



## *Reduce your carbon footprint to a fingerprint Renewable Energy - Solar Thermal Panels*

A solar thermal hot water system is one of the simplest technologies you could incorporate into your building, and the simplest way to make a difference to your fuel bills. Solar thermal panels in the right position can provide you with a significant proportion of your annual domestic hot water.

### *Benefits*

- Reduced fuel use.
- Reduced carbon footprint.
- Increased resale value of your property.
- Feel good factor.
- Easy to use.
- Low maintenance.

### *Feel Good Factor*

Solar thermal panels reward you with virtually free hot water for many years, reducing your overall energy costs. Just knowing that from April to September your boiler or heat pump will rarely come on for hot water is a great feeling, and seeing the difference in your heating bills is an added bonus. It doesn't need to be tropically hot, even a sunny day in winter can produce a full tank of lovely, virtually free hot water.



In-roof panels fitted during the build process



Close-up of above.

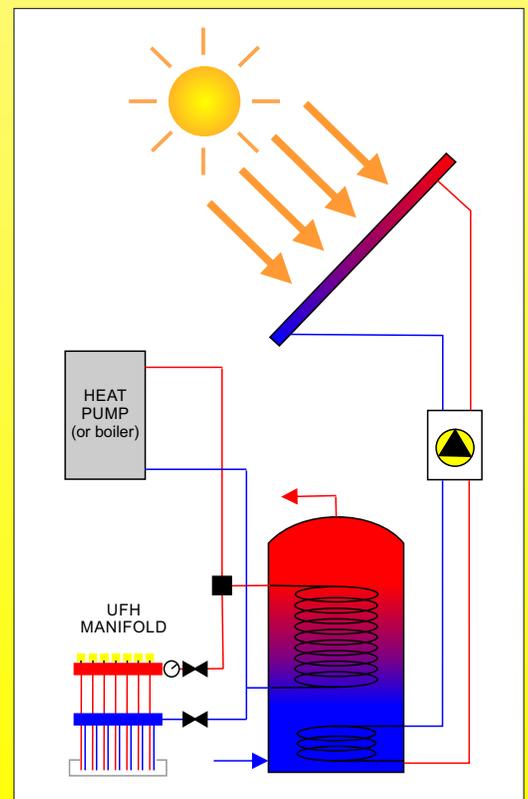


### *How They Work*

Solar radiation heats the flat plate collector. Transfer fluid in the collector is pumped to the coil in the bottom of the DHW cylinder where it heats the water within the cylinder. This is completely automatic.

The pump in the solar control module switches on when the temperature sensor in the solar panels detects an increase in temperature.

The pump will switch off when the water temperature in the cylinder rises to a pre-set level. Between April to September the system can provide around 80 - 90% of your domestic hot water, depending on usage and weather conditions.



## *We won't compromise on quality*



In-roof panels retro-fitted into a Victorian property.



In-roof panels fitted during a new build.

### *Types of Panel*

There are two types of solar thermal panel:

- Flat plate collectors
- Evacuated tubes

When evacuated tube solar thermal panels were developed they were generally more energy efficient than flat plate collectors. However, with the development of high energy heat absorption materials, flat plate collectors are now as energy efficient as evacuated tubes, and some flat plate collectors have a higher efficiency performance than evacuated tubes. Evacuated tubes are less favoured by specifiers and installers because they are more prone to external damage. Flat plate collectors are particularly robust in this regard.



On-roof panels fitted using A-frames.

From an onlooker's perspective, there is also no doubt that flat plate collectors, with their ultra low profile, are much more attractive to look at. Some flat plate collectors are as slim as 70 – 80 mm, and when integrated into tiles and slates, they can easily be mistaken for skylights. Our preference as installers will always be to specify flat plate collectors installed within the roof (integrated).

### *Our Expertise and Experience*

- We are MCS accredited for the installation of solar thermal panels, and ground and air source heat pumps. MCS number: NAP14681
- We specialise in combining heat pumps with underfloor heating.
- We care for every project as if it were our own.
- We use quality products and equipment with excellent guarantees.
- We provide a bespoke design service to suit your project.
- Our installation photos are used in our suppliers' manuals and training literature, and have also been used in various national building magazines.
- We offer advice and support from the planning stage, right through to completion and beyond.
- We provide an unrivalled after sales service.

*Thank you for considering  
our company.*

*Simon & Pauline Currie.*



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