

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
0.018	1.00	33	0.0566	0.0566	0.0248				
0.024	1.32	33	0.0743	0.0743	0.0325				
0.030	1.64	33	0.0913	0.0913	0.0399				
0.036	1.95	33	0.108	0.108	0.0471				
0.048	2.58	33	0.139	0.139	0.0607				

Live Load Factor = 1.5; Importance Factor (I_{s-sls}) = 0.90; Importance Factor (I_{s-uls}) = 1.0

Load Table

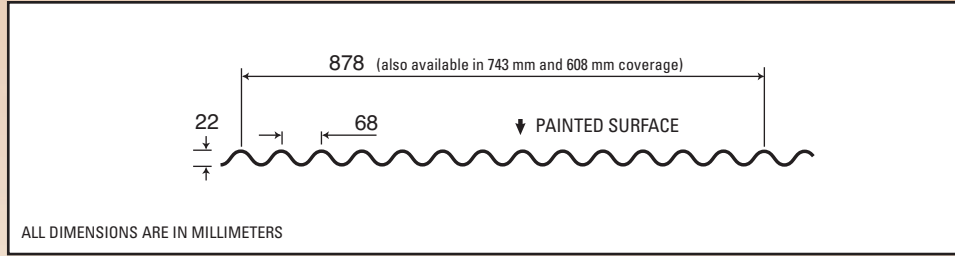
Maximum Specified Uniformly Distributed Loads in psf

Span (ft.)		1-Span Base Steel Thickness (in.)					2-Span Base Steel Thickness (in.)					3-Span Base Steel Thickness (in.)				
		0.018	0.024	0.030	0.036	0.048	0.018	0.024	0.030	0.036	0.048	0.018	0.024	0.030	0.036	0.048
4'-0"	S	47	61	75	89	114	47	61	75	89	114	58	77	94	111	143
	D	38	49	60	71	92	90	118	145	171	221	71	93	114	135	174
4'-6"	S	37	48	59	70	90	37	48	59	70	90	46	61	74	88	113
	D	26	35	42	50	65	63	83	102	120	155	50	65	80	95	122
5'-0"	S	30	39	48	57	73	30	39	48	57	73	37	49	60	71	92
	D	19	25	31	37	47	46	60	74	88	113	36	48	59	69	89
5'-6"	S	25	32	40	47	61	25	32	40	47	61	31	41	50	59	76
	D	14	19	23	27	35	35	45	56	66	85	27	36	44	52	67
6'-0"	S	21	27	33	39	51	21	27	33	39	51	26	34	42	49	64
	D	11	15	18	21	27	27	35	43	51	65	21	28	34	40	51
6'-6"	S		23	28	34	43	18	23	29	34	43	22	29	36	42	54
	D		11	14	17	21	21	28	34	40	51	17	22	27	31	40
7'-0"	S			25	29	37	15	20	25	29	37	19	25	31	36	47
	D			11	13	17	17	22	27	32	41	13	17	21	25	32
7'-6"	S				25	33	13	17	21	25	33	17	22	27	32	41
	D				11	14	14	18	22	26	33	11	14	17	20	26
8'-0"	S					29	12	15	19	22	29		19	24	28	36
	D					11	11	15	18	21	28		12	14	17	22
8'-6"	S							14	17	20	25			21	25	32
	D							12	15	18	23			12	14	18
9'-0"	S							12	15	18	23			19	22	28
	D							10	13	15	19			10	12	15

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
0.457	4.90	230	3.04	3.04	0.0338				
0.610	6.44	230	3.99	3.99	0.0444				
0.762	7.99	230	4.91	4.91	0.0545				
0.914	9.53	230	5.79	5.79	0.0643				
1.22	12.6	230	7.46	7.46	0.0829				

Load Table

Live Load Factor = 1.5; Importance Factor (I_{S-SLS}) = 0.90; Importance Factor (I_{S-ULS}) = 1.0

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)				
		0.457	0.610	0.762	0.914	1.22	0.457	0.610	0.762	0.914	1.22	0.457	0.610	0.762	0.914	1.22
1200	S	2.33	3.06	3.76	4.44	5.72	2.33	3.06	3.76	4.44	5.72	2.92	3.83	4.70	5.55	7.15
	D	1.88	2.47	3.04	3.58	4.62	4.52	5.93	7.29	8.60	11.1	3.56	4.67	5.74	6.77	8.73
1400	S	1.71	2.25	2.76	3.26	4.20	1.71	2.25	2.76	3.26	4.20	2.14	2.81	3.46	4.08	5.25
	D	1.19	1.56	1.91	2.26	2.91	2.85	3.73	4.59	5.42	6.98	2.24	2.94	3.61	4.26	5.49
1500	S	1.49	1.96	2.41	2.84	3.66	1.49	1.96	2.41	2.84	3.66	1.87	2.45	3.01	3.55	4.58
	D	0.96	1.27	1.55	1.83	2.36	2.32	3.04	3.73	4.40	5.67	1.82	2.39	2.94	3.47	4.47
1600	S	1.31	1.72	2.12	2.50	3.22	1.31	1.72	2.12	2.50	3.22	1.64	2.15	2.65	3.12	4.02
	D	0.79	1.04	1.28	1.51	1.95	1.91	2.50	3.08	3.63	4.67	1.50	1.97	2.42	2.86	3.68
1800	S	1.04	1.36	1.67	1.97	2.54	1.04	1.36	1.67	1.97	2.54	1.30	1.70	2.09	2.47	3.18
	D	0.56	0.73	0.90	1.06	1.37	1.34	1.76	2.16	2.55	3.28	1.06	1.38	1.70	2.01	2.59
2000	S		1.10	1.35	1.60	2.06	0.84	1.10	1.35	1.60	2.06	1.05	1.38	1.69	2.00	2.57
	D		0.53	0.66	0.77	1.00	0.98	1.28	1.57	1.86	2.39	0.77	1.01	1.24	1.46	1.88
2200	S				1.32	1.70	0.69	0.91	1.12	1.32	1.70	0.87	1.14	1.40	1.65	2.13
	D				0.58	0.75	0.73	0.96	1.18	1.40	1.80	0.58	0.76	0.93	1.10	1.42
2400	S					1.43	0.58	0.77	0.94	1.11	1.43		0.96	1.18	1.39	1.79
	D					0.58	0.57	0.74	0.91	1.07	1.39		0.58	0.72	0.85	1.09
2500	S					1.32	0.54	0.71	0.87	1.02	1.32		0.88	1.08	1.28	1.65
	D					0.51	0.50	0.66	0.81	0.95	1.23		0.52	0.63	0.75	0.96
2600	S							0.65	0.80	0.95	1.22			1.00	1.18	1.52
	D							0.58	0.72	0.85	1.09			0.56	0.67	0.86
2800	S								0.69	0.82	1.05				1.02	1.31
	D								0.57	0.68	0.87				0.53	0.69

Notes:

- Steel conforms to ASTM A653M.
- Section properties are in accordance with CSA-S136-07.
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- Web crippling not included in strength values. See example calculation in notes to designer.
- Contact the sales department for stocked colours and gauges.
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