

## Case study

## Case study of the Recoup Pipe+ HE WWHRS installation at Gusto Homes "The Edge" in Lincoln





Artist impression of Gusto Homes "The Edge" Lincoln

Steff Wright, CEO of Gusto Homes introduces the development, "The Edge" in Lincoln. A unique site in the superb setting of a 10 acre landscaped parkland estate next to the Lincolnshire Showground. The homes being developed are built well beyond the requirements of current Building Regulations, the aim is to provide spacious, comfortable, low maintenance homes that are exceptionally economical to run. The development consists of eighteen plots in the first phase and is set for inclusion on a further eleven to follow as part of phase two.

The environmental performance of each property is achieved firstly by an exceptionally high thermal mass structure, which is super insulated, triple glazed and virtually air-tight. Energy consumption is further reduced by a heat-recovery ventilation system, use of low energy appliances and lighting, and a shower waste water heat recovery system with the Recoup Pipe+ HE.

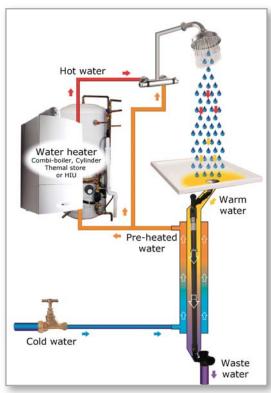
Part of the overall strategy of the development was to remove the need for a gas supply to the site and the need for a gas central heating system and hot water boiler. The homes are purely electric with Infra-red heating panels and electric immersion heaters for hot water. The properties have 4 – 5 KW/p of PV on them with a power diverter which means the majority



Gusto Homes "The Edge" Lincoln

of the power required to heat the hot water is self-generated. The aim of reducing energy consumption within the properties whilst using a simple electric water heating system therefore required the demand for hot water to be as low as possible.

Gusto Homes first became aware of Recoup Energy Solutions and the Pipe+ HE through internet based product research. They realised that the Pipe+ HE waste water heat recovery systems would help to achieve the reduction in the demand for hot water in each property by ensuring generated heat wasn't wasted. Because of the performance, competitive price and good customer support from Recoup the system Pipe+ HE system was applied to every property in the scheme.



Installation Method A

The Recoup Pipe+ HE is installed in the properties of "The Edge" using "Installation Method A" as it achieves the greatest efficiency. With "Installation Method A" pre-heated water from the Pipe+ HE is supplied to the shower and to the hot water heater as well. This means that less hot water is used when the shower is running and pre-heated water is provided to the water heater which then requires less energy to heat to the required temperature. Keeping the flow rate at around 9 litres/min through the Pipe+ HE allows the high efficiency energy transfer of up to 67% be achieved. This equates to over 12kWh of recovered energy.

Because of its design approach to energy saving "The Edge has achieved high recognition as a winner in the 2015 Lincolnshire Energy Awards, and also the winner in its "Best New Homes" category of the 2016 West Lindsey District Council Quality in Construction Awards.

"Gusto Homes have been designing and building low energy homes for almost 20 years and we always try to use simple, low maintenance, cost effective systems. The Recoup Pipe+ HE system fits in well with our approach and will give our customers long term energy savings without incurring maintenance costs."

Steff Wright, CEO of Gusto Homes



Gusto Homes properties with high energy performance products including the Recoup Pipe+ HE

Information above was provided by Stef Wright and from Gusto Homes "The Edge" website and brochure (www.gustohomes.co.uk/the-edge). See additional information on Gusto Homes website.

For more information on Recoup Energy Solutions and the Pipe+ HE visit www.recoupenergysolutions.co.uk or contact us on info@recoupenergysolutions.co.uk or 01379 844010.