

Press Release
28th January 2011

Knauf Insulation is Meeting Strict Environmental Criteria

Knauf Insulation's Perimeter Plus™ Blow-in-Blanket® System, successfully met the stringent U-values and environmental standards required by Essex Disability Adult Community College in Rochford. The college is a pioneering eco-building built to the Passivhaus Standard that is predicted to operate on approximately 5 per cent of a traditional building's energy costs.

Originally a competitor's cellulose blown system was specified, but following a need to further reduce the heat losses from walls and roofs to keep the building safely within the parameters of the Passivhaus Standard and without increasing the thickness of the walls, the specification was switched to Knauf Insulation's unique and innovative offering – Perimeter Plus. This system provided the excellent R values (thermal resistance values) required 10.00 in the walls and 12.85 in the roof.

The fully BBA approved product was installed by Miller Pattison, who regularly use Knauf Insulation's products. The project required 240m² of Perimeter Plus blown into 350mm void areas between Larsen Truss Walls, which had previously been sheeted up as per the specification. In addition, 755m² of Perimeter Plus was blown into a 450mm void area between the roof's I beams on the two blocks of the disability centre.

Richard Boyd, CEO at Essex Disability comments: "We wanted to ensure the building's energy consumption was extremely low, wasting as little energy as possible. Utility and energy bills can be a drain on a charity's resources, so we wanted to have a building that had minimal associated costs and created 95 per cent less CO₂ than a similar 'average UK stock' building performing at the top rating for the Government's new Code for Sustainable Homes." The project also drew on strategic and detailed 'CarbonLite' guidance provided by the AECB – the sustainable building association.



Perimeter Plus is a patented specialist high performance loose glass mineral wool that is designed to be blown into timber frame walls from the interior during construction. Perimeter Plus has optimal thermal properties and excellent coverage and blowing characteristics. The product is blown in behind translucent netting, which gives visual assurance of a quality installation in every area.



The advantage of Perimeter Plus is its ability to compress around pipes, wiring and other services and fittings, ensuring a complete fill, thereby maximising thermal and acoustic performance as well as fast installation of wide cavities. Unlike other blown insulation systems, Perimeter Plus does not require adhesives or additional moisture meaning that working even in a cluttered internal environment does not present a problem, and there is no associated settlement problems. Plus, there is zero waste and no need to allow additional time for cleaning up of the working area.



"The high performance of Perimeter Plus made Knauf Insulation's blow-in system the ideal choice for this particular project due to the stringent criteria. Being quick and clean to install with excellent coverage further supported the specification," comments Andy Simmonds, Partner at Simmonds Mills.

The build for the charitable disability centre was for 'Exceptional Energy Performance and Sustainability', which required the building to be constructed using locally sourced and sustainable resources including recycled materials. In addition to the fundamental and more cost effective measures, such as dramatically minimised heat loss, high levels of passive solar gain and design to minimise overheating risks, the project also made use of renewable energy, through the installation of a solar photo voltaic system mounted on the large 'solar pergola' and solar thermal tubes on the building's roof.

For further information on Perimeter Plus please visit www.knaufinsulation.co.uk

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Notes to Editor

All the design team are members of the AECB: Architects were Simmonds Mills Architects, Energy Advisory Associates and Alan Clarke were responsible for Energy and Services design with Bob Johnson Engineers and Quantity Surveyors Bowen Associates.

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