



EXTERNAL CAR PARK DECK REFURBISHMENT WATERPROOFING AND PROTECTION

MARSLAND HOUSE **GREATER MANCHESTER**

Authorised Contractor:

Grade 2 Structural Repairs 1026m²

Specifier company / name:

Bruntwood

Systems

Area:

Triflex DeckFloor Triflex ProDetail®

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Introduction

Marsland House provides office accommodation in a modernised building. Refurbished to a high standard the managed office facility is situated in a prominent location in Sale, Greater Manchester. With a stylish reception and entrance canopy providing an impressive welcome, the car park was in need of refurbishment.

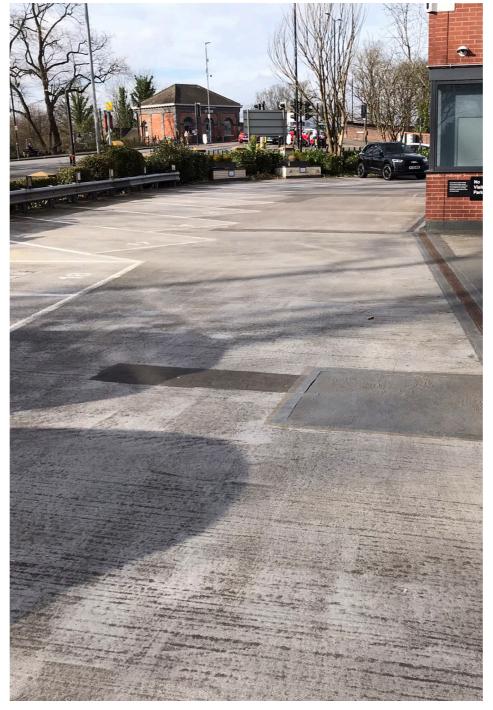
The first phase of works was completed 5 years ago, to stop water ingress to the building's perimeter. Due to the durability and ability of Triflex systems, coupled with exceptional compatibility, phase 2 of works to waterproof and surface the main car park deck incorporated the original perimeter protection. This reduced costs and overall time on site, all without creating a weakness in the system. A waterproofing and surfacing solution for the external car park deck and ramp was required that could also improve the aesthetic whilst increasing safety through enhanced anti-skid for both pedestrians and vehicles.



The challenge

The external car park deck wraps around part of the building, with around 30 parking spaces accessed via a ramp from the highway. The car park features two types of construction; the first consisting of a steel frame with pre-cast reinforced concrete planks and a structural topping, and the other, a traditional cast in situ reinforced concrete frame and deck. A coating had been applied sometime in the past, which was failing extensively through delamination. In addition, a number of repairs were evident in the car park deck, suggestive of cracking due to ongoing structural movement. The car park incorporated a slot drainage channel that ran the length of the external car park deck which was also leaking.

A waterproofing and surfacing solution was required, able to deal with both types of construction and complimenting the existing Triflex detailing solution installed some years prior.













The solution

Triflex Field Technicians undertook a survey and testing to evaluate the concrete substrate and failing coating. Whilst Triflex solutions can often be used to overlay existing coatings, in this instance their poor condition meant that full removal was necessary. The Triflex investigation helped to determine the preparation, pretreatment and primer requirements for the Triflex solution, as well as confirming suitable adhesive and cohesive strength of the existing concrete substrate.

Following a thorough assessment, the Triflex proposed the heavy duty Triflex DeckFloor waterproofing and surfacing system. This thick layer, fully aggregate filled yet flexible system utilises advanced PMMA waterproofing technology and incorporates a high tensile strength reinforcement in high-risk areas. The localised reinforced membrane delivers high levels of dynamic crack bridging with the Triflex DeckFloor system certified to EN 1504-2.

With no existing movement joints in the car park deck, Triflex loop joints were proposed to help prevent future issues. Upon inspection, it was also found that the car park slot drainage channel was intersected by several cracks within the deck. Triflex worked with the client and engineer to address the repeated cracking.

The resolution was to shorten one section of the drainage channel, and the install a Triflex loop joint. The now two drainage channels were rebate lined with Triflex ProDetail waterproofing, offering a rapid repair. The result is that not only does the deck drain directly, but future risks have been eliminated.

The solution

The Triflex solution was installed to a high standard by Triflex Authorised Contractor, Grade 2 Structural Repairs. With works undertaken during late Autumn, the weather was frequently disruptive. However, thanks to the rapid curing properties of the Triflex DeckFloor PMMA solution and with resins that are rainproof within 30 minutes, weather windows were maximised and works completed quickly.

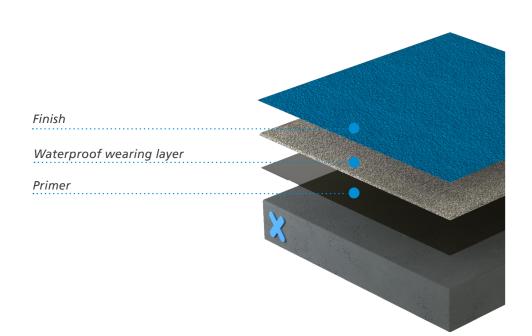
The Marsland House car park refurbishment means that the car park is now protected for the long term, delivering watertight protection to the external concrete deck and ramp. The Traffic Grey finish and contrasting Triflex markings enhances the aesthetic of the building, befitting of its modern design.



System benefits

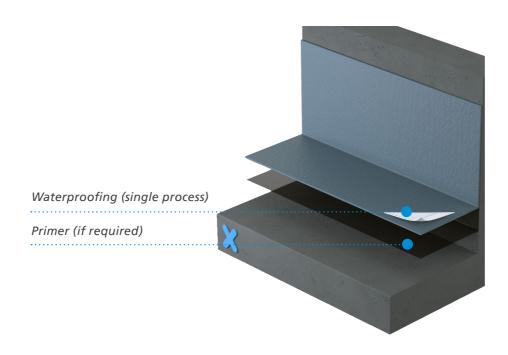
Triflex DeckFloor

- PMMA system for external and internal decks and ramps
- Compatible with a wide range of substrates, including asphalt and concrete
- Locally reinforced with dynamic crack bridging membrane
- High levels of long term skid resistance
- Exceptionally rapid curing, even at low temperatures
- Solvent and isocyanate free
- Totally cold applied, with no risk from hot works



System benefits Triflex ProDetail®

- Waterproof down to the smallest detail
- Compatible with virtually all substrates including asphalt
- Cold applied, fast curing with rapid installation
- Simple, single process waterproofing application
- Rapid curing system even at low temperatures
- Fully reinforced technology
- Certified to the highest standards
- Designed for foot traffic and provides exceptional puncture resistance





Triflex is the leading European specialist in cold liquid applied waterproofing, surfacing and marking resins. Our high-quality systems provide reliable and lasting waterproofing, surfacing, protection and markings for roofs, walkways, balconies, terraces, car parks, roads and infrastructure.

We are a family owned and operated company that provides tailored solutions worldwide. From our production facilities based in Minden, Germany, we have been researching and developing solutions designed to protect and repair the built environment for more than 40 years.

From our UK and Ireland headquarters based in Stone, Staffordshire we pride ourselves on providing our clients with tailored solutions and exceptional levels of service and support throughout all stages of their project. From conducting indepth site surveys to our comprehensive testing and off-site and on-site support, Triflex delivers the highest standards.

Triflex solutions are certified to the highest standards and are backed up by longterm meaningful warranties, ensuring peace of mind for years to come.

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