

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	1.04	33	0.118	0.118	0.104	51.6	12.9	105	17.8
0.024	1.36	33	0.158	0.158	0.138	98.2	24.6	197	33.5
0.030	1.69	33	0.196	0.196	0.173	161	40.1	319	54.3
0.036	2.02	33	0.234	0.234	0.207	239	59.7	472	80.3
0.048	2.67	33	0.309	0.309	0.275	444	111	871	148

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

Load Table

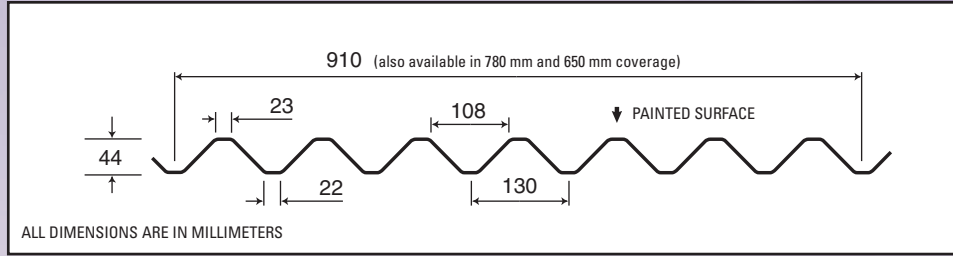
Maximum Specified Uniformly Distributed Loads in psf

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	104	139	173	207	273	104	139	173	207	273	130	174	216	258	341
	D	189	251	314	376	499	453	603	753	902	1198	357	475	593	710	943
4'-6"	S	82	110	137	163	216	82	110	137	163	216	103	138	171	204	269
	D	133	177	220	264	351	318	424	529	633	841	251	334	416	499	663
5'-0"	S	67	89	111	132	175	67	89	111	132	175	83	111	139	165	218
	D	97	129	161	192	256	232	309	385	462	613	183	243	303	364	483
5'-6"	S	55	74	92	109	144	55	74	92	109	144	69	92	114	137	180
	D	73	97	121	145	192	174	232	290	347	461	137	183	228	273	363
6'-0"	S	46	62	77	92	121	46	62	77	92	121	58	77	96	115	152
	D	56	74	93	111	148	134	179	223	267	355	106	141	176	210	280
6'-6"	S	39	53	66	78	103	39	53	66	78	103	49	66	82	98	129
	D	44	59	73	88	116	106	141	175	210	279	83	111	138	165	220
7'-0"	S	34	45	57	68	89	34	45	57	68	89	43	57	71	84	111
	D	35	47	59	70	93	85	113	140	168	224	67	89	111	132	176
7'-6"	S	30	40	49	59	78	30	40	49	59	78	37	50	62	74	97
	D	29	38	48	57	76	69	92	114	137	182	54	72	90	108	143
8'-0"	S	26	35	43	52	68	26	35	43	52	68	33	44	54	65	85
	D	24	31	39	47	62	57	75	94	113	150	45	59	74	89	118
8'-6"	S	23	31	38	46	60	23	31	38	46	60	29	39	48	57	76
	D	20	26	33	39	52	47	63	78	94	125	37	50	62	74	98
9'-0"	S	21	28	34	41	54	21	28	34	41	54	26	34	43	51	67
	D	17	22	28	33	44	40	53	66	79	105	31	42	52	62	83

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		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	5.06	230	6.34	6.33	0.142	0.761	0.190	1.54	0.262
0.610	6.66	230	8.47	8.47	0.189	1.45	0.362	2.90	0.494
0.762	8.25	230	10.5	10.5	0.236	2.37	0.592	4.71	0.801
0.914	9.85	230	12.6	12.6	0.282	3.52	0.881	6.97	1.18
1.22	13.0	230	16.6	16.6	0.375	6.55	1.64	12.9	2.19

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)				
		0.457	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	5.20	6.96	8.65	10.3	13.6	5.20	6.96	8.65	10.3	13.6	6.50	8.70	10.8	12.9	17.0
	D	9.48	12.6	15.8	18.9	25.1	22.8	30.3	37.8	45.3	60.2	17.9	23.9	29.8	35.7	47.4
1400	S	3.82	5.11	6.36	7.59	10.0	3.82	5.11	6.36	7.59	10.0	4.77	6.39	7.95	9.49	12.5
	D	5.97	7.95	9.92	11.9	15.8	14.3	19.1	23.8	28.5	37.9	11.3	15.0	18.7	22.5	29.8
1500	S	3.33	4.45	5.54	6.61	8.72	3.33	4.45	5.54	6.61	8.72	4.16	5.57	6.92	8.26	10.9
	D	4.85	6.46	8.06	9.66	12.8	11.7	15.5	19.4	23.2	30.8	9.17	12.2	15.2	18.3	24.3
1600	S	2.93	3.91	4.87	5.81	7.67	2.92	3.91	4.87	5.81	7.67	3.66	4.89	6.08	7.26	9.59
	D	4.00	5.32	6.64	7.96	10.6	9.60	12.8	16.0	19.1	25.4	7.56	10.1	12.6	15.0	20.0
1800	S	2.31	3.09	3.85	4.59	6.06	2.31	3.09	3.85	4.59	6.06	2.89	3.87	4.81	5.74	7.57
	D	2.81	3.74	4.67	5.59	7.43	6.74	8.97	11.2	13.4	17.8	5.31	7.07	8.82	10.6	14.0
2000	S	1.87	2.50	3.11	3.72	4.91	1.87	2.50	3.11	3.72	4.91	2.34	3.13	3.89	4.65	6.13
	D	2.05	2.73	3.40	4.07	5.41	4.92	6.54	8.16	9.78	13.00	3.87	5.15	6.43	7.70	10.2
2200	S	1.55	2.07	2.57	3.07	4.06	1.55	2.07	2.57	3.07	4.06	1.93	2.59	3.22	3.84	5.07
	D	1.54	2.05	2.56	3.06	4.07	3.69	4.92	6.13	7.35	9.76	2.91	3.87	4.83	5.79	7.69
2400	S	1.30	1.74	2.16	2.58	3.41	1.30	1.74	2.16	2.58	3.41	1.62	2.17	2.70	3.23	4.26
	D	1.19	1.58	1.97	2.36	3.13	2.84	3.79	4.72	5.66	7.52	2.24	2.98	3.72	4.46	5.92
2500	S	1.20	1.60	1.99	2.38	3.14	1.20	1.60	1.99	2.38	3.14	1.50	2.00	2.49	2.97	3.93
	D	1.05	1.40	1.74	2.09	2.77	2.52	3.35	4.18	5.01	6.65	1.98	2.64	3.29	3.94	5.24
2600	S	1.11	1.48	1.84	2.20	2.90	1.11	1.48	1.84	2.20	2.90	1.38	1.85	2.30	2.75	3.63
	D	0.93	1.24	1.55	1.85	2.46	2.24	2.98	3.72	4.45	5.91	1.76	2.35	2.93	3.51	4.66
2800	S	0.96	1.28	1.59	1.90	2.50	0.95	1.28	1.59	1.90	2.50	1.19	1.60	1.99	2.37	3.13
	D	0.75	0.99	1.24	1.49	1.97	1.79	2.38	2.98	3.56	4.74	1.41	1.88	2.34	2.81	3.73

