

Kemper System Delivers a Lesson in Flexibility at the University of Warwick

Gibbet Hill Campus, University of Warwick, Coventry



Many of the buildings on the University of Warwick's Gibbet Hill Campus were purpose-built when the University was first established more than 50 years ago.

Amongst these is the Life Sciences Building which, though structurally sound, was in urgent need of façade repairs.

Explains Richard Weston, head of special projects at the University of Warwick's estates department: "The tiles had faded and become discoloured and they had started to loosen, prompting us to erect a scaffold to ensure no tiles could fall onto circulation areas.

"We needed to take action, but any investment in addressing the cladding system had to be aligned to our wider property management strategy."

Technical Solution

The University was in the process of deciding which elements of its estates to refurbish and which to replace; a planning process that is expected to take around two years.

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It was clear that the cladding on the Life Sciences Building couldn't wait that long, so the University decided to look for an affordable solution to last 5-10 years.

Richard continues: "The cladding remediation was envisaged as 'temporary' but we didn't just want to patch it up; we needed a robust and attractive interim solution.

"I'd used Kemper System products for a roofing project in a previous role and had been very impressed with both the product and the technical support the company provided. I didn't know whether the roofing systems were suitable for façades or whether Kemper had other products to answer the requirement but decided to see what they suggested."

International Experience

While Kemper System had never been involved in such a project in the UK before, the Kemper System team was aware of similar schemes in Europe and visited the site to assess the building's condition and recommend a suitable approach.

Explains Stuart Hicks from Kemper System: "It was clear that the majority of the cladding tiles were still in good order. However, some were at risk of falling, there were gaps where tiles had already been dislodged and there was no homogenous surface to protect against water ingress.

"Our advice was to remove and replace any loose tiles or grout and use filler and primer to create a smooth surface, before sealing the tiles in place using Kemper System's Coetrans liquid resin. This would encapsulate the façade with no need for strip out while the building remained operational."

JMG Roofing was appointed to carry out the work and the team began by using Kemper System's Kemperol Stucco to repair areas with missing tiles or gaps. A fast-hardening PMMA filler, Kemperol Stucco is applied as an elastic grey paste that is rain resistant within 40 minutes of application.

Kemco Pox 2K Primer was then used to prepare the substrate. Once this had cured, Kemper System's Coetrans liquid resin was applied in multiple thin layers in a combination of two colours; 'rock grey' to complement the building's black tiles and 'ice grey' to complement its white tiles. This was then finished using a Coetrans Silk translucent top coat.

The solvent-free Kemperol 2K-PUR liquid waterproofing system was also used to provide a fleece-reinforced and watertight seal for corner details and window apertures.

Minimising Disruption

The result is a completed façade that retains the building's familiar black and white aesthetic while repairing the original structure.

Richard adds: "By working with Kemper System we were able to take an innovative and cost-effective approach to updating the look and condition of the building with a liquid system that was ideally suited to following the unique shape of its tiles, columns and alcoves. It meant that we could continue to use the building throughout the programme. This is an approach we'll consider again in the future."