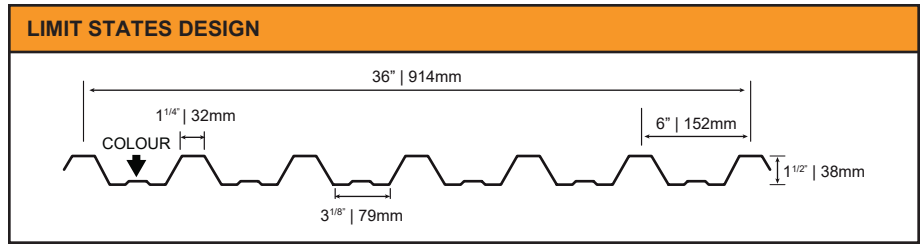


1. Based on ASTM A 653 structural steel.
2. Values in row "S" are based on strength.
3. Values in row "D" are based on deflection of 1/180th span.
4. Web crippling not included in strength calculation. See example.
5. Limit States Design principles were used in accordance with CSA Standard S136-16.



**SECTION PROPERTIES | Per Foot of Width**

Base Steel Thickness (in.)	Weight [G90] (psf)	Yield Stress (ksi)	Section Modulus		Deflection Moment of Inertia (in <sup>4</sup> )	Specified Web Crippling Data			
			Midspan (in <sup>3</sup> )	Support (in <sup>3</sup> )		Pe1 End (lb)	Pe2 End (lb)	Pi1 Interior (lb)	Pi2 Interior (lb)
0.0180	1.04	33	0.0942	0.0892	0.0988	54.1	13.5	105	17.9
0.0180	1.04	50	0.0886	0.0822	0.0961	82.0	20.5	159	27.1
0.0240	1.36	33	0.136	0.129	0.133	102	25.5	197	33.4
0.0300	1.69	33	0.177	0.165	0.166	165	41.3	318	54.1

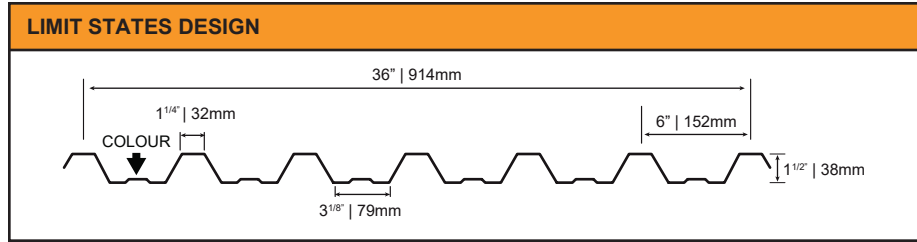
LLF = 1.50; IMPF = 0.90; NORMAL OCCUPANCY = 1.0

**LOAD TABLE | Maximum Uniformly Distributed Specified Loads (psf).**

Span Length (ft)		1-Span Base Steel Thickness (in.)				2-Span Base Steel Thickness (in.)				3-Span Base Steel Thickness (in.)			
		0.0180	0.0180	0.0240	0.0300	0.0180	0.0180	0.0240	0.0300	0.0180	0.0180	0.0240	0.0300
Y.S.* (ksi)		33	50	33	33	33	50	33	33	33	50	33	33
3.0	S	138	197	200	260	131	183	189	242	164	228	237	303
3.0	D	355	345	477	596	851	828	1145	1429	670	652	902	1126
3.5	S	102	145	147	191	96	134	139	178	120	168	174	222
3.5	D	223	217	301	375	536	521	721	900	422	411	568	709
4.0	S	78	111	112	146	74	103	106	136	92	128	133	170
4.0	D	150	146	201	251	359	349	483	603	283	275	381	475
4.5	S	61	88	89	116	58	81	84	108	73	101	105	135
4.5	D	105	102	141	176	252	245	339	423	199	193	267	333
5.0	S	50	71	72	94	47	66	68	87	59	82	85	109
5.0	D	77	75	103	129	184	179	247	309	145	141	195	243
5.5	S	41	59	59	77	39	54	56	72	49	68	70	90
5.5	D	58	56	77	97	138	134	186	232	109	106	146	183
6.0	S	35	49	50	65	33	46	47	61	41	57	59	76
6.0	D	44	43	60	74	106	103	143	179	84	81	113	141
6.5	S	29	42	43	55	28	39	40	52	35	49	50	64
6.5	D	35	34	47	59	84	81	113	141	66	64	89	111
7.0	S	25	36	37	48	24	34	35	44	30	42	43	56
7.0	D	28	27	38	47	67	65	90	113	53	51	71	89
7.5	S	22	32	32	42	21	29	30	39	26	37	38	48
7.5	D	23	22	31	38	54	53	73	91	43	42	58	72
8.0	S	19	28	28	37	18	26	27	34	23	32	33	43
8.0	D	19	18	25	31	45	44	60	75	35	34	48	59
8.5	S	17	25	25	32	16	23	24	30	20	28	29	38
8.5	D	16	15	21	26	37	36	50	63	29	29	40	49
9.0	S	15	22	22	29	15	20	21	27	18	25	26	34
9.0	D	13	13	18	22	32	31	42	53	25	24	33	42
9.5	S	14	20	20	26	13	18	19	24	16	23	24	30
9.5	D	11	11	15	19	27	26	36	45	21	21	28	35
10.0	S	12	18	18	23	12	16	17	22	15	21	21	27
10.0	D	10	9	13	16	23	22	31	39	18	18	24	30

\*Y.S. = Yield Stress

1. Based on ASTM A 653M 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 calculation. See example.
5. Limit States Design principles were used in accordance with CSA Standard S136-16.



**SECTION PROPERTIES | Per Metre of Width**

Base Steel Thickness (mm)	Mass [Z275] (kg/m <sup>2</sup> )	Yield Stress (MPa)	Section Modulus		Deflection Moment of Inertia (x10 <sup>6</sup> mm <sup>4</sup> )	Specified Web Crippling Data			
			Midspan (x10 <sup>3</sup> mm <sup>3</sup> )	Support (x10 <sup>3</sup> mm <sup>3</sup> )		Pe1 End (kN)	Pe2 End (kN)	Pi1 Interior (kN)	Pi2 Interior (kN)
0.457	5.06	230	5.06	4.78	0.135	0.799	0.200	1.55	0.263
0.457	5.06	345	4.76	4.42	0.131	1.20	0.300	2.32	0.395
0.610	6.66	230	7.32	6.93	0.182	1.50	0.375	2.90	0.493
0.762	8.26	230	9.53	8.87	0.227	2.44	0.609	4.69	0.798

LLF = 1.50; IMPF = 0.90; NORMAL OCCUPANCY = 1.0

**LOAD TABLE | Maximum Uniformly Distributed Specified Loads (kPa).**

Span Length (m)		1-Span Base Steel Thickness (mm)				2-Span Base Steel Thickness (mm)				3-Span Base Steel Thickness (mm)			
		0.457	0.457	0.610	0.762	0.457	0.457	0.610	0.762	0.457	0.457	0.610	0.762
YS.* (MPa)		230	345	230	230	230	345	230	230	230	345	230	230
1.0	S	5.58	7.89	8.08	10.5	5.28	7.31	7.65	9.80	6.60	9.14	9.56	12.2
1.0	D	13.0	12.6	17.5	21.8	31.1	30.3	41.9	52.3	24.5	23.9	33.0	41.2
1.2	S	3.88	5.48	5.61	7.30	3.67	5.08	5.31	6.80	4.59	6.35	6.64	8.50
1.2	D	7.51	7.31	10.1	12.6	18.0	17.5	24.3	30.3	14.2	13.8	19.1	23.8
1.4	S	2.85	4.02	4.12	5.37	2.69	3.73	3.90	5.00	3.37	4.66	4.88	6.25
1.4	D	4.73	4.60	6.37	7.94	11.4	11.0	15.3	19.1	8.94	8.70	12.0	15.0
1.6	S	2.18	3.08	3.15	4.11	2.06	2.86	2.99	3.83	2.58	3.57	3.74	4.78
1.6	D	3.17	3.08	4.27	5.32	7.60	7.40	10.2	12.8	5.99	5.83	8.06	10.1
1.8	S	1.72	2.43	2.49	3.25	1.63	2.26	2.36	3.02	2.04	2.82	2.95	3.78
1.8	D	2.22	2.16	3.00	3.74	5.34	5.20	7.19	8.97	4.21	4.09	5.66	7.06
2.0	S	1.40	1.97	2.02	2.63	1.32	1.83	1.91	2.45	1.65	2.29	2.39	3.06
2.0	D	1.62	1.58	2.18	2.73	3.89	3.79	5.24	6.54	3.07	2.98	4.13	5.15
2.2	S	1.15	1.63	1.67	2.17	1.09	1.51	1.58	2.02	1.36	1.89	1.98	2.53
2.2	D	1.22	1.19	1.64	2.05	2.92	2.85	3.94	4.91	2.30	2.24	3.10	3.87
2.4	S	0.97	1.37	1.40	1.83	0.92	1.27	1.33	1.70	1.15	1.59	1.66	2.13
2.4	D	0.94	0.91	1.26	1.58	2.25	2.19	3.03	3.78	1.77	1.73	2.39	2.98
2.6	S	0.83	1.17	1.19	1.56	0.78	1.08	1.13	1.45	0.98	1.35	1.41	1.81
2.6	D	0.74	0.72	0.99	1.24	1.77	1.72	2.39	2.98	1.40	1.36	1.88	2.34
2.8	S	0.71	1.01	1.03	1.34	0.67	0.93	0.98	1.25	0.84	1.17	1.22	1.56
2.8	D	0.59	0.58	0.80	0.99	1.42	1.38	1.91	2.38	1.12	1.09	1.50	1.88
3.0	S	0.62	0.88	0.90	1.17	0.59	0.81	0.85	1.09	0.73	1.02	1.06	1.36
3.0	D	0.48	0.47	0.65	0.81	1.15	1.12	1.55	1.94	0.91	0.88	1.22	1.53
3.2	S	0.55	0.77	0.79	1.03	0.52	0.71	0.75	0.96	0.64	0.89	0.93	1.20
3.2	D	0.40	0.39	0.53	0.67	0.95	0.92	1.28	1.60	0.75	0.73	1.01	1.26
3.4	S	0.48	0.68	0.70	0.91	0.46	0.63	0.66	0.85	0.57	0.79	0.83	1.06
3.4	D	0.33	0.32	0.44	0.55	0.79	0.77	1.07	1.33	0.62	0.61	0.84	1.05

\*Y.S. = Yield Stress