

CASE STUDY

Watertight Rooftop Parking

MAKERS

...makes the difference

PROJECT

Stamford Quarter, Altrincham

STRUCTURE

Shopping Centre Car Park

CLIENT

Lunar Altrincham S.A.R.L.

CONTRACT VALUE

£1.1m circa

CONTRACT



First constructed in the 1970's, Altrincham's popular Stamford Quarter Shopping Centre has two main car parks; that of the Rooftop car park over the existing retail stores and a newer multi-storey car park constructed many years later.

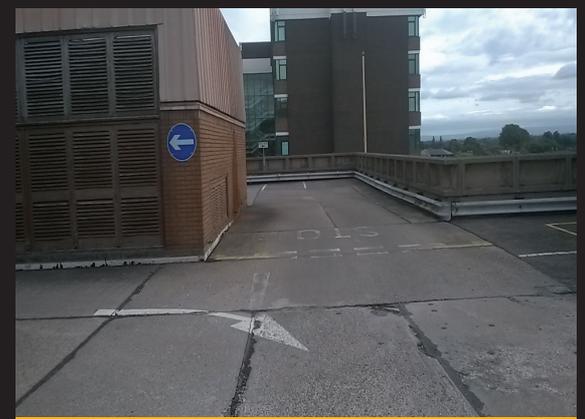
The existing parking deck of the Rooftop comprised a concrete screed in part combined with mastic asphalt waterproof wearing course that was badly leaking.

The exposed concrete screed – laid in bays with a failing bitumen sealant material in the bay joints – was allowing water ingress into the shops below whilst the asphalt had developed splits and cracks to many areas after long term, continuous exposure to the elements and UV degradation.

Following a programme of successful remedial works carried out by Makers in 2013, a second phase of work was awarded to us following a competitive tender process to re-waterproof the Rooftop parking deck including a substantive programme of concrete repair and protection works to the Rooftop's pre-cast, reinforced concrete parapet walls. Re-waterproofing of the failed system on the new multi-storey car park was also required.



Before



Before

T : 08458 994444
F : 01543 480676
E : enquiries@makers.biz
W : www.makers.biz

Makers Office Building 4,
Shenstone Business Park
Lynn Lane, Shenstone, WS14 0SB

Registered in England No: 6348341 Registered Office as above

Association Membership



Accreditations



CASE STUDY

Watertight Rooftop Parking

MAKERS

...makes the difference



Decaying Concrete Parapets



Blistered Asphalt



Failing Bay Joints

Retailers beneath the Rooftop Car Park had endured leaks and water ingress into their retail space for a number of years. Ever since initial installation, the asphalt had also suffered the effects of interstitial (trapped) moisture. This manifests itself in the development of surface blistering across much of the car park deck. Asphalt absorbs heat from the sun which in turn increases the size of blistering as the trapped moisture expands and tries to escape from the substrate. Such blistering creates major trip hazards for users of the car park.

The interior faces of the reinforced concrete parapet walls around the perimeter of the Rooftop car park were badly spalled with much of the corroding reinforcing steel exposed. Concrete repairs were carried out using Sika's Monotop repair system and protected with Sikagard anti-carbonation coatings.

The entire parking deck area – concrete screed and asphalt – was prepared to remove surface contaminants and to take off the blistering in readiness for the application of Triflex's fully-fleece-reinforced PDST deck waterproofing system. All of the failed bitumen joints to the concrete screed were cut out and replaced with Triflex's rapid-curing Flex filler with splits, repairs and daywork joints in the asphalt also overbanded to improve crack-bridging. A new aluminium flashing detail to the cove upstands of the asphalt was installed to allow the asphalt to continue to 'breathe' to prevent further blistering from entrapped moisture.

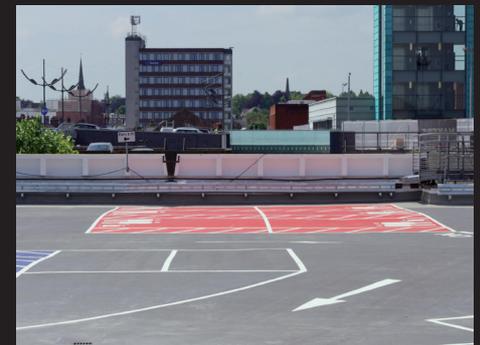
New Parent & Child and Disabled parking bays were applied in bright, contrasting colours with all existing Armco barriers being replaced with new as well as replacing all of the existing, outdated signage.



Parapets Repaired



Rooftop Parking Area



Use of Contrasting Colours

T : 08458 994444
F : 01543 480676
E : sales@makers.biz
W : www.makers.biz

Makers Office Building 4,
Shenstone Business Park
Lynn Lane, Shenstone, WS14 0SB

Registered in England No: 6348341 Registered Office as above

Association Membership



Accreditations

