

Offer long-term value to your customers

The coalition government's flagship Green Deal policy and setting of UK carbon emission reduction targets has put energy efficiency in homes firmly on the national agenda. The heating and hot water industry is at the forefront of the focus on sustainability and **Mark Foster**, chief executive of cylinder specialist Gledhill Building Products, explains how the installation of multi-fuel thermal store systems can add long-term value for householders and why they offer particular benefits for an alternative energy installation

The increasing interest in efficiency is evident to everyone in our industry – as manufacturers respond with product innovation, installers must also keep pace with market changes.

Rising awareness among end-users means they are increasingly keen to use alternative heat solutions and harness renewable energy.

It is important that the right advice is given to householders looking to maximise the efficiency of heating and hot water systems and that installers understand the benefits and installation processes of thermal stores which meet these needs.

The principles of a thermal store are different to a conventional open-vented or unvented cylinder.

The water in a thermal store remains constantly hot, heated by one or many sources of energy.

This energy is used to instantaneously heat mains cold water as it passes through a special high-efficiency heat exchanger in the store before being delivered to the taps as mains pressure hot water.

This design and method of operation gives a number of advantages.

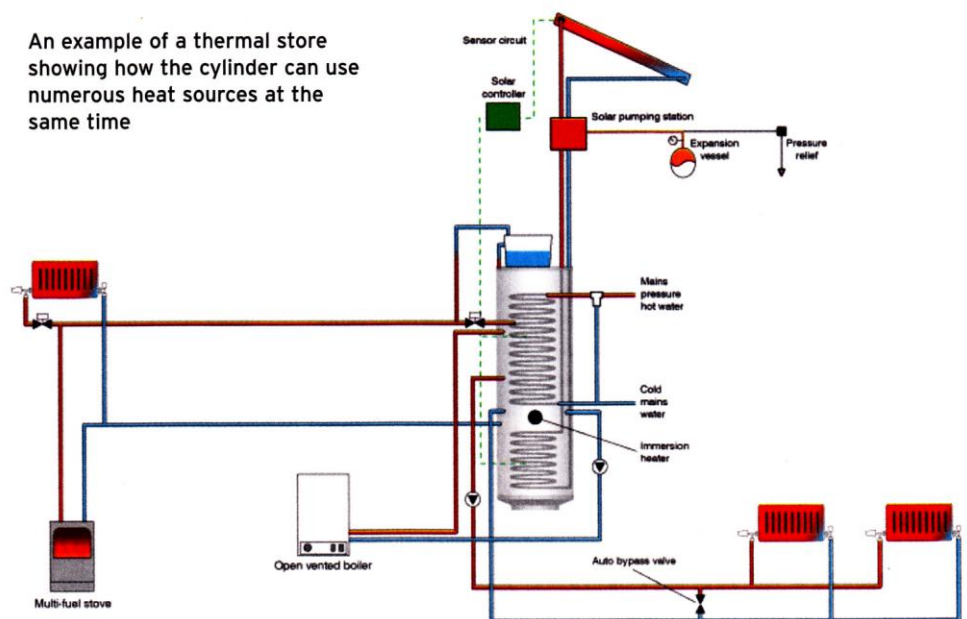
Open-vented thermal stores are able to use heat from a variety of different sources at the same time and offer a solution to the lack of energy security from traditional energy sources.

Additional input can be taken, when available, from a wide range of devices including solar panels, solid fuel wood-burning stoves, ground or air source heat pumps and electricity from renewable or low-carbon sources, and harnessed for later conversion into both hot water and heating.

This is not easily possible with other systems where alternative energy sources usually only contribute to the hot water and not the heating in the property.

Thermal stores are particularly suitable for use with wood-burning, solid fuel stoves or other 'uncontrolled' heat sources, as the cylinder is open vented and so

An example of a thermal store showing how the cylinder can use numerous heat sources at the same time



does not require complicated control systems.

Because they are open-vented, thermal stores do not require temperature and pressure relief valve discharge pipework and no annual safety inspection is needed.

The thermal store acts as the neutral point of the system, so there is no requirement for a neutraliser.

A thermal store fitted with all the required tappings offers ease of installation for the plumber.

It also means that installers can offer 'solar or wood-burner ready' options to householders

who may want to add additional alternative energies in the future as an upgrade to their system.

While the principles and benefits of a thermal store are straightforward to understand, creating a functioning system requires expertise.

To provide guidance to the industry, the Hot Water Association (HWA) has invested significant time and effort to develop the 'Performance Specification for Thermal Stores', which sets out the characteristics necessary for an effective system to be constructed. Installers should check that any

product meets this standard which is named in Building Regulations.

The document can be downloaded at the HWA website: www.hotwater.org.uk.

The need to lower carbon emissions will become more pressing as the government continues to encourage as many people as possible to make homes and businesses more efficient.

With the right knowledge and expertise, the hot water industry is well-equipped to respond to this gathering momentum with solutions to help the UK reach its sustainability goals.

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