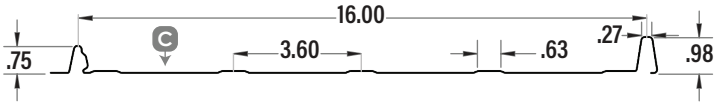
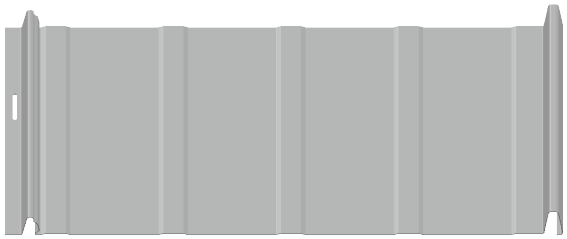
WF-PROLOK 16 ROOF





All dimensions are in inches

SECTION PROPERTIES (PER FOOT OF WIDTH)

IMPERIAL	Base Steel Thickness (in.)	Weight G90 (psf)	Yield Stress (ksi)	Sec. Modulus Midspan (in^3)	Sec. Modulus Support (in^3)	Deflection Moment of Inertia (in^4)	Specified Web Crippling Data P_{e1} End (lb)	P_{e2} End (lb)	P_{i1} Interior (lb)	P_{i2} Interior (lb)
	0.018	1.00	33	0.0170	0.0128	0.0138	52.2	13.1	100	17.1
	0.024	1.30	33	0.0224	0.0178	0.0182	96.3	24.1	185	31.4

Live load factor = 1.5; Importance factor = 0.90; Importance Category = 1.0

MAXIMUM UNIFORMLY DISTRIBUTED SPECIFIED LOADS (PSF)

SPAN LENGTH (ft)		1-SPAN BASE STEEL THICKNESS (in.)					2-SPAN BASE STEEL THICKNESS (in.)					3-SPAN BASE STEEL THICKNESS (in.)				
		0.018	0.024				0.018	0.024				0.018	0.024			
1.0	S	224	296				168	235				210	293			
	D	S	S				S	S				S	S			
1.5	S	100	131				75	104				94	130			
	D	S	S				S	S				S	S			
2.0	S	56	74				42	59				53	73			
	D	S	S				S	S				S	S			
2.5	S	36	47				27	38				34	47			
	D	S	S				S	S				S	S			
3.0	S	25	33				19	26				23	33			
	D	S	S				S	S				S	S			
3.5	S	18	24				14	19				17	24			
	D	S	S				S	S				S	S			
4.0	S	14	18				11	15				13	18			
	D	S	S				S	S				S	S			

Notes:

1. Based on ASTM A 653 structural steel. Coating can also be AZ50.
2. Values in row "S" are based on strength.
3. Values in row "D" are based on deflection of L/180.
4. Web crippling not included in strength calculations. See Example.
5. Limit States Design principles were used in accordance with CSA S136-16.
6. Prepared by Dr. R.M. Schuster, P. Eng., Distinguished Professor Emeritus, University of Waterloo.

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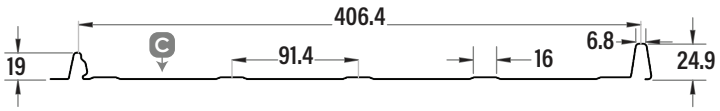
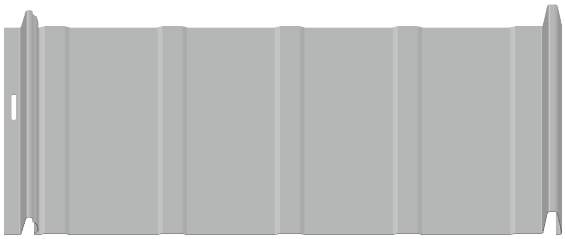
WF-PROLOK 16 ROOF





All dimensions are in millimeters

SECTION PROPERTIES (PER METRE OF WIDTH)

	Base Steel Thickness (mm)	Mass Z275 (kg/m^2)	Yield Stress (MPa)	Sec. Modulus Midspan ($x10^3$ mm^3)	Sec. Modulus Support ($x10^3$ mm^3)	Deflection Moment of Inertia ($x10^6 mm^4$)	Specified Web Crippling Data P_{e1} End (kN)	P_{e2} End (kN)	P_{i1} Interior (kN)	P_{i2} Interior (kN)
METRIC	0.457	4.82	230	0.914	0.685	0.0188	0.770	0.192	1.48	0.252
	0.610	6.33	230	1.21	0.955	0.0249	1.42	0.355	2.72	0.463

Live load factor = 1.5; Importance factor = 0.90; Importance Category = 1.0

MAXIMUM UNIFORMLY DISTRIBUTED SPECIFIED LOADS (kPa)

SPAN LENGTH (mm)		1-SPAN BASE STEEL THICKNESS (mm)					2-SPAN BASE STEEL THICKNESS (mm)					3-SPAN BASE STEEL THICKNESS (mm)				
		0.457	0.610				0.457	0.610				0.457	0.610			
300	S	11.2	14.8				8.40	11.7				10.5	14.6			
	D	S	S				S	S				S	S			
400	S	6.31	8.31				4.73	6.59				5.91	8.23			
	D	S	S				S	S				S	S			
500	S	4.04	5.32				3.02	4.22				3.78	5.27			
	D	S	S				S	S				S	S			
600	S	2.80	3.69				2.10	2.93				2.63	3.66			
	D	S	S				S	S				S	S			
700	S	2.06	2.71				1.54	2.15				1.93	2.69			
	D	S	S				S	S				S	S			
800	S	1.58	2.08				1.18	1.65				1.48	2.06			
	D	S	S				S	S				S	S			
900	S	1.25	1.64				0.93	1.30				1.17	1.63			
	D	S	S				S	S				S	S			
1000	S	1.01	1.33				0.76	1.05				0.95	1.32			
	D	S	S				S	S				S	S			
1100	S	0.83	1.10				0.62	0.87				0.78	1.09			
	D	S	S				S	S				S	S			
1200	S	0.70	0.92				0.53	0.73				0.66	0.91			
	D	S	S				S	S				S	S			

Notes:

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