



CASE STUDY

TESCO FERNDOWN



TESCO approached waterproofing experts OUTCO to assist with repairs to the top deck to their Multi-Storey Car Park of their Superstore

OVERVIEW

AREAS

Car park

MATERIALS

Waterproof Resin

SERVICES

Waterproof

Line Marking

Civil Engineering

Following 30 years of use, surface deterioration and water ingress, NMC were asked to carry major works to the upper deck, these works would ensure the deck was watertight and would bring a fresh new look to the car park.

Following initial scoping and surveying, NMC offered Tesco an alternative solution to a typical asphalt wearing course. Using a fleece reinforced waterproofing resin, we would be able to apply a waterproof coating and remove circa 90% of the deck weight by replacing the asphalt with a full resin system.

The twelve-week programme began by removing the existing asphalt surface, during this phase of the delivery it became clear that the deck has never received a waterproofing system when originally built. The concrete structure had therefore been open to water ingress for 30 years, with some areas showing levels of 99% humidity within the concrete structure.

New expansion joints were installed measuring 130lm, the drainage gully's were repaired including the installation of 40 new gully covers. The exterior walls to the top deck and railings prepared and coated with an anti-carbonisation paint.

Using vacuum shot blasting equipment the concrete slabs were prepared to receive the resin coating, repairs were carried out to damaged areas of the concrete deck. The fleece reinforced resin waterproofing system consisted of five layers of protection and equivalent to 12kg per sqm², a reduction in weight of circa 90% against the old asphalt surface.

Structural issues held by Acro Props were resolved as NMC installed new structural steelwork alleviating the requirement for the props and reopening the six closed parking bays.

The site was completed with the installation of line markings across the deck, adjusting the design slightly to accommodate lighting columns providing better access to certain parking bays.

NMC replaced old trolley shelters with free standing weighted trolley bays removing the requirement to penetrate fixings into the new waterproofing system