



## Isover goes green in Wales

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Insulation from Saint-Gobain Isover was specified for its green credentials for the first timber frame school to be built for Powys County Council.

The replacement community primary school on a greenfield site in Llanrhaeadr ym Mochant near Oswestry features Isover thermal batts in the external walls and vaulted roof as well as thermal batts in cold roof areas and acoustic insulation in the internal partition walls.

The £2.2 million project is also one of the first uses of Isover's Vario climate membrane which was specifically developed for timber frame construction and has been employed in the roof and external walls.

The school's distance from the nearest fire station also meant all the insulation had to feature increased fire performance and Isover insulation is totally non combustible, being rated to the highest possible European Euroclass A1.

Designed and erected by timber frame specialists Frame Wise and built by local contractor Paveaways, the school has achieved Building Regulations-busting levels of insulation and air tightness.

Powys County Council's schools modernisation programme focuses on bringing all school buildings up to the Welsh Assembly's fit-for-purpose standards by 2020 at an estimated cost of £150 million.

Llanrhaeadr School contains four classrooms in a single-storey building of 850m<sup>2</sup>. Its design balances the need to provide a significant new gateway building without overpowering its site on the edge of the village.

Jim Swabey, central property team leader for the council's property and design services directorate, briefed Frame Wise to provide a replacement school with integral provision for early years usage and an allowance for possible future extension of the hall.







"We had no special requirements other than recognising the increasing importance of the environmental agenda and its significance within the teaching environment," he said.

"Isover products were specified in view of their environmental credentials and through discussion with the timber frame supplier and have been extremely beneficial in achieving a well-insulated and air tight building."

Simon Orrells, managing director of Frame Wise, added: "We were asked to work with the council to develop the design and deliver a sustainable environmental school with a fresh feel to it. We also had to deliver a thermally efficient school which is where we brought in our insulation partner Isover.

"Air tightness was also a key requirement and we used Isover's latest product, the Vario vapour barrier, which delivers zero air leakage but also breathes which is a big benefit. This was fitted on the inside of the timber frame, with a counter batten on top to form a service zone prior to plasterboard being fitted."

Isover specification manager Andrew Macdonnell said: "The project had particular design requirements as laid down by the council's design department, not least its rural location which required sustainable materials and a minimisation of waste and minimisation of energy on completion. It also required an increased fire performance because of its distance from the nearest fire services.

"The council wanted to see U values for walls, floors and roof achieve significant improvements over the current Building Regulations. We agreed on a range of insulation materials then the conversation turned to air leakage and future running costs. Good insulation needed to be combined with excellent air leakage performance.

"While the budget wasn't endless, it was made clear money was available for sustainable, energy-saving products. The design considerations were very much about spending now to save later. Vario fitted this requirement. We left some samples/trial kits for product testing and once approved we agreed to help train the contractor how to install it correctly."

**ENDS** 



