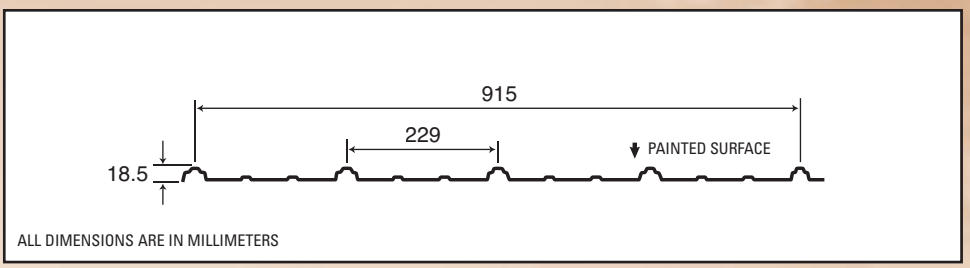
METRIC

Optimum Rib

Roof 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}
0.343	3.46	550	0.676	0.533	0.0113	0.90	0.22	1.39	0.24
0.457	4.52	230	0.895	0.772	0.0150	0.69	0.17	1.12	0.19
0.610	5.94	230	1.18	1.07	0.0199	1.28	0.32	2.12	0.36

Load Table

Live Load Factor = 1.5; Importance Factor ($I_{I\text{-}SLS}$) = 0.90; Importance Factor ($I_{I\text{-}ULS}$) = 1.0

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)		0.343	0.457	0.610	0.343	0.457	0.610	0.343	0.457	0.610
400	S	8.34	6.14	8.09	6.57	5.29	7.33	8.22	6.62	9.18
	D	17.03	22.60	29.98	41.01	54.44	72.22	32.14	42.67	56.61
500	S	5.33	3.92	5.16	4.19	3.37	4.68	5.25	4.22	5.86
	D	8.72	11.57	15.35	21.00	27.87	36.98	16.46	21.85	28.98
600	S	3.69	2.71	3.57	2.90	2.33	3.23	3.64	2.92	4.05
	D	5.04	6.70	8.88	12.15	16.13	21.40	9.52	12.64	16.77
800	S	2.06	1.51	1.99	1.62	1.29	1.80	2.03	1.63	2.26
	D	2.13	2.83	3.75	5.13	6.81	9.03	4.02	5.33	7.08
1000	S	1.31		1.25	1.03		1.13	1.29	1.03	1.43
	D	1.09		1.92	2.62		4.62	2.06	2.73	3.62

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.
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 Paul Ransom Engineering, Burlington, Ontario, Canada.