

ECO-HEATING FOR NEW BUILD HOME



STIEBEL ELTRON UK
TEL 0151 346 2300 FAX 0151 334 2913 | E-MAIL INFO@STIEBEL-ELTRON.CO.UK | WWW.STIEBEL-ELTRON.CO.UK

PROJECT DATA
WPC10 Ground Source Heat Pump with 200-litre DHW cylinder and 200-litre buffer vessel
New build 4-bedroom home
Newton Grange
Derbyshire

CONTRACTORS
David Calladine Builders
Ashbourne, Derbyshire
07966 432848

Martin Hellaby Plumbing
Ashbourne, Derbyshire
07973 728122

STIEBEL ELTRON

ISSUE 07_07 | 280787_L_1.5_07_07_BKN

STIEBEL ELTRON

GROUND SOURCE PUMP FOR HEAT AND DHW



The heat pump and cylinder are discreetly positioned in a plant room

A brand new farm property has taken advantage of spare land to install an eco-friendly Ground Source Heat Pump system.

The Stiebel Eltron WPC10 heat pump will provide energy efficient heating and hot water for the new build 4-bedroom home in Newton Grange in Ashbourne, Derbyshire.

Stiebel Eltron UK worked closely with David Calladine Builders and Hellaby Plumbing on the design and installation of the system, which utilises a 500m ground loop in land adjacent to the building.

The WPC10 has been combined with a 200 litre hot water cylinder and 200 litre buffer vessel to provide green energy at a vastly reduced cost compared to gas or boiler systems.

The 200sq m home, which includes one family bathroom and one en-suite, has been fitted out with underfloor heating on the ground floor and radiators on the first floor.

It has been purpose-built for Daniel Bradbury, whose family owns and runs a farm and hotel within the same countryside complex.



Underfloor heating has been installed on the property's ground floor

Daniel said: "I had heard good things about green energy and always wanted to consider it when the property was being designed.

"The developer and plumbing company suggested using Stiebel Eltron UK, and Chris Johnson from the company came to meet me to describe the benefits of their products.

"Chris showed me the designs and all the figures for costs and savings and this was a big factor – for example I am saving around £250 per quarter in fuel bills alone.

"The customer service and support was excellent and once the system was installed and set up, I was shown exactly how to use it.

"Everything is now running smoothly and efficiently, and I don't have to worry about issues like boiler maintenance.

"The heat pump and cylinder are discreetly out of sight and run very quietly; the team have done a great job with the installation."

The WPC10 offers a complete solution for Domestic Hot Water (DHW) and central heating, drawing its heating energy from geothermal loops in the ground.

The unit contains a 200-litre cylinder under its noise-insulated external casing and all safety and control components for a fully automatic operation are already integrated into the design.

David Calladine said: "On past projects Martin Hellaby and I have struggled with other manufacturers to get the right design and specification. Stiebel Eltron gave us a prompt response and came up with the perfect solution.

"Chris Johnson from Stiebel Eltron UK supported us from start to finish – he also gave us the confidence that the product would work."

Chris Johnson, Regional Specification Manager for Stiebel Eltron UK, said: "This project was perfect for a ground loop system due to the available land space next to the property. We find that a lot of farm and land owners will opt for ground source heat pumps as the best solution for their green heating needs.

"The WPC10 requires minimum effort to install, even in very tight spaces and provides high energy efficiency (with a COP of 4.5) and substantial cost savings against fossil fuels.

"Domestic properties with Ground Source Heat Pumps will qualify for the Renewable Heat Incentive from this summer (2013), while some households can claim the Renewable Heat Premium Payment and still be eligible for the RHI when it kicks in."



Chris Johnson, Stiebel Eltron UK



The WPC10 heat pump requires minimum effort to install and provides high energy efficiency with significant cost savings