

■ MAKING THE MOST OF NATURE'S ENERGY TO MEET CFSH

Heatrae Sadia has helped property developer Freshwater Estates to create one of the UK's first carbon-neutral housing schemes; Parker's Mill in Mildenhall, Cambridgeshire. The development's 14 luxury apartments benefit from Amptec electric boilers and Megaflo HE hot water cylinders, which use electricity generated by the renovated mill; proving that electricity can be used to meet the challenging level six of the Code for Sustainable Homes.

The mill was purchased by Freshwater Estates at the end of 2006 with a vision of creating stylish apartments in a sympathetic yet modern way. The intention was always to retain many of the building's original features but it wasn't until after work had begun that the company discovered the original Victorian turbines, and had the foresight to realise they could be used to generate carbon-neutral electricity.

When electricity is produced from renewable sources such as water, it is an extremely environmentally friendly fuel option. In this instance, the energy produced by the mill stream and water turbines can be used to produce enough electricity for the 14 apartments, so they were therefore designed to be 'all-electric'. This meant that, because of the way the electricity is produced, the apartments were deemed carbon-neutral, and were among the first residences in the UK to meet level six of the Code for Sustainable Homes.

To provide heating and hot water for the apartments, Freshwater Estates needed to find an electric solution. An electric wet central heating system with underfloor heating was specified by the plumbing contractor for the development, M. Rogerson Ltd, and Heatrae Sadia supplied 14 Amptec electric boilers with Megaflo HE unvented hot water cylinders. Amptec electric flow boilers work in a similar way to gas fired boilers to provide heat when it's actually needed. They are compact in design and are 99.8 per cent efficient, so were ideal for use in this application.

To provide domestic hot water, Megaflo HEs were installed in each of the apartments. Megaflo HE unvented cylinders help meet consumer demand for powerful showers and fast filling baths, so are ideal in a modern development such as Parker's Mill.

Malvin Rogerson, managing director of M. Rogerson, explains: "Megaflo HE is unique in the marketplace as it features an internal air gap and floating baffle system to accommodate expanded water, which means the product has a neat, self-contained design. We also find Heatrae Sadia to be extremely cost competitive and their products have a very impressive reliability record."

Jon Cockburn, head of marketing at Heatrae Sadia, comments: “The future of electric heating is very positive. Currently, there is much Government investment into electric towns, nuclear power and creating cleaner coal power stations, and the grid is set to become decarbonised. At Heatrae Sadia, we are committed to investing in electric heating products, as we believe this fuel has a secure future. And, when used in conjunction with renewable energy sources, such as solar, wind or in this case water, electric space and water heating can become a cost effective way to achieve carbon neutral ratings.”

James Nicholson, project support manager at Freshwater Estates, adds: “Many homebuyers want energy efficient homes and, as such, the interest in the Parker’s Mill development has been unprecedented. These homes rate extremely well in the HIP because they are carbon neutral. In addition, residents save around 15 per cent on their fuel bills.”

For further information about Heatrae Sadia’s range of electric heating and water heating solutions visit www.heatraesadia.com or by call 01603 420 220.