

Case Study: Resin Flooring

Richard III Visitor Centre, Leicester

Contractor: Morgan Sindall Limited

Completed: July 2014

Area Coverage: Café 380 m², Visitor Centre 300 m²



Project Description

On 4th February 2013, it was confirmed that a battle-scarred skeleton found in a car park in Leicester was King Richard III. The last of the Plantagenet dynasty, Richard had been killed in the Battle of Bosworth on 22nd August 1485 and buried in what was then Greyfriars Friary Church. The find attracted worldwide interest and it was decided to build the Richard III Visitor Centre on the site, telling the story of the King's life and death.

Zenith Contract Services Limited were recommended to client, Morgan Sindall, by flooring manufacturer, Weber Saint Gobain, whose product, Durastone 4635 diamond polished pumped screed, had been specified by the project architect. With many years' experience and widespread expertise in overcoming inherent flooring problems, Zenith were able to act as flooring consultants on the project, suggesting a flooring solution that avoided existing asphalt and screed having to be removed, ultimately saved Morgan Sindall both time and money.

During an initial site inspection, it was found that the existing substrate was in a poor condition, comprising 40mm of asphalt membrane, a cardboard type bitumen coated layer, and a further 20 – 30mm of screed, before reaching a sturdy concrete base. It appeared unlikely that there was a damp proof membrane in the floor. Access to the site added a further difficulty, as the entrance gate was just 4 metres wide, providing constraints for deliveries. It was agreed that the flooring product could not be installed on the existing floor without fear of failure, and an initial proposal was put forward.



DPM being applied



Screed in curing process in the Throne Room

Products & Systems Used

The Triton Platon floating floor system
Weber 4360 base material
Weber 4650 G80 black
DD silk top coat sealer

This suggested removing and refilling trenches and areas of infill, filling deeper trenches with concrete, removing and filling debonded areas, removing tarmac and, in one area, installing the new floor over existing paving slabs and concrete. It would also be necessary to consult a resin manufacturer about installing a damp proof membrane. While everything would be done to reduce the risk of cracking, this could not be guaranteed.

As a resin floor specialist, with a proven track record of working with problem floors, Zenith Contract Services Limited suggested an alternative solution. Zenith recommended the introduction of the Triton Platon system, this was chosen and could then be finished with Weber 4650 G80 Black in slip-resistant matt, silk or gloss.

A semi-rigid DPM was prepared and introduced to the architect for approval. Once this approach was agreed, Zenith progressed the project by making good all the damaged areas, fixing the platon securely wall-to-wall by means of tape, edging and corner strips, and pumping Weber 4360 base material into all areas. Finally, a top of Weber G80 black was applied and sealed with Resutile Clear Satin.

The team from Zenith worked weekends and Bank Holidays to avoid delays in completion and the result was an impressive floor installed on time and within budget. Zenith Pola operatives, Chris and Steve McGowan worked closely with the Morgan Sindall Site Manager, who responded immediately to the programme changes, enabling other trades to progress their works and meet the project deadline.

Screed to Main Exhibition Area

