

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	4.72	3.24	3.48	0.068	0.574	0.143	1.10	0.188
	0.610	0.650	6.20	4.93	5.13	0.105	1.08	0.269	2.07	0.351
	0.762	0.802	7.68	6.60	6.90	0.142	1.75	0.436	3.34	0.568
	0.914	0.954	9.16	8.08	8.73	0.180	2.58	0.645	4.93	0.839
	1.22	1.26	12.1	11.1	11.6	0.255	4.76	1.19	9.07	1.54

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	3.58	5.44	7.29	8.92	12.2	3.85	5.66	7.62	9.64	12.8	4.81	7.07	9.52	12.1	16.0										
	D	5.86	9.09	12.3	15.6	22.1	4.06	21.8	29.5	37.4	53.1	1.08	17.2	23.2	29.5	41.8										
1.2	S	2.48	3.78	5.06	6.19	8.48	2.67	3.93	5.29	6.69	8.89	3.34	4.91	6.61	8.37	11.1										
	D	3.39	5.26	7.11	9.02	12.8	8.14	12.6	17.1	21.7	30.7	6.41	9.94	13.4	17.1	24.2										
1.4	S	1.82	2.77	3.72	4.55	6.23	1.96	2.89	3.89	4.92	6.53	2.45	3.61	4.86	6.15	8.17										
	D	2.14	3.31	4.48	5.68	8.06	5.13	7.95	10.8	13.6	19.3	4.04	6.26	8.47	10.7	15.2										
1.6	S	1.40	2.12	2.85	3.48	4.77	1.50	2.21	2.98	3.77	5.00	1.88	2.76	3.72	4.71	6.25										
	D	1.43	2.22	3.00	3.81	5.40	3.43	5.32	7.20	9.14	13.0	2.70	4.19	5.67	7.19	10.2										
1.8	S	1.10	1.68	2.25	2.75	3.77	1.19	1.75	2.35	2.98	3.95	1.48	2.18	2.94	3.72	4.94										
	D	1.00	1.56	2.11	2.67	3.79	2.41	3.74	5.06	6.42	9.10	1.90	2.94	3.98	5.05	7.17										
2.0	S	0.89	1.36	1.82	2.23	3.05	0.96	1.41	1.90	2.41	3.20	1.20	1.77	2.38	3.01	4.00										
	D	0.73	1.14	1.54	1.95	2.76	1.76	2.73	3.69	4.68	6.63	1.38	2.15	2.90	3.68	5.22										
2.2	S	0.74	1.12	1.51	1.84	2.52	0.79	1.17	1.57	1.99	2.65	0.99	1.46	1.97	2.49	3.31										
	D	0.55	0.85	1.15	1.46	2.08	1.32	2.05	2.77	3.51	4.98	1.04	1.61	2.18	2.77	3.92										
2.4	S	0.62	0.94	1.27	1.55	2.12	0.67	0.98	1.32	1.67	2.22	0.83	1.23	1.65	2.09	2.78										
	D	0.42	0.66	0.89	1.13	1.60	1.02	1.58	2.13	2.71	3.84	0.80	1.24	1.68	2.13	3.02										
2.6	S	0.53	0.80	1.08	1.32	1.81	0.57	0.84	1.13	1.43	1.89	0.71	1.05	1.41	1.78	2.37										
	D	0.33	0.52	0.70	0.89	1.26	0.80	1.24	1.68	2.13	3.02	0.63	0.98	1.32	1.68	2.38										
2.8	S	0.46	0.69	0.93	1.14	1.56	0.49	0.72	0.97	1.23	1.63	0.61	0.90	1.21	1.54	2.04										
	D	0.27	0.41	0.56	0.71	1.01	0.64	0.99	1.34	1.70	2.42	0.50	0.78	1.06	1.34	1.90										
3.0	S	0.40	0.60	0.81	0.99	1.36	0.43	0.63	0.85	1.07	1.42	0.53	0.79	1.06	1.34	1.78										
	D	0.22	0.34	0.46	0.58	0.82	0.52	0.81	1.09	1.39	1.97	0.41	0.64	0.86	1.09	1.55										
3.2	S	0.35	0.53	0.71	0.87	1.19	0.38	0.55	0.74	0.94	1.25	0.47	0.69	0.93	1.18	1.56										
	D	0.18	0.28	0.38	0.48	0.67	0.43	0.67	0.90	1.14	1.62	0.34	0.52	0.71	0.90	1.28										
3.4	S	0.31	0.47	0.63	0.77	1.06	0.33	0.49	0.66	0.83	1.11	0.42	0.61	0.82	1.04	1.38										
	D	0.15	0.23	0.31	0.40	0.56	0.36	0.55	0.75	0.95	1.35	0.28	0.44	0.59	0.75	1.06										
3.6	S	0.28	0.42	0.56	0.69	0.94	0.30	0.44	0.59	0.74	0.99	0.37	0.55	0.73	0.93	1.24										
	D	0.13	0.19	0.26	0.33	0.47	0.30	0.47	0.63	0.80	1.14	0.24	0.37	0.50	0.63	0.90										
3.8	S	0.25	0.38	0.50	0.62	0.85	0.27	0.39	0.53	0.67	0.89	0.33	0.49	0.66	0.83	1.11										
	D	0.11	0.17	0.22	0.28	0.40	0.26	0.40	0.54	0.68	0.97	0.20	0.31	0.42	0.54	0.76										
4.0	S	0.22	0.34	0.46	0.56	0.76	0.24	0.35	0.48	0.60	0.80	0.30	0.44	0.60	0.75	1.00										
	D	0.09	0.14	0.19	0.24	0.35	0.22	0.34	0.46	0.58	0.83	0.17	0.27	0.36	0.46	0.65										

- 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

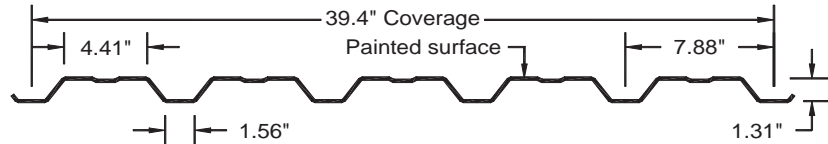




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SAMSON PANEL-SB



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	0.966	0.0604	0.0649	0.0497	38.9	9.70	74.8	12.7
	0.024	0.0255	1.27	0.0919	0.0955	0.0769	73.0	18.3	140	23.8
	0.030	0.0315	1.57	0.123	0.129	0.104	118	29.6	227	38.5
	0.036	0.0375	1.88	0.150	0.163	0.132	175	43.7	334	56.8
	0.048	0.0495	2.48	0.206	0.216	0.187	322	80.6	615	105

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	199	303	406	496	679	214	315	424	537	712	268	394	530	671	890
	D	542	839	1135	1440	2040	1300	2014	2725	3455	4895	1024	1586	2146	2721	3855
2.5	S	128	194	260	317	434	137	202	271	344	456	171	252	339	429	570
	D	277	430	581	737	1044	665	1031	1395	1769	2506	524	812	1099	1393	1974
3.0	S	89	135	180	220	302	95	140	189	239	316	119	175	236	298	396
	D	160	249	336	427	604	385	597	807	1024	1450	303	470	636	806	1142
3.5	S	65	99	132	162	222	70	103	139	175	232	87	129	173	219	291
	D	101	157	212	269	381	243	376	508	645	913	191	296	400	508	719
4.0	S	50	76	101	124	170	54	79	106	134	178	67	99	133	168	222
	D	68	105	142	180	255	162	252	341	432	612	128	198	268	340	482
4.5	S	39	60	80	98	134	42	62	84	106	141	53	78	105	133	176
	D	48	74	100	126	179	114	177	239	303	430	90	139	188	239	338
5.0	S	32	48	65	79	109	34	50	68	86	114	43	63	85	107	142
	D	35	54	73	92	131	83	129	174	221	313	66	101	137	174	247
5.5	S	26	40	54	66	90	28	42	56	71	94	35	52	70	89	118
	D	26	40	55	69	98	62	97	131	166	235	49	76	103	131	185
6.0	S	22	34	45	55	75	24	35	47	60	79	30	44	59	75	99
	D	20	31	42	53	76	48	75	101	128	181	38	59	79	101	143
6.5	S	19	29	38	47	64	20	30	40	51	67	25	37	50	64	84
	D	16	24	33	42	59	38	59	79	101	143	30	46	63	79	112
7.0	S	16	25	33	40	55	17	26	35	44	58	22	32	43	55	73
	D	13	20	26	34	48	30	47	64	81	114	24	37	50	63	90
7.5	S	14	22	29	35	48	15	22	30	38	51	19	28	38	48	63
	D	10	16	22	27	39	25	38	52	66	93	19	30	41	52	73
8.0	S	12	19	25	31	42	13	20	27	34	44	17	25	33	42	56
	D	8	13	18	22	32	20	31	43	54	76	16	25	34	43	60
8.5	S	11	17	22	27	38	12	17	23	30	39	15	22	29	37	49
	D	7	11	15	19	27	17	26	35	45	64	13	21	28	35	50
9.0	S	10	15	20	24	34	11	16	21	27	35	13	19	26	33	44
	D	6	9	12	16	22	14	22	30	38	54	11	17	24	30	42
9.5	S	9	13	18	22	30	9	14	19	24	32	12	17	24	30	39
	D	5	8	11	13	19	12	19	25	32	46	10	15	20	25	36
10.0	S	8	12	16	20	27	9	13	17	21	28	11	16	21	27	36
	D	4	7	9	12	16	10	16	22	28	39	8	13	17	22	31

- 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

