Evacuated Tube Solar Collector

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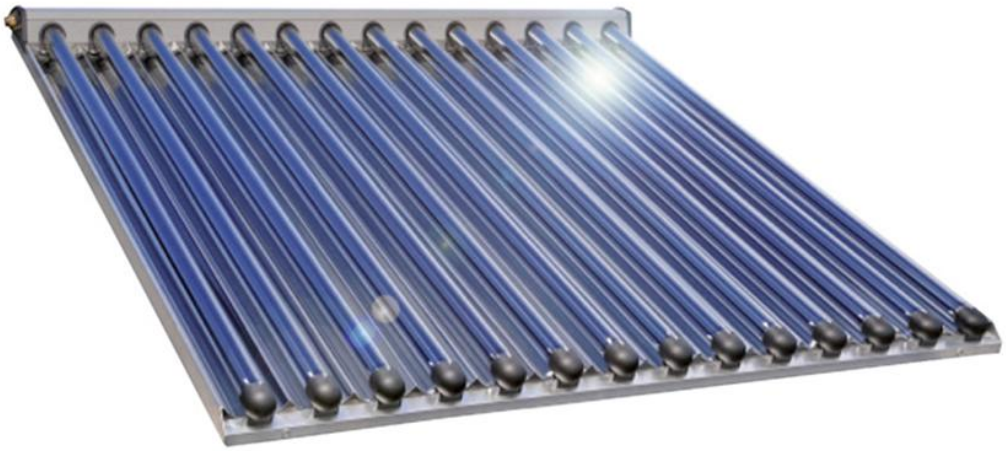
Meibes evacuated tube solar collectors incorporate vacuum technology ensuring the most effective transfer of energy into heat. They provide enhanced performance and greater efficiency which allows them to produce much higher temperatures than flat-plate collectors. They are the best collectors for any residential, commercial or industrial application requiring extremely high temperatures (170°F/75°C and 350°F/175°C).

Each Meibes solar collector is constructed with a highly insulated header and a row of parallel glass solar tubes. Air is removed, or evacuated, from each tube to form a vacuum, which helps eliminate conductive and convective heat loss. Each tube contains absorber tubes that are attached to an aluminum heat conductor sheet. The conductor sheet is covered with a selective coating that absorbs solar energy well and transfers heat to the fluid circulating through the absorber tubes. The 360 degree, tubular design, provides maximum exposure at every sun angle throughout the day allowing the collector to effectively collect sunlight earlier and later in the day. This design characteristic also helps maximize collector performance on cloudy days and overcast conditions.

- **Vacuum technology ensures the most effective and efficient transfer of energy into heat**
- **Capable of producing much higher temperatures than flat-plate collectors**
- **Tubular collector design captures light at multiple angles which maximizes absorption even on cloudy days**
- **Excellent choice for residential, commercial and industrial solar thermal applications**
- **10-Year Warranty**



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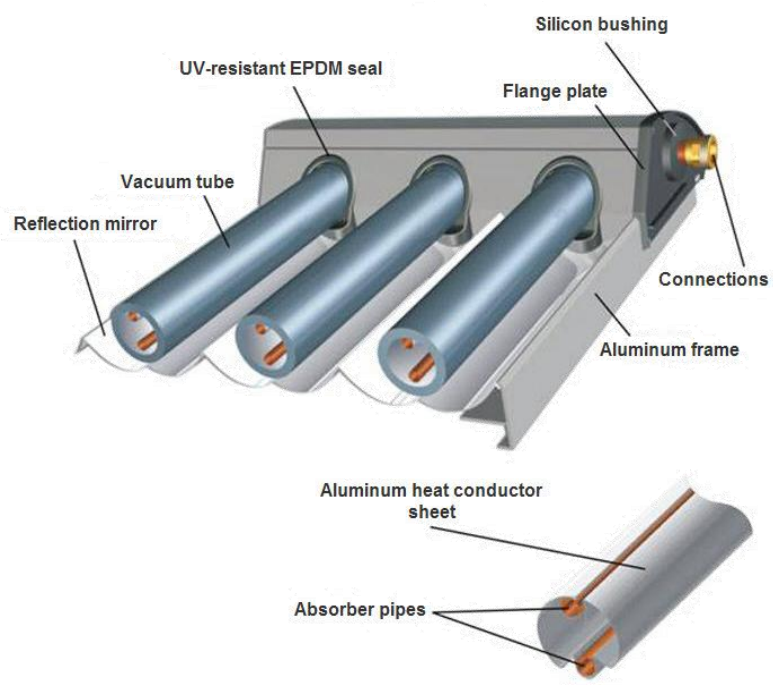
Meibes Evacuated Tube Collector

Model Number: SC-ET-001 / MVK 001

Overall area [ft² (m²)]	27.7 (2.57)	**Absorption [%]**	96
Absorber area [ft² (m²)]	25.4 (2.36)	**Emission [%]**	6
Aperture area [ft² (m²)]	24.0 (2.23)	**Glass cover**	N/A
L x W x H [in (mm)]	61.4 (1560) x 65.8 (1647) x 4.2 (107)	**Transmittance of glass [%]**	N/A
Weight [lb (kg)]	93 (42)	**Vacuum tubes**	Borosilicate glass, highly selective inside coating
Absorber capacity [gal (l)]	0.60 (2.27)	**Reflection mirror**	PVD-coated
Connections	3/4" ISO 228	**Insulation**	Vacuum insulated
Ø manifold [in (mm)]	3/4" (18)	**Max. stagnation temperature**	557°F (292 °C) under test conditions
Ø risers [in (mm)]	5/16" (8)	**Max. operating pressure**	145 psi (10 bar)
Housing	Aluminum	**Proper heat transfer medium**	Polypropylene glycol / water mixture
Back plate	N/A	**Approved installation angle**	min. 15°, max. 75°
Absorber	Rolled aluminum sheet		

Design & Construction



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