

CASE STUDY

CAR PARK PRESERVATION



ASISOLUTIONS.CO.UK



With millions of cars on the world's roads it is not surprising that car parks form an essential part of transport infrastructure. Asphalt maintenance causes disruption and can be an issue, with owners and engineers struggling to balance surface condition with free access.

FIRST IMPRESSIONS COUNT

Degraded surfaces and potholes, apart from the health and safety considerations, can persuade members of the public to spend their money elsewhere and can have a direct effect on retail profits. The car park surface is the first thing customers see and can often influence their overall impression of the facility. The application of RHINOPHALT® can be undertaken at night, at a fraction of the cost and time of more commonly used and invasive maintenance techniques.



LINE REMOVAL AND RE-MARKING

The Challenge

All large retail organisations listen to their customers, many are now changing the width of parking bays due to the high incidence of minor impact damage and subsequent claims/complaints from users. The black surface finish provides a quick, cost effective solution when line marking removal and re-alignment is carried out, without the need to replace the asphalt surface course.

In 2016, Asda Superstores (part of the Walmart Group) made a decision to widen some of their parking bays from 2.2m to 2.4m, following customer feedback.

Five key stores in the UK were chosen for the first sites and the largest project at 3,700m², was at Fulwood, near Preston in Lancashire. The location of the parking bays are in prime locations at the front of the store.

The Solution

The old lines were removed by water jetting and dried using a heat lance. There was no damage to the existing asphalt surface course, and only an appearance difference where the surface detritus and fines had been removed.

Sealing the surface with RHINOPHALT® reinforces the aggregate matrix in the asphalt and prevent ravelling.

The contract took 5 shifts to complete, starting in the evening when the car park was quieter, making access easy and the night time application caused minimal overall disruption to the client.

To ensure the surface was dry before treatment, the contractor removed the old white lines a day in advance of each shift. RhinoDust was applied immediately after treatment to provide grip to the surface. All of the old white lines were completely removed without leaving a white trace (ghosting) on the surface which could have lead to confusion for drivers when parking.





BUSINESS UNIT RENOVATION

The Challenge

In 2017, Northwood Investors refurbished a large office building and wanted to refresh the car park and re-line with parking bay numbers. The total asphalt area was 2,240m² and the surface was an aged AC 10 CLOSE SURF which was about 15 years old.

The surface was structurally sound requiring some minor patching (approx. 65m²) to repair two areas of fretting.

The Solution

The unit was unoccupied which aided a quick completion, and the contract was completed over 4 days (daytime application) which included 1 day for line removal, sweeping and cleaning.

The majority of the car park was treated using a towable mini-sprayer, with the kerb edges being completed with a line lazer sprayer. Fine RhinoDust was applied to the treated surface to provide grip.

Fast process minimises disruption. Rapid curing of the RHINOPHALT® during the daytime application meant that the re-lining could start on the same shift, ensuring no delays in the contract timing.

EXTENDED PAVEMENT LIFE

Preservation

RHINOPHALT® protects bitumen from the impact of oxidation due to weathering and UV degradation. It achieves this by penetrating the existing asphalt binder of the surface course and provides a durable seal to prevent water ingress into the bitumen and to resist further oxidation; coupled with this is the benefit of improved cohesion and binding properties with the aggregate matrix.

RHINOPHALT® will seal and protect the asphalt surface of a car park, and provide an aesthetic fresh black colour that will assist with re-alignment. This colour will lighten over time due to the micro-texture of the surface aggregate becoming exposed with trafficking as the aggregate colour is lighter than the black preservative.

The ability to apply at night ensures that areas can be prepared and treated and thus causes minimal disruption to clients and customers.

Surface aggregate loss is reduced as the RHINOPHALT® locks into the asphalt mortar, reinforcing the aggregate matrix and it remains within the macro-texture providing a preservative seal.

