sup> mm <sup>3</sup> )	(10 <sup>3</sup> mm <sup>3</sup> )					
	0.457	0.497	4.97	2.38	2.38	0.0230				
	0.610	0.650	6.54	3.15	3.15	0.0310				
	0.762	0.802	8.11	3.92	3.92	0.0390				
	0.914	0.954	9.67	4.68	4.68	0.0470				
	1.22	1.26	12.8	6.16	6.16	0.0620				

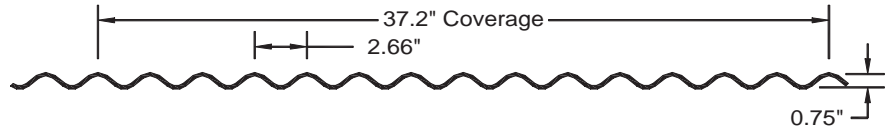
### MAXIMUM UNIFORMLY DISTRIBUTED SPECIFIED LOAD (kPa)

SPAN LENGTH (m)		1-SPAN															2-SPAN					3-SPAN				
		BASE STEEL THICKNESS (mm)					BASE STEEL THICKNESS (mm)					BASE STEEL THICKNESS (mm)					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										
1.0	S	2.63	3.48	4.33	5.16	6.80	2.63	3.48	4.33	5.16	6.80	3.28	4.35	5.41	6.45	8.50										
	D	2.01	2.69	3.36	4.04	5.41	4.83	6.45	8.07	9.70	13.0	3.80	5.08	6.36	7.64	10.2										
1.1	S	2.17	2.88	3.58	4.27	5.62	2.17	2.88	3.58	4.27	5.62	2.71	3.60	4.47	5.33	7.03										
	D	1.51	2.02	2.53	3.04	4.06	3.63	4.84	6.06	7.29	9.75	2.85	3.81	4.78	5.74	7.68										
1.2	S	1.82	2.42	3.01	3.6	4.72	1.82	2.42	3.01	3.58	4.72	2.28	3.02	3.76	4.48	5.91										
	D	1.16	1.55	1.95	2.34	3.13	2.79	3.73	4.67	5.62	7.51	2.20	2.94	3.68	4.42	5.92										
1.3	S	1.55	2.06	2.56	3.05	4.03	1.55	2.06	2.56	3.05	4.03	1.94	2.58	3.20	3.82	5.03										
	D	0.92	1.22	1.53	1.84	2.46	2.20	2.93	3.67	4.42	5.91	1.73	2.31	2.89	3.48	4.65										
1.4	S	1.34	1.78	2.21	2.63	3.47	1.34	1.78	2.21	2.63	3.47	1.68	2.22	2.76	3.29	4.34										
	D	0.73	0.98	1.23	1.47	1.97	1.76	2.35	2.94	3.54	4.73	1.38	1.85	2.32	2.78	3.73										
1.5	S	1.17	1.55	1.92	2.29	3.02	1.17	1.55	1.92	2.29	3.02	1.46	1.93	2.40	2.87	3.78										
	D	0.60	0.80	1.00	1.20	1.60	1.43	1.91	2.39	2.87	3.85	1.13	1.50	1.88	2.26	3.03										
1.6	S	1.03	1.36	1.69	2.02	2.66	1.03	1.36	1.69	2.02	2.66	1.28	1.70	2.11	2.52	3.32										
	D	0.49	0.66	0.82	0.99	1.32	1.18	1.57	1.97	2.37	3.17	0.93	1.24	1.55	1.87	2.50										
1.7	S	0.91	1.20	1.50	1.79	2.35	0.91	1.20	1.50	1.79	2.35	1.14	1.51	1.87	2.23	2.94										
	D	0.41	0.55	0.68	0.82	1.10	0.98	1.31	1.64	1.97	2.64	0.77	1.03	1.29	1.56	2.08										
1.8	S	0.81	1.07	1.34	1.59	2.10	0.81	1.07	1.34	1.59	2.10	1.01	1.34	1.67	1.99	2.62										
	D	0.34	0.46	0.58	0.69	0.93	0.83	1.11	1.38	1.66	2.23	0.65	0.87	1.09	1.31	1.75										
1.9	S	0.73	0.96	1.20	1.43	1.88	0.73	0.96	1.20	1.43	1.88	0.91	1.21	1.50	1.79	2.36										
	D	0.29	0.39	0.49	0.59	0.79	0.70	0.94	1.18	1.41	1.89	0.55	0.74	0.93	1.11	1.49										
2.0	S	0.66	0.87	1.08	1.29	1.70	0.66	0.87	1.08	1.29	1.70	0.82	1.09	1.35	1.61	2.13										
	D	0.25	0.34	0.42	0.51	0.68	0.60	0.81	1.01	1.21	1.62	0.47	0.63	0.79	0.96	1.28										
2.1	S	0.60	0.79	0.98	1.17	1.54	0.60	0.79	0.98	1.17	1.54	0.74	0.99	1.23	1.46	1.93										
	D	0.22	0.29	0.36	0.44	0.58	0.52	0.70	0.87	1.05	1.40	0.41	0.55	0.69	0.83	1.10										
2.2	S	0.54	0.72	0.89	1.07	1.41	0.54	0.72	0.89	1.07	1.41	0.68	0.90	1.12	1.33	1.76										
	D	0.19	0.25	0.32	0.38	0.51	0.45	0.61	0.76	0.91	1.22	0.36	0.48	0.60	0.72	0.96										

- 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.



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



**SECTION PROPERTIES (PER FOOT OF WIDTH)**

<b>IMPERIAL</b>	Base Steel Thickness (in.)	Coated Steel Thickness (G90) (in.)	Coated Weight (psf)	Sec. Modulus		Deflection Moment of Inertia (in. <sup>4</sup> )	Specified Web Crippling Data			
				Midspan	Support		P <sub>e1</sub> End (lb)	P <sub>e2</sub> End (lb)	P <sub>i1</sub> Interior (lb)	P <sub>i2</sub> Interior (lb)
	0.018	0.0195	1.02	0.0443	0.0443	0.0170				
	0.024	0.0255	1.34	0.0587	0.0587	0.0227				
	0.030	0.0315	1.66	0.0729	0.0729	0.0284				
	0.036	0.0375	1.98	0.0870	0.0870	0.0342				
0.048	0.0495	2.62	0.115	0.115	0.0457					

**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	146	194	240	287	378	146	193	241	287	378	183	242	301	359	473
	D	185	248	310	373	499	445	594	744	895	1197	350	468	586	704	943
2.5	S	93	124	154	184	242	93	124	154	184	242	117	155	192	230	303
	D	95	127	159	191	255	228	304	381	458	613	179	240	300	361	483
3.0	S	65	86	107	128	168	65	86	107	128	168	81	107	134	159	210
	D	55	73	92	110	148	132	176	220	265	355	104	139	174	209	279
3.5	S	48	63	79	94	123	48	63	79	94	124	60	79	98	117	154
	D	35	46	58	70	93	83	111	139	167	223	65	87	109	131	176
4.0	S	36	48	60	72	95	37	48	60	72	95	46	60	75	90	118
	D	23	31	39	47	62	56	74	93	112	150	44	58	73	88	118
4.5	S	29	38	47	57	75	29	38	48	57	75	36	48	59	71	93
	D	16	22	27	33	44	39	52	65	79	105	31	41	51	62	83
5.0	S	23	31	38	46	60	23	31	38	46	61	29	39	48	57	76
	D	12	16	20	24	32	28	38	48	57	77	22	30	38	45	60
5.5	S	19	26	32	38	50	19	26	32	38	50	24	32	40	47	63
	D	9	12	15	18	24	21	29	36	43	58	17	23	28	34	45
6.0	S	16	22	27	32	42	16	21	27	32	42	20	27	33	40	53
	D	7	9	11	14	18	16	22	28	33	44	13	17	22	26	35
6.5	S	14	18	23	27	36	14	18	23	27	36	17	23	28	34	45
	D	5	7	9	11	15	13	17	22	26	35	10	14	17	21	27
7.0	S	12	16	20	23	31	12	16	20	23	31	15	20	25	29	39
	D	4	6	7	9	12	10	14	17	21	28	8	11	14	16	22
7.5	S	10	14	17	20	27	10	14	17	20	27	13	17	21	26	34
	D	4	5	6	7	9	8	11	14	17	23	7	9	11	13	18
8.0	S	9	12	15	18	24	9	12	15	18	24	11	15	19	22	30
	D	3	4	5	6	8	7	9	12	14	19	5	7	9	11	15
8.5	S	8	11	13	16	21	8	11	13	16	21	10	13	17	20	26
	D	2	3	4	5	6	6	8	10	12	16	5	6	8	9	12
9.0	S	7	10	12	14	19	7	10	12	14	19	9	12	15	18	23
	D	2	3	3	4	5	5	7	8	10	13	4	5	6	8	10

- 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.

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

