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News

JML Contracts launch off-the-shelf low energy housing



Scottish structural insulated panel experts JML Contracts have brought a series of standardised, low energy structural insulated panel (SIP) designs to the housing market. These off-the-shelf homes are intended to provide more affordable low energy housing, incorporating cutting edge technology in ready-made designs.

"To produce our designs, we teamed up with

a certified passive house designer, Colin Potter of Architeco," said John Langley of JML Contracts. "The standard house types have been developed specifically for our SIP system, which is inherently airtight and has negligible thermal bridging. By using the optimum SIP dimensions and designing for passive house suitability, the resulting house designs are extremely cost-effective, super energy-efficient, and can achieve

passive house standard."

One of the main features of SIP construction is the lack of cross timber supports in the roof, allowing for excellent use of space below the roof slope. The effect of an open roof space can be quite dramatic, as well as practical.

JML Contracts produce the structural insulated panel systems in its Perthshire factory. The standardised houses are available in two, three and four bed versions, and JML Contracts also offer a full bespoke design and build service for SIPs houses.

Langley reported strong early interest in the houses, with orders starting to come in just as the designs were being finalised. The first of the houses are due to be built early in the new year.

The designs can be customised for individual clients with a degree of flexibility included in the designs, Langley said, but costs are kept as low as possible by sticking to the standard plans.

As well as being an NHBC house builder, JML Contracts also offer services in civil engineering and can provide full in house ground-works and SIP kit supply and erect packages.

(above) a standardised design for a JML Contracts low energy three-bed house

Ecological Building Systems wins two awards at Irish Architecture Expo

Ecological Building Systems won the awards for best exterior building product and best interior building product at the Royal Institute of the Architects of Ireland's Architecture Expo 2013 show. The company's Passive Eco Wall concept won best exterior building product while the Smart Six Insulation Xpander system won best interior building product.

Passive Eco Wall is designed to provide a complete low energy, diffusion open building concept based on passive house principles. It utilises natural insulation materials supplied by Ecological Building Systems in Ireland and the UK, as well as the Pro Clima intelligent airtightness system. A number of certified passive house buildings have already been constructed based on this concept.

The Smart Insulation Xpander System (Smart Six) is designed to provide greater flexibility in the thermal refurbishment of existing buildings. The system can also be utilised in new buildings. Smart Six creates additional insulation space for roofs, walls and floors in an "effective, economical and safe manner". The system can be applied either internally or externally. The Smart Six system is designed to allow installers more

efficiently align rafters or joists and at the same time significantly increase insulation thicknesses in a cost-effective manner.

Ecological Building Systems engineer Niall Crosson said: "We are delighted to have won such prestigious awards. The market demands more innovative solutions to deliver passive house levels of performance and also to tackle a number of the complexities which can arise in the retrofitting of existing buildings. Our Passive Eco Wall and Smart Six solutions both provide innovative practical solutions for both markets."

Ecological Building Systems has pioneered environmental and sustainable building product solutions for over a decade, gaining the sole agency in Ireland and the UK for Pro Clima, the award winning intelligent airtight and windtight building system. The company also supply a range of natural insulations such as Thermo Hemp and Gutex wood fibreboards.

(pictured) Ecological Building Systems' Niall Crosson (centre) accepts Architecture Expo awards from judges Gary Mongey of Box Architecture (left) and Knut Klimmek of Klimmek Henderson Furniture (right); the anatomy of the Passive Eco Wall system



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