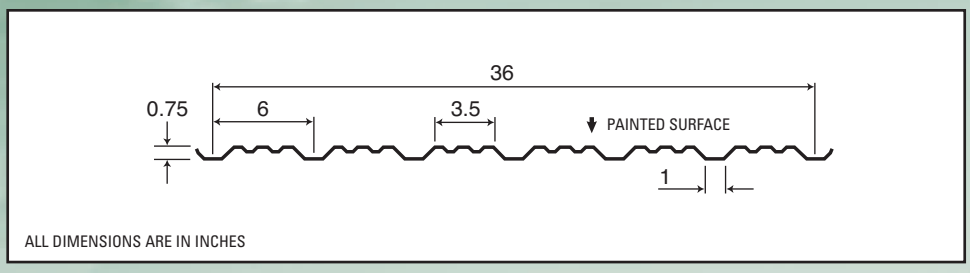
Light Weight Cladding

DR6-75



Section Properties

(Per Foot of Width)

Base Steel Thickness	Weight G90	Yield Stress	Section Modulus		Deflection Moment of Inertia	Specified Web Crippling Data (lb)			
			Mid Span	Support		End	End	Interior	Interior
(in.)	(psf)	(ksi)	(in^3)	(in^3)	Mid Span (in^4)	P_{e1}	P_{e2}	P_{i1}	P_{i2}
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

Load Table

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

Maximum Specified Uniformly Distributed Loads in psf

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

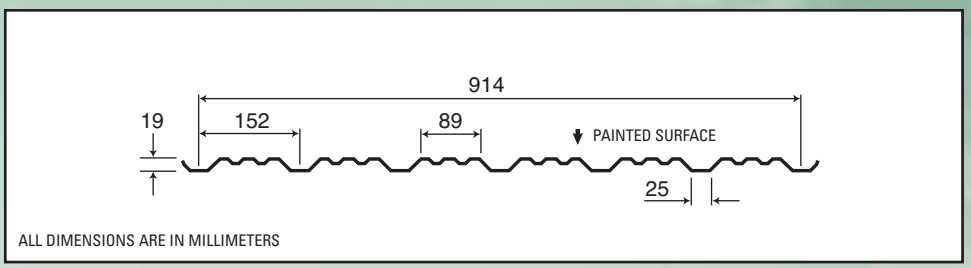
Notes:

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.

METRIC

DR6-75

Light Weight Cladding



ALL DIMENSIONS ARE IN MILLIMETERS

Section Properties

(Per Metre of Width)

Base Steel Thickness	Mass Z275	Yield Stress	Section Modulus		Deflection Moment of Inertia	Specified Web Crippling Data (kN)			
			Mid Span	Support		End	End	Interior	Interior
(mm)	(kg/m^2)	MPa	($x10^3 mm^3$)	($x10^3 mm^3$)	Mid Span ($x10^6 mm^4$)	P_{e1}	P_{e2}	P_{i1}	P_{i2}
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

Load Table

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

Maximum Specified Uniformly Distributed Loads in kPa

Span		1-Span Base Steel Thickness (mm)				2-Span Base Steel Thickness (mm)				3-Span Base Steel Thickness (mm)			
(mm)		0.305	0.343	0.457	0.610	0.305	0.343	0.457	0.610	0.305	0.343	0.457	0.610
400	S	9.37	18.1	16.8	23.1	10.2	20.2	17.6	25.5	12.8	25.2	22.0	31.9
	D	20.1	21.0	37.2	55.0	48.1	50.4	89.4	132	37.9	39.7	70.4	104
500	S	5.99	11.6	10.7	14.8	6.56	12.9	11.3	16.3	8.20	16.1	14.1	20.4
	D	10.3	10.8	19.1	28.2	24.7	25.8	45.8	67.6	19.4	20.3	36.0	53.2
600	S	4.16	8.04	7.44	10.3	4.55	8.97	7.84	11.3	5.69	11.2	9.80	14.2
	D	5.94	6.23	11.0	16.3	14.3	15.0	26.5	39.1	11.2	11.8	20.9	30.8
800	S	2.34	4.52	4.19	5.77	2.56	5.04	4.41	6.38	3.20	6.30	5.51	7.97
	D	2.51	2.63	4.65	6.87	6.02	6.31	11.2	16.5	4.74	4.97	8.80	13.0
1000	S	1.50	2.89	2.68	3.70	1.64	3.23	2.82	4.08	2.05	4.03	3.53	5.10
	D	1.28	1.35	2.38	3.52	3.08	3.23	5.72	8.44	2.43	2.54	4.50	6.65
1200	S	1.04	2.01	1.86	2.57	1.14	2.24	1.96	2.83	1.42	2.80	2.45	3.54
	D	0.74	0.78	1.38	2.04	1.78	1.87	3.31	4.89	1.40	1.47	2.61	3.85
1400	S			1.37	1.89	0.84	1.65	1.44	2.08	1.05	2.06	1.80	2.60
	D			0.87	1.28	1.12	1.18	2.08	3.08	0.88	0.93	1.64	2.42
1500	S			1.19	1.64	0.73	1.43	1.25	1.81	0.91	1.79	1.57	2.27
	D			0.71	1.04	0.91	0.96	1.69	2.50	0.72	0.75	1.33	1.97
1600	S			1.05	1.44	0.64	1.26	1.10	1.59	0.80	1.58	1.38	1.99
	D			0.58	0.86	0.75	0.79	1.40	2.06	0.59	0.62	1.10	1.62
1800	S				1.14	0.51	1.00	0.87	1.26			1.09	1.57
	D				0.60	0.53	0.55	0.98	1.45			0.77	1.14

Notes:

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