

Kemper System Rolls Out the Red Carpet for Major Pharmaceutical Firm

High Wycombe, Buckinghamshire



A major multinational medical devices, pharmaceutical and consumer packaged goods manufacturer was able to remain operational at its High Wycombe UK headquarters throughout an extensive roof refurbishment project thanks to the solvent-free Kemperol 2K-PUR waterproofing membrane from Kemper System.

The company's extensive office building has a complex 13,000sqm flat roof split across many levels, including a plant room roof, multiple balconies and an internal courtyard. The existing asphalt roof had reached the end of its service life and needed to be replaced. The client stipulated that there should be no business interruption during the works and specified the need for an odourless system. Specialist contractor, Concept Roofing, responded with a warm roof upgrade and solvent-free liquid waterproofing membrane from Kemper System, Kemperol 2K-PUR for the extensive project that was shortlisted as a finalist in the Liquid Waterproofing category of the Roofing Awards 2013.

The original inverted roof design was upgraded to a warm roof, improving the thermal performance. Kemper's Kempertherm FR insulation board was selected due to its dense closed cell structure and interlocking tongue and groove joints. The joints reduce cold bridging and give a rigid base creating a smooth, flat surface with stable joints with minimal increase in height.

Kempertherm FR insulation has a 3mm reinforced facing that can be used on areas subject to greater point loading or more frequent traffic. This offered a cost-effective solution for the more frequently trafficked areas and avoided the labour and material costs of an additional plywood strengthening layer.

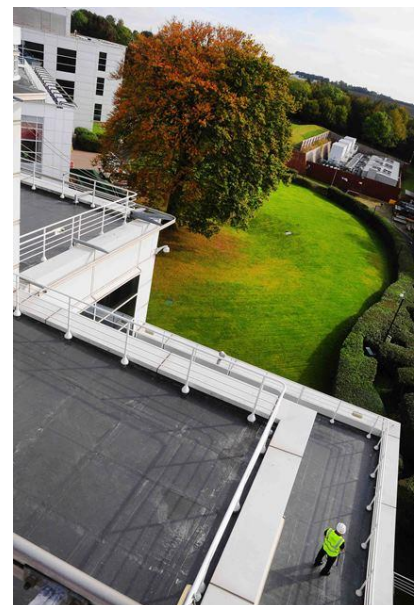
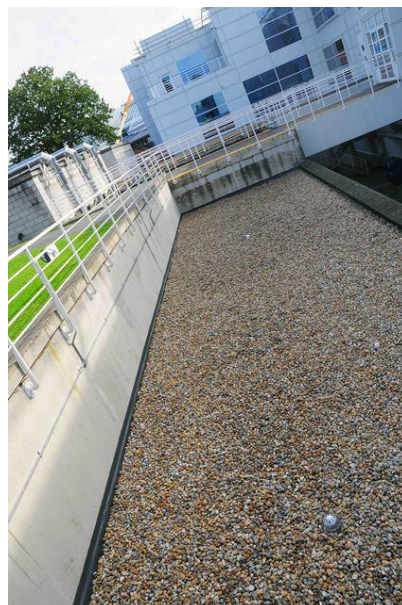
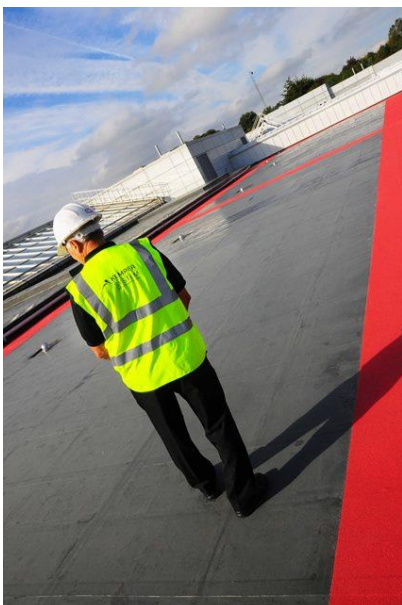
The Concept team began by stripping off the existing inverted roof components, down to the old asphalt which was then prepared ready for the new Kempertherm insulation board. Kemperfix fast curing polyurethane adhesive was used to bond the insulation to the asphalt, itself now acting as the vapour control layer for the build-up. Once primed, the Kemperol 2K-PUR waterproofing was then applied directly to the insulation board.

Kemperol is applied 'wet-on-wet' with the resin saturating a polyester reinforcement fleece. The resin cures to create a membrane which is immensely strong, yet flexible, durable and tear resistant. This application method provides total integration of the base and surface build-up into a single chemically bonded seamless membrane, thus avoiding the weaknesses associated with multiple coating systems.



To complete the installation, Concept roofing created anti-slip walkways on the roof and the courtyard areas with Kemper System's TC resin and bespoke specification coloured quartz. This gave the 'red carpet' effect on the roof, with decorative grey quartz being used in the courtyard areas. Finally, the quartz surface was sealed using Kemper System's silk-matt Eco Finish.

Frank Smith from Concept Roofing comments: "Kemper System's Kemperol 2K-PUR solvent-free waterproofing membrane not only provides clients with an eco-friendly solution, its odour-free formulation also makes it ideal for occupied buildings as there are no nuisance odours. This project upgraded the thermal performance and waterproofing protection of the roof in a fast, fuss-free programme."



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