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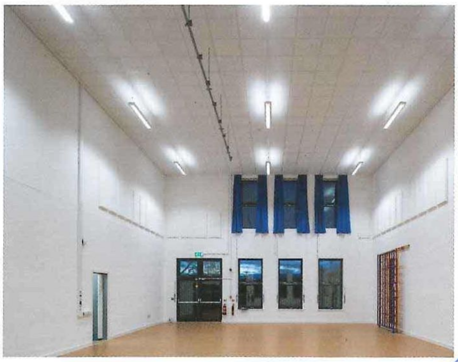
A class act

21/12/11

Cavendish Close Junior School uses a Trend BEMS to maximise energy efficiency and create optimum comfort conditions.



Cavendish Close Junior School in Derbyshire has been rebuilt as part of the Priority School Building Programme (PSBP) – a government initiative designed to address the needs of the schools most in need of urgent repair.

Energy efficiency was a key prerequisite of the new building and Integrated BMS was called in to configure a solution. The company's Managing Director, Jason Harper, says, 'As a Trend Technology Centre, we had no hesitation in recommending the company's technology.'

> ***'If CO^2 goes above a certain level a button is pressed that will then activate the mechanical heat recovery unit, so that fresh air is introduced.'***

Trend's advanced IQ®eco controllers were delivered to site, integrated within mechanical heat recovery units supplied by Nuaire – a Trend Original Equipment Manufacturer. Integrated BMS developed an operational strategy that allowed each mechanical heat recovery unit to run as efficiently as possible. Jason Harper comments, 'We configured the requisite number of I/O modules for each classroom so that an IQ®eco device can communicate directly with a wall mounted control unit. This acts as a fan speed controller, a setpoint adjuster and a CO^2 monitor. If CO^2 goes above a certain level a button is pressed that will then activate the mechanical heat recovery unit, so that fresh air is introduced.'

Each IQ®eco is configured with an output so that a pressure independent control valve (PICV) controls the radiators via the BEMS. Just as importantly, Cavendish Close Junior School can sequence heat recovery and ventilation on just one system.

Richard Daniels, Environmental Engineer at the Education Funding Agency (EFA), concludes, 'This is the first school we know of where the contractor has been able to use the energy monitoring system specified in the PSBP output specification to validate the commissioning of meters and controls and to get a good picture of the energy use in the building as part of Post Occupancy Evaluation.'