

Specifier Products

Sustainable alternatives for varnish, vinyl flooring and building blocks. Plus, a heat recovery system that makes the most of waste water and, below, the start of a quiet revolution in wind turbines

Product innovation: The winds of change



XCO2 has released the Quiet Revolution 6 kW wind turbine, which it claims is quieter and vibrates less than traditional wind turbines. Unlike the latter, which rotate horizontally, the QR rotates vertically and has three long carbon-fibre blades connected to the vertical axis.

XCO2 claims the design performs more efficiently as it does not have to keep changing direction with the wind as a traditional turbine would. This decreases vibrations and cuts down on aerodynamic noise.

The rotating section is 5 m high and 3.1 m in diameter, and is designed to work up to a maximum wind speed of 16 m/s.

The turning of the turbine drives the 6 kW generator and creates electricity in the same way as a traditional turbine. QR can be mounted on either a 5–10 m high tower or a roof, and will produce a claimed 6000 kW/h

per year in a low wind site and more than 12,000 kW/h per year in a good wind site. The company says the product can last for 20 years.

The Quiet Revolution is also available in a version fitted with a series of LEDs in the blades. According to XCO2 these can be programmed to light up in sequence as the turbine rotates and be used as an illuminated display for artwork or advertising.

The design is currently in pre-production and will undergo final assessment before the first commercial installations in winter 2005. Planning permission has already been given for developments on London's Southwark Bridge Road, commencing in December 2005, and one at Temple Meads Roundabout in Bristol, starting in January 2006.

XCO2
www.xco2.com
www.building.co.uk/enquiries 301

Interlocking building blocks

Natural Building Technologies has launched a thermally efficient clay building block. Ziegel Building Blocks have a honeycomb structure and are fixed using a thin joint system. The blocks only need a masonry bed when jointed horizontally as they interlock vertically, eliminating the need for mortar. As well as blocks for corners and lintels, NBT also has blocks for internal pipe work and internal walls. A 300 mm block has a claimed U-value of 0.35, and higher-performance blocks are available. The system is also available for flooring and roofing.

Natural Building Technologies
www.natural-building.co.uk
www.building.co.uk/enquiries 302

Combination condensing boilers

Halstead Boilers has launched two combination condensing boilers called the Ace HE 24 and the Ace HE 30. The difference between the two models is the rate at which the combi boiler heats water, 10.9 litres/min and 14.71 litres/min respectively for a temperature rise of 30°C. The products dimensions 758 mm x 446 mm x 327 mm.

Halstead Boilers
www.halsteadboilers.co.uk
www.building.co.uk/enquiries 303

Mineral wool wall insulation

Knauf Insulation has launched two full-fill wall insulation products, which it says will allow wall cavities in masonry walls to be less than 100 mm wide and still meet the provisions of the new Part L. Knauf claims the products, DriTherm 32 and DriTherm 34, have elemental U-values of between 0.27 and 0.32 in wall cavities between 75 and 100 mm. The products are said to be good insulators against fire and noise. DriTherm will be available in Knauf's glass mineral wool and rock mineral wool ranges.

Knauf Insulation
www.knaufinsulation.com
www.building.co.uk/enquiries 304

Vinyl sheet flooring

Mannington Commercial has unveiled a vinyl flooring range called Relay. Forty per cent of the flooring is made from excess tile trim from other products, which is turned into coloured chips that are used to decorate Relay. The product is available in 1.8 m widths and is topped with urethane plastic to prevent staining. It comes in 16 colours, including green, beige and blue.

Mannington Commercial
info@mannington.uk.com
www.building.co.uk/enquiries 305