

Press Release
October 25th 2022

Delta work on remedial waterproofing for podium deck

The scope of the project was to offer a retrofit solution to a leaking podium deck. Works included closing up a leaking parapet, podium deck interface and side wall and providing a robust waterproofing solution to a residential structure in North Yorkshire.

Podium decks are an external platform between and/or attached to a structure and is defined as an externally weathered platform. Podium decks can be utilised for car parks, leisure spaces, recreational spaces, patio terraces and gardens.

The requirement to waterproof a podium deck is to:

- protect the deck surface from water accumulation
- prevent the ingress of water to the space below
- prevent ingress of water to adjacent buildings

Delta Registered Installers, Dryfix Preservation Ltd, York, were appointed by the customer to provide a guaranteed, cost-effective scheme that would comply with BS 8102:2022 (Protection of below ground structures against water ingress. Code of practice.) and BS 6229:2018 Flat Roofs with Continuously Supported Flexible Waterproof Coverings and that would ensure the structural integrity of their home.



At the time of the construction, the podium deck had been waterproofed, however detailing to the parapet and surrounding wall was poor. The parapet and external wall itself had been left completely unprotected and vulnerable. Over time, water inevitably ingressed into the structure.

Methodology

On the initial site visit, waterproofing installation had been evident and was providing the podium deck with a form of protection, however the space below the deck to the parapet wall and side wall, were allowing water ingress. Along with site surveys, investigations were also carried out to ensure all defects were identified and correctly diagnosed. During these site investigations a number of further defects were identified which were allowing for the migration of water internally.

When it comes to homes and commercial buildings, waterproofing is a critical element for protecting the structure and preserving its integrity. Poor waterproofing design, incorrect specification of products or poor workmanship can all cause a waterproofing solution to fail. Fortunately, some waterproofing fails, require remedial approaches as to completely new system approaches.

Once all defects were identified, discussions were held with the homeowners on remedial options, methodology for remedial works and cost. Due to the location of the waterproofing failure, Dryfix Preservation Ltd, York were able to provide a robust waterproofing design which would remedy the failed system.

Dryfix proposed alterations to the existing structure which addressed the poor, at risk design which would allow for a continuous waterproofing system to be implemented between the existing parapet.



Following alterations to the structure, attention was given to the exterior junctions to ensure no water could ingress the structure via cavities as previously experienced by the owners. An application of Koster NB 4000 via construction interfaces was installed as a primary waterproofing solution to the additional blockwork.



Where different types of construction meet, there is always potential for movement. Koster NB 4000 would provide a long lasting, flexible approach in providing security for difficult junctions and the event of movement. Koster NB 4000 is an elastic, crack bridging, bitumen free, polymer modified, mineral hybrid coating suitable for external waterproofing application. Being UV stable, and not weather dependant, an ideal remedial solution for this project.

Products used:

- Koster NB 4000

Case Study Results

On time and to budget - the client/homeowners were delighted with Dryfix's pragmatic and practical approach to this project, assured that their home would be preserved.

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