Thermomax - Designed and Manufactured in Ireland for European Weather Conditions.

Thermomax products are manufactured and designed in Ireland by Kingspan, a leader in energy efficient products. Kingspan supports us via a full service package, including bespoke design, technical advice, training and sales support. The quality of their product is paramount to Kingspan's success. This differentiates them from the influx of inferior products being imported from the Far East.

Thermomax - the original and still the best

The Thermomax brand is the original and still the best vacuum tube collector in the world. Several million tubes are now installed worldwide.

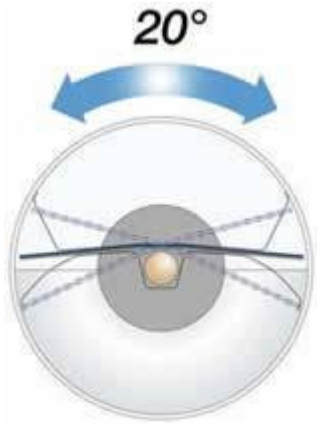
Thermomax products were the first to receive the European quality mark for solar collectors - The Solar Keymark.

Thermomax collectors are the premium product in the market, designed specifically for a Northern European climate. They provide a superior performance whatever the weather.

Our Partners have been trained and accredited by Thermomax; we are therefore able to offer a 10 year warranty on Thermomax kits.

Where on my house do the panels need to go?

Can be installed on sloping roofs, flat roofs or facades.



Individual tubes can be angled up to 20° to achieve best performance for building orientation. This makes the system flexible and adaptable to many different buildings.

Solar Thermal Vacuum Tube Systems

Solar thermal technology transforms direct and diffuse solar radiation into useful heat using a solar collector.

Each solar collector consists of a highly insulated manifold and a row of solar tubes. The vacuum inside each tube provides perfect insulation and therefore protects the system from outside influences such as cold and windy weather or high humidity. The vacuum technology ensures the most effective transfer of energy into heat, giving extra performance in comparison to traditional flat plate collectors and providing heat not only on warm, sunny days, but also in cooler, windy or humid conditions.

Easy Installation

The unique ‘plug and play’ design of Thermomax solar collectors makes installation quick and easy. There is no need for heavy lifting equipment, as tubes can be carried onto the roof individually. Usually facing south, the collector is fixed to the roof by easy-fit roof brackets, which are simply fixed to the rafter.

A Positive Environmental Impact

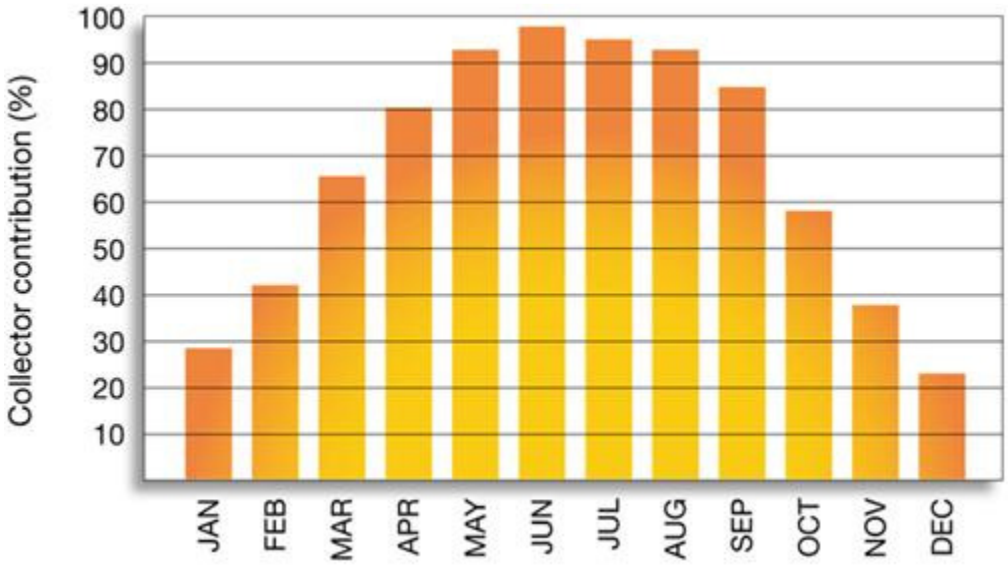
Burning fossil fuels produces vast quantities of carbon dioxide, a major contributor to global warming. The average household with a Thermomax system installed can expect to generate approximately 2,256 kWh/year with zero emissions.

Performance and Savings

- Thermomax products have been designed specifically for Northern European climates
- Supplies up to 70% of your annual hot water needs - reducing dependence on increasingly expensive fossil fuels
- Works from dawn until dusk and throughout the year
- Provides heat even in cold, windy or humid conditions
- Rapid conductivity and transfer of energy into heat
- 30% more effective than flat plate collectors
- Average 25-year lifespan

Contribution Table :

The table below shows the typical annual solar energy contribution in London.



Thermomax Collectors are effective for both Domestic and Commercial applications

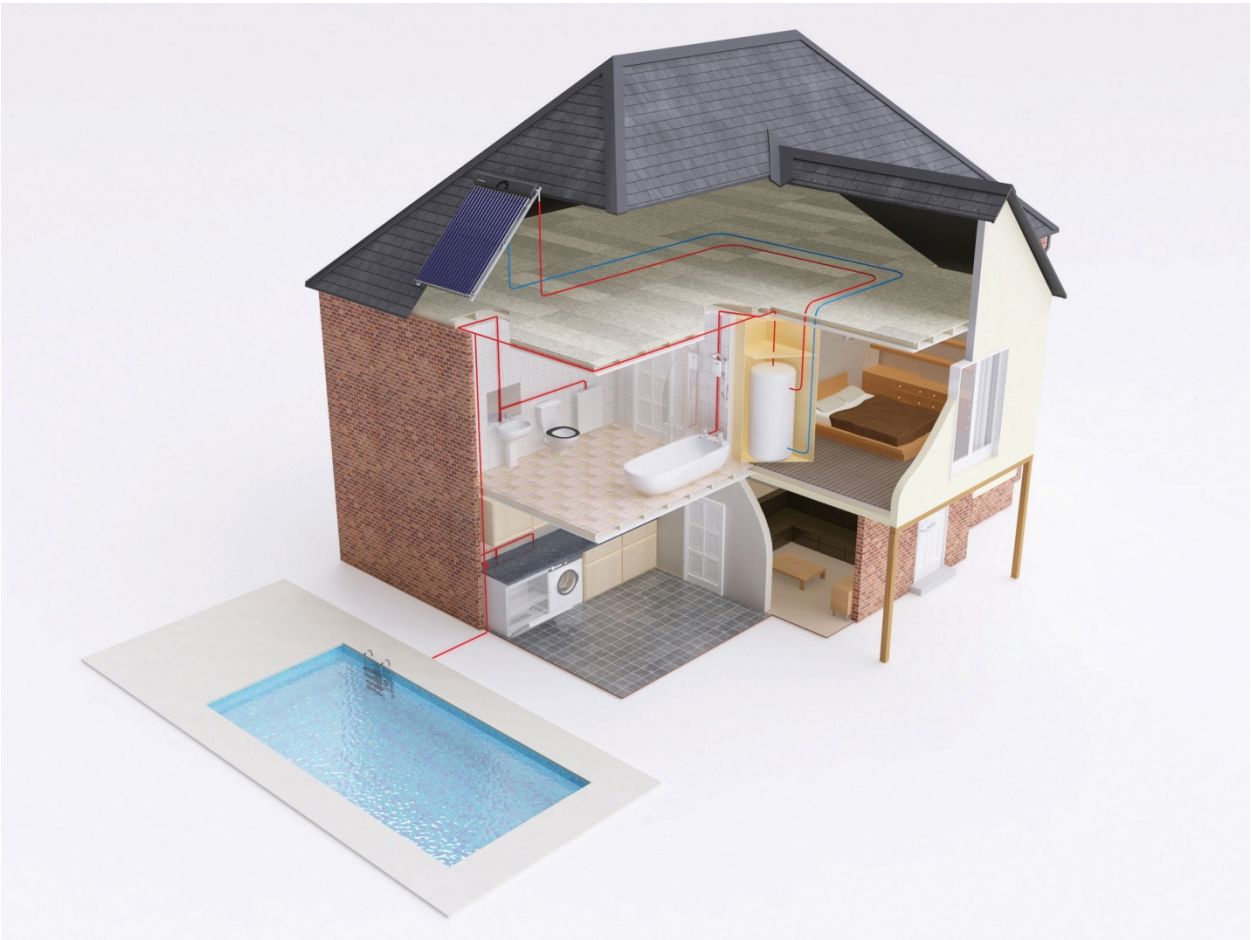
In addition to domestic hot water, the superior performance of a Thermomax vacuum tube collector can also provide central heating support for standard or under floor heating, specialised industrial hot water heating for high temperature applications and solar cooling.

Domestic Installations

These range from typical, single module systems for domestic hot water to larger installations and systems designed to fit building constraints.

Commercial Installations

These range from small-scale water heating, farming applications, to large applications for solar cooling.



You will need

A cylinder

A twin coil hot water storage tank enables energy input from the central heating system to the top half of the tank and energy input from solar system to the bottom half of the tank. Choose your cylinder according to whether your system is pressurised or vented.

Stainless Steel - For use in a pressurised system. Copper - For use in an open vented system

Choose the correct size

This is dependent on your household's hot water demand, which is estimated at 50 litres per adult / per day. Cylinder storage size is calculated at twice the demand. Therefore, we would recommend a 200 litre cylinder for a one to two adult household and a 300 litre cylinder for three to five adults.

Solar Collectors

Choose the collector size
It is important that the solar system is correctly sized in relation to the number of occupants to maximise efficiency.
There are 2 basic collector sizes for domestic systems:

- 2m2 collector for 1-2 adults
- 3m2 collector for 3-5 adults

These sizes are based on ideal orientation. Please contact us for further advice on sizing.

Choose where on your roof

Before you choose your collector, you need to decide where it will be positioned on your house. Between the best and worst orientation, annual energy contribution can be nearly halved. To get the best efficiency, the collector should be installed, facing due south at an angle of 30-40°.

Frequently Asked Questions (FAQs)

Q: Does Solar only work when the sun is shining?

A: Solar works all year round - and even in Winter it will help to give you hot water, because vacuum tubes absorb energy efficiently in all different weathers conditions and all year round.

Q: Where are the panels fitted?

A: Ideally to a south facing roof or slight deviations of about 15 - 30° from that. The inclination / pitch of the collector is equal to the geographical latitude. So if you live at 45° latitude north the ideal pitch is about 45°. Once again slight deviations are not a problem and will only slightly effect the solar yield.

Q: What are the savings?

A: Savings of up to 50 - 70% annually on the heating cost for your hot water and/or heating. Once you have the panel installed that amount of energy is free for you. The main percentage of your water heating cost is done away through the use of the solar panel. Over time, your savings will increase as the price of oil / gas / electricity and other fossil fuels will increase in the future.

Solar also reduces the carbon dioxide (CO_2) emissions helping to protect the environment from being polluted. CO_2 is one of the largest single contributors towards global warming.

Q: Do I need planning permission?

A: Normally only if the building is in a conservation area / listed building or under construction - but you should check with your local planning office. Our panels are environmentally friendly and aesthetically pleasing, in roof or on roof mounted.

Q: We have a large building - is there a suitable system to use solar thermal in a commercial setting?

A: The collectors can be integrated with your existing system to provide hot water throughout the building for toilets / showers / canteens etc in fact anywhere large quantities of free hot water can be used i.e. Hospitals / Leisure Centres and all other commercial applications.

Q: What maintenance is required?

A: No collector maintenance is required. The glass tubes are round and perfectly smooth; any dirt or dust is carried away by the wind and/or rain. There are no moving parts to wear out. All components are made from high-grade stainless steel, aluminium, copper or non-corrosive materials.

Q: What does installation involve?

A: Thermomax collectors are light and modular and can usually be installed by a qualified professional in 1-2 days. They are supplied with an aluminium frame and, being lightweight, they will attach easily to your existing structure. The solar tubes allow air to circulate around them and will not trap moisture or debris.

Q: Is it possible to retain heat gained?

A: The heat can be stored in different ways - normally it is stored in a twin coil solar cylinder for domestic hot water. It can also be used for solar space heating or to heat a swimming pool. It also possible to combine the different applications.

Q: Do I need to take any precautions when going on holiday or leaving the system unattended for long periods?

A: A well-designed and sized solar system should provide you with the right amount of hot water. Even when going on a holiday the system will still work and feed the energy into the cylinder. There the losses will at some stage level out with the energy provided. This will just lead to a slightly higher cylinder temperature.

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What does it cost to install Solar Hot Water?

Roughly, it is £1,200 per person to install solar hot water.

It is essential that they have south facing roof.

The tubes are guaranteed for 10 years, but expected to last over 20.

That means the installation costs around 16 pence per person per day (16p is not much today, it'll be worth much less in 2030!)

£1,200 / (20 x 365)

However, once installed, the hot water is essentially free.

Energy prices are constantly rising, and at the end of 15 years, the tubes will still be working, will have a value that rises with the price of the house - and the owner will have paid 2010/11 prices

How can you get further information or advice. Call Kenny on 01387 73066 or email kennyATsolwayrecycling.co.uk. Alternatively request a call back from any of the Solway Renewable Energy Team by filling in the Contact Solway Form available at http://www.solwayrecycling.co.uk/contact-solway-recycling.