

Step by step guide to installing a closed loop heat pump system

For a horizontal system the installation process would proceed as follows:

## Step 1 - Site consultation and system design

We meet with yourselves and the other contractors involved in the project to agree timings and share information on requirements for the system to be installed, culminating in a Project Agreement- a clear statement of what is expected from ourselves and what measures are required regarding other works in order to successfully accommodate the heat pump system. Prior to this meeting either extensive heat loss calculations or a SAP report will be required in order to establish the sizing of the equipment required.

## Step 2 - Ground loop installation and testing

Excavation of trenches, the laying and thermal welding of the polyethylene ground loop pipes. Header pipes run to boiler room/utility area via an external flushing chamber. Flushing of the system will be carried out to remove any thermal welding swarf or other contaminants and the system charged with a specialist non-toxic antifreeze/water mixture. The whole ground loop system will be pressure tested prior to back filling of trenches.







Step 3 - Heat pump installation

The ground source heat pump(s) will be installed by our engineers and connected to the ground loop system, the domestic distribution system (domestic hot water and central heating etc.) and mains electricity supply.

Step 4 - Commissioning

Pre-commissioning checks will be carried out by our engineers - this process will concentrate on



completeness and suitability of the domestic distribution system, heating controls and electrical supply. The system will then be commissioned.

