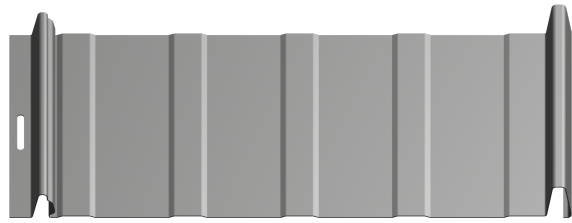
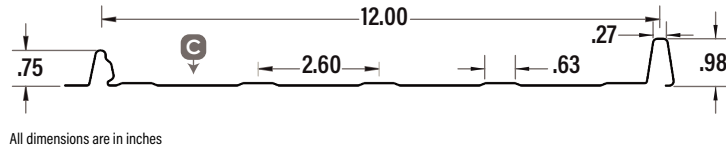




WF-PROLOK 12 ROOF



All dimensions are in inches

SECTION PROPERTIES (PER FOOT OF WIDTH)

IMPERIAL	Base Steel Thickness (in.)	Weight G90 (psf)	Yield Stress (ksi)	Sec. Modulus		Deflection Moment of Inertia (in ⁴)	Specified Web Crippling Data			
				Midspan	Support		P _{e1} End (lb)	P _{e2} End (lb)	P _{i1} Interior (lb)	P _{i2} Interior (lb)
				(in ³)	(in ³)					
	0.018	1.05	33	0.0194	0.0149	0.0145	70.0	17.5	134	22.8
	0.024	1.38	33	0.0256	0.0208	0.0192	129	32.3	246	41.9

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

MAXIMUM UNIFORMLY DISTRIBUTED SPECIFIED LOADS (PSF)

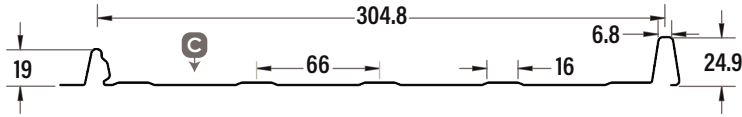
SPAN LENGTH (ft)		1-SPAN				2-SPAN				3-SPAN			
		BASE STEEL THICKNESS (in.)				BASE STEEL THICKNESS (in.)				BASE STEEL THICKNESS (in.)			
		0.018	0.024			0.018	0.024			0.018	0.024		
1.0	S	257	338			197	274			246	343		
	D	S	S			S	S			S	S		
1.5	S	114	150			88	122			109	152		
	D	S	S			S	S			S	S		
2.0	S	64	84			49	69			62	86		
	D	S	S			S	S			S	S		
2.5	S	41	54			32	44			39	55		
	D	S	S			S	S			S	S		
3.0	S	29	38			22	30			27	38		
	D	S	S			S	S			S	S		
3.5	S	21	28			16	22			20	28		
	D	S	S			S	S			S	S		
4.0	S	16	21			12	17			15	21		
	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.

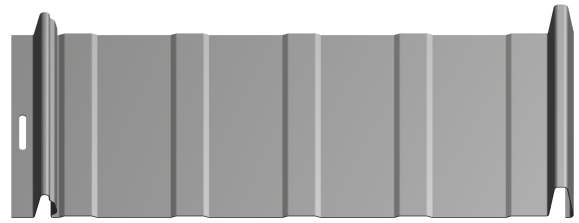




WF-PROLOK 12 ROOF



All dimensions are in millimeters



SECTION PROPERTIES (PER METRE OF WIDTH)

METRIC	Base Steel Thickness (mm)	Mass Z275 (kg/m ²)	Yield Stress (MPa)	Sec. Modulus		Deflection Moment of Inertia (x10 ⁶ mm ⁴)	Specified Web Crippling Data			
				Midspan	Support		P _{e1} End (kN)	P _{e2} End (kN)	P _{i1} Interior (kN)	P _{i2} Interior (kN)
				(x10 ³ mm ³)	(x10 ³ mm ³)					
	0.457	5.14	230	1.05	0.801	0.0198	1.03	0.258	1.97	0.336
	0.610	6.76	230	1.38	1.12	0.0262	1.91	0.476	3.63	0.617

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

MAXIMUM UNIFORMLY DISTRIBUTED SPECIFIED LOADS (kPa)

SPAN LENGTH (mm)		1-SPAN				2-SPAN				3-SPAN			
		BASE STEEL THICKNESS (mm)				BASE STEEL THICKNESS (mm)				BASE STEEL THICKNESS (mm)			
		0.457	0.610			0.457	0.610			0.457	0.610		
300	S	12.8	16.9			9.83	13.7			12.3	17.1		
	D	S	S			S	S			S	S		
400	S	7.21	9.5			5.53	7.70			6.91	9.63		
	D	S	S			S	S			S	S		
500	S	4.61	6.08			3.54	4.93			4.42	6.16		
	D	S	S			S	S			S	S		
600	S	3.20	4.22			2.46	3.42			3.07	4.28		
	D	S	S			S	S			S	S		
700	S	2.35	3.10			1.81	2.51			2.26	3.14		
	D	S	S			S	S			S	S		
800	S	1.80	2.37			1.38	1.93			1.73	2.41		
	D	S	S			S	S			S	S		
900	S	1.42	1.88			1.09	1.52			1.37	1.90		
	D	S	S			S	S			S	S		
1000	S	1.15	1.52			0.88	1.23			1.11	1.54		
	D	S	S			S	S			S	S		
1100	S	0.95	1.26			0.73	1.02			0.91	1.27		
	D	S	S			S	S			S	S		
1200	S	0.80	1.05			0.61	0.86			0.77	1.07		
	D	S	S			S	S			S	S		

- Notes:**
- 1 Based on ASTM A 653M structural steel. Coating can also be AZM150.
 - 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.

