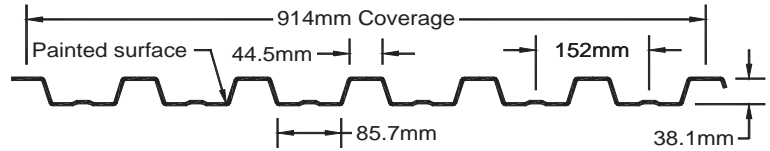




S-15-SH



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	5.14	5.10	4.88	0.146	0.904	0.226	1.72	0.293
	0.610	0.650	6.76	7.55	7.39	0.205	1.70	0.424	3.22	0.548
	0.762	0.802	8.38	10.2	10.3	0.261	2.74	0.686	5.21	0.886
	0.914	0.954	10.0	13.0	12.6	0.313	4.05	1.01	7.69	1.31
	1.22	1.26	13.2	17.7	17.2	0.415	7.46	1.87	14.1	2.40

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	5.64	8.33	11.3	14.4	19.5	5.39	8.16	11.3	13.9	19.0	6.73	10.2	14.2	17.4	23.7
	D	12.7	17.8	22.6	27.1	35.9	30.4	42.7	54.3	65.0	86.2	23.9	33.6	42.7	51.2	67.9
1.2	S	3.91	5.79	7.83	9.96	13.5	3.74	5.66	7.86	9.67	13.2	4.68	7.08	9.83	12.1	16.5
	D	7.33	10.3	13.1	15.7	20.8	17.6	24.7	31.4	37.6	49.9	13.9	19.5	24.7	29.6	39.3
1.4	S	2.88	4.25	5.75	7.32	9.94	2.75	4.16	5.78	7.10	9.67	3.44	5.20	7.22	8.88	12.1
	D	4.61	6.48	8.24	9.86	13.1	11.1	15.6	19.8	23.7	31.4	8.72	12.3	15.6	18.6	24.8
1.6	S	2.20	3.26	4.40	5.60	7.61	2.10	3.19	4.42	5.44	7.40	2.63	3.98	5.53	6.80	9.25
	D	3.09	4.34	5.52	6.61	8.77	7.42	10.4	13.3	15.9	21.1	5.84	8.20	10.4	12.5	16.6
1.8	S	1.74	2.57	3.48	4.43	6.01	1.66	2.52	3.50	4.30	5.85	2.08	3.15	4.37	5.37	7.31
	D	2.17	3.05	3.88	4.64	6.16	5.21	7.32	9.30	11.1	14.8	4.10	5.76	7.33	8.77	11.6
2.0	S	1.41	2.08	2.82	3.59	4.87	1.35	2.04	2.83	3.48	4.74	1.68	2.55	3.54	4.35	5.92
	D	1.58	2.22	2.83	3.38	4.49	3.80	5.33	6.78	8.12	10.8	2.99	4.20	5.34	6.40	8.49
2.2	S	1.16	1.72	2.33	2.96	4.03	1.11	1.69	2.34	2.88	3.91	1.39	2.11	2.92	3.59	4.89
	D	1.19	1.67	2.12	2.54	3.37	2.85	4.01	5.10	6.10	8.10	2.25	3.16	4.01	4.80	6.38
2.4	S	0.98	1.45	1.96	2.49	3.38	0.94	1.42	1.97	2.42	3.29	1.17	1.77	2.46	3.02	4.11
	D	0.92	1.29	1.64	1.96	2.60	2.20	3.09	3.92	4.70	6.24	1.73	2.43	3.09	3.70	4.91
2.6	S	0.83	1.23	1.67	2.12	2.88	0.80	1.21	1.68	2.06	2.80	1.00	1.51	2.09	2.57	3.50
	D	0.72	1.01	1.29	1.54	2.04	1.73	2.43	3.09	3.70	4.91	1.36	1.91	2.43	2.91	3.86
2.8	S	0.72	1.06	1.44	1.83	2.49	0.69	1.04	1.44	1.78	2.42	0.86	1.30	1.81	2.22	3.02
	D	0.58	0.81	1.03	1.23	1.64	1.38	1.94	2.47	2.96	3.93	1.09	1.53	1.95	2.33	3.09
3.0	S	0.63	0.93	1.25	1.59	2.17	0.60	0.91	1.26	1.55	2.11	0.75	1.13	1.57	1.93	2.63
	D	0.47	0.66	0.84	1.00	1.33	1.13	1.58	2.01	2.41	3.19	0.89	1.24	1.58	1.89	2.52
3.2	S	0.55	0.81	1.10	1.40	1.90	0.53	0.80	1.11	1.36	1.85	0.66	1.00	1.38	1.70	2.31
	D	0.39	0.54	0.69	0.83	1.10	0.93	1.30	1.66	1.98	2.63	0.73	1.03	1.30	1.56	2.07
3.4	S	0.49	0.72	0.98	1.24	1.69	0.47	0.71	0.98	1.20	1.64	0.58	0.88	1.22	1.50	2.05
	D	0.32	0.45	0.58	0.69	0.91	0.77	1.09	1.38	1.65	2.19	0.61	0.85	1.09	1.30	1.73
3.6	S	0.43	0.64	0.87	1.11	1.50	0.42	0.63	0.87	1.07	1.46	0.52	0.79	1.09	1.34	1.83
	D	0.27	0.38	0.48	0.58	0.77	0.65	0.91	1.16	1.39	1.85	0.51	0.72	0.92	1.10	1.46
3.8	S	0.39	0.58	0.78	0.99	1.35	0.37	0.56	0.78	0.96	1.31	0.47	0.71	0.98	1.20	1.64
	D	0.23	0.32	0.41	0.49	0.65	0.55	0.78	0.99	1.18	1.57	0.44	0.61	0.78	0.93	1.24
4.0	S	0.35	0.52	0.70	0.90	1.22	0.34	0.51	0.71	0.87	1.18	0.42	0.64	0.88	1.09	1.48
	D	0.20	0.28	0.35	0.42	0.56	0.47	0.67	0.85	1.02	1.35	0.37	0.53	0.67	0.80	1.06

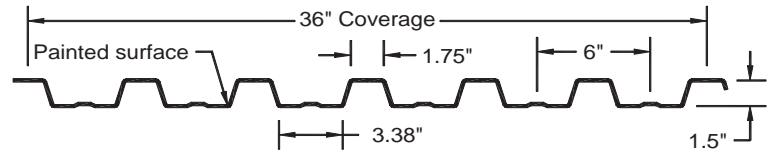
- Notes:**
- 1 Based on ASTM A 653 Grade 230 structural steel.
 - 2 Values in row "S" are based on strength.
 - 3 Values in row "D" are based on deflection of 1/180th span.
 - 4 Web crippling not included in strength calculations. See Example.

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





S-15-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. 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	1.05	0.0951
				0.024	0.0255		1.38	0.141	0.138	0.150	115	28.7	219	37.1
0.030	0.0315	1.72	0.190	0.191	0.191	186	46.5	353	60.1					
0.036	0.0375	2.05	0.242	0.235	0.229	275	68.6	521	88.6					
0.048	0.0495	2.71	0.328	0.319	0.304	506	126	959	163					

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	140	206	279	355	481	133	202	281	344	468	167	253	351	430	585
	D	346	486	618	739	982	831	1166	1482	1775	2356	654	919	1167	1398	1855
3.5	S	103	152	205	261	354	98	148	206	253	344	123	186	258	316	430
	D	218	306	389	466	618	523	735	933	1118	1483	412	578	735	880	1168
4.0	S	78	116	157	200	271	75	114	158	194	263	94	142	197	242	329
	D	146	205	261	312	414	351	492	625	749	994	276	388	492	590	783
4.5	S	62	92	124	158	214	59	90	125	153	208	74	112	156	191	260
	D	103	144	183	219	291	246	346	439	526	698	194	272	346	414	550
5.0	S	50	74	100	128	173	48	73	101	124	169	60	91	126	155	211
	D	75	105	133	160	212	179	252	320	383	509	141	198	252	302	401
5.5	S	42	61	83	106	143	40	60	83	102	139	50	75	104	128	174
	D	56	79	100	120	159	135	189	241	288	382	106	149	189	227	301
6.0	S	35	52	70	89	120	33	51	70	86	117	42	63	88	108	146
	D	43	61	77	92	123	104	146	185	222	294	82	115	146	175	232
6.5	S	30	44	59	76	103	28	43	60	73	100	36	54	75	92	125
	D	34	48	61	73	97	82	115	146	174	232	64	90	115	137	182
7.0	S	26	38	51	65	88	25	37	52	63	86	31	46	64	79	108
	D	27	38	49	58	77	65	92	117	140	185	52	72	92	110	146
7.5	S	22	33	45	57	77	21	32	45	55	75	27	40	56	69	94
	D	22	31	40	47	63	53	75	95	114	151	42	59	75	89	119
8.0	S	20	29	39	50	68	19	28	39	48	66	23	36	49	60	82
	D	18	26	33	39	52	44	62	78	94	124	35	48	62	74	98
8.5	S	17	26	35	44	60	17	25	35	43	58	21	31	44	54	73
	D	15	21	27	33	43	37	51	65	78	104	29	40	51	61	82
9.0	S	16	23	31	39	53	15	22	31	38	52	19	28	39	48	65
	D	13	18	23	27	36	31	43	55	66	87	24	34	43	52	69
9.5	S	14	21	28	35	48	13	20	28	34	47	17	25	35	43	58
	D	11	15	19	23	31	26	37	47	56	74	21	29	37	44	58
10.0	S	13	19	25	32	43	12	18	25	31	42	15	23	32	39	53
	D	9	13	17	20	27	22	31	40	48	64	18	25	32	38	50
10.5	S	11	17	23	29	39	11	16	23	28	38	14	21	29	35	48
	D	8	11	14	17	23	19	27	35	41	55	15	21	27	33	43
11.0	S	10	15	21	26	36	10	15	21	26	35	12	19	26	32	44
	D	7	10	13	15	20	17	24	30	36	48	13	19	24	28	38

- 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

