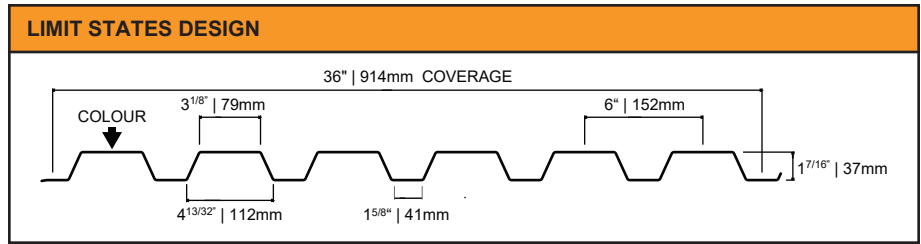


1. Based on ASTM A 653 structural steel.
2. Values in row "S" are based on strength.
3. Values in row "D" are based on deflection of 1/180th span.
4. Web crippling not included in strength calculation. See example.
5. Limit States Design principles were used in accordance with CSA Standard S136-16.



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	0.0847	0.0884	0.0754	62.1	15.5	119	20.2
0.0180	1.04	50	0.0778	0.0822	0.0707	94.1	23.5	180	30.5
0.0240	1.36	33	0.128	0.130	0.114	116	29.1	222	37.7
0.0300	1.69	33	0.175	0.176	0.152	188	47.1	359	61.0

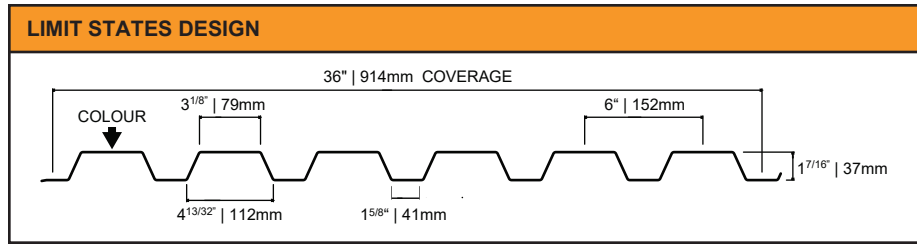
LLF = 1.40; IMPF = 0.75; NORMAL OCCUPANCY = 1.0

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	0.0240	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	75	104	113	154	78	110	115	155	98	138	144	194
4.0	D	137	128	207	276	329	308	497	662	259	243	391	521
4.5	S	59	82	89	122	62	87	91	123	77	109	114	153
4.5	D	96	90	145	194	231	217	349	465	182	171	275	366
5.0	S	48	67	72	99	50	70	74	99	63	88	92	124
5.0	D	70	66	106	141	168	158	254	339	133	124	200	267
5.5	S	40	55	60	82	41	58	61	82	52	73	76	103
5.5	D	53	49	80	106	126	119	191	255	100	93	151	200
6.0	S	33	46	50	69	35	49	51	69	43	61	64	86
6.0	D	41	38	61	82	97	91	147	196	77	72	116	154
6.5	S	28	39	43	58	30	42	44	59	37	52	55	74
6.5	D	32	30	48	64	77	72	116	154	60	57	91	121
7.0	S	24	34	37	50	26	36	38	51	32	45	47	63
7.0	D	26	24	39	51	61	58	93	123	48	45	73	97
7.5	S	21	30	32	44	22	31	33	44	28	39	41	55
7.5	D	21	19	31	42	50	47	75	100	39	37	59	79
8.0	S	19	26	28	39	20	28	29	39	24	34	36	49
8.0	D	17	16	26	34	41	39	62	83	32	30	49	65
8.5	S	17	23	25	34	17	24	26	34	22	30	32	43
8.5	D	14	13	22	29	34	32	52	69	27	25	41	54
9.0	S	15	21	22	30	15	22	23	31	19	27	28	38
9.0	D	12	11	18	24	29	27	44	58	23	21	34	46
9.5	S	13	18	20	27	14	20	20	28	17	24	26	34
9.5	D	10	10	15	21	25	23	37	49	19	18	29	39
10.0	S	12	17	18	25	13	18	18	25	16	22	23	31
10.0	D	9	8	13	18	21	20	32	42	17	16	25	33

*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	4.54	4.74	0.103	0.916	0.229	1.75	0.297
0.457	5.06	345	4.18	4.42	0.0965	1.37	0.344	2.62	0.446
0.610	6.66	230	6.87	7.00	0.155	1.72	0.429	3.27	0.556
0.762	8.26	230	9.37	9.43	0.207	2.78	0.695	5.29	0.900

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	0.610	0.762	0.457	0.457	0.610	0.762	0.457	0.457	0.610	0.762
Y.S.* (MPa)		230	345	230	230	230	345	230	230	230	345	230	230
1.0	S	5.37	7.42	8.13	11.1	5.61	7.84	8.28	11.2	7.01	9.80	10.4	14.0
1.0	D	11.9	11.2	17.9	23.9	28.5	26.8	43.1	57.3	22.4	21.1	33.9	45.2
1.2	S	3.73	5.15	5.64	7.70	3.90	5.45	5.75	7.75	4.87	6.81	7.18	9.68
1.2	D	6.87	6.45	10.4	13.8	16.5	15.5	24.9	33.2	13.0	12.2	19.6	26.1
1.4	S	2.74	3.78	4.15	5.66	2.86	4.00	4.22	5.69	3.58	5.00	5.28	7.12
1.4	D	4.32	4.06	6.54	8.71	10.4	9.75	15.7	20.9	8.17	7.68	12.4	16.5
1.6	S	2.10	2.90	3.17	4.33	2.19	3.06	3.23	4.36	2.74	3.83	4.04	5.45
1.6	D	2.90	2.72	4.38	5.83	6.95	6.53	10.5	14.0	5.47	5.14	8.28	11.0
1.8	S	1.66	2.29	2.51	3.42	1.73	2.42	2.55	3.44	2.16	3.03	3.19	4.30
1.8	D	2.03	1.91	3.08	4.10	4.88	4.59	7.38	9.83	3.85	3.61	5.81	7.74
2.0	S	1.34	1.85	2.03	2.77	1.40	1.96	2.07	2.79	1.75	2.45	2.59	3.49
2.0	D	1.48	1.39	2.24	2.99	3.56	3.34	5.38	7.17	2.80	2.63	4.24	5.64
2.2	S	1.11	1.53	1.68	2.29	1.16	1.62	1.71	2.31	1.45	2.03	2.14	2.88
2.2	D	1.11	1.05	1.68	2.24	2.67	2.51	4.04	5.39	2.11	1.98	3.18	4.24
2.4	S	0.93	1.29	1.41	1.92	0.97	1.36	1.44	1.94	1.22	1.70	1.80	2.42
2.4	D	0.86	0.81	1.30	1.73	2.06	1.94	3.11	4.15	1.62	1.52	2.45	3.27
2.6	S	0.79	1.10	1.20	1.64	0.83	1.16	1.22	1.65	1.04	1.45	1.53	2.06
2.6	D	0.68	0.63	1.02	1.36	1.62	1.52	2.45	3.26	1.28	1.20	1.93	2.57
2.8	S	0.69	0.95	1.04	1.41	0.72	1.00	1.06	1.42	0.89	1.25	1.32	1.78
2.8	D	0.54	0.51	0.82	1.09	1.30	1.22	1.96	2.61	1.02	0.96	1.54	2.06
3.0	S	0.60	0.82	0.90	1.23	0.62	0.87	0.92	1.24	0.78	1.09	1.15	1.55
3.0	D	0.44	0.41	0.66	0.88	1.05	0.99	1.59	2.12	0.83	0.78	1.26	1.67

*Y.S. = Yield Stress