CASE STUDY

Tower Bridge - Ticket Offices

Garland System	Sector
Dura-Coat	**Heritage**

A considerate roof refurbishment at Tower Bridge ticket offices, delivering waterproofing protection that preserves the heritage appearance and physical integrity of this iconic landmark.

As one of the UK's most iconic and historically significant structures, Tower Bridge is a Grade I listed site that demands the highest standards in conservation, safety, and technical delivery. As part of a planned heritage maintenance programme, the client identified that three independent external ticket office roofs, located at the north and south approaches, had reached the end of their serviceable life. The original asphalt waterproofing, installed in the 1960s, had deteriorated and required replacement to ensure continued weatherproofing.

The project demanded a carefully considered solution that would respect the building's protected status, retain the visual character of the existing roofs, and be installed without disrupting the bridge's operational function. Working in a live public environment with significant pedestrian footfall added further complexity, as did the requirement to avoid hot works and maintain the original light grey reflective finish.

Garland UK was appointed as system designer and material supplier, with Technical Manager Jack Costello overseeing the specification, detailing and technical support throughout the works. Installation was delivered by Garland UK Approved Contractor JAW Roofing, working under Garland's quality-assured partnership model.

> "The project demanded a carefully considered solution that would respect the building's protected status."

Challenge

While the roof areas were modest in size, the technical and logistical constraints presented a highly sensitive working environment. The existing roofs formed part of a functioning ticket office within a conservation area, requiring a non-invasive solution that would preserve the underlying structure and original appearance.

A key design constraint was that no changes could be made to the existing parapet heights, thresholds or detailing. This meant the new waterproofing system had to terminate exactly at existing interfaces, with zero tolerance for height adaptation. Given the live, high-traffic nature of Tower Bridge, the use of hot works was strictly prohibited, and the installation had to be coordinated to avoid impact on daily operations.

The winter programme introduced further challenges. Low ambient temperatures and variable conditions required careful control of catalyst quantities and curing times, with the client needing full confidence that quality, colour consistency and workmanship would meet the elevated expectations that come with working on a structure of global significance.

Solution

Garland UK specified the Dura-Coat liquid waterproofing system, a high-performance polyurethane-modified methyl methacrylate (PMMA) solution engineered to provide durable waterproofing over existing substrates, including aged asphalt. This made it an ideal match for the ticket office roofs, where retention of the existing structure was a conservation requirement.

The system offered several critical advantages. Its flame-free, cold-applied application removed the need for hot works and eliminated associated risks within a live public setting. Dura-Coat's rapid curing properties ensured reliable installation even in lower temperatures, with catalyst levels adjusted daily to suit site conditions. Crucially, the system build-up allowed for direct application to the cleaned asphalt substrate without any alteration to existing thresholds or parapet levels.

> "Dura-Coat's flame-free, cold applied application removed the need for hot works."

The full system included Garland Dura-Coat Primer, an embedment coat, reinforcement fleece, and a colour-matched light grey topcoat to replicate the original solar-reflective finish. All materials were fully compatible with the existing asphalt and designed to deliver long-term waterproofing with minimal environmental impact. The system, supplied in full by Garland UK, ensured complete technical continuity and traceability.

Throughout the programme, Garland UK provided close technical oversight, reviewing detailed drawings and advising on sequencing, termination accuracy and quality assurance. Jack Costello conducted regular site visits, offering practical guidance to support the contractor during cold-weather work and overseeing key detailing to ensure full compliance with the agreed specification. The works were tracked using Garland UK's Roof Asset Management Programme (RAMP), providing progress reports and photographic documentation as a digital audit trail for stakeholder transparency.

Outcome

The project was delivered safely, efficiently and with no disruption to Tower Bridge's daily operations. The refurbished roofs now provide high-performance waterproofing protection while fully preserving the heritage appearance and physical integrity of the original structures.

Thanks to the non-invasive specification, the works were completed without altering existing thresholds, avoiding the need for structural modification and maintaining compliance with strict conservation requirements. The finished result visually replicates the original light grey coating, ensuring continuity with the bridge's architectural character.

> "The refurbished roofs now provide high-performance waterproofing protection while fully preserving the heritage appearance."

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Jack Costello commented,

'This was a project we were genuinely proud to support. Working on Tower Bridge carries a particular responsibility, not just to deliver technical performance, but to do so in a way that respects the cultural and architectural significance of the structure. Through close collaboration, precise detailing and disciplined quality control, we were able to achieve a result that is both functional and faithful to the original design.'

This heritage refurbishment exemplifies how modern liquid waterproofing systems, when correctly specified and supported, can be successfully integrated within the most sensitive environments, delivering conservation-compliant outcomes without compromise on quality, durability or appearance.

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