



Solar Thermal - Factsheet

What Is It?

- Solar thermal is a technology which provides hot water heated by the sun through solar panels or collectors.
- There are two main types: Evacuated tubes and Flat Panels

How do they work?

- The sun is collected on the panels or tubes and heats up a fluid which passes through pipes in the panels. This fluid is pumped around pipes which connect the panels to a water cylinder and these heated pipes heat up your water in the cylinder

How much does it cost?

- Solar thermal can cost from £3,500 to £5,000 depending on your situation.

What does Solar thermal give me for my money?

- It provides you with hot water for approximately 70-80% of the year (the restriction is because of the reduced amount of daylight hours in the winter)
- It does not supply your heating system
- Solar systems work in our climate, they are designed to work with daylight

How do I know if my house is suitable?

- The best locations are south facing surfaces (roofs usually) which have a 45degree tilt towards the sun. It is possible to site panels on east/west locations, but the cost is more as we have to catch sun throughout the whole day
- It is preferable to have your site on the rear or sides of a building and not the public facing side as this avoids many planning issues. Listed buildings have stricter rules and it is essential you contact your local authority

What systems can work with solar thermal?

- Most conventional systems can connect to solar thermal with the use of a new cylinder allowing an extra coil to heat your water.
- It is possible to connect to Combi boilers and Rayburn/Aga, but there are important practical considerations to be taken into account

When Is a good time to invest in solar?

- Any time of the year and if you want to save money then preferably when you plan to replace your existing boiler. If you are renovating your house the same savings can apply.



What Products do Freesource use?

- We regularly use Kloben, Thermomax, Schuco and Imagination brands, but are happy to use others as well. All of our products are registered with the Low Carbon Buildings grant scheme

What do I get for my investment?

- Freesource will always take time to discuss your needs and plans before specifying a product. Once you are happy to proceed Freesource will send a fully qualified installer to survey your property and specify.
- All solar thermal products will recommend a new water cylinder – this is so that practically you can connect the system to your existing boiler. It is not advisable to use an existing cylinder unless you have purchased it with potential solar use in mind.
- All Freesource quotes include product costs and installation so you know the total cost of the product. Where VAT applies this will be at a reduced rate of 5%

Grants

- There is a grant of £400 available to customers who apply for the Low Carbon Buildings fund, details can be found at <http://www.lowcarbonbuildings.org.uk/home/>. Freesource will help you fill in forms for this.
- No work can be undertaken for grant aided schemes until permission has been given by the grant authority. Grant payments will be paid direct to the customer once the work has been completed.

Do I get any warranties?

- Freesource commits to a minimum of a years workmanship guarantee on all projects
- All products used by Freesource have warranties which range from 2-10 years depending on the brand.

Do I need planning permission?

- You should contact your local authority and notify them of your intentions as early as possible. Not every site requires permission but Freesource recommends you check with your local council. Councils requiring permission to be given often like to see photographs of your site and your surrounding area as well as your location on the map. They will often request details of the product dimensions and any other information to support your reasons for this investment.

How often should I maintain my system

- Most systems have little or no problems in their lifetime, we would recommend you get your pressure checked at least every 1-2 years. No cleaning is required, but please ensure your system is out of reach of human hands as they can get very hot.
- Cleaning is done by the elements and aided by the 45 degree angle.
- Most systems have a high heat tolerance and should not overheat, or they will have a system which acts as a failsafe to prevent this. Fresh water systems should not freeze either, as they are often filled with an agent to prevent this as well.