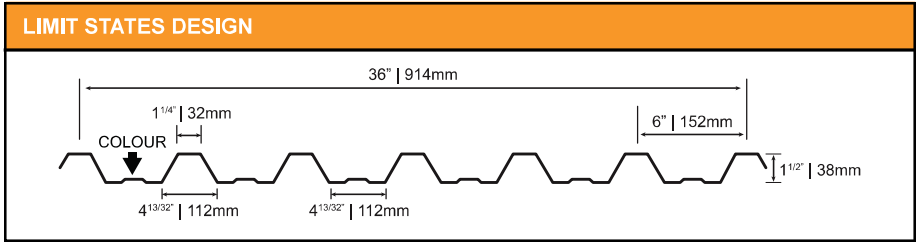


1. Based on ASTM A 653 structural steel.
2. Values in row "S" are based on strength.
3. Values in row "D" are based on deflection of 1/180th span.
4. Web crippling not included in strength calculation. See example.
5. Limit States Design principles were used in accordance with CSA Standard S136-12.



SECTION PROPERTIES | Per Foot of Width

Base Steel Thickness (inches)	Weight [G90] (psf)	Yield Stress (ksi)	Section Modulus		Deflection Moment of Inertia (in ⁴)	Specified Web Crippling Data			
			Midspan (in ³)	Support (in ³)		Pe1 End (lb)	Pe2 End (lb)	Pi1 Interior (lb)	Pi1 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

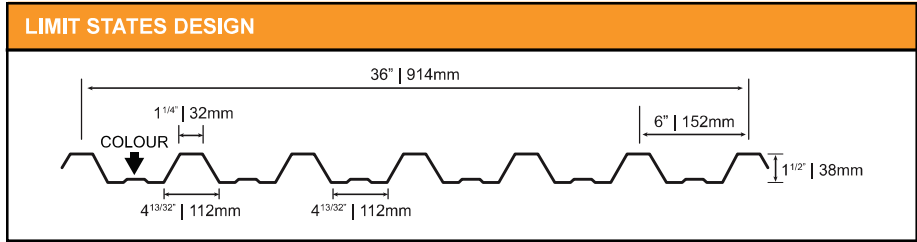
LLF = 1.50; IMPF = 0.90; NORMAL OCCUPANCY = 1.0

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

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

*Y.S. = Yield Strength

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 S136-12.



SECTION PROPERTIES | Per Metre of Width

Base Steel Thickness (mm)	Mass [Z275] (kg/m ²)	Yield Stress (MPa)	Section Modulus		Deflection Moment of Inertia (x10 ⁶ mm ⁴)	Specified Web Crippling Data			
			Midspan (x10 ³ mm ³)	Support (x10 ³ mm ³)		Pe1 End (kN)	Pe2 End (kN)	Pi1 Interior (kN)	Pi1 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

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	0.457	0.457	0.610	0.457	0.457	0.610
	Y.S.* (MPa)	230	345	230	230	345	230	230	345	230
1.0	S	5.58	7.89	8.08	5.28	7.31	7.65	6.60	9.14	9.56
1.0	D	13.0	12.6	17.5	31.1	30.3	41.9	24.5	23.9	33.0
1.2	S	3.88	5.48	5.61	3.67	5.08	5.31	4.59	6.35	6.64
1.2	D	7.51	7.31	10.1	18.0	17.5	24.3	14.2	13.8	19.1
1.4	S	2.85	4.02	4.12	2.69	3.73	3.90	3.37	4.66	4.88
1.4	D	4.73	4.60	6.37	11.4	11.0	15.3	8.94	8.70	12.0
1.6	S	2.18	3.08	3.15	2.06	2.86	2.99	2.58	3.57	3.74
1.6	D	3.17	3.08	4.27	7.60	7.40	10.2	5.99	5.83	8.06
1.8	S	1.72	2.43	2.49	1.63	2.26	2.36	2.04	2.82	2.95
1.8	D	2.22	2.16	3.00	5.34	5.20	7.19	4.21	4.09	5.66
2.0	S	1.40	1.97	2.02	1.32	1.83	1.91	1.65	2.29	2.39
2.0	D	1.62	1.58	2.18	3.89	3.79	5.24	3.07	2.98	4.13
2.2	S	1.15	1.63	1.67	1.09	1.51	1.58	1.36	1.89	1.98
2.2	D	1.22	1.19	1.64	2.92	2.85	3.94	2.30	2.24	3.10
2.4	S	0.97	1.37	1.40	0.92	1.27	1.33	1.15	1.59	1.66
2.4	D	0.94	0.91	1.26	2.25	2.19	3.03	1.77	1.73	2.39
2.6	S	0.83	1.17	1.19	0.78	1.08	1.13	0.98	1.35	1.41
2.6	D	0.74	0.72	0.99	1.77	1.72	2.39	1.40	1.36	1.88
2.8	S	0.71	1.01	1.03	0.67	0.93	0.98	0.84	1.17	1.22
2.8	D	0.59	0.58	0.80	1.42	1.38	1.91	1.12	1.09	1.50
3.0	S	0.62	0.88	0.90	0.59	0.81	0.85	0.73	1.02	1.06
3.0	D	0.48	0.47	0.65	1.15	1.12	1.55	0.91	0.88	1.22
3.2	S	0.55	0.77	0.79	0.52	0.71	0.75	0.64	0.89	0.93
3.2	D	0.40	0.39	0.53	0.95	0.92	1.28	0.75	0.73	1.01
3.4	S	0.48	0.68	0.70	0.46	0.63	0.66	0.57	0.79	0.83
3.4	D	0.33	0.32	0.44	0.79	0.77	1.07	0.62	0.61	0.84

*Y.S. = Yield Strength