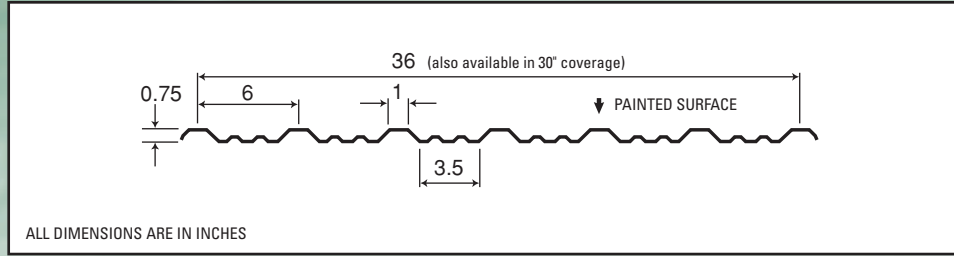


# Light Weight Cladding

# Diamond Rib



## 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 <sup>4</sup> )	Specified Web Crippling Data (lb)			
			Mid Span (in <sup>3</sup> )	Support (in <sup>3</sup> )		End Pe1	End Pe2	Interior Pi1	Interior Pi2
0.0120	0.64	33	0.0221	0.0202	0.0144	25.5	6.38	50.8	8.63
0.0135	0.71	80	0.0227	0.0203	0.0152	71.2	17.8	141	24.0
0.0180	0.93	33	0.0381	0.0361	0.0227	61.7	15.4	121	20.6
0.0240	1.22	33	0.0550	0.0498	0.0302	114	28.6	223	38.0
0.0300	1.51	33	0.0683	0.0637	0.0376	184	45.9	357	60.7

## Load Table

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

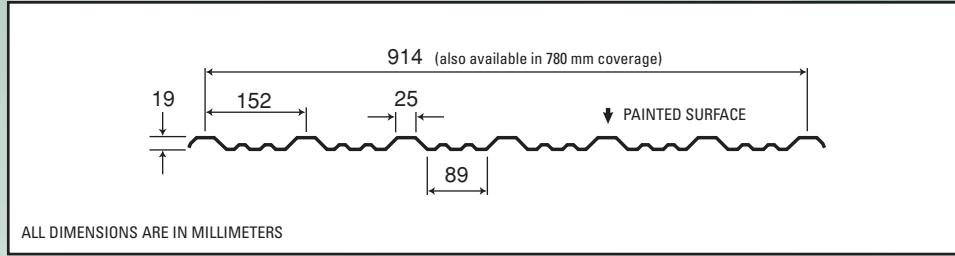
Maximum Specified Uniformly Distributed Loads in psf

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	205	455	354	510	633	188	406	335	463	591	235	507	419	578	739
	D	588	620	927	1234	1540	1411	1488	2224	2961	3695	1111	1172	1751	2331	2910
20	S	131	291	226	327	405	120	260	215	296	378	150	325	268	370	473
	D	301	317	474	632	788	722	762	1139	1516	1892	569	600	897	1194	1490
24	S	91	202	157	227	282	84	180	149	206	263	104	225	186	257	329
	D	174	184	275	366	456	418	441	659	877	1095	329	347	519	691	862
30	S	58	129	101	145	180	53	115	95	132	168	67	144	119	164	210
	D	89	94	141	187	234	214	226	337	449	561	169	178	266	354	441
36	S	41	90	70	101	125	37	80	66	91	117	46	100	83	114	146
	D	52	54	81	108	135	124	131	195	260	324	98	103	154	205	255
42	S	30	66	51	74	92	27	59	49	67	86	34	74	61	84	107
	D	32	34	51	68	85	78	82	123	164	204	61	65	97	129	161
48	S	23	51	39	57	70	21	45	37	51	66	26	56	47	64	82
	D	22	23	34	46	57	52	55	82	110	137	41	43	65	86	108
54	S	18	40	31	45	56	16	36	29	41	52	21	45	37	51	65
	D	15	16	24	32	40	37	39	58	77	96	29	30	46	61	76
60	S	15	32	25	36	45	13	29	24	33	42	17	36	30	41	53
	D	11	12	18	23	29	27	28	42	56	70	21	22	33	44	55
66	S			21	30	37	11	24	20	27	35	14	30	25	34	43
	D			13	18	22	20	21	32	42	53	16	17	25	33	41
72	S			17	25	31		20	17	23	29	12	25	21	29	37
	D			10	14	17		16	24	32	41	12	13	19	26	32
78	S				21	27		17	14	19	25		21	18	24	31
	D				11	13		13	19	26	32		10	15	20	25
84	S					23		15	12	17	21			15	21	27
	D					11		10	15	20	26			12	16	20

## 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 <sup>2</sup> )	Yield Stress (MPa)	Section Modulus		Deflection Moment of Inertia Mid Span (x 10 <sup>6</sup> mm <sup>4</sup> )	Specified Web Crippling Data (kN)			
			Mid Span (x 10 <sup>3</sup> mm <sup>3</sup> )	Support (x 10 <sup>3</sup> mm <sup>3</sup> )		End Pe1	End Pe2	Interior Pi1	Interior Pi2
0.305	3.11	230	1.19	1.09	0.0196	0.376	0.094	0.749	0.127
0.343	3.46	550	1.22	1.09	0.0207	1.04	0.259	2.06	0.350
0.457	4.52	230	2.04	1.94	0.0309	0.910	0.227	1.79	0.304
0.610	5.94	230	2.96	2.68	0.0412	1.69	0.421	3.29	0.560
0.762	7.36	230	3.67	3.42	0.0514	2.71	0.677	5.27	0.895

### Load Table

Live Load Factor = 1.5; Importance Factor (I<sub>w-SLS</sub>) = 0.90; Importance Factor (I<sub>w-ULS</sub>) = 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	10.2	22.5	17.6	25.5	31.7	9.37	20.0	16.8	23.1	29.5	11.7	25.0	20.9	28.9	36.9
	D	29.5	31.2	46.5	62.0	77.3	70.8	74.8	112	149	186	55.7	58.9	87.9	117	146
500	S	6.56	14.4	11.3	16.3	20.3	5.99	12.8	10.7	14.8	18.9	7.49	16.0	13.4	18.5	23.6
	D	15.1	16.0	23.8	31.7	39.6	36.2	38.3	57.2	76.1	95.0	28.5	30.1	45.0	59.9	74.8
600	S	4.55	9.98	7.84	11.3	14.1	4.16	8.90	7.44	10.3	13.1	5.20	11.1	9.30	12.8	16.4
	D	8.74	9.23	13.8	18.4	22.9	21.0	22.2	33.1	44.1	55.0	16.5	17.4	26.1	34.7	43.3
800	S	2.56	5.61	4.41	6.38	7.91	2.34	5.00	4.19	5.77	7.38	2.93	6.25	5.23	7.22	9.23
	D	3.69	3.89	5.82	7.74	9.66	8.84	9.35	14.0	18.6	23.2	6.96	7.36	11.0	14.6	18.3
1000	S	1.64	3.59	2.82	4.08	5.06	1.50	3.20	2.68	3.70	4.72	1.87	4.00	3.35	4.62	5.91
	D	1.89	1.99	2.98	3.96	4.95	4.53	4.78	7.15	9.51	11.9	3.57	3.77	5.63	7.49	9.35
1200	S	1.14	2.49	1.96	2.83	3.52	1.04	2.22	1.86	2.57	3.28	1.30	2.78	2.33	3.21	4.10
	D	1.09	1.15	1.72	2.29	2.86	2.62	2.77	4.14	5.51	6.87	2.06	2.18	3.26	4.34	5.41
1400	S	0.84	1.83	1.44	2.08	2.58	0.76	1.63	1.37	1.89	2.41	0.96	2.04	1.71	2.36	3.01
	D	0.69	0.73	1.09	1.44	1.80	1.65	1.74	2.60	3.47	4.33	1.30	1.37	2.05	2.73	3.41
1500	S	0.73	1.60	1.25	1.81	2.25	0.67	1.42	1.19	1.64	2.10	0.83	1.78	1.49	2.05	2.62
	D	0.56	0.59	0.88	1.17	1.47	1.34	1.42	2.12	2.82	3.52	1.06	1.12	1.67	2.22	2.77
1600	S			1.10	1.59	1.98	0.59	1.25	1.05	1.44	1.85	0.73	1.56	1.31	1.80	2.31
	D			0.73	0.97	1.21	1.11	1.17	1.74	2.32	2.90	0.87	0.92	1.37	1.83	2.28
1800	S			0.87	1.26	1.56		0.99	0.83	1.14	1.46	0.58	1.24	1.03	1.43	1.82
	D			0.51	0.68	0.85		0.82	1.23	1.63	2.04	0.61	0.65	0.97	1.28	1.60
2000	S				1.27			0.80	0.67	0.92	1.18			0.84	1.15	1.48
	D				0.62			0.60	0.89	1.19	1.48			0.70	0.94	1.17

### Notes:

- Steel conforms to ASTM A653M.
- Section properties are in accordance with CSA-S136-07.
- Values in row "S" are based on strength.
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- 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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