



Two new beachside holiday cottages at Gamber Sands in East Sussex have been installed with ground source heat pumps from Danfoss, as part of creating a renewable energy system that is affordable to run.

The developers approached Reina Group, based in Folkestone, Kent, a Danfoss-approved installer, which recommended two Danfoss DHP-L Opti Pro heat pump systems with a 400 litre cylinder and 120 litre buffer vessel. Each four bedroom property has two boreholes of around 100 metres in depth drilled onto the beach as the source of energy for the heat pumps. The two beach houses, which are built on a steel frame clad with cedar, were fitted with heat pumps of 8kW output.

Reina Group fitted underfloor heating throughout the properties, which is the most effective method of distribution of heat for a heat pump system. The company also integrated an MHVR (mechanical heat ventilation recovery) system, which provides fresh air and improved climate control, while also saving energy by reducing heating (and cooling) requirements.

Dan Large at the Reina Group said: "It is unusual that bore holes are drilled into a beach, but it worked out really well on this project and the owners can now enjoy the benefits of this cleaner, greener energy, without having to rely on fossil fuels."

Chris Dale, Director at Danfoss, said: Heat pumps are becoming increasingly common for holiday cottages, as it means they are warm and comfortable but offer reduced running costs for the owners. The DHP-L Opti Pro is a very popular ground source heat pump as it offers a high level of energy efficiency."

The DHP-L Opti Pro heat pump uses technology that incorporates an intelligent control system using speed controlled circulation pumps to ensure that the output is constantly adjusted to the prevailing requirements and conditions of both the heating system and collector. This means the heat pump will always operate under ideal conditions, therefore guaranteeing maximum efficiency, second by second and hour by hour. Domestic hot water performance also benefits from a built-in de-superheater and a technique that enables higher hot water production, even when carrying out space heating.

Danfoss Ltd. has extensive experience in the manufacture of heat pump systems for homes, schools, community buildings, developers, local authorities, housing associations and self builders.

For more details about heat pumps, visit the Danfoss website at www.heatpumps.danfoss.co.uk or telephone 0114 270 3900.

For more information about heat pump system design and installation contact Reina Group by calling 01303 248648 or visit the website www.reinagroup.co.uk.