

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
0.0135	0.73	80	0.0340	0.0278	0.0455	26.9	6.73	53.4	9.08
0.0150	0.80	33	0.0428	0.0364	0.0564	16.1	4.02	31.8	5.41
0.0180	0.95	50	0.0509	0.0432	0.0673	36.6	9.16	72.2	12.3
0.0240	1.25	33	0.0777	0.0674	0.0938	45.6	11.4	89.3	15.2
0.0300	1.55	33	0.101	0.0867	0.117	74.1	18.5	144	24.6

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

Load Table

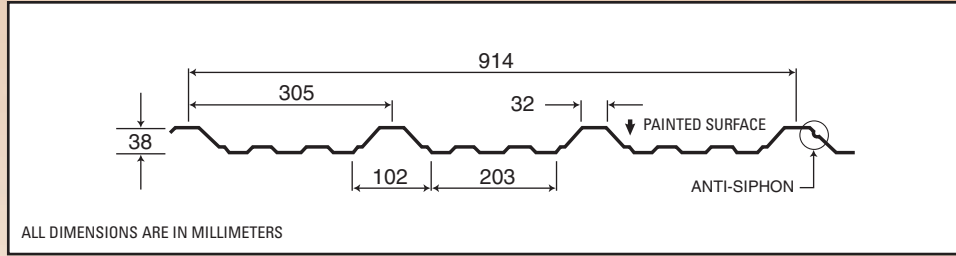
Maximum Specified Uniformly Distributed Loads in psf

Span (ft.)		1-Span Base Steel Thickness (in.)					2-Span Base Steel Thickness (in.)					3-Span Base Steel Thickness (in.)				
		0.0135	0.0150	0.0180	0.0240	0.0300	0.0135	0.0150	0.0180	0.0240	0.0300	0.0135	0.0150	0.0180	0.0240	0.0300
2'-0"	S	210	141	255	257	335	168	120	216	222	286	191	150	270	278	358
	D	551	683	816	1136	1419	1322	1639	1958	2727	3405	1041	1291	1542	2148	2681
3'-0"	S	106	63	113	114	149	86	53	96	99	127	108	67	120	123	159
	D	163	202	242	337	420	392	486	580	808	1009	308	382	457	636	794
3'-6"	S	78	46	83	84	109	64	39	70	73	93	79	49	88	91	117
	D	103	127	152	212	265	247	306	365	509	635	194	241	288	401	500
4'-0"	S	60	35	64	64	84	49	30	54	56	72	61	38	67	69	89
	D	69	85	102	142	177	165	205	245	341	426	130	161	193	268	335
4'-6"	S	47	28	50	51	66	38	24	43	44	57	48	30	53	55	71
	D	48	60	72	100	125	116	144	172	239	299	91	113	135	189	235
5'-0"	S	38	23	41	41	54	31	19	35	36	46	39	24	43	44	57
	D	35	44	52	73	91	85	105	125	175	218	67	83	99	137	172
5'-6"	S	32	19	34	34	44	26	16	29	29	38	32	20	36	37	47
	D	26	33	39	55	68	64	79	94	131	164	50	62	74	103	129
6'-0"	S	26	16	28	29	37	22	13	24	25	32	27	17	30	31	40
	D	20	25	30	42	53	49	61	73	101	126	39	48	57	80	99
6'-6"	S	23	13	24	24	32	18	11	20	21	27	23	14	26	26	34
	D	16	20	24	33	41	39	48	57	79	99	30	38	45	63	78
7'-0"	S	19	12	21	21	27	16		18	18	23	20	12	22	23	29
	D	13	16	19	27	33	31		46	64	79	24	30	36	50	63
7'-6"	S	17	10	18	18	24	14		15	16	20	17	11	19	20	25
	D	10	13	15	22	27	25		37	52	65	20	24	29	41	51
8'-0"	S			16	16	21	12		13	14	18	15		17	17	22
	D			13	18	22	21		31	43	53	16		24	34	42

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
0.343	3.55	550	1.83	1.49	0.0621	0.392	0.098	0.778	0.132
0.381	3.91	230	2.30	1.95	0.0769	0.237	0.059	0.470	0.080
0.457	4.64	345	2.74	2.32	0.0919	0.535	0.134	1.06	0.179
0.610	6.09	230	4.17	3.62	0.128	0.673	0.168	1.32	0.224
0.762	7.54	230	5.45	4.66	0.160	1.09	0.273	2.13	0.362

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)				
		0.343	0.381	0.457	0.610	0.762	0.343	0.381	0.457	0.610	0.762	0.343	0.381	0.457	0.610	0.762
600	S	10.2	7.04	12.6	12.8	16.7	8.18	5.98	10.7	11.1	14.3	9.29	7.48	13.3	13.9	17.9
	D	27.7	34.3	41.0	57.1	71.2	66.4	82.2	98.3	137	171	52.3	64.7	77.4	108	135
800	S	6.61	3.96	7.08	7.20	9.40	5.40	3.37	6.00	6.24	8.03	6.75	4.21	7.50	7.80	10.0
	D	11.7	14.5	17.3	24.1	30.1	28.0	34.7	41.5	57.8	72.1	22.1	27.3	32.7	45.5	56.8
1000	S	4.23	2.53	4.53	4.61	6.02	3.45	2.15	3.84	3.99	5.14	4.32	2.69	4.80	4.99	6.43
	D	5.98	7.40	8.85	12.3	15.4	14.3	17.8	21.2	29.6	36.9	11.3	14.0	16.7	23.3	29.1
1200	S	2.94	1.76	3.15	3.20	4.18	2.40	1.50	2.67	2.77	3.57	3.00	1.87	3.33	3.47	4.46
	D	3.46	4.28	5.12	7.13	8.91	8.30	10.3	12.3	17.1	21.4	6.54	8.09	9.68	13.5	16.8
1400	S	2.16	1.29	2.31	2.35	3.07	1.76	1.10	1.96	2.04	2.62	2.20	1.37	2.45	2.55	3.28
	D	2.18	2.70	3.22	4.49	5.61	5.23	6.47	7.74	10.8	13.5	4.12	5.10	6.09	8.49	10.6
1500	S	1.88	1.13	2.01	2.05	2.67	1.54	0.96	1.71	1.78	2.29	1.92	1.20	2.13	2.22	2.86
	D	1.77	2.19	2.62	3.65	4.56	4.25	5.26	6.29	8.76	10.9	3.35	4.14	4.95	6.90	8.62
1600	S	1.65	0.99	1.77	1.80	2.35	1.35	0.84	1.50	1.56	2.01	1.69	1.05	1.88	1.95	2.51
	D	1.46	1.81	2.16	3.01	3.76	3.50	4.34	5.18	7.22	9.02	2.76	3.41	4.08	5.69	7.10
1800	S	1.31	0.78	1.40	1.42	1.86	1.07	0.66	1.19	1.23	1.59	1.33	0.83	1.48	1.54	1.98
	D	1.02	1.27	1.52	2.11	2.64	2.46	3.05	3.64	5.07	6.33	1.94	2.40	2.87	3.99	4.99
2000	S	1.06	0.63	1.13	1.15	1.50	0.86	0.54	0.96	1.00	1.29	1.08	0.67	1.20	1.25	1.61
	D	0.75	0.92	1.11	1.54	1.92	1.79	2.22	2.65	3.70	4.62	1.41	1.75	2.09	2.91	3.64
2200	S	0.87	0.52	0.94	0.95	1.24	0.71		0.79	0.83	1.06	0.89	0.56	0.99	1.03	1.33
	D	0.56	0.69	0.83	1.16	1.45	1.35		1.99	2.78	3.47	1.06	1.31	1.57	2.19	2.73
2400	S			0.79	0.80	1.04	0.60		0.67	0.69	0.89	0.75		0.83	0.87	1.12
	D			0.64	0.89	1.11	1.04		1.54	2.14	2.67	0.82		1.21	1.69	2.10

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.

