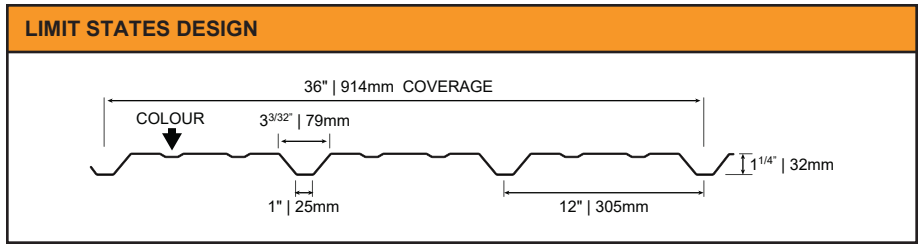


1. Based on ASTM A 653 structural steel.
2. Values in row "S" are based on strength.
3. Values in row "D" are based on deflection of 1/180th span.
4. Web crippling not included in strength calculation. See example.
5. Limit States Design principles were used in accordance with CSA Standard S136-16.



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	0.94	33	0.0343	0.0406	0.0265	25.9	6.47	50.2	8.53
0.0180	0.94	50	0.0326	0.0385	0.0243	39.2	9.80	76.0	12.9
0.0180	0.94	80	0.0314	0.0375	0.0234	47.1	11.8	91.2	15.5
0.0240	1.23	33	0.0476	0.0571	0.0420	48.6	12.2	93.8	16.0
0.0300	1.53	33	0.0613	0.0710	0.0573	78.7	19.7	152	25.8

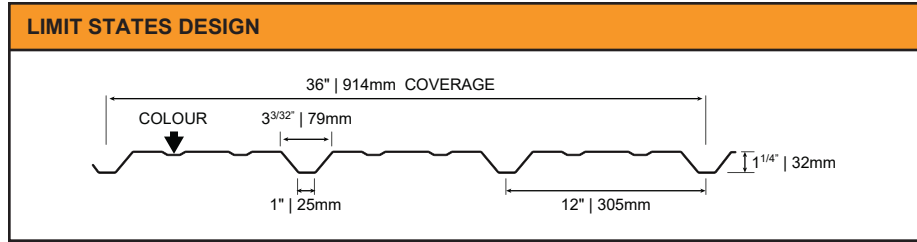
LLF = 1.40; IMPF = 0.75; NORMAL OCCUPANCY = 1.0

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	0.0180	0.0240	0.0300	0.0180	0.0180	0.0180	0.0240	0.0300	0.0180	0.0180	0.0180	0.0240	0.0300
Y.S.* (ksi)		33	50	80	33	33	33	50	80	33	33	33	50	80	33	33
2.0	S	121	175	202	168	217	144	206	241	202	251	179	257	302	252	314
2.0	D	385	353	341	611	834	924	847	818	1466	2001	727	667	644	1154	1576
2.5	S	78	112	129	108	139	92	132	154	129	161	115	165	193	161	201
2.5	D	197	181	174	313	427	473	434	419	751	1025	372	342	330	591	807
3.0	S	54	78	90	75	96	64	92	107	90	112	80	114	134	112	139
3.0	D	114	105	101	181	247	274	251	242	434	593	216	198	191	342	467
3.5	S	40	57	66	55	71	47	67	79	66	82	59	84	98	82	102
3.5	D	72	66	64	114	156	172	158	153	274	373	136	125	120	215	294
4.0	S	30	44	51	42	54	36	51	60	50	63	45	64	75	63	78
4.0	D	48	44	43	76	104	115	106	102	183	250	91	83	80	144	197
4.5	S	24	35	40	33	43	28	41	48	40	50	35	51	60	50	62
4.5	D	34	31	30	54	73	81	74	72	129	176	64	59	57	101	138
5.0	S	19	28	32	27	35	23	33	39	32	40	29	41	48	40	50
5.0	D	25	23	22	39	53	59	54	52	94	128	47	43	41	74	101
5.5	S	16	23	27	22	29	19	27	32	27	33	24	34	40	33	41
5.5	D	19	17	16	29	40	44	41	39	70	96	35	32	31	56	76
6.0	S	13	19	22	19	24	16	23	27	22	28	20	29	34	28	35
6.0	D	14	13	13	23	31	34	31	30	54	74	27	25	24	43	58
6.5	S	11	17	19	16	21	14	20	23	19	24	17	24	29	24	30
6.5	D	11	10	10	18	24	27	25	24	43	58	21	19	19	34	46
7.0	S	10	14	16	14	18	12	17	20	16	20	15	21	25	21	26
7.0	D	9	8	8	14	19	22	20	19	34	47	17	16	15	27	37
7.5	S	9	12	14	12	15	10	15	17	14	18	13	18	21	18	22
7.5	D	7	7	6	12	16	18	16	16	28	38	14	13	12	22	30
8.0	S	8	11	13	11	14	9	13	15	13	16	11	16	19	16	20
8.0	D	6	6	5	10	13	14	13	13	23	31	7	11	10	18	25

*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	4.59	230	1.85	2.18	0.0361	0.382	0.095	0.740	0.126
0.457	4.59	345	1.76	2.07	0.0332	0.573	0.143	1.11	0.189
0.457	4.59	550	1.69	2.02	0.0320	0.685	0.171	1.33	0.226
0.610	6.02	230	2.56	3.07	0.0572	0.717	0.179	1.38	0.235
0.762	7.46	230	3.29	3.82	0.0782	1.16	0.290	2.24	0.380

LLF = 1.40; IMPF = 0.75; 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	0.457	0.610	0.762	0.457	0.457	0.457	0.610	0.762	0.457	0.457	0.610	0.762	
YS.* (MPa)		230	345	550	230	230	230	345	550	230	230	230	345	550	230	230
1.0	S	2.18	3.11	3.59	3.02	3.89	2.58	3.67	4.28	3.63	4.52	3.22	4.58	5.35	4.54	5.64
1.0	D	4.16	3.83	3.70	6.61	9.03	9.99	9.19	8.87	15.9	21.7	7.87	7.24	6.99	12.5	17.1
1.2	S	1.52	2.16	2.49	2.10	2.70	1.79	2.55	2.97	2.52	3.14	2.24	3.18	3.72	3.15	3.92
1.2	D	2.41	2.22	2.14	3.83	5.22	5.78	5.32	5.13	9.18	12.5	4.55	4.19	4.04	7.23	9.87
1.4	S	1.11	1.59	1.83	1.54	1.99	1.32	1.87	2.19	1.85	2.30	1.64	2.34	2.73	2.31	2.88
1.4	D	1.52	1.40	1.35	2.41	3.29	3.64	3.35	3.23	5.78	7.89	2.87	2.64	2.55	4.55	6.22
1.6	S	0.85	1.22	1.40	1.18	1.52	1.01	1.43	1.67	1.42	1.76	1.26	1.79	2.09	1.77	2.20
1.6	D	1.02	0.93	0.90	1.61	2.20	2.44	2.24	2.17	3.87	5.29	1.92	1.77	1.71	3.05	4.16
1.8	S	0.67	0.96	1.11	0.93	1.20	0.80	1.13	1.32	1.12	1.39	0.99	1.41	1.65	1.40	1.74
1.8	D	0.71	0.66	0.63	1.13	1.55	1.71	1.58	1.52	2.72	3.71	1.35	1.24	1.20	2.14	2.92
2.0	S	0.55	0.78	0.90	0.76	0.97	0.64	0.92	1.07	0.91	1.13	0.81	1.15	1.34	1.13	1.41
2.0	D	0.52	0.48	0.46	0.83	1.13	1.25	1.15	1.11	1.98	2.71	0.98	0.90	0.87	1.56	2.13
2.2	S	0.45	0.64	0.74	0.62	0.80	0.53	0.76	0.88	0.75	0.93	0.67	0.95	1.11	0.94	1.17
2.2	D	0.39	0.36	0.35	0.62	0.85	0.94	0.86	0.83	1.49	2.03	0.74	0.68	0.66	1.17	1.60
2.4	S	0.38	0.54	0.62	0.52	0.68	0.45	0.64	0.74	0.63	0.78	0.56	0.80	0.93	0.79	0.98
2.4	D	0.30	0.28	0.27	0.48	0.65	0.72	0.66	0.64	1.15	1.57	0.57	0.52	0.51	0.90	1.23
2.6	S	0.32	0.46	0.53	0.45	0.58	0.38	0.54	0.63	0.54	0.67	0.48	0.68	0.79	0.67	0.83
2.6	D	0.24	0.22	0.21	0.38	0.51	0.57	0.52	0.50	0.90	1.23	0.45	0.41	0.40	0.71	0.97
2.8	S	0.28	0.40	0.46	0.39	0.50	0.33	0.47	0.55	0.46	0.58	0.41	0.58	0.68	0.58	0.72
2.8	D	0.19	0.17	0.17	0.30	0.41	0.46	0.42	0.40	0.72	0.99	0.36	0.33	0.32	0.57	0.78
3.0	S	0.24	0.35	0.40	0.34	0.43	0.29	0.41	0.48	0.40	0.50	0.36	0.51	0.59	0.50	0.63
3.0	D	0.15	0.14	0.14	0.24	0.33	0.37	0.34	0.33	0.59	0.80	0.29	0.27	0.26	0.46	0.63

*Y.S. = Yield Stress