

The ZEDfabric Thermal Store by DPS for use with ZEDfabric Solar thermal collector

ZEDfabric in collaboration with Dedicated Pressure Systems (DPS) have developed a new concept in domestic hot water. To do this we went back to basics and asked what people want out of a hot water system. The answer was obvious - hot water at a useful pressure, whenever you want it without having to think about where it comes from and requiring minimal fuel to create.

A complete system

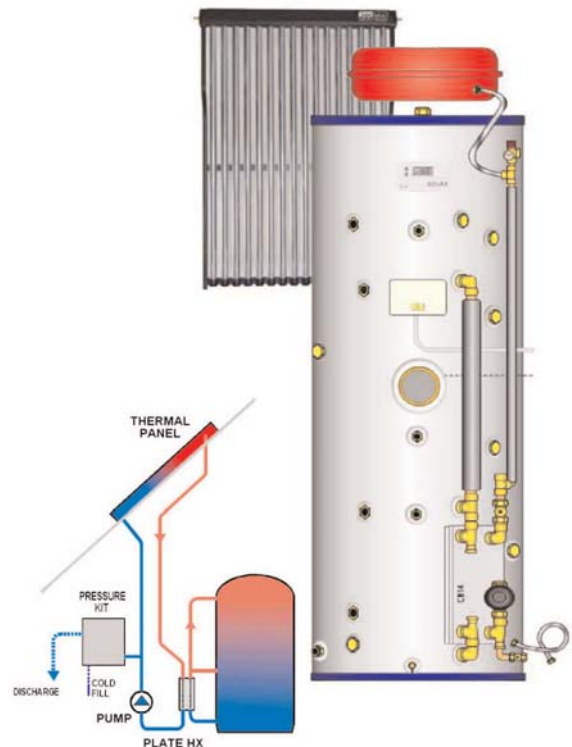
Everything that is needed for the solar system is built into the tank. A integral photovoltaic powered pump pumps water to and from the solar thermal panels. This is plugged into a separate 30 W PV panel. To prevent the pump being energised when there is light but no heat in the panels, an integral Resol controller monitors the temperature in the panels and compares it with the temperature in the tank and only allows the pump to start once the panels are hotter than the tank. The controller is also powered by the PV panel making this system totally independent of mains electricity.

Additional heat sources

The tank provides a number of connection points for a variety of different heat sources. A solid fuel stove with back boiler or wood pellet boiler would be connected to heat the whole store where as a controllable source such as a gas boiler would be connected to only heat the top section of the tank to allow the solar thermal system to heat the bottom section of the tank.

Space heating

The water in the tank can be plumbed directly into a space heating circuit. To make maximum use of solar thermal a low temperature heating system should be considered such as under floor heating (UFH). In winter, the solar thermal may only be able to bring the store up to 30 - 40 degC. While insufficient for hot water, this is adequate for UFH. At other times the water in the tank can be heated by a boiler.



Mains Pressure Hot Water Systems using Vented Storage for high performance hot water, using solar combined with other heat sources. Instead of a solar coil, the unit is fitted with an external plate heat exchanger that provides thermo-syphon (gravity) recovery from the top down.

- Mains Pressure Hot Water up to 2.5 bar.
- Fully Vented system suitable for DIY installation.
- Solar and Solid Fuel Ready.
- Solar Controls driven by PV Panel.
- No Power Requirements for Solar or Hot Water.
- Use Solar or Solid Fuel towards central heating.
- Rapid Recovery using full boiler output.
- Vary the volume heated by boiler / solar reserve.
- 'Combination Boiler' Mode.
- Rapid heat up of radiators.
- Cased with 40mm Insulation
- Choice of Diameters and Heights.
- Options for fitted immersion heaters.
- Uncased units available.
- Additional bosses on request.
- Options for fitted control assemblies.
- No Annual Maintenance Requirements.