



The Department of Chemistry at the University of Warwick is one of the top departments in the UK and is an international centre of excellence for Chemical Science. Over recent years, the University has invested in upgrading its facilities and these include a state of the art Undergraduate Teaching Laboratory.

The brief

To replace an existing roof which had come to the end of its natural life with a high performance waterproofing solution, which would not only meet the university's carbon reduction policy, but could also be installed quickly during term holidays in order to minimise disruption to students and staff.

The presence of air handling equipment on the roof meant that complex detailing challenges had to be overcome in order to ensure a watertight barrier. The existence of plant on the roof also presented health and safety issues and so the client requested a flame-free roofing solution be specified.

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.

The solution

The new roof was laid on top of the original concrete substrate. A self-adhesive underlay was applied at the perimeter before installing a roof insulation board. A self-bonding IKO Polimar preparation membrane was used to act as a dimensionally stable reinforced base on which to install Polimar EC resin prior to applying the liquid top coat.

Project Sector: Education

System: Cold Applied Liquid Roofing System

Products Used: IKO Polimar EC / UV

Completed: August 2013

Size: 2,500m²

IKO Polimar UV formed a seamless, durable waterproof barrier as well as ultra-violet stability.

The high proportion of plant and equipment throughout the roof presented complex detailing requirements and access issues which the Polimar cold applied liquid roofing system was able to overcome. IKO assisted with the U-value calculations and helped with site-specific design details around termination to metal upstands. The University was pleased to work with a manufacturer who could monitor and partner the project and be on hand with any refurbishment changes as the project progressed.

The quick apply Polimar installation took place over the summer break causing minimal disruption on site. The warm roof build up provided a modern, cost efficient, durable waterproofing solution with a 20 year materials and workmanship guarantee.

The application of the Polimar EC/UV system ensured not only the structural integrity of the roof, but also met and surpassed the minimum Part L Building Regulation requirements for current building regulations by incorporating 140mm IKO Enertherm insulation into the specification. The client identified the roof as an area for improvement in its carbon emissions and this was successfully achieved.