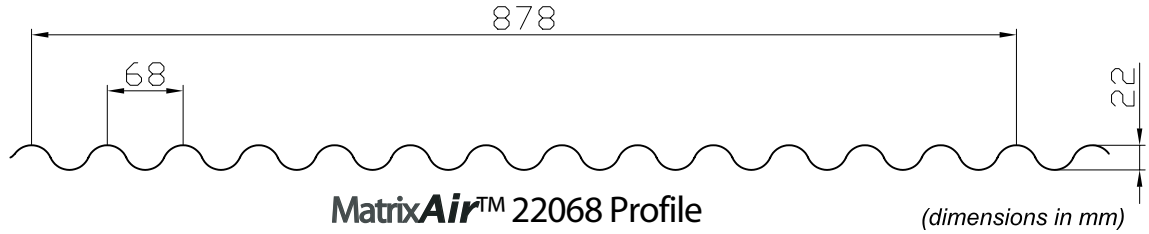




Cladding Specifications for MatrixAir™ Solar Air Heating Collector - metric 22068

22068 is available in base steel nominal thicknesses of 0.046mm (26ga) and 0.061mm (24ga).



Physical Properties (per metre width) In accordance with CSA Specification S136-01										
Gauge	Base steel nominal thickness (mm)	Nominal thickness with Z275 coating (mm)	Mass with Z275 coating (kg/m ²)	Section Modulus		Moment of inertia midspan (mm ⁴ x10 ³)	Factored Resistance			
				Midspan (mm ³ x10 ³)	Support (mm ³ x10 ³)		Moment		Reaction	
							Midspan (Nm)	Support (Nm)	Exterior (kN)	Interior (kN)
26 gauge	0.46	0.5	5.47	2.72	2.72	29.6	563	563	-	-
24 gauge	0.61	0.65	7.07	3.61	3.61	39.5	747.3	747.3	-	-

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.

Load Table Maximum Specified Uniformly Distributed Load in kN/m ² (kPa)										
Support spacing		1-Span		2-Span		3-Span				
		Base steel nominal thickness (mm)		Base steel nominal thickness (mm)		Base steel nominal thickness (mm)				
		26ga	24ga	26ga	24ga	26ga	24ga			
		0.46	0.61	0.46	0.61	0.46	0.61			
1200	B	2.1	2.8	2.1	2.8	2.6	3.5			
	D	1.1	1.5	R	R	2.1	2.8			
1300	B	1.8	2.4	1.8	2.4	2.2	2.9			
	D	0.9	1.2	R	R	1.7	2.2			
1400	B	1.5	2	1.5	2	1.9	2.5			
	D	0.7	0.9	R	R	1.3	1.8			
1500	B	1.3	1.8	1.3	1.8	1.7	2.2			
	D	0.6	0.8	R	R	1.1	1.4			
1600	B	1.2	1.6	1.2	1.6	1.5	1.9			
	D	0.5	0.6	1.1	1.5	0.9	1.2			
1700	B	1	1.4	1	1.4	1.3	1.7			
	D	0.4	0.5	0.9	1.3	0.7	1			
1800	B	-	1.2	0.9	1.2	1.2	1.5			
	D	-	0.4	0.8	1.1	0.6	0.8			
1900	B	-	1.1	0.8	1.1	1	1.4			
	D	-	0.4	0.7	0.9	0.5	0.7			
2000	B	-	-	0.8	1	-	1.2			
	D	-	-	0.6	0.8	-	0.6			
2100	B	-	-	0.7	0.9	-	1.1			
	D	-	-	0.5	0.7	-	0.5			
2200	B	-	-	0.6	0.8	-	1			
	D	-	-	0.4	0.6	-	0.5			