

CASE STUDY

THE UNIVERSITY OF WOLVERHAMPTON

Refectory roof gets an upgrade



WA Building is the main student hub at University of Wolverhampton's Walsall Campus, which specialises in Education Health & Wellbeing and Performing Arts courses. The WA Building houses the refectory and café lounge, student support and campus Facilities Management.

The brief was to replace an existing roof that had reached the end of its serviceable life, with a high performance waterproofing solution and upgrade the insulation in order to meet the University's energy efficiency policy.

The roof is situated above the campus refectory in the WA Building at Walsall Campus. It houses the plant relating to the kitchen below, so in order for the refurbishment work to be carried out, the roof plant had to be dismantled and the kitchen decommissioned, all within a short timeframe to ensure the refectory was operational for the start of the new term in May.

The existence of plant on the roof also presented health and safety issues and so the client requested a waterproofing system that has a reduction in the amount of flame used compared to traditional waterproofing systems. A number of North lights had to be removed due to fragility issues and the areas made watertight.

It was important for the University to partner with a waterproofing manufacturer who could provide technical assistance both in house and on site. A long lasting, durable roofing solution was imperative to the University and so a UK manufactured system was stipulated which held a UK guarantee.

Due to the nature of the site, a hybrid system was preferred by the client in order to reduce hot works along with keeping the roof robust enough to allow future roof access for ducting systems to be serviced.

The specifier on this project chose IKO's Ultra prevENT Guardian (Hybrid) Warm Roof System. The built-up felt system, installed by

Project Sector: Education

System: Built-up Felt Roofing

Products Used: Ultra prevENT Guardian System

Completed: July 2014

Size: 550m²

IKO's approved contractor Monarch Roofing, provides proven products combined with speed of application and safe installation practices on site. The deck was primed before applying an IKO SA Vapour Control Layer followed by IKO Tapered Enertherm ALU insulation which was bonded using IKOpro PU Adhesive, a high-foaming solvent-free adhesive specifically developed to securely bond a wide range of insulation boards in minimum time. An IKO SA underlay was followed by an Ultra prevENT cap sheet, which incorporates graphite technology to achieve the highest fire performance standards. IKO insulated hard edge was included as part of the scheme and drainage was reversed to the parameter.

The University of Wolverhampton decided to engage IKO to prepare the roofing specification following an earlier introduction when a detailed roof survey on another part of the campus was carried out by IKO. An informative workshop, hosted by IKO, further reinforced the University's decision to use IKO products. The technical support offered by IKO both in terms of the production of technical specification and post-contract monitoring leading to a 25-year single point guarantee was also an influencing factor.

The roof was successfully completed without disruption to staff or students with the roofing contractor working weekends in order to remove the north lights and keep the project on track. The result was a high grade waterproofing solution with a 25-year single point guarantee and a 0.18 U-value.