

Sunlight can easily be used to heat domestic hot water and in some cases also be used to heat your home. The collector absorbs heat from the sun. Fluid (usually anti-freeze), passing through the panel/tubes is heated and then fed (usually by a pump) to a hot water cylinder.

Is your home suitable?

Solar thermal panels are installed preferably on a south facing, un-shaded area of a property's roof with a pitch or slope of around 35 degrees. They can also be installed on out buildings or placed on the ground, a ground mounted frame or on a south facing wall.

Technology types

Panels are available in two different types, flat plate panels and evacuated glass tube panels.



Annually solar thermal panels can provide up to 60% of your domestic hot water needs depending on your consumption.

Both work equally as well, though flat plate panels may require a slightly larger surface area to achieve the same results. If the panels are to be attached to a roof, make sure that the structure is able to support the additional weight.

These systems require a hot water storage cylinder to be present and therefore cannot be installed if you only use a combination boiler providing instantaneous hot water. You will most likely need to replace your hot water storage cylinder with one which is larger and has the extra coil/heat exchanger at its base.

Planning permission

This technology currently falls into the permitted development aspect of the planning regulations, which means that provided the top surface of the panel(s) is no more than 200mm away from the surface of the roof it will not need planning permission, although this



can be overridden by local planning regulations if you live in a listed building, your property is in an area of outstanding natural beauty or a conservation area/national park.

Savings and Costs

Installing this kind of system typically costs between £3,500 and £5,500. Installers should carry the Micro Generation Certification Scheme accreditation; they may also be members of the Renewable Energy Association.

The temperature of the water heated by these panels is dependent on the levels of sunlight and will therefore vary with the seasons. On sunny winter days it is still possible for the panels to provide some heat gain.

The amount of heated water produced is dependent on the levels of sunlight and will vary and potentially be seasonal with more sunshine available during the longer days of the summer months than during the shorter winter days.

From autumn 2012, the domestic element of the government's Renewable Heat Incentive (RHI) scheme will provide financial incentives for the installation of some heat generating renewable energy technologies. Householders installing an eligible technology after 15th July 2009 should be eligible for the RHI tariff once it has been introduced.

RENEWABLE HEAT INCENTIVE (RHI)

You may be able to receive payments for the heat you generate through the government's proposed Renewable Heat Incentive.

Savings on annual fuel bills will vary depending on the fuel type replaced.

Cornwall's Independent Energy Experts

Our services to help householders in Cornwall and Devon enjoy warmer, energy efficient homes include:

- › Insulation and heating solutions
- › Energy efficiency advice and surveys
- › Planning for renewables services
- › Condensation and mould services
- › Help to understand and reduce energy bills

In certain circumstances we can access funding for services - call us to discuss your needs.



For advice
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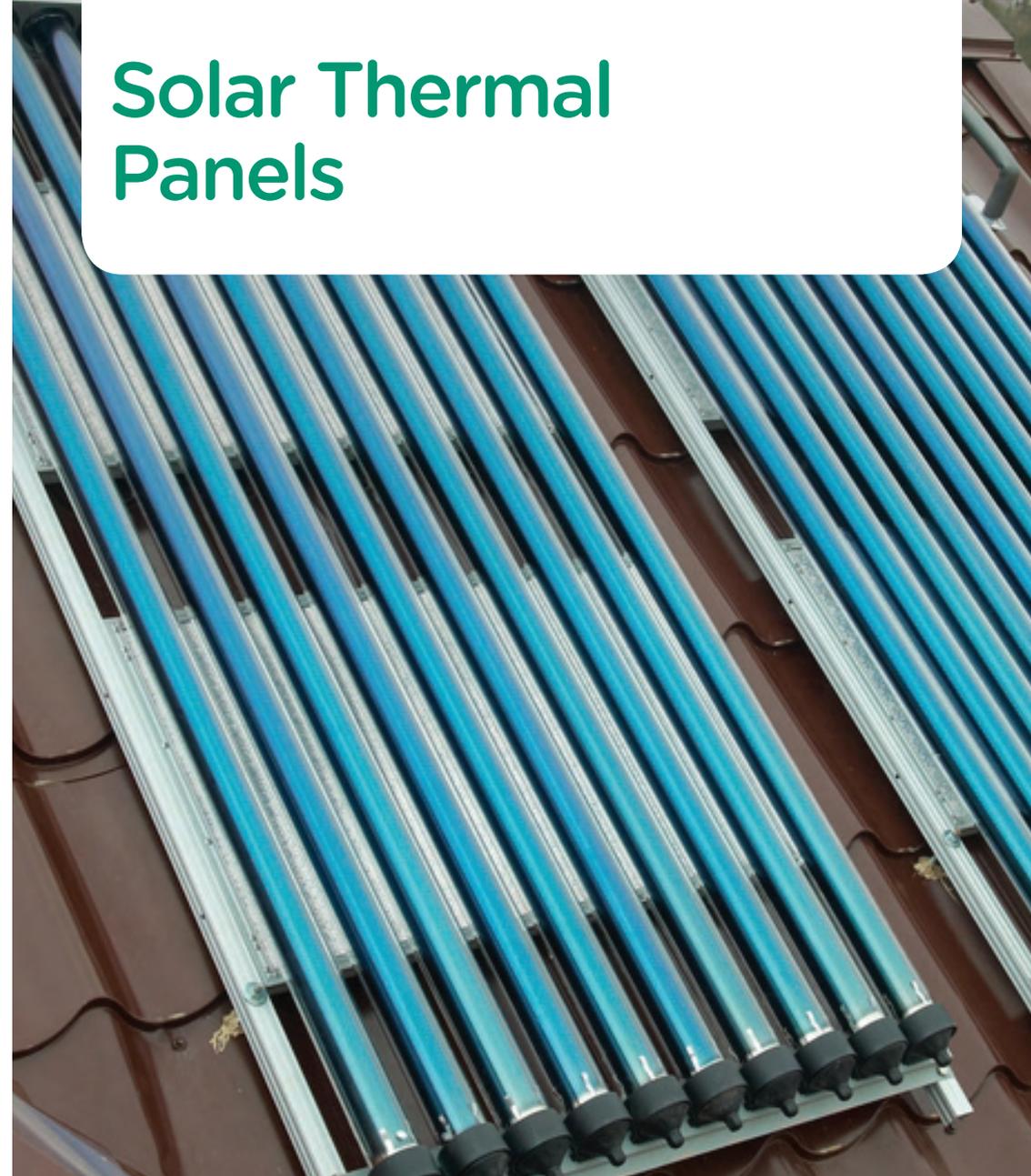
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A Simple Guide
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Solar Thermal Panels



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