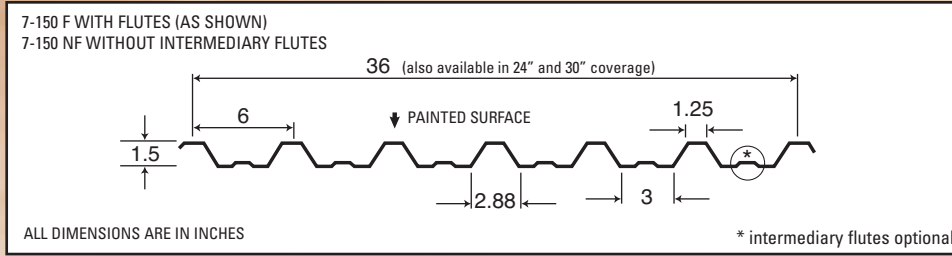


Roof Cladding

7-150 F and 7-150 NF



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	0.0940	0.0888	0.0985	54.1	13.5	105	17.9
0.024	1.36	33	0.136	0.127	0.132	102	25.5	197	33.4
0.030	1.69	33	0.175	0.162	0.165	165	41.3	318	54.1
0.036	2.02	33	0.208	0.198	0.197	244	61.1	470	79.8

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

Load Table

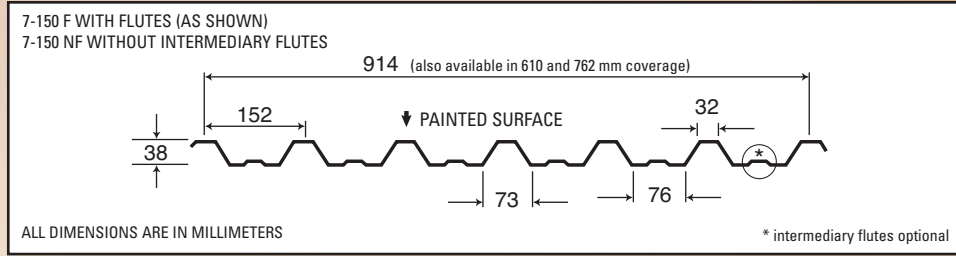
Maximum Specified Uniformly Distributed Loads in psf

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	0.018	0.024	0.030	0.036	0.018	0.024	0.030	0.036
4'-0"	S	78	112	144	172	73	105	134	164	92	131	167	205
	D	149	200	250	299	358	480	599	717	282	378	472	565
4'-6"	S	61	88	114	136	58	83	106	129	72	103	132	162
	D	105	140	175	210	251	337	421	504	198	266	331	397
5'-0"	S	50	72	92	110	47	67	86	105	59	84	107	131
	D	76	102	128	153	183	246	307	367	144	194	241	289
5'-6"	S	41	59	76	91	39	55	71	87	48	69	89	108
	D	57	77	96	115	138	185	230	276	108	145	181	217
6'-0"	S	34	50	64	76	33	47	60	73	41	58	74	91
	D	44	59	74	89	106	142	177	213	84	112	140	167
6'-6"	S	29	42	55	65	28	40	51	62	35	50	63	77
	D	35	47	58	70	83	112	140	167	66	88	110	132
7'-0"	S	25	37	47	56	24	34	44	53	30	43	55	67
	D	28	37	47	56	67	90	112	134	53	71	88	105
7'-6"	S	22	32	41	49	21	30	38	47	26	37	48	58
	D	23	30	38	45	54	73	91	109	43	57	72	86
8'-0"	S	19	28	36	43	18	26	33	41	23	33	42	51
	D	19	25	31	37	45	60	75	90	35	47	59	71
8'-6"	S	17	25	32	38	16	23	30	36	20	29	37	45
	D	16	21	26	31	37	50	62	75	29	39	49	59
9'-0"	S	15	22	28	34	14	21	26	32	18	26	33	40
	D	13	18	22	26	31	42	53	63	25	33	41	50

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
0.457	5.06	230	5.05	4.77	0.134	0.799	0.200	1.55	0.263
0.610	6.66	230	7.28	6.82	0.180	1.50	0.375	2.90	0.493
0.762	8.25	230	9.38	8.73	0.225	2.44	0.609	4.69	0.798
0.914	9.85	230	11.2	10.7	0.270	3.60	0.901	6.93	1.18

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	0.457	0.610	0.762	0.914	0.457	0.610	0.762	0.914
1200	S	3.87	5.58	7.19	8.58	3.65	5.23	6.69	8.17	4.57	6.53	8.36	10.2
	D	7.49	10.0	12.5	15.0	18.0	24.1	30.1	36.0	14.2	19.0	23.7	28.4
1400	S	2.84	4.10	5.28	6.31	2.68	3.84	4.92	6.00	3.36	4.80	6.14	7.51
	D	4.71	6.33	7.89	9.45	11.3	15.2	18.9	22.7	8.91	12.0	14.9	17.9
1500	S	2.48	3.57	4.60	5.49	2.34	3.34	4.28	5.23	2.92	4.18	5.35	6.54
	D	3.83	5.14	6.42	7.69	9.20	12.3	15.4	18.4	7.24	9.72	12.1	14.5
1600	S	2.18	3.14	4.04	4.83	2.06	2.94	3.76	4.60	2.57	3.67	4.70	5.75
	D	3.16	4.24	5.29	6.33	7.58	10.2	12.7	15.2	5.97	8.01	9.99	12.0
1800	S	1.72	2.48	3.20	3.82	1.62	2.32	2.97	3.63	2.03	2.90	3.72	4.54
	D	2.22	2.98	3.71	4.45	5.32	7.14	8.91	10.7	4.19	5.62	7.02	8.41
2000	S	1.39	2.01	2.59	3.09	1.32	1.88	2.41	2.94	1.64	2.35	3.01	3.68
	D	1.62	2.17	2.71	3.24	3.88	5.21	6.50	7.78	3.06	4.10	5.12	6.13
2200	S	1.15	1.66	2.14	2.55	1.09	1.55	1.99	2.43	1.36	1.94	2.49	3.04
	D	1.22	1.63	2.03	2.44	2.92	3.91	4.88	5.85	2.30	3.08	3.84	4.60
2400	S	0.97	1.40	1.80	2.15	0.91	1.31	1.67	2.04	1.14	1.63	2.09	2.55
	D	0.94	1.26	1.57	1.88	2.25	3.01	3.76	4.50	1.77	2.37	2.96	3.55
2500	S	0.89	1.29	1.66	1.98	0.84	1.20	1.54	1.88	1.05	1.50	1.93	2.35
	D	0.83	1.11	1.39	1.66	1.99	2.67	3.33	3.98	1.56	2.10	2.62	3.14
2600	S	0.82	1.19	1.53	1.83	0.78	1.11	1.43	1.74	0.97	1.39	1.78	2.18
	D	0.74	0.99	1.23	1.48	1.77	2.37	2.96	3.54	1.39	1.87	2.33	2.79
2800	S	0.71	1.03	1.32	1.58	0.67	0.96	1.23	1.50	0.84	1.20	1.54	1.88
	D	0.59	0.79	0.99	1.18	1.41	1.90	2.37	2.84	1.11	1.49	1.86	2.23

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.
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