

Case Study

Hevingham School, Norfolk

The facts:

Property Type:
New Build, School

Property size:
358 m²

Product supplied:
20kW Kensa Compact Heat Pump with twin compressors

Application:
100% space heating within the property, complementing under-floor heating.

Installation:
Underground pipes laid in 50m trenches, 2m deep in horizontal 'Slinky' coils, under the playing field.

Cost Savings:
Approximately £573 per year reported in 2003 and compared to oil prices of the day. The cost of oil is now significantly higher.

Fuel Displaced:
Oil

CO₂ Reduction :
57% saving over oil (based on data from the DTI and BRE)



'Pioneering Classroom of the future'

Norfolk County Council chose Hevingham School as the showcase site for its Classroom Of The Future. The low energy building design is highly insulated with a "wet" underfloor heating system throughout.

The Kensa 20kW Compact heat pump connects to the underfloor for space heating only with provision of hot water supported by solar panels and the water supplied primarily by a rain-water recovery system.

Ground arrays; 'Slinky' pipe coils, were buried underground to draw the heat energy transferring this to the heat pump via a manifold on the outside of the plant room.

The Slinkies are buried under the school playing field in four trenches, each fifty metres long. Two metre deep trenches were dug to hold the Slinkies, then backfilled to restore the playing field for normal school activities.

This was the first British application using a heat pump dedicated Scroll compressor, the latest technology developed by Copeland. As pioneers in heat pump design and manufacture, Kensa invest in proven components to maximise energy efficiency. The compressor is capable of working over a wider operating envelope than traditional compressors and is between 8% and 12% more efficient.

£Grants

for details contact:

Kensa Engineering Ltd
Mount Wellington
Chacewater, Truro
Cornwall, TR4 8RJ.
Tel: 01392 826021/22
Fax: 01872 862440

info@kensaengineering.com
www.kensaengineering.com

Expertise | Service | Quality

Project partners

Barrett and Wright Ltd
building services engineers

Mansell Construction
main contractor

