The Four Key Questions V2

1. Is there sufficient land available to install the required number of ground loop, slinkies or boreholes?

Energy for the heat pump must be extracted from the ground or from a local water source. The ground needs to be suitable for digging trenches and must be accessible to digging machinery. The area of ground or water source required to extract sufficient energy will depend on the size of the building you want to heat. As a general guide, Kensa recommends 10m of trench with slinkies per kW of the heat pump size.. This means a 4kW heat pump will require one 40m long trench with slinky pipes buried in the ground for space heating. Should domestic hot water be required, the length of the trench will be slightly increased.

If there is insufficient land available for digging trenches, boreholes can be considered. Installations costs will increase dramatically when drilling is involved. For this reason, boreholes are not considered a feasible option on small domestic applications.

2. Is the building going to be well insulated?

Since ground source heat pumps produce lower temperature heat than traditional boilers, it's essential that your clients home is well-insulated and draught proofed for the heating system to be effective. It could also make the system cheaper and smaller.

3. What sort of heating distribution system is currently in place, or what heating distribution system do you propose on using?

The ideal application for any heat pump is a well insulated new build property with a wet under-floor heating system and sufficient land to bury the ground arrays. Heat pumps can also be used effectively for buildings using radiators subject to a number of considerations.

4. What level of financial commitment can you give to installing a ground source heat pump?

Costs of a ground source heat pump can range enormously and depend on the size of the building you wish to heat and the insulation levels in place. Running costs will depend on a number of factors, including the size of your home and how well insulated it is.

For an accurate sizing and assessment of the suitability of a heat pump contact Kensa. We require drawings of the building and plot and a Heat Loss Report to BS EN12831. We can use the information within this report to obtain a more accurate peak heating load for the building to ensure the heat pump can provide 100% of the requirement.

Now you have established a heat pump is right for your project, submit your plans to Kensa for an accurate quotation.