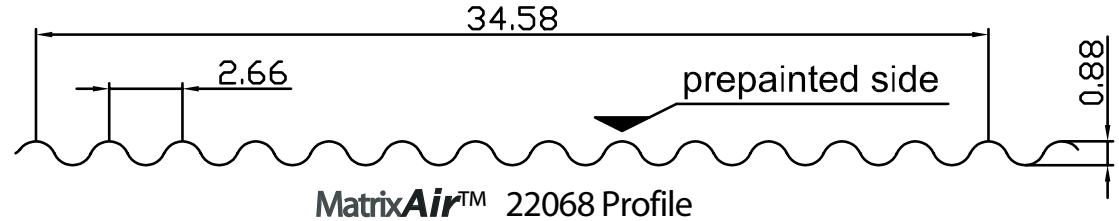




Cladding Specifications for MatrixAir™ Solar Air Heating Collector - imperial 22068

22068 is available in base steel nominal thicknesses of 0.018" (26ga) and 0.024" (24ga).



MatrixAir™ 22068 Profile

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	1.12	0.0506	0.0506	0.0217	1502.6	1502.6	-	-
24 gauge	0.024	0.026	1.448	0.0671	0.0671	0.0289	1994.2	1994.2	-	-

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		42	55	42	55	52	69		
	D		30	40	R	R	R	R		
4' - 6"	B		33	44	33	44	41	55		
	D		21	28	R	R	39	52		
5' - 0"	B		27	35	27	35	33	44		
	D		15	20	R	R	29	38		
5' - 6"	B		22	29	22	29	28	37		
	D		11	15	R	R	22	29		
6' - 0"	B		-	25	-	25	23	31		
	D		-	12	-	R	17	22		
6' - 6"	B		-	21	-	21	-	26		
	D		-	9	-	R	-	17		
7' - 0"	B		-	-	-	-	-	23		
	D		-	-	-	-	-	14		
7' - 6"	B		-	-	-	-	-	-		
	D		-	-	-	-	-	-		
8' - 0"	B		-	-	-	-	-	-		
	D		-	-	-	-	-	-		
8' - 6"	B		-	-	-	-	-	-		
	D		-	-	-	-	-	-		
9' - 0"	B		-	-	-	-	-	-		
	D		-	-	-	-	-	-		

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.