SOLO
HEATING INSTALLATIONS

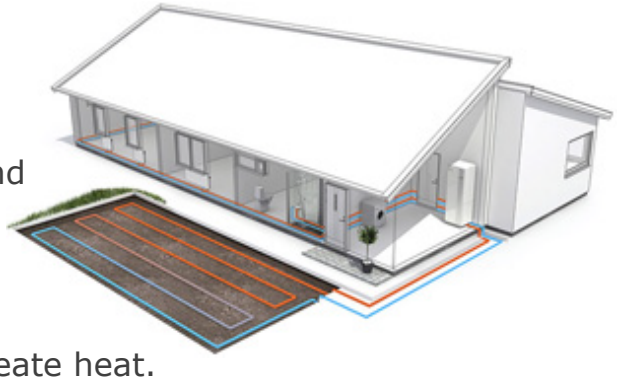
Ground Source Heat Pumps Outline Introduction

Ground source heat pumps (GSHP's) are at the forefront of modern heating technology.

Whatever the time of year, there is an almost constant temperature of 12 degrees C just 1.5 metres below the ground. Heat pumps extract this heat through ground loops and convert it to useable heat energy for your home. The unit is powered by electricity and for every 1Kw of electricity you put in, you get around 4.4Kw of heat energy out.

Heat supplied by the ground source heat pump will provide all of your space heating requirements via underfloor heating or even oversized radiators.

We can manage the installation of your ground source heat pump from the initial ground survey, through to the final commissioning of the appliance.



The unit itself works on pressurising refrigerant to create a heat output. Imagine a refrigerator but working backwards. Ground source heat pumps use electrical current to power a compressor that forces gaseous refrigerant through a small hole to create heat. This heat is transferred to your heating medium and it's this cycle which makes ground source heat pumps so efficient.

Here we have shown a diagram of a standard horizontal loop collector system. This utilises pipe buried 1.5m beneath the soil. You can also have borehole collectors which incorporate a long loop lowered into a borehole, usually around 140 metres deep.

More information can be found at
www.soloheatinginstallations.co.uk/ground_source_heat_pump.htm

Please feel free to keep on file.