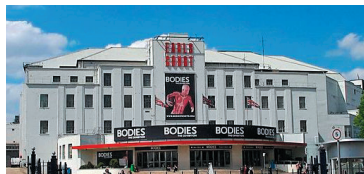




Case Study

Earls Court



The iconic Art deco exhibition centre Earls Court, one of the UK's largest indoor arenas, and a popular concert venue was largely a waste ground for many years. In

1935 the land was sold and the new owners hatched a plan to construct a show centre to rival any other in the world. The building was constructed at great speed, and at the time was one of the largest reinforced concrete buildings in existence.

On the 1st September 1937, at a cost of £1.5 million, Earls Court finally opened to the public for the Chocolate and Confectionery Exhibition.

Over the years **Cemplas Waterproofing and Concrete Repairs Limited** are proud to have been associated with maintaining the integrity of the internal, and external façades, of both Earls court and Olympia working as the principle contractor for Earls Court Ltd.

Earls Court surveyors having noted the Warwick Road Basement Concourse was showing visible signs of delaminating concrete, called upon the expertise of Cemplas to investigate the extent of the defects.

Consequently Cemplas were appointed to undertake in excess of £50,000 of major remedial concrete and brickwork repairs.

Access to some building elements was demanding, and Cemplas supplied a fixed scaffold which had to be craned in to position. Careful consideration had to be adopted, and the work was programmed to be carried out between shows.

Earls Court facade before and after



Following a detailed survey, a full Jet wash of the substrate, followed by detailed hammer testing to all areas was undertaken to determine the full extent of required repairs.

Areas were marked out in a series of straight lines to form a border around defective area including any hairline cracking. Defective areas were the Saw cut at right angles along previously marked lines to a minimum depth of 10 mm.

All defective concrete was removed. Where the steel reinforcement bar had been exposed and was corroded, the concrete was removed to a depth of 20 mm behind the bar, and the concrete around the exposed corroded reinforcement bar was removed until 50 mm of clean steel could be achieved at both ends of the rebar.

All corrosion was removed to achieve BS7079: Part A1, and two coats of Fosroc Nitoprime Zincrich steel reinforcement protector was applied to the previously cleaned reinforcement bar.

The area to be reinstated was firstly primed with Nitobond HAR, and whilst still tacky, Fosroc's Renderoc HB Repair Mortar was applied to match the existing surface, and the mortar cured with Nitobond AR.

Cracks to concrete and brick works were resin injected with Fosroc Nitokit Surface Sealant. Defective bricks were replaced, re-pointed and stitched where required.

On completion of the remedial repairs, Fosroc's Anti-carbonation coating was applied to provide a decorative protective finish.

For further details contact:

Paul Stacey at Cemplas on **0208 654 3149**
or **email: info@cemplas.co.uk**

