

TECHNICAL BULLETIN

PRODUCT: GREENSKIES SOLAR

ADDING SOLAR TO EXISTING SYSTEMS:

Adding solar energy to an existing heating system is a highly economical upgrade and will provide immediate savings on fuel bills and major benefits to the environment, and can be undertaken in a number of ways;

REGULAR HEATING SYSTEMS;

The most common and typical solar system layout uses a twin coil cylinder which is fed by both a boiler and the solar panels. (fig 1)

The solar system and the regular indirect system do not come into direct contact with each other and the only shared part is the cylinder.

The solar system has its own pump, expansion vessel, pressure relief valve, air vent and controller.

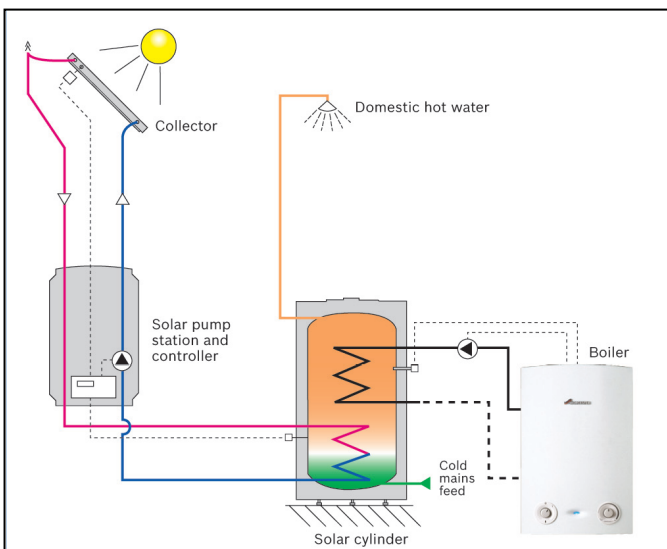


Fig 1: Regular systems are ideally suited to solar installations

The Worcester Greenskies solar package is ideal for use with Worcester oil or gas fired regular or system boilers, and the Worcester system ground source heat pumps.

COMBINATION HEATING SYSTEMS;

A combination boiler heats the hot water directly from the mains, consequently a combi system does not require a hot water cylinder. This of course makes it a little more difficult to connect a solar system to a combi boiler.

If, however it is desired, then it is possible by installing a twin coiled cylinder that would provide hot water to the majority of the hot water outlets whilst still retaining the combi hot water operation for perhaps one outlet.

This would also require alteration to the heating circuit with the addition of two 2-port motorised valves (fig 2), as such creating two primary circuits, one for the existing heating system and one for the heat exchange coil within the hot water cylinder.

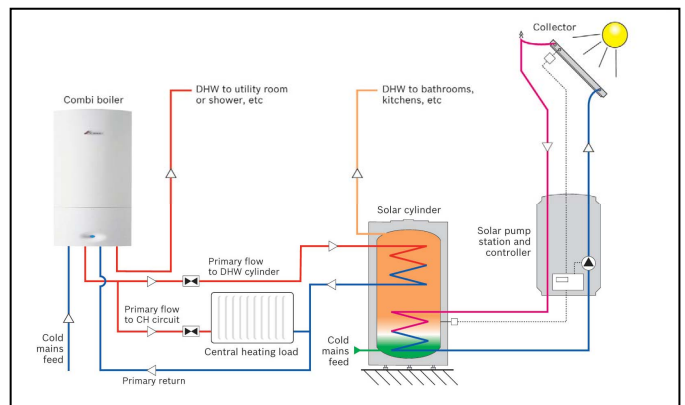


Fig 2: An additional hot water cylinder allows for solar installation

The primary flow and return pipework from the cylinder must go all the way back to the boiler

The Worcester Greenskies solar package is ideal for use with Worcester oil or gas fired combi boilers, the Worcester combi ground source heat pumps.

We do not recommend the pre-heating of the mains water inlet to a combi boiler.