



Case study

Baxi Geoflo ground source heat pump

When heating engineer Patrick Gilmartin bought a house in Northumberland to renovate and extend, he took the opportunity to install a ground source heat pump and solar panels. The property, situated in a picturesque village, is in an off-mains gas area, and Patrick was keen to make the property as environmentally sound and cost effective to run as possible.

Patrick explains how he installed the Baxi Geoflo ground source heat pump. "We are fortunate to have plenty of land here, so the slinkies are buried two metres deep, the length of the back garden, and the heat pump and manifold for the underfloor heating is situated in an outhouse.

"We have put in underfloor heating right through the ground and first floors. Even though the rooms are very big, the house is always warm and cosy. My wife really suffers from the cold, but even she has been comfortable since the underfloor heating went in.

"We used three inch insulation for the underfloor heating, and special insulation in the loft to keep in the heat – it's only about 10mm thick, but is equivalent to one and a half metres of conventional insulation, as used on the space shuttle!

"We had planned to have an Aga in the kitchen, but we didn't need the extra heat! We do have an oil boiler to use as back-up, but haven't needed it yet. Hot water is provided by three solar panels on the south facing roof and a 300 litre Heatrae Sadia Megafluo cylinder.

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