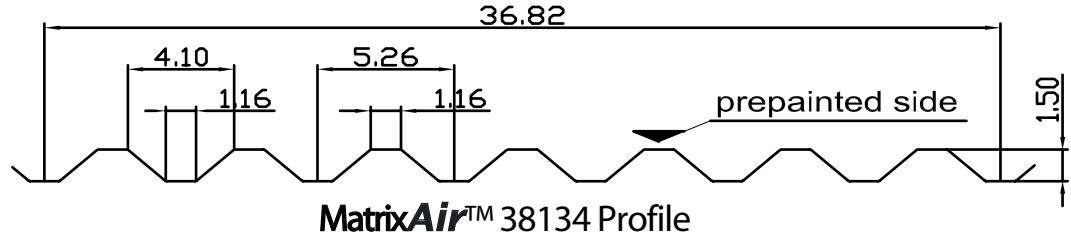




Cladding Specifications for MatrixAir™ Solar Air Heating Collector - imperial **38134**

38134 is available in base steel nominal thicknesses of 0.018" and 0.024".



Physical Properties (per foot width) In accordance with CSA Specification S136-01										
Gauge	Base steel nominal thickness (inches)	Nominal thickness with Z275 coating (inches)	Mass with Z275 coating (lb/ft ²)	Section Modulus		Moment of inertia midspan (inches ⁴)	Factored Resistance			
				Midspan (inches ³)	Support (inches ³)		Moment		Reaction	
							Midspan (lb-in)	Support (lb-in)	Exterior (pounds)	Interior (pounds)
26 gauge	0.018	0.02	1.0506	0.1012	0.1012	0.0834	3005.2	3005.2	233	343
24 gauge	0.024	0.026	1.36	0.1442	0.1443	0.1114	4281.3	4286.8	404	603

Load Table Maximum Specified Uniformly Distributed Load in lb/ft ² (psf)										
Support spacing		1-Span		2-Span		3-Span				
		Base steel nominal thickness (inches)		Base steel nominal thickness (inches)		Base steel nominal thickness (inches)				
		26ga 0.018	24ga 0.024	26ga 0.018	24ga 0.024	26ga 0.018	24ga 0.024			
4' - 0"	B	78*	119	46*	80*	52*	91*			
	D	R	R	R	R	R	R			
4' - 6"	B	66	94	41*	71*	46*	81*			
	D	R	R	R	R	R	R			
5' - 0"	B	53	76	37*	64*	42*	73*			
	D	R	R	R	R	R	R			
5' - 6"	B	44	63	33*	58*	38*	66*			
	D	44	59	R	R	R	R			
6' - 0"	B	37	53	30*	53	35*	61*			
	D	34	45	R	R	R	R			
6' - 6"	B	32	45	28*	45	32*	56*			
	D	27	35	R	R	R	R			
7' - 0"	B	27	39	26*	39	30*	49			
	D	21	28	R	R	R	R			
7' - 6"	B	24	34	24	34	28*	42			
	D	17	23	R	R	R	R			
8' - 0"	B	21	30	21	30	26*	37			
	D	14	19	R	R	R	36			
8' - 6"	B	-	26	-	26	23	33			
	D	-	16	-	R	22	30			
9' - 0"	B	-	23	-	24	21	29			
	D	-	13	-	R	19	25			

NOTES - LIMIT STATES DESIGN:

- Properties and loads are based on Grade 33 Steel with a minimum yield stress of 33,000 psi, and a maximum stress under factored loads of 29,700 psi.
- Row B indicates the load capacity based on strength. Strength capacity should be checked against [Specified Live Load] + [0.833 x Specified Dead Load].
- Row D indicates the load capacity based on deflection of 1/180th span. For allowable deflection of 1/90th span, values in Row D can be doubled, but must not exceed the value in Row B. The symbol "R" indicates the load for strength governs. Deflection capacity should be checked against Specified Load(s).
- An * indicates capacity has been reduced to account for web crippling.