

All's quiet at St Martins

WHEN TGA CONSULTING chose to use the Belimo Fan Optimiser on St Martins School in Northwood it was not just to save energy. As large proportions of the new building at St Martins were to be used for music practice rooms the original concern was reducing noise.

The Belimo Fan Optimiser, when used with Belimo VAV controls, can reduce fan energy consumption by up to 50%. A normal VAV system runs with a duct pressure high enough to supply air to the index box in a maximum air condition, therefore in normal everyday use a great deal of the VAV boxes would be closing off against excessive pressure, in some cases only being open approximately 10%. This not only

uses excess energy running the fans faster than they need to, but also creates more noise at each individual box.

Using the MP bus information the optimisers look at the damper position of each motor and turn the fan speed down until the damper position of the most open box is approximately 90% open therefore supplying just the amount of air that is actually required for the current situation. Reducing the amount of pressure that a damper has to close off against also reduces the noise levels at each individual box and therefore in each room.

At St Martins School, the system also incorporates Belimo CR room controllers which also control the heating valves bringing in heated



air through the VAV units eliminating the need for additional heating. The CR24-B3/A3 controllers are also linked to PIR sensors for each room which shut down the heating and air conditioning if the

room becomes vacant, this saves even more energy when taking into account changing timetables and of course break times and lunch breaks.

01932 260460

Hydropath has revised its Hydroflow C range and extended it from five to seven models in a bid to raise its profile and make it more suited to the commercial market.

Featuring the Hydropath-patented electronic technology to tackle encrusting limescale in

Extended Hydropath C range

pipes, the revised and rebranded models, the C32, C40, C80, and the C100, have now been joined with three new units, the C50, C65 and C125, extending the pipe

sizes covered from 32mm up to 125mm DN. Easy to install, the C units require no plumbing, chemicals or wrap-around wires so are maintenance-free.

Hydroptath also offers on-site surveys, commissioning and a full advisory service in addition to its products in the AquaKlear, Agriflow and 'C' and 'S' Hydroflow ranges. Customised units are available for larger pipe sizes. www.hydropath.com

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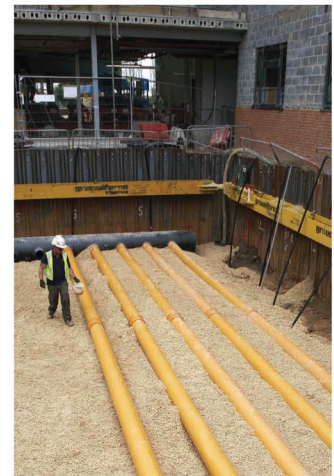
Underground in York

The new £28million flagship Joseph Rowntree Secondary School in York will be a showcase for many of Rehau's building solution products, including a ground-air heat exchanger, underfloor heating and cable management system.

A One School Pathfinder project built as part of the Building Schools for the Future programme, its construction and specification will inform the overall plans for York secondary schools in the future.

The Rehau AWADUKT Thermo ground-air heat exchanger system serves the demonstration theatre, a focal point of the school's science and technology based curriculum. The system will provide a low energy source of ventilation.

A 12m x 14m array of 15 runs of Rehau's 250mm optimised polypropylene pipework has been laid at a depth of around 1.5m under what will eventually be part of the school's main entrance. The system operates by drawing air in through the pipes and using the natural 8-12°C temperature of the earth at that depth to either pre-cool or pre-warm the air – depending on the season – before



it is delivered into the building via an ahu. The pipe size and grid layout has been designed by Rehau to meet an airflow requirement into the school's demonstration area of 3.2m³/h.

Alongside the Rehau AWADUKT Thermo system, Rehau is also supplying underfloor heating for installation by its Authorised Partner B&K Systems across the school's 12,000m² floor area and the cable management system required for the Cat 6a/7 data cabling to be installed throughout.

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