

Little Trethewey, St Levan

The Penwith Housing Association has installed six properties in the Little Trethewey estate, St. Levan with ground source heating systems. This estate was built in 1966, meaning large improvements in insulation for these six properties to make this new technology economically viable. The property has a floor area of 50m² over two floors, and has a 3.5kilowatt peak heating requirement.

The ground source heating system for each property comprises of one borehole ground loop. This is connected to a closed loop, water-to-water heat pump. The heat pump meets the peak heating load of the building, and provides domestic hot water to an indirect hot water cylinder, heating the building using wall mounted radiators.

By using this technology, connected to the national electricity grid the system will reduce CO₂ emissions by 40 – 60% compared to using traditional fossil fuel systems.

Ground loop Type	1 x 75m Borehole per property
Heat Pump	6 x 3.5kW Calorex DT3500
Client	Penwith Housing Association
Commissioned	April 2006

