

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	4.98	6.41	6.41	0.151	0.701	0.175	1.44	0.245
	0.610	0.650	6.55	8.93	8.93	0.201	1.33	0.333	2.70	0.459
	0.762	0.802	8.12	11.1	11.1	0.251	2.18	0.544	4.37	0.744
	0.914	0.954	9.69	13.3	13.3	0.301	3.24	0.809	6.46	1.10
	1.22	1.26	12.8	17.5	17.5	0.400	6.01	1.50	11.9	2.02

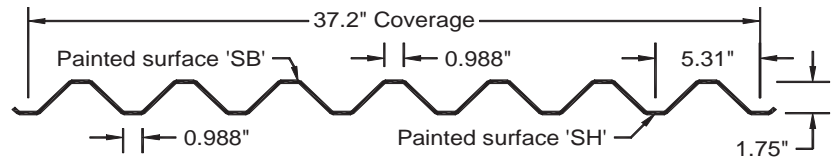
MAXIMUM UNIFORMLY DISTRIBUTED SPECIFIED LOAD (kPa)

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
1.0	S	7.07	9.86	12.3	14.6	19.3	7.07	9.86	12.3	14.6	19.3	8.84	12.3	15.3	18.3	24.2
	D	13.1	17.4	21.7	26.1	34.6	31.4	41.8	52.2	62.5	83.1	24.7	32.9	41.1	49.2	65.4
1.2	S	4.91	6.85	8.51	10.2	13.4	4.91	6.85	8.51	10.2	13.4	6.14	8.56	10.6	12.7	16.8
	D	7.57	10.1	12.6	15.1	20.0	18.2	24.2	30.2	36.2	48.1	14.3	19.1	23.8	28.5	37.9
1.4	S	3.61	5.03	6.26	7.47	9.86	3.61	5.03	6.26	7.47	9.86	4.51	6.29	7.82	9.34	12.3
	D	4.77	6.35	7.92	9.49	12.6	11.5	15.2	19.0	22.8	30.3	9.02	12.0	15.0	17.9	23.9
1.6	S	2.76	3.85	4.79	5.72	7.55	2.76	3.85	4.79	5.72	7.55	3.45	4.81	5.99	7.15	9.44
	D	3.20	4.25	5.31	6.36	8.45	7.67	10.2	12.7	15.3	20.3	6.04	8.04	10.0	12.0	16.0
1.8	S	2.18	3.04	3.78	4.52	5.96	2.18	3.04	3.78	4.52	5.96	2.73	3.80	4.73	5.65	7.46
	D	2.24	2.99	3.73	4.47	5.94	5.39	7.17	9.0	10.7	14.3	4.24	5.65	7.05	8.44	11.2
2.0	S	1.77	2.46	3.07	3.66	4.83	1.77	2.46	3.07	3.66	4.83	2.21	3.08	3.83	4.57	6.04
	D	1.64	2.18	2.72	3.26	4.33	3.93	5.23	6.52	7.82	10.4	3.09	4.12	5.14	6.2	8.18
2.2	S	1.46	2.04	2.53	3.02	3.99	1.46	2.04	2.53	3.02	3.99	1.83	2.55	3.17	3.78	4.99
	D	1.23	1.64	2.04	2.45	3.25	2.95	3.93	4.90	5.87	7.80	2.32	3.09	3.86	4.62	6.15
2.4	S	1.23	1.71	2.13	2.54	3.36	1.23	1.71	2.13	2.54	3.36	1.54	2.14	2.66	3.18	4.19
	D	0.95	1.26	1.57	1.88	2.50	2.27	3.03	3.78	4.52	6.01	1.79	2.38	2.97	3.56	4.73
2.6	S	1.05	1.46	1.81	2.17	2.86	1.05	1.46	1.81	2.17	2.86	1.31	1.82	2.27	2.71	3.57
	D	0.74	0.99	1.24	1.48	1.97	1.79	2.38	2.97	3.56	4.73	1.41	1.87	2.34	2.80	3.72
2.8	S	0.90	1.26	1.56	1.87	2.46	0.90	1.26	1.56	1.87	2.46	1.13	1.57	1.95	2.33	3.08
	D	0.60	0.79	0.99	1.19	1.58	1.43	1.90	2.38	2.85	3.79	1.13	1.50	1.87	2.24	2.98
3.0	S	0.79	1.10	1.36	1.63	2.15	0.79	1.10	1.36	1.63	2.15	0.98	1.37	1.70	2.03	2.68
	D	0.48	0.65	0.81	0.96	1.28	1.16	1.55	1.93	2.32	3.08	0.92	1.22	1.52	1.82	2.42
3.2	S	0.69	0.96	1.20	1.43	1.89	0.69	0.96	1.20	1.43	1.89	0.86	1.20	1.50	1.79	2.36
	D	0.40	0.53	0.66	0.80	1.06	0.96	1.28	1.59	1.91	2.54	0.75	1.01	1.25	1.50	2.00
3.4	S	0.61	0.85	1.06	1.27	1.67	0.61	0.85	1.06	1.27	1.67	0.76	1.07	1.33	1.58	2.09
	D	0.33	0.44	0.55	0.66	0.88	0.80	1.06	1.33	1.59	2.11	0.63	0.84	1.05	1.25	1.66
3.6	S	0.55	0.76	0.95	1.13	1.49	0.55	0.76	0.95	1.13	1.49	0.68	0.95	1.18	1.41	1.86
	D	0.28	0.37	0.47	0.56	0.74	0.67	0.90	1.12	1.34	1.78	0.53	0.71	0.88	1.06	1.40
3.8	S	0.49	0.68	0.85	1.01	1.34	0.49	0.68	0.85	1.01	1.34	0.61	0.85	1.06	1.27	1.67
	D	0.24	0.32	0.40	0.47	0.63	0.57	0.76	0.95	1.14	1.51	0.45	0.60	0.75	0.90	1.19
4.0	S	0.44	0.62	0.77	0.91	1.21	0.44	0.62	0.77	0.91	1.21	0.55	0.77	0.96	1.14	1.51
	D	0.20	0.27	0.34	0.41	0.54	0.49	0.65	0.82	0.98	1.30	0.39	0.51	0.64	0.77	1.02

- 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 (in. ³)	Support (in. ³)		P _{e1} End (lb)	P _{e2} End (lb)	P _{i1} Interior (lb)	P _{i2} Interior (lb)
	0.018	0.0195	1.02	0.119	0.119	0.111	47.5	11.9	97.7	16.6
	0.024	0.0255	1.34	0.166	0.166	0.147	90.3	22.6	183	31.1
	0.030	0.0315	1.66	0.207	0.207	0.184	148	36.9	297	50.4
	0.036	0.0375	1.98	0.247	0.247	0.220	220	54.9	438	74.4
0.048	0.0495	2.63	0.326	0.326	0.293	408	102	806	137	

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	
3.0	S	175	243	303	362	477	175	244	303	362	478	219	304	379	452	597	
	D	358	476	594	712	946	858	1142	1426	1708	2270	676	900	1123	1345	1787	
3.5	S	129	179	223	266	351	129	179	223	266	351	161	224	278	332	439	
	D	225	300	374	448	596	540	719	898	1076	1429	426	567	707	847	1126	
4.0	S	98	137	170	203	268	98	137	170	203	269	123	171	213	254	336	
	D	151	201	251	300	399	362	482	601	721	958	285	380	474	567	754	
4.5	S	78	108	135	161	212	78	108	135	161	212	97	135	168	201	265	
	D	106	141	176	211	280	254	338	422	506	673	200	267	333	399	530	
5.0	S	63	88	109	130	172	63	88	109	130	172	79	110	136	163	215	
	D	77	103	128	154	204	185	247	308	369	490	146	194	242	291	386	
5.5	S	52	72	90	108	142	52	72	90	108	142	65	91	113	135	178	
	D	58	77	96	115	153	139	185	231	277	368	110	146	182	218	290	
6.0	S	44	61	76	90	119	44	61	76	90	119	55	76	95	113	149	
	D	45	59	74	89	118	107	143	178	213	284	84	112	140	168	223	
6.5	S	37	52	65	77	102	37	52	65	77	102	47	65	81	96	127	
	D	35	47	58	70	93	84	112	140	168	223	66	88	110	132	176	
7.0	S	32	45	56	66	88	32	45	56	66	88	40	56	70	83	110	
	D	28	37	47	56	74	68	90	112	134	179	53	71	88	106	141	
7.5	S	28	39	48	58	76	28	39	48	58	76	35	49	61	72	96	
	D	23	30	38	46	61	55	73	91	109	145	43	58	72	86	114	
8.0	S	25	34	43	51	67	25	34	43	51	67	31	43	53	64	84	
	D	19	25	31	38	50	45	60	75	90	120	36	47	59	71	94	
8.5	S	22	30	38	45	59	22	30	38	45	59	27	38	47	56	74	
	D	16	21	26	31	42	38	50	63	75	100	30	40	49	59	79	
9.0	S	19	27	34	40	53	19	27	34	40	53	24	34	42	50	66	
	D	13	18	22	26	35	32	42	53	63	84	25	33	42	50	66	
9.5	S	17	24	30	36	48	17	24	30	36	48	22	30	38	45	60	
	D	11	15	19	22	30	27	36	45	54	71	21	28	35	42	56	
10.0	S	16	22	27	33	43	16	22	27	33	43	20	27	34	41	54	
	D	10	13	16	19	26	23	31	38	46	61	18	24	30	36	48	
10.5	S	14	20	25	30	39	14	20	25	30	39	18	25	31	37	49	
	D	8	11	14	17	22	20	27	33	40	53	16	21	26	31	42	
11.0	S	13	18	23	27	35	13	18	23	27	36	16	23	28	34	44	
	D	7	10	12	14	19	17	23	29	35	46	14	18	23	27	36	

- 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