

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
0.0150	0.80	33	0.0364	0.0428	0.0328	17.2	4.31	34.1	5.80
0.0180	0.95	33	0.0470	0.0539	0.0422	25.9	6.48	51.1	8.68
0.0240	1.25	33	0.0674	0.0777	0.0666	48.9	12.2	95.7	16.3
0.0300	1.55	33	0.0867	0.101	0.0911	79.4	19.9	155	26.3

Load Table

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

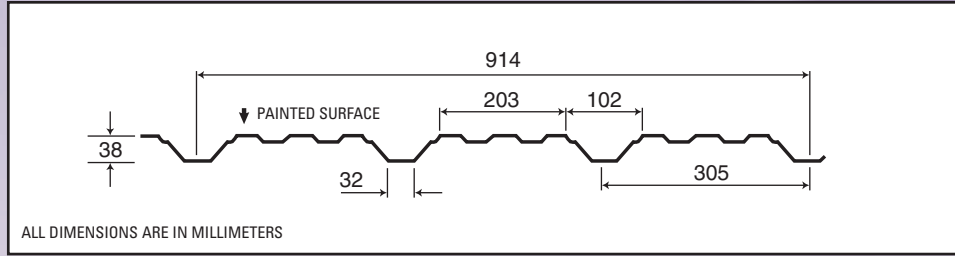
Maximum Specified Uniformly Distributed Loads in psf

Span (ft.)		1-Span Base Steel Thickness (in.)				2-Span Base Steel Thickness (in.)				3-Span Base Steel Thickness (in.)			
		0.0150	0.0180	0.0240	0.0300	0.0150	0.0180	0.0240	0.0300	0.0150	0.0180	0.0240	0.0300
3'-0"	S	57	74	106	136	67	85	122	159	84	106	153	199
	D	141	182	287	392	339	437	689	942	267	344	542	742
3'-6"	S	42	54	78	100	49	62	90	117	62	78	112	146
	D	89	115	181	247	213	275	434	593	168	216	342	467
4'-0"	S	32	42	60	77	38	48	69	90	47	60	86	112
	D	60	77	121	166	143	184	291	397	113	145	229	313
4'-6"	S	25	33	47	61	30	38	54	71	37	47	68	89
	D	42	54	85	116	100	129	204	279	79	102	161	220
5'-0"	S	21	27	38	49	24	31	44	57	30	38	55	72
	D	30	39	62	85	73	94	149	203	58	74	117	160
5'-6"	S	17	22	31	41	20	25	36	47	25	32	45	59
	D	23	30	47	64	55	71	112	153	43	56	88	120
6'-0"	S	14	18	26	34	17	21	31	40	21	26	38	50
	D	18	23	36	49	42	55	86	118	33	43	68	93
6'-6"	S	12	16	23	29	14	18	26	34	18	23	33	42
	D	14	18	28	39	33	43	68	93	26	34	53	73
7'-0"	S	10	14	19	25	12	16	22	29	15	19	28	37
	D	11	14	23	31	27	34	54	74	21	27	43	58
7'-6"	S		12	17	22	11	14	20	25	13	17	24	32
	D		12	18	25	22	28	44	60	17	22	35	47
8'-0"	S			15	19		12	17	22	12	15	21	28
	D			15	21		23	36	50	14	18	29	39

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
0.381	3.91	230	1.95	2.30	0.0447	0.254	0.064	0.503	0.086
0.457	4.64	230	2.52	2.90	0.0575	0.382	0.096	0.753	0.128
0.610	6.09	230	3.62	4.17	0.0908	0.721	0.180	1.41	0.240
0.762	7.54	230	4.66	5.45	0.124	1.17	0.293	2.28	0.388

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 kPa

Span (mm)		1-Span Base Steel Thickness (mm)				2-Span Base Steel Thickness (mm)				3-Span Base Steel Thickness (mm)			
		0.381	0.457	0.610	0.762	0.381	0.457	0.610	0.762	0.381	0.457	0.610	0.762
600	S	6.41	8.28	11.9	15.3	7.54	9.51	13.7	17.9	9.43	11.9	17.1	22.4
	D	23.9	30.8	48.5	66.4	57.3	73.8	116	159	45.1	58.1	91.7	125
800	S	3.61	4.66	6.69	8.61	4.24	5.35	7.71	10.1	5.30	6.69	9.64	12.6
	D	10.1	13.0	20.5	28.0	24.2	31.1	49.1	67.2	19.0	24.5	38.7	52.9
1000	S	2.31	2.98	4.28	5.51	2.71	3.43	4.94	6.45	3.39	4.28	6.17	8.06
	D	5.16	6.64	10.5	14.3	12.4	15.9	25.2	34.4	9.75	12.6	19.8	27.1
1200	S	1.60	2.07	2.97	3.83	1.89	2.38	3.43	4.48	2.36	2.97	4.28	5.60
	D	2.98	3.84	6.07	8.29	7.16	9.23	14.6	19.9	5.64	7.27	11.5	15.7
1400	S	1.18	1.52	2.18	2.81	1.39	1.75	2.52	3.29	1.73	2.18	3.15	4.11
	D	1.88	2.42	3.82	5.22	4.51	5.81	9.17	12.5	3.55	4.58	7.22	9.87
1500	S	1.03	1.33	1.90	2.45	1.21	1.52	2.19	2.87	1.51	1.90	2.74	3.58
	D	1.53	1.97	3.11	4.25	3.67	4.72	7.46	10.2	2.89	3.72	5.87	8.03
1600	S	0.90	1.16	1.67	2.15	1.06	1.34	1.93	2.52	1.33	1.67	2.41	3.15
	D	1.26	1.62	2.56	3.50	3.02	3.89	6.14	8.40	2.38	3.07	4.84	6.61
1800	S	0.71	0.92	1.32	1.70	0.84	1.06	1.52	1.99	1.05	1.32	1.90	2.49
	D	0.88	1.14	1.80	2.46	2.12	2.73	4.31	5.90	1.67	2.15	3.40	4.64
2000	S	0.58	0.75	1.07	1.38	0.68	0.86	1.23	1.61	0.85	1.07	1.54	2.02
	D	0.64	0.83	1.31	1.79	1.55	1.99	3.15	4.30	1.22	1.57	2.48	3.39
2200	S		0.62	0.88	1.14	0.56	0.71	1.02	1.33	0.70	0.88	1.27	1.67
	D		0.62	0.98	1.35	1.16	1.50	2.36	3.23	0.92	1.18	1.86	2.54
2400	S			0.74	0.96		0.59	0.86	1.12	0.59	0.74	1.07	1.40
	D			0.76	1.04		1.15	1.82	2.49	0.71	0.91	1.43	1.96

Notes:

- Steel conforms to ASTM A653M.
- Section properties are in accordance with CSA-S136-07.
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