

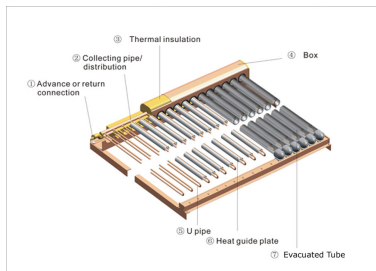


The Suntrap Evacuated U Tube Solar Collector (U series collector)

Suntrap uses the latest Technology Evacuated U Tube Solar Collectors available, manufactured to Australian Standards AS/NZS 2712 and AS 3498. Each Suntrap evacuated U tube solar collector integrates the 16 all-glass evacuated tubes, the 16 U shaped copper heat absorbers, and the 16 aluminum fins into the solar collector frame. The solar collector is located separately from the Solar Hot Water tank and the capacity of this tank is 'sized' to the number of solar collectors installed, and the expected water usage profiles.

Operational principle

The selective coating inside the inner glass of the evacuated U tubes ensures high energy absorption and a low heat radiance loss, which converts solar energy into heat energy. This heat energy is then transferred via the 16 x U shaped copper heat absorbers and the aluminum fins to the solar collector manifold (**There is over 48 meters of U shaped copper heat absorbers in every Suntrap Solar Collector !**). The Solar Hot Water in the collector manifold is re-circulated from the Solar Hot Water outlet to the Solar Hot Water storage tank and back into the inlet side of the solar collector(s). The Solar Controller detects the temperature differences between the solar collectors on the roof and the Solar Hot Water in the storage tank, and controls the solar pump to provide the automation of the solar hot water heating system. The solar collectors operate all the time sun shines. The Suntrap U series collectors operate all the year round, even in cold climates, in combination with an electric or a Gas boost backup. **The Suntrap Evacuated U Tube Solar Collector is the most efficient, reliable and maintenance-free type of evacuated tube solar collector on the market today and does not require a high mounting angle of the solar collector frame (just greater than 5 degrees on a flat roof).**



Advantages

1. Suntrap Pty Ltd use the latest Technology Evacuated **U Tube** Solar collectors, made to AS/NZS 2712 Standards.
2. All Suntrap Solar Collectors use the latest design Evacuated **U Tube** technology where solar hot water is circulated down and up the total length of the evacuated U tube (effective length of the solar heat absorbing copper conductor within the each U tube is over 3 meters and there are 16 of these U tubes in each Suntrap Solar U Tube collector- a total of over **48 meters of copper heat absorbers in every Suntrap Solar Collector**)

These **U Tube** solar collectors offer greater efficiency, are smaller in profile, and are less weight on the roof than other types of evacuated tube.

3. Highly efficient with high performance absorber.
4. Made to withstand high pressure mains water systems. No water directly inside the evacuated tubes; the solar water heater can operate even with a tube(s) breakage.
5. Highly efficient insulation with polyurethane foam.
6. Simple structure, easy to assembly and install.
7. Can be used all year round, even in a cold climate.
8. Can be used together with auxiliary Electric or Gas (Natural Gas or LPG) boost.
9. Automatically controlled.
10. Large-scale solar hot water systems can be installed either with parallel or in-series connections.
11. Suntrap only supply Stainless Steel Solar Hot Water Tanks for long lasting, trouble free operation.
12. The solar controller is mounted on a pair of stainless steel rails for ease of access to all components – plumber friendly. All control components are weatherproof.
13. All Suntrap Solar collectors are easy to mount using a pre-drilled Stainless Steel frame, fitted first and fixed to the roof (no holes through tiles) keeping roof work time to a minimum. The Solar collectors simply bolt to this frame when fixed in position.
14. All Suntrap Solar Hot Water kits are plumber, installer and end user friendly.
15. Suntrap offer 2 purchase models- (1) Purchase kit and install with your nominated plumber, or (2) Purchase kit and if Suntrap has a plumber/installer in your area, then we can provide a Suntrap affiliated plumber/installer for you.
16. Suntrap provide an on-line Installation and Owners Manual (www.suntrap.net.au) containing installation instructions, maintenance information and warranty information, which may be reviewed (and printed) by any plumber/installer/end user to refer to, in conjunction with all Suntrap Solar Hot Water installations.. This manual also contains descriptions of all kit parts supplied with each Suntrap Solar Hot water model.
17. Costs are kept to the minimum as we sell direct from the factory.
18. All quotes include delivery to site.

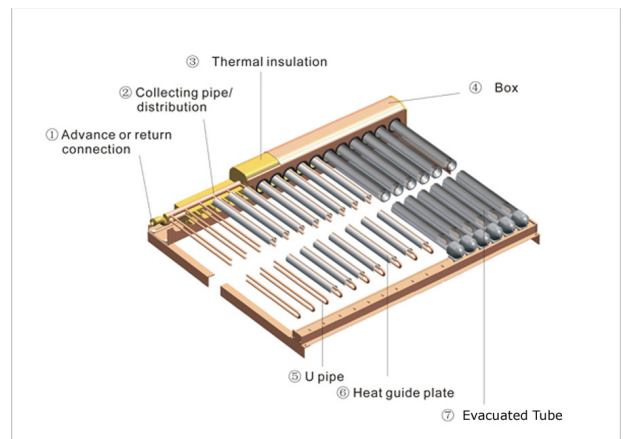
U Series Solar Collector

Specifications

U series solar collector is an all-glass evacuated tubular collector with copper U tubes.

SPECIFICATIONS		
MODELS	U-1500/16	
Collector tubes	SL-I-1500	
Tube (piece)	16	
U Tube	Material	Copper
	Diameter	8 mm
	Thickness	1 mm
Aperture area	1.44 m ²	
Intercept efficiency	0.616	
Heat loss	1.293w(m ² K ¹)	
Net weight	45 KG	
Max. Pressure	1000 KPA	
Inlet/outlet connections	¾"	
Stagnation temp. (with reflector)	220 °C	

The selective coating on the outside of the inner glass tubes ensures high energy absorption and low heat loss, which converts solar energy into heat and transfers this heat to the copper U tubes by the aluminium fins.



Features

- Simple structure and stable operation;
- Utilization all year round even in cold climates;
- Can operate with water pressure up to 600Kpa;
- Can still operate in the event of occasional tube breakages;
- Modular system means easy handling, installation and can be extended to cover larger areas;
- Easy to install on roofs, balconies or facades;
- Can be combined with existing energy source;
- Quasi-tracking all day.

