

**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> )					
	0.610	0.650	7.57	17.5	17.5	0.758	0.733	0.183	1.46	0.249
	0.762	0.802	9.39	23.6	23.6	0.993	1.21	0.302	2.39	0.407
	0.914	0.954	11.2	30.2	30.0	1.24	1.80	0.451	3.56	0.605
	1.22	1.26	14.9	42.9	43.0	1.67	3.37	0.843	6.61	1.12

**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)			
		0.610	0.762	0.914	1.22	0.610	0.762	0.914	1.22	0.610	0.762	0.914	1.22
1.5	S	8.58	11.6	14.8	21.0	8.59	11.6	14.7	21.1	10.7	14.5	18.4	26.4
	D	19.4	25.5	31.7	42.9	46.7	61.2	76.2	103	36.8	48.2	60.0	81.1
1.6	S	7.54	10.2	13.0	18.5	7.55	10.2	12.9	18.5	9.44	12.7	16.2	23.2
	D	16.0	21.0	26.2	35.3	38.5	50.4	62.8	84.8	30.3	39.7	49.4	66.8
1.8	S	5.96	8.04	10.3	14.6	5.96	8.03	10.2	14.6	7.46	10.0	12.8	18.3
	D	11.3	14.8	18.4	24.8	27.0	35.4	44.1	59.6	21.3	27.9	34.7	46.9
2.0	S	4.82	6.51	8.33	11.8	4.83	6.50	8.27	11.9	6.04	8.13	10.3	14.8
	D	8.20	10.8	13.4	18.1	19.7	25.8	32.1	43.4	15.5	20.3	25.3	34.2
2.2	S	3.99	5.38	6.88	9.77	3.99	5.37	6.84	9.80	4.99	6.72	8.55	12.3
	D	6.16	8.08	10.1	13.6	14.8	19.4	24.1	32.6	11.7	15.3	19.0	25.7
2.4	S	3.35	4.52	5.78	8.21	3.36	4.51	5.75	8.23	4.19	5.64	7.18	10.3
	D	4.75	6.22	7.75	10.5	11.4	14.9	18.6	25.1	8.97	11.8	14.6	19.8
2.5	S	3.09	4.17	5.33	7.57	3.09	4.16	5.30	7.59	3.87	5.20	6.62	9.49
	D	4.20	5.50	6.86	9.26	10.1	13.2	16.5	22.2	7.94	10.4	13.0	17.5
2.6	S	2.85	3.85	4.93	7.00	2.86	3.85	4.90	7.02	3.57	4.81	6.12	8.77
	D	3.73	4.89	6.09	8.23	8.96	11.7	14.6	19.8	7.06	9.25	11.5	15.6
2.8	S	2.46	3.32	4.25	6.03	2.46	3.32	4.22	6.05	3.08	4.15	5.28	7.56
	D	2.99	3.92	4.88	6.59	7.17	9.40	11.7	15.8	5.65	7.41	9.22	12.5
3.0	S	2.14	2.90	3.70	5.25	2.15	2.89	3.68	5.27	2.68	3.61	4.60	6.59
	D	2.43	3.19	3.97	5.36	5.83	7.65	9.52	12.9	4.59	6.02	7.50	10.1
3.2	S	1.88	2.54	3.25	4.62	1.89	2.54	3.23	4.63	2.36	3.17	4.04	5.79
	D	2.00	2.62	3.27	4.42	4.81	6.30	7.85	10.6	3.78	4.96	6.18	8.35
3.4	S	1.67	2.25	2.88	4.09	1.67	2.25	2.86	4.10	2.09	2.81	3.58	5.13
	D	1.67	2.19	2.73	3.68	4.01	5.25	6.54	8.84	3.16	4.14	5.15	6.96
3.5	S	1.58	2.13	2.72	3.86	1.58	2.12	2.70	3.87	1.97	2.65	3.38	4.84
	D	1.53	2.01	2.50	3.38	3.67	4.81	6.00	8.10	2.89	3.79	4.72	6.38
3.6	S	1.49	2.01	2.57	3.65	1.49	2.01	2.55	3.66	1.86	2.51	3.19	4.57
	D	1.41	1.84	2.30	3.10	3.38	4.42	5.51	7.45	2.66	3.48	4.34	5.86
3.8	S	1.34	1.80	2.31	3.27	1.34	1.80	2.29	3.28	1.67	2.25	2.87	4.11
	D	1.20	1.57	1.95	2.64	2.87	3.76	4.69	6.33	2.26	2.96	3.69	4.99
4.0	S	1.21	1.63	2.08	2.96	1.21	1.63	2.07	2.96	1.51	2.03	2.59	3.71
	D	1.03	1.34	1.67	2.26	2.46	3.23	4.02	5.43	1.94	2.54	3.16	4.27

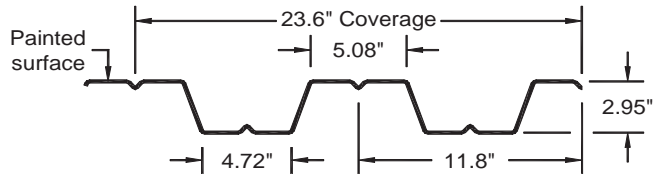
- Notes:**
- 1 Based on ASTM A 653 Grade 230 structural steel.
  - 2 Values in row "S" are based on strength.
  - 3 Values in row "D" are based on deflection of 1/180th span.
  - 4 Web crippling not included in strength calculations. See Example.

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





# S-300-SH



## 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. <sup>4</sup> )	Specified Web Crippling Data													
				Midspan (in. <sup>3</sup> )	Support (in. <sup>3</sup> )		P <sub>e1</sub> End (lb)	P <sub>e2</sub> End (lb)	P <sub>i1</sub> Interior (lb)	P <sub>i2</sub> Interior (lb)										
											0.024	0.0255	1.55	0.326	0.326	0.556	49.7	12.4	99.2	16.9
											0.030	0.0315	1.92	0.440	0.439	0.729	81.8	20.4	162	27.6
0.036	0.0375	2.30	0.562	0.559	0.908	122	30.6	241	41.0											
0.048	0.0495	3.04	0.798	0.800	1.23	229	57.2	448	76.1											

## 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)			
		0.024	0.030	0.036	0.048	0.024	0.030	0.036	0.048	0.024	0.030	0.036	0.048
5.0	S	172	232	297	420	172	232	295	422	215	290	369	528
	D	388	508	634	855	931	1220	1521	2052	733	961	1198	1616
5.5	S	142	192	245	347	142	192	244	349	178	240	305	436
	D	291	382	476	642	700	917	1143	1542	551	722	900	1214
6.0	S	119	161	206	292	120	161	205	293	150	201	256	367
	D	225	294	367	495	539	706	880	1188	424	556	693	935
6.5	S	102	137	176	249	102	137	175	250	127	171	218	312
	D	177	231	288	389	424	555	692	934	334	437	545	736
7.0	S	88	119	151	214	88	118	151	216	110	148	188	269
	D	141	185	231	312	339	445	554	748	267	350	436	589
7.5	S	76	103	132	187	77	103	131	188	96	129	164	235
	D	115	151	188	253	276	362	451	608	217	285	355	479
8.0	S	67	91	116	164	67	91	115	165	84	113	144	206
	D	95	124	155	209	227	298	371	501	179	235	292	395
8.5	S	60	80	103	145	60	80	102	146	75	100	128	183
	D	79	103	129	174	190	248	310	418	149	196	244	329
9.0	S	53	72	92	130	53	72	91	130	66	89	114	163
	D	67	87	109	147	160	209	261	352	126	165	205	277
9.5	S	48	64	82	116	48	64	82	117	60	80	102	146
	D	57	74	92	125	136	178	222	299	107	140	175	236
10.0	S	43	58	74	105	43	58	74	106	54	72	92	132
	D	48	64	79	107	116	153	190	257	92	120	150	202
10.5	S	39	53	67	95	39	53	67	96	49	66	84	120
	D	42	55	68	92	101	132	164	222	79	104	129	174
11.0	S	36	48	61	87	36	48	61	87	44	60	76	109
	D	36	48	60	80	87	115	143	193	69	90	112	152
11.5	S	33	44	56	79	33	44	56	80	41	55	70	100
	D	32	42	52	70	77	100	125	169	60	79	98	133
12.0	S	30	40	52	73	30	40	51	73	37	50	64	92
	D	28	37	46	62	67	88	110	148	53	70	87	117
12.5	S	28	37	48	67	28	37	47	68	34	46	59	84
	D	25	33	41	55	60	78	97	131	47	62	77	103
13.0	S	25	34	44	62	25	34	44	62	32	43	55	78
	D	22	29	36	49	53	69	87	117	42	55	68	92

- 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

