

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	0.0110	0.0116	0.0037	21.4	5.34	40.5	6.88
0.0150	0.68	33	0.0112	0.0120	0.0039	51.1	12.8	96.9	16.5
0.0180	0.88	33	0.0207	0.0208	0.0072	51.0	12.8	96.6	16.4
0.0240	1.16	33	0.0304	0.0312	0.0107	93.8	23.5	178	30.2
0.0300	1.43	33	0.0386	0.0413	0.0144	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

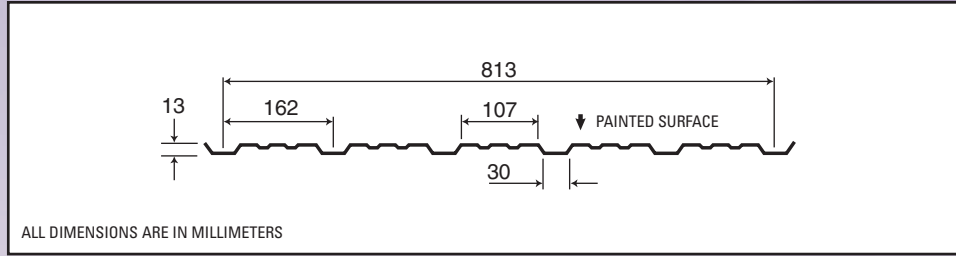
Maximum Specified Uniformly Distributed Loads in psf

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	88	165	165	242	307	92	177	165	248	328	115	221	207	310	410
	D	184	192	351	526	705	441	461	842	1263	1693	347	363	663	995	1333
1'-8"	S	56	106	106	155	197	59	113	106	159	210	74	141	132	198	263
	D	94	98	180	269	361	226	236	431	647	867	178	186	340	509	683
2'-0"	S	39	73	73	107	136	41	79	73	110	146	51	98	92	138	182
	D	54	57	104	156	209	131	137	250	374	502	103	108	197	295	395
2'-6"	S	25	47	47	69	87	26	50	47	71	93	33	63	59	88	117
	D	28	29	53	80	107	67	70	128	192	257	53	55	101	151	202
3'-0"	S	17	33	33	48	61	18	35	33	49	65	23	44	41	61	81
	D	16	17	31	46	62	39	40	74	111	149	30	32	58	87	117
3'-6"	S	13	24	24	35	45	13	26	24	36	48	17	32	30	45	60
	D	10	11	19	29	39	24	25	47	70	94	19	20	37	55	74
4'-0"	S			18	27	34	10	20	18	28	36	13	25	23	34	46
	D			13	19	26	16	17	31	47	63	13	13	25	37	49
4'-6"	S				21	27		16	15	22	29			18	27	36
	D				14	18		12	22	33	44			17	26	35
5'-0"	S					22			12	18	23			15	22	29
	D					13			16	24	32			13	19	25
5'-6"	S					18				15	19				18	24
	D					10				18	24				14	19
6'-0"	S									12	16				15	20
	D									14	19				11	15
6'-6"	S									10	14					17
	D									11	15					12

Notes:

- Steel conforms to ASTM A653.
- 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.
- Web crippling not included in strength values. See example calculation in notes to designer.
- Contact the sales department for stocked colours and gauges.
- 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 (x 10 ³ mm ³)		Deflection Moment of Inertia Mid Span (x 10 ⁶ mm ⁴)	Specified Web Crippling Data (kN)			
			Mid Span	Support		End Pe1	End Pe2	Interior Pi1	Interior Pi2
0.305	2.97	230	0.590	0.621	0.0051	0.315	0.079	0.597	0.102
0.381	3.30	230	0.600	0.643	0.0053	0.745	0.186	1.41	0.240
0.457	4.31	230	1.11	1.12	0.0093	0.752	0.188	1.43	0.242
0.610	5.66	230	1.63	1.67	0.0146	1.38	0.346	2.62	0.445
0.762	7.00	230	2.07	2.22	0.0196	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.
- Web crippling not included in strength values. See example calculation in notes to designer.
- Contact the sales department for stocked colours and gauges.
- 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	7.75	14.5	14.6	21.4	27.3	8.17	15.5	14.7	22.0	29.2	10.2	19.4	18.3	27.5	36.5
	D	21.8	22.9	39.7	62.5	83.8	52.3	54.9	95.4	150	201	41.2	43.2	75.1	118	158
400	S	4.36	8.13	8.21	12.1	15.3	4.59	8.71	8.24	12.4	16.4	5.74	10.9	10.3	15.5	20.5
	D	9.20	9.7	16.8	26.4	35.4	22.1	23.2	40.2	63.3	84.9	17.4	18.2	31.7	49.8	66.9
500	S	2.79	5.21	5.25	7.72	9.81	2.94	5.58	5.27	7.91	10.5	3.67	6.97	6.59	9.89	13.1
	D	4.71	4.94	8.58	13.5	18.1	11.3	11.9	20.6	32.4	43.5	8.90	9.3	16.2	25.5	34.2
600	S	1.94	3.61	3.65	5.36	6.82	2.04	3.87	3.66	5.50	7.29	2.55	4.84	4.58	6.87	9.11
	D	2.73	2.86	4.97	7.81	10.5	6.54	6.86	11.9	18.8	25.2	5.15	5.40	9.39	14.8	19.8
800	S	1.09	2.03	2.05	3.02	3.83	1.15	2.18	2.06	3.09	4.10	1.44	2.72	2.57	3.86	5.13
	D	1.15	1.21	2.10	3.30	4.42	2.76	2.90	5.03	7.91	10.6	2.17	2.28	3.96	6.23	8.36
1000	S	0.70	1.30	1.31	1.93	2.45	0.73	1.39	1.32	1.98	2.62	0.92	1.74	1.65	2.47	3.28
	D	0.59	0.62	1.07	1.69	2.26	1.41	1.48	2.58	4.05	5.43	1.11	1.17	2.03	3.19	4.28
1200	S			0.91	1.34	1.70	0.51	0.97	0.92	1.37	1.82	0.64	1.21	1.14	1.72	2.28
	D			0.62	0.98	1.31	0.82	0.86	1.49	2.34	3.14	0.64	0.68	1.17	1.85	2.48
1400	S			0.98	1.25			0.71	0.67	1.01	1.34			0.84	1.26	1.67
	D			0.62	0.82			0.54	0.94	1.48	1.98			0.74	1.16	1.56
1500	S			0.86	1.09			0.59	0.88	1.17				0.73	1.10	1.46
	D			0.50	0.67			0.76	1.20	1.61				0.60	0.95	1.27
1600	S				0.96			0.51	0.77	1.03				0.97	1.28	
	D				0.55			0.63	0.99	1.33				0.78	1.04	
1800	S								0.61	0.81				0.76	1.01	
	D								0.69	0.93				0.55	0.73	

