

# CASE STUDY

## Car Park Refurbishment

# MAKERS

...makes the difference

### PROJECT

Prince Bishop MSCP

### STRUCTURE

Multi-Storey Car Park

### CLIENT

Savills

### CONTRACT



Prince Bishops Car Park is located right in the heart of Durham City and is the closest car park to the unmissable World Heritage Site – Durham Cathedral and Castle.

This reinforced concrete car park structure was suffering concrete spalling damage in numerous locations with concrete suffering chloride induced corrosion exacerbated by construction weakness such as plastic shrinkage, and low cover and “tram line” cracking above the beams. These defects combined with salt laden moisture ingress had resulted in reinforcement corrosion and spalling to the concrete deck.

The original car park construction is a reinforced concrete frame which supports precast concrete planks with an insitu concrete topping. This has subsequently been extended with a structural steel frame used to add two further levels, again with precast concrete planks and insitu concrete topping forming the deck.

The car park has 400 spaces over 7 split levels, including 22 accessible bays located on Level 1, and is situated directly beneath Prince Bishops Shopping Centre, the number one retail destination in Durham City.



Before



After

T: 0845 899 4444

E: [sales@makers.biz](mailto:sales@makers.biz)

W: [www.makers.biz](http://www.makers.biz)

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

Registered in England No: 6348341 Registered Office as above.



# CASE STUDY

# MAKERS

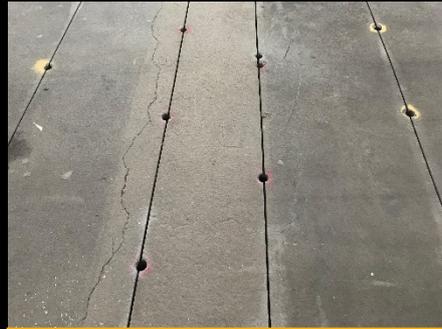
...makes the difference

In order to maintain a live operational car park, refurbishment was carried out in 4 phases working from top down, with communication with retailers and traffic management to protect the public being key.

Concrete repairs were required to decks, ramps, columns, soffits, upstands and parapet panels. Repairs to decks were carried out and reinstated with Fosroc Patchroc GP. Repairs to soffits and column areas were carried out using Fosroc Primer AR bonding bridge and Fosroc HB.



Before



During



During

CPT Patchguard Anode system was installed on the decks along the beam lines, which was installed on all levels throughout the car park.

Columns, walls and beams were cleaned using high-pressure water jetting unit to remove all deleterious material from the surface prior to painting and deck preparation was carried out with captive blasting including line marking removal.

Stairwells were stripped back and non-slip coatings installed to landings and tread along with fresh painted soffits and walls.

Included within the refurbishment was the installation of new Electric Vehicle charging bays to level 1.

Triflex DeckDefence was installed on the decks and Triflex DeckCoat was installed onto the ramps, providing the client with a 10-year guarantee on works and products installed.



After



After



After

**T: 0845 899 4444**  
**E: [sales@makers.biz](mailto:sales@makers.biz)**  
**W: [www.makers.biz](http://www.makers.biz)**

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

Registered in England No: 6348341 Registered Office as above.

