

Section Properties

(Per Foot of Width)

Base Steel Thickness (in.)	Weight G90 (psf)	Yield Stress (ksi)	Section Modulus		Deflection Moment of Inertia Mid Span (in ⁴)	Specified Web Crippling Data (lb)			
			Mid Span (in ³)	Support (in ³)		End Pe1	End Pe2	Interior Pi1	Interior Pi2
0.0120	0.61	33	0.0116	0.0110	0.0056	21.4	5.34	40.5	6.88
0.0150	0.68	33	0.0116	0.0108	0.0056	58.5	14.6	111	18.9
0.0180	0.88	33	0.0208	0.0207	0.0092	51.0	12.8	96.6	16.4
0.0240	1.16	33	0.0312	0.0304	0.0125	93.8	23.5	178	30.2
0.0300	1.43	33	0.0413	0.0386	0.0156	150	37.5	284	48.2

Load Table

Live Load Factor = 1.4; Importance Factor (I_{W-SLS}) = 0.75; Importance Factor (I_{W-ULS}) = 1.0

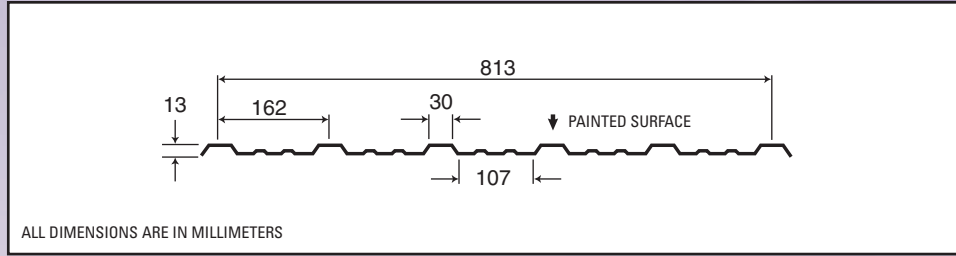
Maximum Specified Uniformly Distributed Loads in psf

Span (ft.)		1-Span Base Steel Thickness (in.)					2-Span Base Steel Thickness (in.)					3-Span Base Steel Thickness (in.)				
		0.0120	0.0150	0.0180	0.0240	0.0300	0.0120	0.0150	0.0180	0.0240	0.0300	0.0120	0.0150	0.0180	0.0240	0.0300
1'-4"	S	92	196	165	248	328	88	182	165	242	307	109	228	206	302	384
	D	272	276	452	613	765	654	663	1085	1471	1836	515	522	855	1159	1446
1'-8"	S	59	126	106	159	210	56	117	106	155	197	70	146	132	193	246
	D	139	142	232	314	392	335	340	556	753	940	264	267	438	593	740
2'-0"	S	41	87	73	110	146	39	81	73	107	136	49	101	92	134	171
	D	81	82	134	182	227	194	197	322	436	544	153	155	253	343	428
2'-6"	S	26	56	47	71	93	25	52	47	69	87	31	65	59	86	109
	D	41	42	69	93	116	99	101	165	223	279	78	79	130	176	219
3'-0"	S	18	39	33	49	65	17	36	33	48	61	22	45	41	60	76
	D	24	24	40	54	67	57	58	95	129	161	45	46	75	102	127
3'-6"	S	13	29	24	36	48	13	26	24	35	45	16	33	30	44	56
	D	15	15	25	34	42	36	37	60	81	102	28	29	47	64	80
4'-0"	S	10	22	18	28	36		20	18	27	34	12	25	23	34	43
	D	10	10	17	23	28		25	40	54	68	19	19	32	43	54
4'-6"	S			15	22	29		16	14	21	27		20	18	27	34
	D			12	16	20		17	28	38	48		14	22	30	38
5'-0"	S				18	23		13	12	17	22			15	21	27
	D				12	15		13	21	28	35			16	22	27
5'-6"	S					19				14	18			12	18	23
	D					11				21	26			12	17	21
6'-0"	S									12	15				15	19
	D									16	20				13	16
6'-6"	S									10	13					16
	D									13	16					12

Notes:

1. Steel conforms to ASTM A653.
2. Section properties are in accordance with CSA-S136-07.
3. Values in row "S" are based on strength.
4. Values in row "D" are based on a deflection limit of 1/180 of the span.
5. Web crippling not included in strength values. See example calculation in notes to designer.
6. Contact the sales department for stocked colours and gauges.
7. The load table contained on this data sheet was prepared by Dr. R.M. Schuster P.Eng. Professor Emeritus of Structural Engineering, University of Waterloo, Ontario, Canada.





Section Properties

(Per Metre of Width)

Base Steel Thickness (mm)	Mass Z275 (kg/m ²)	Yield Stress (MPa)	Section Modulus		Deflection Moment of Inertia Mid Span (x 10 ⁶ mm ⁴)	Specified Web Crippling Data (kN)			
			Mid Span (x 10 ³ mm ³)	Support (x 10 ³ mm ³)		End Pe1	End Pe2	Interior Pi1	Interior Pi2
0.305	2.97	230	0.621	0.590	0.0076	0.315	0.079	0.597	0.102
0.381	3.30	230	0.625	0.580	0.0077	0.852	0.213	1.62	0.275
0.457	4.31	230	1.12	1.11	0.0126	0.752	0.188	1.43	0.242
0.610	5.66	230	1.67	1.63	0.0171	1.38	0.346	2.62	0.445
0.762	7.00	230	2.22	2.07	0.0213	2.21	0.553	4.18	0.711

Notes:

- Steel conforms to ASTM A653M.
- Section properties are in accordance with CSA-S136-07.
- Values in row "S" are based on strength.
- Values in row "D" are based on a deflection limit of 1/180 of the span.

5. Web crippling not included in strength values. See example calculation in notes to designer.

6. Contact the sales department for stocked colours and gauges.

7. The load table contained on this data sheet was prepared by Dr. R.M. Schuster P.Eng. Professor Emeritus of Structural Engineering, University of Waterloo, Ontario, Canada.

Live Load Factor = 1.4; Importance Factor (I_{w-SLS}) = 0.75; Importance Factor (I_{w-ULS}) = 1.0

Load Table

Maximum Specified Uniformly Distributed Loads in kPa

Span (mm)		1-Span Base Steel Thickness (mm)					2-Span Base Steel Thickness (mm)					3-Span Base Steel Thickness (mm)				
		0.305	0.381	0.457	0.610	0.762	0.305	0.381	0.457	0.610	0.762	0.305	0.381	0.457	0.610	0.762
300	S	8.17	17.2	14.7	22.0	29.2	7.75	16.0	14.6	21.4	27.3	9.69	20.0	18.2	26.8	34.1
	D	32.4	32.9	53.8	73.0	91.1	77.7	79.0	129	175	219	61.2	62.2	102	138	172
400	S	4.59	9.69	8.24	12.4	16.4	4.36	9.00	8.21	12.1	15.3	5.45	11.3	10.3	15.1	19.2
	D	13.7	13.9	22.7	30.8	38.4	32.8	33.3	54.5	73.9	92.2	25.8	26.2	42.9	58.2	72.6
500	S	2.94	6.20	5.27	7.91	10.5	2.79	5.76	5.25	7.72	9.81	3.49	7.20	6.57	9.65	12.3
	D	6.99	7.11	11.6	15.8	19.7	16.8	17.1	27.9	37.8	47.2	13.2	13.4	22.0	29.8	37.2
600	S	2.04	4.31	3.66	5.50	7.29	1.94	4.00	3.65	5.36	6.82	2.42	5.00	4.56	6.70	8.52
	D	4.05	4.11	6.72	9.12	11.4	9.71	9.9	16.1	21.9	27.3	7.65	7.78	12.7	17.2	21.5
800	S	1.15	2.42	2.06	3.09	4.10	1.09	2.25	2.05	3.02	3.83	1.36	2.81	2.57	3.77	4.79
	D	1.71	1.74	2.84	3.85	4.80	4.10	4.17	6.81	9.23	11.5	3.23	3.28	5.36	7.27	9.08
1000	S	0.73	1.55	1.32	1.98	2.62	0.70	1.44	1.31	1.93	2.45	0.87	1.80	1.64	2.41	3.07
	D	0.87	0.89	1.45	1.97	2.46	2.10	2.13	3.48	4.73	5.90	1.65	1.68	2.74	3.72	4.65
1200	S	0.51	1.08	0.92	1.37	1.82		1.00	0.91	1.34	1.70	0.61	1.25	1.14	1.68	2.13
	D	0.51	0.51	0.84	1.14	1.42		1.23	2.02	2.74	3.41	0.96	0.97	1.59	2.15	2.69
1400	S			0.67	1.01	1.34		0.73	0.67	0.98	1.25		0.92	0.84	1.23	1.56
	D			0.53	0.72	0.90		0.78	1.27	1.72	2.15		0.61	1.00	1.36	1.69
1500	S				0.88	1.17		0.64	0.58	0.86	1.09			0.73	1.07	1.36
	D				0.58	0.73		0.63	1.03	1.40	1.75			0.81	1.10	1.38
1600	S					1.03		0.56	0.51	0.75	0.96			0.64	0.94	1.20
	D					0.60		0.52	0.85	1.15	1.44			0.67	0.91	1.13
1800	S									0.60	0.76				0.74	0.95
	D									0.81	1.01				0.64	0.80

