

Solar thermal evacuated tubes

Water Heating

Solar Thermal Collectors use sunlight to heat water. Evacuated tubes have been developed particularly for northern climates where outdoor air temperatures are low.

Evacuated tubes consist of a collector tube, which heats up in sunlight and converts solar energy into heat energy which is used to heat a glycol-water antifreeze mixture flowing over elements at the end of each tube. The collector tube is enclosed in an outer glass tube, which maintains a vacuum around the collector tube eliminating heat loss.

A closed loop system is used to circulate the heated fluid through a storage tank coil to heat water and return the cooled fluid back to the collectors.



Specification

Collector

Dimensions:	2290 x 1516 x 134mm
Gross area:	3.472m ²
Aperture area:	1.764m ²
Absorber area:	1.522m ²
Weight empty:	68.2kg
Number of covers:	1
Cover of materials:	Borosilicate glass
Cover thickness:	1.8mm
Number of tubes:	16
Tube length:	2.1m
Tube diameter:	58mm
Absorber diameter:	47mm
Absorber construction:	Evacuated double glass tube
Heat transfer medium:	Water-Glycol
Heat conducting metal sheet::	U-tube Cu
Absorber surface:	AIN/SS-AIN/Cu on glass
Maximum operation temp:	250°C
Maximum operation pressure:	6 bar

Thermal insulation and casing

Thermal insulation thickness:	Average 20mm
Insulation material:	Polyurethane
Sealing material:	Silicon Rubber

Warranty:

2 years product warranty