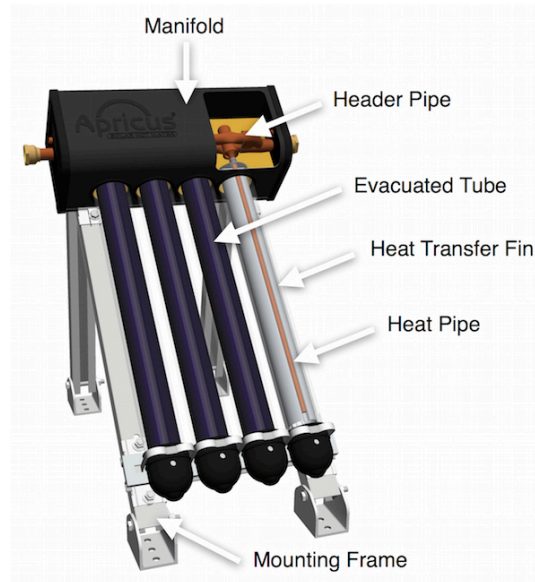


SOLAR THERMAL EVACUATED TUBE PANEL

Construction

The ETC solar collector is comprised of four main parts:



Evacuated Tube (ET)

Absorbs solar energy and converts it to usable heat. A vacuum between the two glass layers insulates against heat loss.

The Heat Transfer Fin helps to transfer heat to the Heat Pipe.

Heat Pipe (HP)

Copper vacuum pipe that transfers the heat from within the ET up to the manifold.

Manifold

Insulated box containing the copper header pipe. The header is a pair of contoured copper pipes with dry connect sockets that the heat pipes plug into.

Mounting Frame

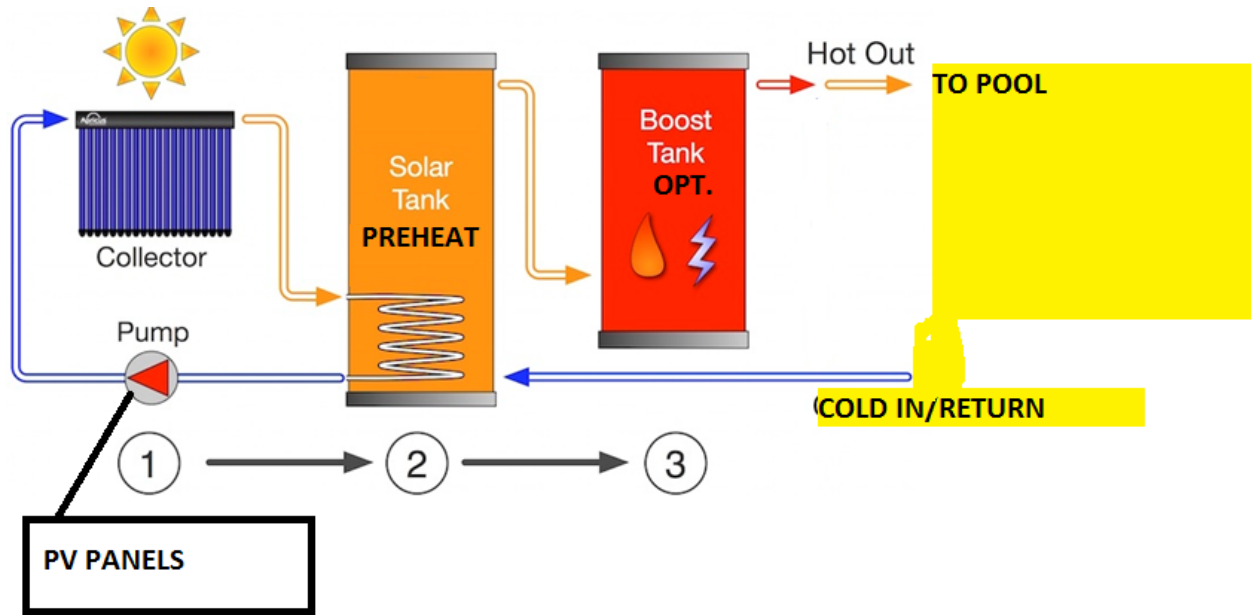
Strong and easy to install with a range of attachment options.

Collector Operation

Step 1: The evacuated tube solar collector converts sunlight into heat. A circulation pump (**powered by dedicated PV panels**) moves liquid through the collector, carrying heat back to the solar storage tank.

Step 2: Gradually throughout the day the water in the solar storage tank is heated up, either directly or via a heat exchanger (as shown).

Step 3: When hot water is used, solar pre-heated water is fed into a traditional water heater which boosts the temperature if not already hot enough. (optional)



SOLAR THERMAL PANELS ON ROOFTOP