
Press release

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Kalzip's solar solution for Energus

Almost 4,000 sqm of Kalzip aluminium standing seam roofing including over 1,500 sqm of Kalzip AluPlusSolar sheets have been installed on the Energus Centre of Excellence in Workington, Cumbria by approved Teamkal contractor, Lakesmere Ltd. AluPlusSolar provides a lightweight and fully integrated renewable power generation source - the system utilises a robust yet flexible thin-film PV laminate that is factory-bonded directly onto the Kalzip sheet's outer surface.

Designed by Architects Plus (UK) Ltd, the environmentally friendly Energus Centre of Excellence was built by Thomas Armstrong Construction Ltd. "The AluPlusSolar roof is very cost effective and comfortably meets its design performance criteria. We're delighted with the Kalzip roofs which are extremely well insulated and stand up splendidly to the extreme weather conditions we face here on the west coast of Cumbria," says Energus Operations Director, John Dyson.

The part of Energus pictured is a huge training and education workshop that is covered by a fully built-up Kalzip roof system with an overall U-value of 0.25 W/m²K. Cranked on plan, the mono pitch roof comprises a combination of AluPlusSolar and standard Kalzip AF sheets which are all PVF² colour coated to RAL 9006, Metallic Silver over a Bright White coated structural liner deck. The AluPlusSolar system at Energus generates a peak power output in excess of 44 Kilowatts which equates to an impressive average of 30,000 Kilowatt hours per annum.

A fully built-up mono pitch Kalzip roof with an overall U-value of 0.25 W/m²K has also been installed over the front half of this main Energus building. The outer sheets are standard stucco embossed Kalzip with Bright White perforated Kalzip roof liner sheets and a combination of sound-absorbing insulation materials for improved acoustic performance. This Kalzip canopy roof covers the main entrance reception, a series of conference, meeting and training rooms, a large open atrium area for conference exhibitions and a separate section leased to the University of Cumbria.

To further conserve energy resources and reduce carbon dioxide emissions, nearly 300 sqm of site-assembled, triple-skin Kalzip Multivault SSR rooflights with a U-value of 2.20 W/m²K have also been incorporated into the workshop's roof. Installed in a series of runs between the AluPlusSolar panels, the rooflight's weather sheets comprise a double-skin of polycarbonate barrel vaults over in-plane translucent GRP liner panels to give an even distribution of diffused daylight with minimal shadow effect throughout the workshop.

Energus provides up to date education and training facilities for vocational skills designed to meet the needs of local and national businesses involved in the nuclear supply chain as well as those in a wider energy and environmental context together with bespoke training and education support for industry.

For details or a copy of the 'Kalzip solar solutions' brochure, please visit www.kalzip.com

