

SOLAR THERMAL SYSTEM

FEATURES and BENEFITS

- **High Borosilicate Glass Tube**
Reliable and efficient twin-glass
- **Aluminum Header**
Corrosion resistant header designed to withstand all climates
- **High Efficiency Absorption Coating** is applied using vacuum magnetic control sputtering, which provides a coefficient of at least 92%, with an emission coefficient of approximately 8%
- **Copper Heat Pipes**
Provides rapid heat transfer
- **Easy Installation**
Frame ready for mounting
- **Multiple Applications**
Compatible with any HVAC-R systems that uses refrigerants.
- **Maintenance Free**
No moving parts offers more reliability
- **10-year Warranty**
Excludes accidental, malicious or any severe weather damage

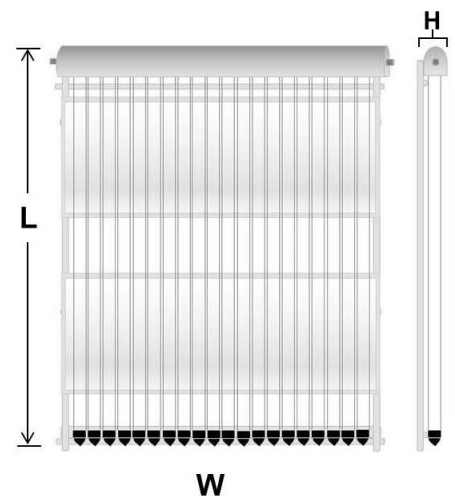


- **Aluminum Alloy Frame**
Lightweight, weather resistant and durable
- **Corrosion resistant copper header**
Designed to withstand all climates
- **Durability**
Able to endure impact of hail up to 25mm in diameter at max velocity

THERMAL VACUUM PIPE COLLECTOR

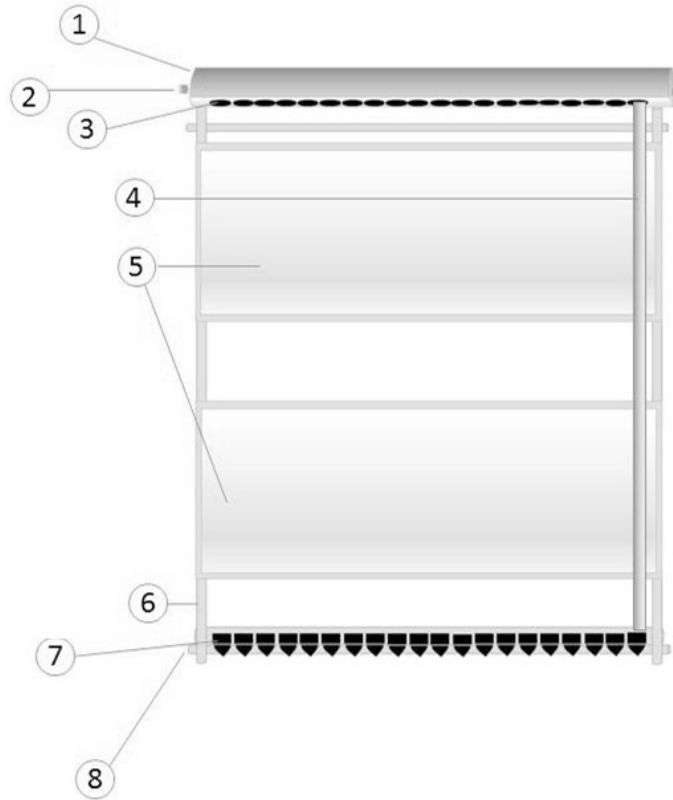
Dimensions

Panel Dimensions			Tube Dimensions		Weight
Height	Width	Length	Length	Diameter	138 lbs.
120 mm	1620 mm	1640 mm	1500 mm	47 mm	61 kg



Parts List

1. Bi-directional Aluminum Header
2. Brass Header Connectors & Fittings
3. Header Tube Insert Rubber Rings
4. High Impact Glass Evacuated Tube
5. Reflective Aluminum panel
Aluminum Box Frame
6. 25 x 25 x 1.5mm C-Channel
7. Evacuated Tube Threaded End Cap
8. Stainless Steel Support Plate 1.5mm Thickness



THERMAL VACUUM PIPE COLLECTOR Components & Specifications

Specific Data	
Total area:	3.80 m ² /40.90 ft ²
Collector depth:	130 mm/5.1"
Number of tubes:	20
Length of the tubes:	1500 mm/59.1"
Volume of refrigerant req:	300g (10.58oz)
Type:	vacuum tube collector w/ heat pipe conception
Material of the cover:	aluminum
Material of the cover tube:	borosilicate glass
Transmission of the cover tube:	86%
Outer diameter of the cover tube:	58 mm/2.28"
Thickness of the cover tube:	1.5 mm/.059"
Outer diameter of the inner tube:	47 mm/1.85"
Thickness of the inner tube:	1.5 mm/.059"

THERMAL VACUUM PIPE COLLECTOR

Absorber	
Material of the absorber:	Glass
Kind/Brand of selective coating:	Graded Al/N/Al on Glass
Absorptive coefficient:	92%
Material of the absorber pipes:	ACR Copper
Layout of the absorber pipes:	Heat pipe
Outer diameter:	9.5 mm ACR
Distance between the pipes:	80 mm/3.15"
Material of the header pipe:	ACR Copper
Diameter of the header pipe connector:	5/8
Function of the absorber:	Segmented contact sheets to the inner glass tube, connected to the heat pipe
Material of the contact sheets:	Aluminum
Thickness of the contact sheets:	0.2 mm/.007"
Insulation and Casing	
Material of the casing:	Aluminum
Sealing material:	Silicon
Limitations	
Maximum pressure:	69 bar / 1000 psi
Maximum service temperature:	149°C / 300°F
Maximum wind load:	SRCC - Miami Dade 140mph
Recommended tilt angle:	20-50° (depending on latitude)

Falkonair are evaluated and certified by SRCC.