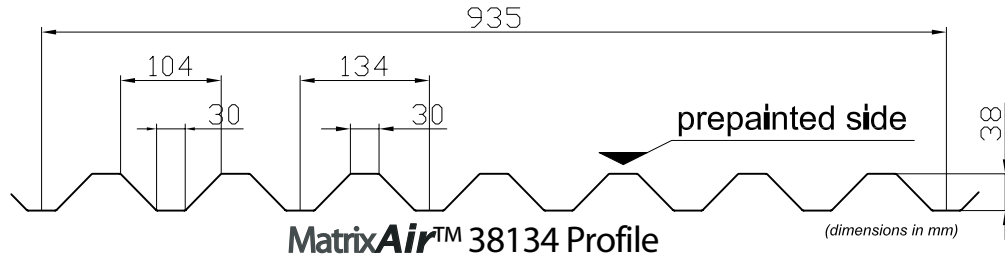




Cladding Specifications for MatrixAir™ Solar Air Heating Collector - metric 38134

38134 is available in base steel nominal thicknesses of 0.46mm (26ga) and 0.61mm (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	5.13	5.44	5.44	113.9	1126.1	1126.1	3.4	5
24 gauge	0.61	0.65	6.64	7.75	7.76	152.1	1604.3	1606.3	5.9	8.8

Load Table Maximum Specified Uniformly Distributed Load in kN/m ² (kPa)											
Support spacing (mm)		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	26ga	24ga		
		0.46	0.61	0.46	0.61	0.46	0.61				
1200	B	3.8	5.9	2.2*	3.9*	2.5*	4.4*				
	D	R	5.7	R	R	R	R				
1400	B	3.1	4.4	1.9*	3.4*	2.2*	3.8*				
	D	2.7	3.6	R	R	R	R				
1600	B	2.3	3.3	1.7*	2.9*	1.9*	3.3*				
	D	1.8	2.4	R	R	R	R				
1800	B	1.9	2.6	1.5*	2.6*	1.7*	3.0*				
	D	1.3	1.7	R	R	R	R				
2000	B	1.5	2.1	1.3*	2.1	1.5*	2.7*				
	D	0.9	1.2	R	R	R	2.3				
2200	B	1.2	1.8	1.2*	1.8	1.4*	2.2				
	D	0.7	0.9	R	R	1.3	1.8				
2400	B	1	1.5	1	1.5	1.3*	1.9				
	D	0.5	0.7	R	R	1	1.4				
2600	B	-	1.3	0.9	1.3	1.1	1.6				
	D	-	0.6	R	R	0.8	1.1				
2800	B	-	1.1	0.8	1.1	-	1.4				
	D	-	0.5	R	1.1	-	0.9				
3000	B	-	-	0.7	1	-	1.2				
	D	-	-	0.7	0.9	-	0.7				
3200	B	-	-	0.6	0.8	-	1				
	D	-	-	0.5	0.7	-	0.6				

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.