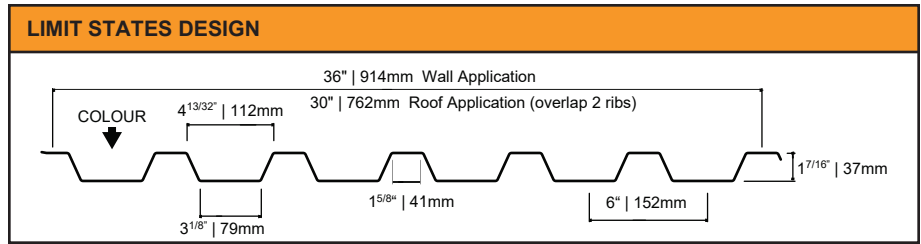


1. Based on ASTM A 653 structural steel.
2. Values in row "S" are based on strength.
3. Values in row "D" are based on deflection of 1/180th span.
4. Web crippling not included in strength calculation. See example.
5. Limit States Design principles were used in accordance with CSA Standard S136-16.



SECTION PROPERTIES | Per Foot of Width

Base Steel Thickness (in.)	Weight [G90] (psf)	Yield Stress (ksi)	Section Modulus		Deflection Moment of Inertia (in ⁴)	Specified Web Crippling Data			
			Midspan (in ³)	Support (in ³)		Pe1 End (lb)	Pe2 End (lb)	Pi1 Interior (lb)	Pi2 Interior (lb)
0.0180	1.04	33	0.0884	0.0847	0.0923	58.0	14.5	111	18.8
0.0180	1.04	50	0.0822	0.0778	0.0881	87.8	22.0	168	28.5
0.0240	1.36	33	0.130	0.128	0.129	109	27.2	207	35.2
0.0300	1.69	33	0.176	0.175	0.162	176	44.0	335	56.9

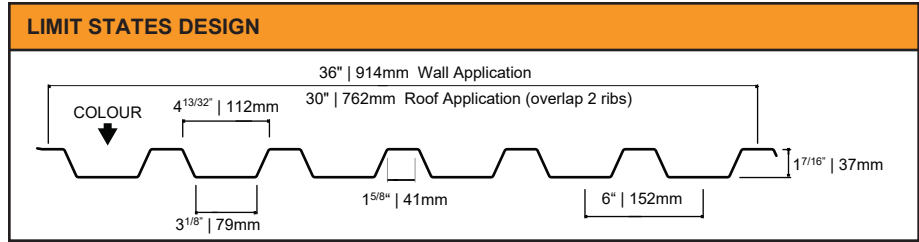
LLF = 1.50; IMPF = 0.90; NORMAL OCCUPANCY = 1.0

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	0.0135	0.0180	0.0240	0.0300
Y.S.* (ksi)		33	50	33	33	33	50	33	33	33	50	33	33
4.0	S	73	103	108	145	70	97	106	144	87	121	132	180
4.0	D	140	133	195	246	336	320	468	590	264	252	369	465
4.5	S	58	81	85	115	55	77	84	114	69	96	104	142
4.5	D	98	94	137	173	236	225	329	414	186	177	259	326
5.0	S	47	66	69	93	45	62	68	92	56	78	85	115
5.0	D	72	68	100	126	172	164	240	302	135	129	189	238
5.5	S	39	54	57	77	37	51	56	76	46	64	70	95
5.5	D	54	51	75	95	129	123	180	227	102	97	142	179
6.0	S	32	46	48	64	31	43	47	64	39	54	59	80
6.0	D	41	40	58	73	99	95	139	175	78	75	109	138
6.5	S	28	39	41	55	26	37	40	55	33	46	50	68
6.5	D	33	31	45	57	78	75	109	137	62	59	86	108
7.0	S	24	34	35	47	23	32	35	47	29	40	43	59
7.0	D	26	25	36	46	63	60	87	110	49	47	69	87
7.5	S	21	29	31	41	20	28	30	41	25	35	38	51
7.5	D	21	20	30	37	51	49	71	90	40	38	56	70
8.0	S	18	26	27	36	17	24	26	36	22	30	33	45
8.0	D	17	17	24	31	42	40	59	74	33	32	46	58
8.5	S	16	23	24	32	15	22	23	32	19	27	29	40
8.5	D	15	14	20	26	35	33	49	61	28	26	38	48
9.0	S	14	20	21	29	14	19	21	28	17	24	26	36
9.0	D	12	12	17	22	29	28	41	52	23	22	32	41
9.5	S	13	18	19	26	12	17	19	26	15	22	23	32
9.5	D	10	10	15	18	25	24	35	44	20	19	28	35
10.0	S	12	16	17	23	11	16	17	23	14	19	21	29
10.0	D	9	9	12	16	21	20	30	38	17	16	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 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)	Pi2 Interior (kN)
0.457	5.06	230	4.74	4.54	0.126	0.855	0.214	1.63	0.277
0.457	5.06	345	4.42	4.18	0.120	1.28	0.321	2.45	0.416
0.610	6.66	230	7.00	6.87	0.176	1.60	0.401	3.06	0.519
0.762	8.26	230	9.43	9.37	0.222	2.60	0.649	4.94	0.840

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	5.24	7.32	7.72	10.4	5.01	6.92	7.59	10.4	6.27	8.65	9.48	12.9	
1.0	D	12.1	11.6	16.9	21.3	29.1	27.8	40.6	51.2	22.9	21.9	32.0	40.3	
1.2	S	3.64	5.08	5.36	7.23	3.48	4.81	5.27	7.19	4.35	6.01	6.58	8.98	
1.2	D	7.02	6.70	9.79	12.3	16.8	16.1	23.5	29.6	13.3	12.7	18.5	23.3	
1.4	S	2.67	3.73	3.94	5.31	2.56	3.53	3.87	5.28	3.20	4.41	4.84	6.60	
1.4	D	4.42	4.22	6.16	7.77	10.6	10.1	14.8	18.7	8.35	7.97	11.7	14.7	
1.6	S	2.05	2.86	3.02	4.07	1.96	2.70	2.96	4.04	2.45	3.38	3.70	5.05	
1.6	D	2.96	2.83	4.13	5.21	7.10	6.78	9.91	12.5	5.59	5.34	7.80	9.84	
1.8	S	1.62	2.26	2.38	3.21	1.55	2.14	2.34	3.19	1.93	2.67	2.93	3.99	
1.8	D	2.08	1.98	2.90	3.66	4.99	4.76	6.96	8.80	3.93	3.75	5.48	6.91	
2.0	S	1.31	1.83	1.93	2.60	1.25	1.73	1.90	2.59	1.57	2.16	2.37	3.23	
2.0	D	1.52	1.45	2.11	2.67	3.64	3.47	5.07	6.40	2.86	2.73	4.00	5.04	
2.2	S	1.08	1.51	1.60	2.15	1.04	1.43	1.57	2.14	1.30	1.79	1.96	2.67	
2.2	D	1.14	1.09	1.59	2.00	2.73	2.61	3.81	4.81	2.15	2.05	3.00	3.79	
2.4	S	0.91	1.27	1.34	1.81	0.87	1.20	1.32	1.80	1.09	1.50	1.65	2.25	
2.4	D	0.88	0.84	1.22	1.54	2.10	2.01	2.94	3.70	1.66	1.58	2.31	2.92	
2.6	S	0.77	1.08	1.14	1.54	0.74	1.02	1.12	1.53	0.93	1.28	1.40	1.91	
2.6	D	0.69	0.66	0.96	1.21	1.66	1.58	2.31	2.91	1.30	1.24	1.82	2.29	
2.8	S	0.67	0.93	0.99	1.33	0.64	0.88	0.97	1.32	0.80	1.10	1.21	1.65	
2.8	D	0.55	0.53	0.77	0.97	1.33	1.27	1.85	2.33	1.04	1.00	1.46	1.84	
3.0	S	0.58	0.81	0.86	1.16	0.56	0.77	0.84	1.15	0.70	0.96	1.05	1.44	
3.0	D	0.45	0.43	0.63	0.79	1.08	1.03	1.50	1.90	0.85	0.81	1.18	1.49	

*Y.S. = Yield Stress