

Fact Sheet

Slinky Installation

Facts at a glance:

Horizontal Slinky Trenches

Horizontally installed slinkies should be placed in a 1.2m wide by 1.2m deep trench.

Vertical Slinky Trenches

Vertically installed slinkies should be placed in a 300-400mm wide by 2m deep trench.

Separation Distances

Each trench should be separated by a minimum of 5m between centres.

Backfilling

Trenches should be backfilled with sand over the slinky if the excavated earth contains sharp flints or large clods of earth.

Energy Absorption

For every 10m of slinky 1kW of energy can be absorbed from the ground.

Trench Layout

Trenches do not have to be straight, they can twist and turn as long as the 5m separation distance is maintained.

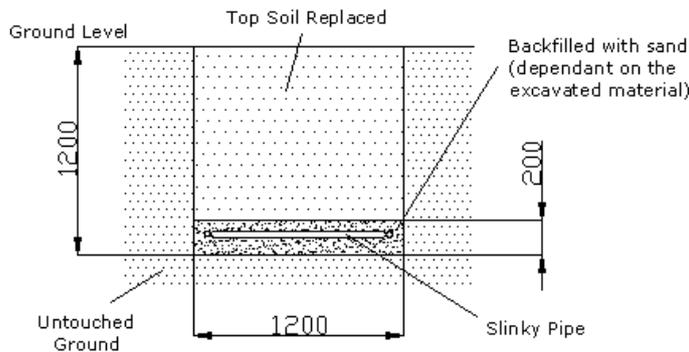
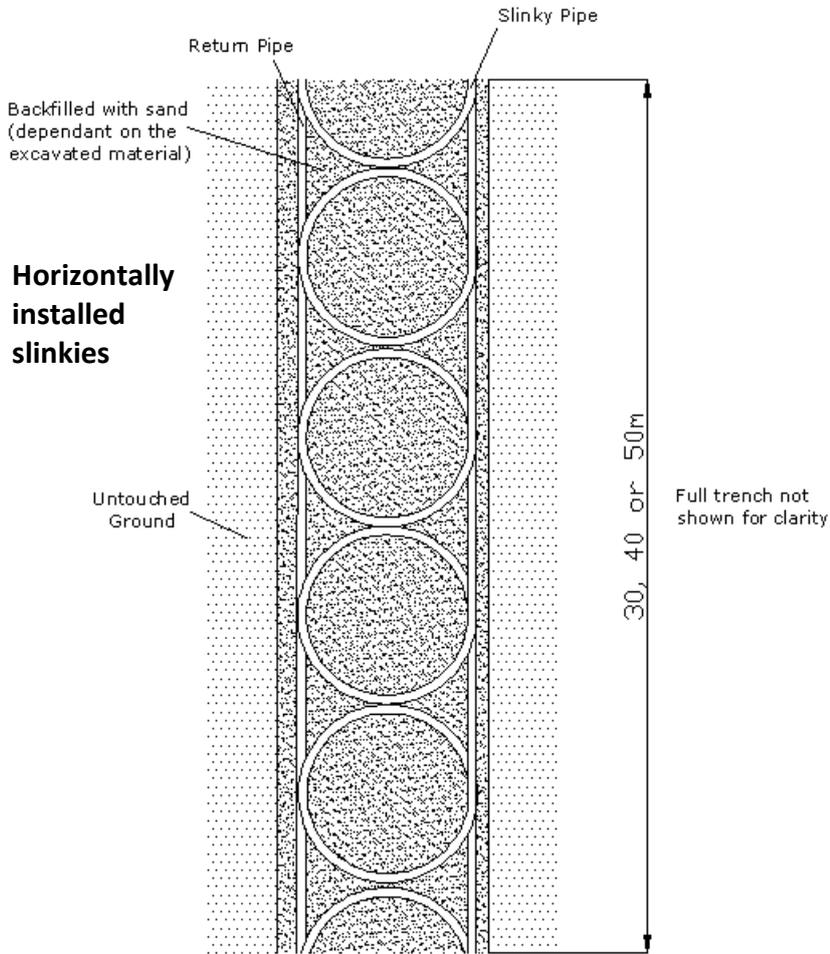
Slinkies versus Straight Pipe

Slinkies and straight pipe have broadly the same performance and need the same area of land, however slinkies are a fifth of the amount of digging of straight pipe.

Ground source heat pumps absorb energy from the ground via buried heat exchangers.

Kensa recommend the use of slinky ground arrays as they are the most cost effective way of installing ground arrays due to the fact that they reduce the amount of digging required.

They can be installed on their edge vertically or laid flat in the bottom of a trench, horizontally.



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The slinky, and its return pipe, is placed in the trench and carefully backfilled with the excavated material, graded to remove any large or sharp stones. Where the excavated material consists of large clods (which might leave air gaps around the pipes resulting in poor heat conduction) or sharp flints (which could damage the slinky pipe) then sand should be used to backfill until the slinky is covered, after which the excavated material can be used.

Pea gravel should only be used in slinky trenches which are being used as soakaways and only after the slinky trench has been approximately half filled.

Vertically installed slinkies

