

KEMPER SYSTEM On Display at Museum of Liverpool

Liverpool



Kemper System has helped to refurbish part of a waterfront museum which is one of the largest in the UK. Positioned over the Leeds Liverpool canal link, the Museum of Liverpool spans an area 110m long by 60m wide and is 26m high at its tallest point.

Architects Bickerdike Allen Partners (BAP) was responsible for the remedial works, which involved removing the original terrace steps and the failed single ply waterproofing of two separate terraces to the north and south of the building.

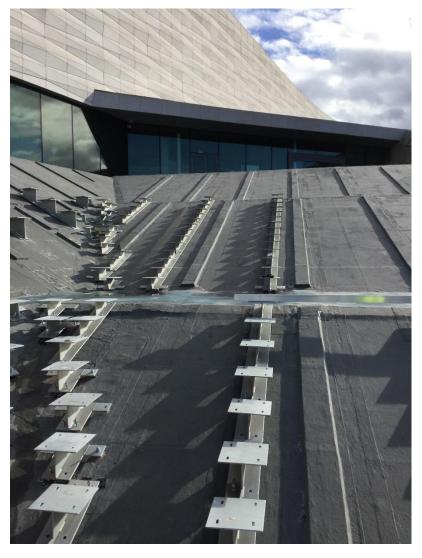
Kemper System's solvent-free Kemperol 2K-PUR liquid waterproofing system was specified for the new terrace support structure and structural deck, and installed by roofing contractors K Pendlebury & Sons.

The work was carried out in two phases. Once the original steps and terraces structure had been removed by the main contractor WH Snow, Kemperol 2K-PUR was used to waterproof the original concrete slab underneath.

Phase two saw a complex steel support system installed and bolted through the new waterproofed concrete slab. Further waterproofing was required comprising very specific detailing, including 672m of galvanised steel



stepped beams with more than 200 small individual supports and more than 3,600 individual bolt heads securing the steel to the slab.



Further work included the application of a protective coating consisting of Kempertec EP5 Primer and quartz sand to flat terrace areas where cement bonded blockwork supports were being used.

The museum remained open to the public throughout the project, including all structural work, waterproofing and installation of the new replacement terrace steps.

Neilan Symondson from K Pendlebury said: "This was an extremely intricate job which had to be carried out in challenging weather conditions as the building is located right on the waterfront. The Kemperol 2K-PUR was applied on slopes ranging from 20 to 35 degrees with very complex and specific detailing. It had to provide a guaranteed watertight solution, resolving many issues resulting from the original construction and retention of external cladding finishes.

"Kemperol 2K-PUR was an ideal solution as it's applied wet-on-wet, which made it much easier for us to work around the extensive structural detailing and awkward shapes, ensuring they were waterproofed effectively.



"As it's odourless, this also assured the client that anyone visiting or working at the museum during the works wouldn't be affected by any disruptive odours."

The project was successfully completed, resulting in seating, terraces and steps at both ends of the Museum, leading to two viewing platforms offering observation points for the city, River Mersey and Liverpool Bay. Stuart Hicks from Kemper System added: "This was a complex, high-profile project that had to meet a number of strict requirements with no room for error.

"Crucially, the application process for Kemperol 2K-PUR will ensure the waterproofing performs to the highest standards to keep the museum watertight for many years to come."

