

EARTHENERGY™



Stourbridge



This new house has been constructed on a very small site in a small gap in a row of terraced houses. Amongst the innovative energy saving features incorporated in the building is an EarthEnergy system which has been running since October 1998. The system comprises a single vertical borehole drilled with the truck mounted rig seen in the adjacent picture. Because of the limited space, the borehole is actually now covered by the building. The ends of the closed plastic loop, grouted into the borehole, are brought directly out into the airing cupboard where they are connected to the heat pump.

The heat pump is a water-to-water, heating only, fully integrated IVT unit that incorporates two circulating pumps - one for the ground loop and one for the internal distribution. The heat pump feeds an appropriately sized wet radiator system via a thermal storage tank, and also provides domestic water pre-heat. A supplementary electric flow boiler is fitted in series and is automatically controlled by the heat pump in the event that additional heat is required.

Ground Loop	<i>Trenches</i>
Heat Pump	<i>4 kilowatt IVT</i>
Distribution System	<i>Radiators</i>
Client	<i>Camphill Community Houses</i>
Mechanical & Electrical	
Commissioned	<i>October 1998</i>