

SOLAR-THERMAL IN VICTORIA CRESCENT, MARCH 2010

Last October a suspicious brown stain appeared on our living room ceiling. It didn't take long to work out that the hot water cylinder in the airing cupboard above was leaking. We called the plumber in and he diagnosed the problem - the 20-year-old hot water cylinder was knackered.

It was obviously time to bring forward our plans to have a solar thermal fitted because we would need to replace the cylinder anyway. We are lucky enough to have a large south-southeast-facing sloping roof on our Victorian semi in Upper Parkstone so it has always seemed a prime site for a solar panel or two.

There are two basic types of solar thermal panel: flat panel or evacuated tubes. And there are people who swear by one or the other, it just depends who you speak to. Because our system was being fitted by a friend of a friend we obviously went along with his opinion, which was to have the vacuum tube variety.

I also like the fact that the tubes are universal in design. Because they are held in an aluminium frame with clips if one of them develops a fault it can be snapped out and replaced cheaply and easily. If a flat panel develops a fault you have to replace the whole thing.

The water cylinder for a solar thermal system needs to be bigger than standard and because our airing cupboard is on the narrow side the cylinder is tall and thin. We chose the UK-made Gledhill Sunspeed 2. Capacity 170 litres which measures 1500x400mm. This was fitted in a day at a total cost of £475 parts + £120 labour.



Because of a lack of immediate funds we waited until February before completing the job and getting the solar panel. This is a 20-tube panel with insulated flexible steel tubes leading to a small white expansion tank in the loft. The whole thing was installed in half a day with no mess.



There's a control panel in the airing cupboard that records the temperature at the top of the panel, and at the top and bottom of the cylinder. Whenever the temperature at the top of the panel gets to 6 degrees higher than the water in the bottom of the cylinder the pump switches on, circulating an organic-based heat-transfer fluid.

The panel and its installation cost £2650.

So, does it work? Well it's early days and we haven't had much in the way of sunshine since late February but nevertheless it does heat to 50–60 degrees most days. Obviously it doesn't heat the water in time for early morning showers so we haven't turned off our gas boiler completely and it does mean we need to adjust daily routines – like putting on the washing machine in the late afternoon. In the summer I guess we'll just have the gas on for an hour or so in the morning to top up.



Useful site for choosing suppliers www.yougen.org.

Tip: Make sure your supplier is MCS registered. It may make a difference if/when government pay-back scheme for solar thermal comes in next year.