

# STRUCTURES CASE STUDY

## Car Park

# MAKERS

...makes the difference

### PROJECT

Eastgate MSCP, Basildon

### STRUCTURE

Car Park

### CLIENT

British Land

### CONTRACT VALUE

£1,543,564

### CONTRACT



At the time of its first phase of construction in the 1980's, Eastgate Basildon was the largest shopping centre in Europe.

With little maintenance carried out since its original construction, the centre's reinforced concrete, flat-slab multi-story car park – with 800 spaces – was displaying a variety of defects throughout the structure.

This seven-storey car park underwent a 48-week programme of full internal refurbishment which required approximately 40m<sup>3</sup> of concrete repairs to decks, soffits, columns & beams.

The top deck asphalt waterproof layer had failed and was allowing salt-water ingress to the structure below as well as the asphalt on levels 1 & 2 internally.

Owing to its 1980's design, the reinforced concrete column spacings throughout the structure provided three parking spaces sandwiched between the columns. The narrow width of each space meant that customers of the centre's car park found it difficult to use getting in & out of parking spaces.

Poor overall utilisation of the car park was having a significant impact on the shopping centre's footfall and parking revenue.



Before



Before

T : 08458 994444

F : 01543 480676

E : [enquiries@makers.biz](mailto:enquiries@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

## Association Membership



## Accreditations



# CASE STUDY

## Car Park

# MAKERS

...makes the difference



3 Narrow Spaces between Columns



Original Entrance / Exit



Original Roof Deck

In order to revive and protect the internal aspects and structure of the car park, a combination of Triflex and Sika's non slip waterproof deck coatings were installed to the intermediate parking deck surfaces using contrasting colours for drive aisles and parking bays. The parking decks were a mixture of asphalt and reinforced concrete substrates.

Following careful preparation of both concrete and asphalt surfaces, concrete repairs were required to the concrete decks followed by the application of Sika Ferroguard 903 migratory corrosion inhibitor as a corrosion management system. Both the asphalt and concrete deck surfaces throughout were primed in readiness to receive the colour deck coatings. All cracks and daywork joints were overbanded with a fibre mesh to provide further crack-bridging and to ensure a seamless application of the waterproof and protective deck coatings. Anti-carbonation coatings were applied to the soffits, columns and beams throughout to further brighten the internal appearance and enhance the customer experience with a light & bright car park.

As well as providing a new lighting scheme throughout with new signage, Makers recommended that given previous poor utilisation issues combined with narrow parking spaces, the spaces between the columns was reduced to two parking spaces from three. Though the overall number of spaces has been reduced from 800 to 700 spaces approximately, the shopping centre's owners have seen a dramatic uplift in utilisation resulting in improved revenues.



2 Wider Spaces between Columns



Revised Entrance / Exit



Top Deck After

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

