

SIKA AT WORK THE CUNARD BUILDING, LIVERPOOL

REFURBISHMENT: Sika® MonoTop®-610, Sika® MonoTop®-612, Sika® MonoTop®-620, Sika® CarboDur®, Sika® Ferrogard®-903+, Sikadur®-30, Sikagard®-550W Elastic, Decothane®





THE CUNARD BUILDING



SIKA SUPPLIES PROVEN TOP TO BOTTOM SOLUTION FOR HISTORIC BUILDING REFURBISHMENT

Sika showcased the scope of its construction sector specialisms during the refurbishment and conversion of an historic, Grade II-listed building – with its industry-leading products selected for both roof and basement works.

The Cunard is described as one of Liverpool's most iconic buildings. Built in 1917, the six-storey construction not only provided sanctuary as a Second World War air-raid shelter, its dockside location also made it an ideal site for ship building blueprints and luggage storage.

Following its conversion into high-end office blocks, a survey of the building revealed issues with the roof and basement.

At the top of the building, aged asphalt patches with varying level changes and multiple cases of cracking, slumping and blistering were identified.

Meanwhile, in the basement soffits, beams and columns located in its sub-basement began to show signs of deterioration. Carbonation and chloride levels in the concrete led to the reinforcement bars becoming exposed in areas, leading to surface cracking and spalling. Sika had the ideal solutions for both problems.

Designed Roof Systems Ltd was given the task of solving the roofing issues. They specified a 20-year Decothane[®] system in light grey with red walkways.

Michael Devlin, Managing Director at Designed Roof Systems Ltd, said: "The Decothane[®] system was chosen as the client didn't want to replace the asphalt and wanted to avoid the need for hot works to be carried out but at the same time was looking for a roofing solution that was aesthetically suitable and effective over varying details and angles as well as the more basic flat areas. <u>Decothane[®]</u> more than delivered on this brief."

Clan Contracting were instructed to carry out the basement's <u>concrete</u> repair and began by removing the cracked and delaminated concrete and



cleaning the areas in preparation for the application of Sika's reinforcement system. Firstly, the steel reinforcement was applied with <u>Sika® MonoTop®-610</u>, a high-performance, one-component, cementitious polymer-modified protection coating.

This was followed by <u>Sika® MonoTop®-612</u>, a high-strength repair and reprofiling system suitable for overhead and vertical concrete substrates. Spray or hand-applied, <u>Sika® MonoTop®-612</u> provides superb resistance to water and chloride penetration. For the one-component, polymer-modified cementitious smoothing coat, <u>Sika® MonoTop®-620</u> was applied.

As well as crack repairs, Sika provided carbon fibre strengthening in the form of <u>Sika® CarboDur®</u>, carbon fibre-reinforced polymer (CFRP) laminates which are bonded onto the structure as externally-bonded reinforcement using <u>Sikadur®-30 structural adhesive</u>. <u>Sika®</u> <u>Ferrogard®-903+</u>, a surface-applied, multi-functional liquid corrosion inhibitor, and <u>Sikagard®-550 W Elastic</u>, a plasto-elastic, anti-carbonation coating supplied the system's final protective layers.

Damian Meyers, Commercial Director at Clan Contracting, said: "The Sika concrete repair system was specified on the strength of its proven properties as a dependable, long-term refurbishment and strengthening system. It performed as promised, delivering a superb solution to the debilitating soffits, beams and columns without issue."

Thanks to the superb properties of Sika's exemplary concrete repair and strengthening and roofing systems, the top and bottom of the landmark Cunard building has been improved, leaving a well-protected, structurally-sound belowground floor and water-tight, visually-pleasing roof.

For further information call 0800 112 3863.



