

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	0.64	33	0.0202	0.0221	0.0098	25.5	6.38	50.8	8.63
0.0135	0.71	80	0.0208	0.0232	0.0102	62.7	15.7	124	21.1
0.0180	0.93	33	0.0361	0.0381	0.0182	61.7	15.4	121	20.6
0.0240	1.22	33	0.0498	0.0550	0.0268	114	28.6	223	38.0
0.0300	1.51	33	0.0637	0.0683	0.0356	184	45.9	357	60.7

Live Load Factor = 1.5; Importance Factor (I_{W-SLS}) = 0.90; Importance Factor (I_{W-ULS}) = 0.80

Load Table

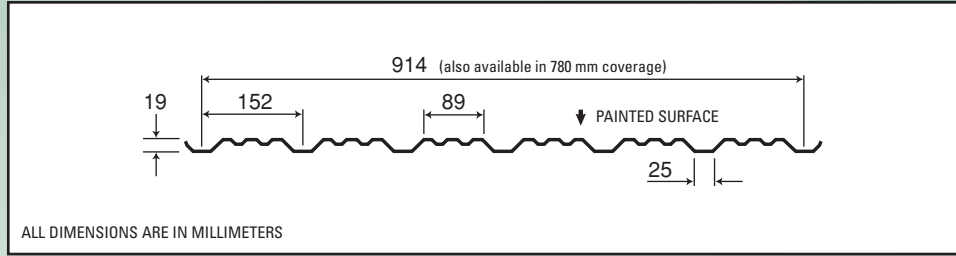
Maximum Specified Uniformly Distributed Loads in psf

Span (in.)		1-Span Base Steel Thickness (in.)					2-Span Base Steel Thickness (in.)					3-Span Base Steel Thickness (in.)				
		0.0120	0.0135	0.0180	0.0240	0.0300	0.0120	0.0135	0.0180	0.0240	0.0300	0.0120	0.0135	0.0180	0.0240	0.0300
16	S	188	367	335	463	591	205	409	354	510	633	257	511	442	638	792
	D	400	418	743	1097	1456	961	1004	1784	2632	3494	757	791	1405	2073	2752
20	S	120	235	215	296	378	131	262	226	327	405	164	327	283	408	507
	D	205	214	380	562	745	492	514	913	1348	1789	387	405	719	1061	1409
24	S	84	163	149	206	263	91	182	157	227	282	114	227	196	284	352
	D	119	124	220	325	431	285	298	528	780	1035	224	234	416	614	815
30	S	53	104	95	132	168	58	116	101	145	180	73	145	126	182	225
	D	61	63	113	166	221	146	152	271	399	530	115	120	213	314	417
36	S	37	72	66	91	117	41	81	70	101	125	51	101	87	126	156
	D	35	37	65	96	128	84	88	157	231	307	66	69	123	182	242
42	S	27	53	49	67	86	30	59	51	74	92	37	74	64	93	115
	D	22	23	41	61	80	53	56	99	146	193	42	44	78	115	152
48	S	21	41	37	51	66	23	45	39	57	70	29	57	49	71	88
	D	15	15	28	41	54	36	37	66	97	129	28	29	52	77	102
54	S	16	32	29	41	52	18	36	31	45	56	23	45	39	56	70
	D	10	11	19	29	38	25	26	46	68	91	20	21	37	54	72
60	S			24	33	42	15	29	25	36	45	18	36	31	45	56
	D			14	21	28	18	19	34	50	66	14	15	27	39	52
66	S			20	27	35	12	24	21	30	37	15	30	26	38	47
	D			11	16	21	14	14	25	38	50	11	11	20	30	39
72	S				23	29	10	20	17	25	31			22	32	39
	D				12	16	11	11	20	29	38			15	23	30
78	S					25			15	21	27			19	27	33
	D					13			15	23	30			12	18	24
84	S					21			13	19	23				23	29
	D					10			12	18	24				14	19

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	3.11	230	1.09	1.19	0.0133	0.376	0.094	0.749	0.127
0.343	3.46	550	1.12	1.25	0.0140	0.913	0.228	1.81	0.308
0.457	4.52	230	1.94	2.04	0.0248	0.910	0.227	1.79	0.304
0.610	5.94	230	2.68	2.96	0.0366	1.69	0.421	3.29	0.560
0.762	7.36	230	3.42	3.67	0.0486	2.71	0.677	5.27	0.895

Load Table

Live Load Factor = 1.5; Importance Factor (I_{w-SLS}) = 0.90; Importance Factor (I_{w-ULS}) = 0.80

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	0.343	0.457	0.610	0.762	0.305	0.343	0.457	0.610	0.762	0.305	0.343	0.457	0.610	0.762
400	S	9.37	18.1	16.8	23.1	29.5	10.2	20.2	17.6	25.5	31.7	12.8	25.2	22.0	31.9	39.6
	D	20.1	21.0	37.2	55.0	73.0	48.1	50.4	89.4	132	175	37.9	39.7	70.4	104	138
500	S	5.99	11.6	10.7	14.8	18.9	6.56	12.9	11.3	16.3	20.3	8.20	16.1	14.1	20.4	25.3
	D	10.3	10.8	19.1	28.2	37.4	24.7	25.8	45.8	67.6	89.7	19.4	20.3	36.0	53.2	70.7
600	S	4.16	8.04	7.44	10.3	13.1	4.55	8.97	7.84	11.3	14.1	5.69	11.2	9.80	14.2	17.6
	D	5.94	6.23	11.0	16.3	21.6	14.3	15.0	26.5	39.1	51.9	11.2	11.8	20.9	30.8	40.9
800	S	2.34	4.52	4.19	5.77	7.38	2.56	5.04	4.41	6.38	7.91	3.20	6.30	5.51	7.97	9.89
	D	2.51	2.63	4.65	6.87	9.13	6.02	6.31	11.2	16.5	21.9	4.74	4.97	8.80	13.0	17.3
1000	S	1.50	2.89	2.68	3.70	4.72	1.64	3.23	2.82	4.08	5.06	2.05	4.03	3.53	5.10	6.33
	D	1.28	1.35	2.38	3.52	4.67	3.08	3.23	5.72	8.44	11.2	2.43	2.54	4.50	6.65	8.83
1200	S	1.04	2.01	1.86	2.57	3.28	1.14	2.24	1.96	2.83	3.52	1.42	2.80	2.45	3.54	4.40
	D	0.74	0.78	1.38	2.04	2.70	1.78	1.87	3.31	4.89	6.49	1.40	1.47	2.61	3.85	5.11
1400	S			1.37	1.89	2.41	0.84	1.65	1.44	2.08	2.58	1.05	2.06	1.80	2.60	3.23
	D			0.87	1.28	1.70	1.12	1.18	2.08	3.08	4.09	0.88	0.93	1.64	2.42	3.22
1500	S			1.19	1.64	2.10	0.73	1.43	1.25	1.81	2.25	0.91	1.79	1.57	2.27	2.81
	D			0.71	1.04	1.38	0.91	0.96	1.69	2.50	3.32	0.72	0.75	1.33	1.97	2.62
1600	S			1.05	1.44	1.85	0.64	1.26	1.10	1.59	1.98	0.80	1.58	1.38	1.99	2.47
	D			0.58	0.86	1.14	0.75	0.79	1.40	2.06	2.74	0.59	0.62	1.10	1.62	2.16
1800	S			1.14	1.46	0.51	1.00	0.87	1.26	1.56			1.09	1.57	1.95	
	D			0.60	0.80	0.53	0.55	0.98	1.45	1.92			0.77	1.14	1.51	

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.

