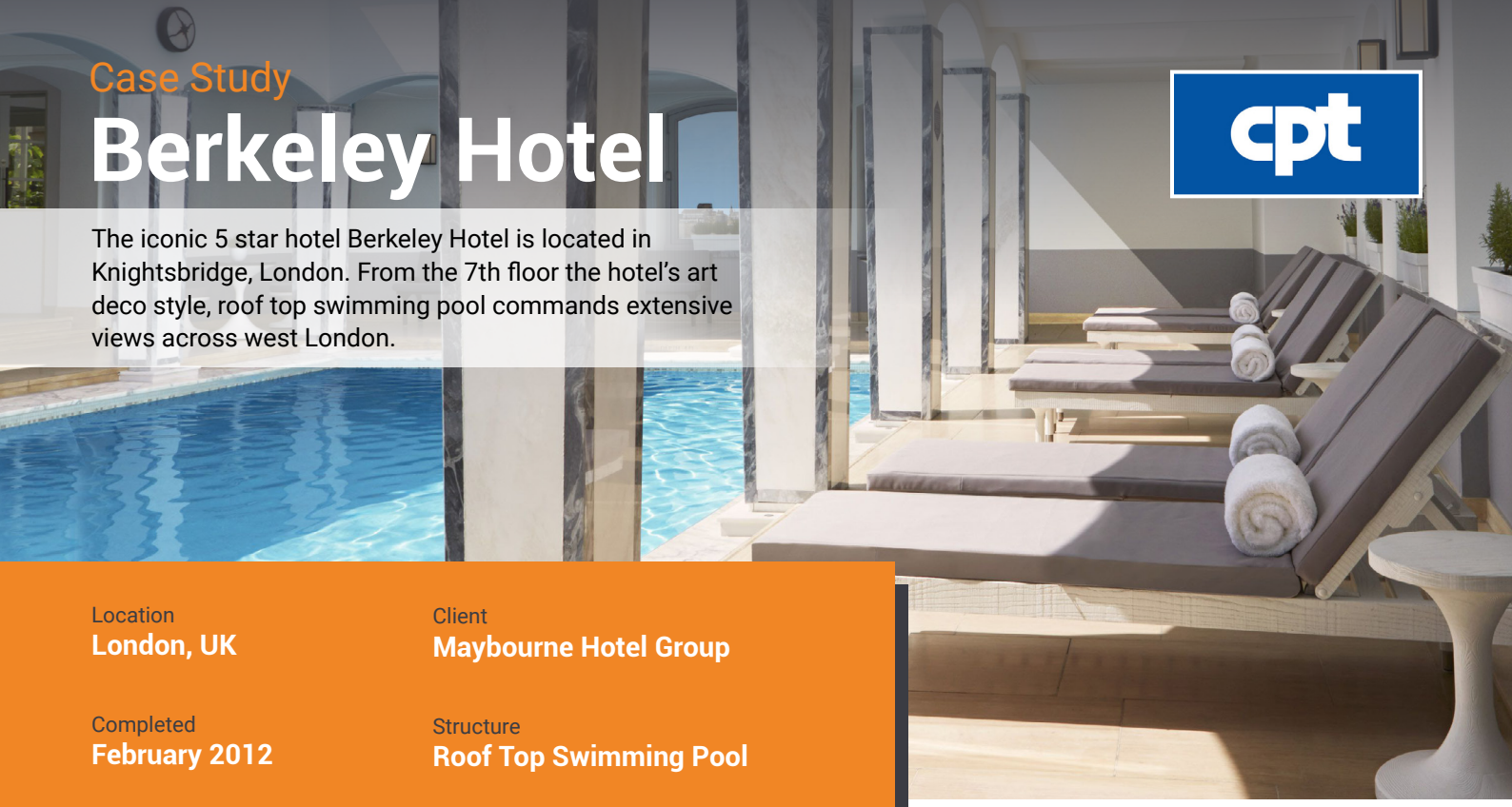
Case Study

Berkeley Hotel



The iconic 5 star hotel Berkeley Hotel is located in Knightsbridge, London. From the 7th floor the hotel's art deco style, roof top swimming pool commands extensive views across west London.

Location
London, UK

Client
Maybourne Hotel Group

Completed
February 2012

Structure
Roof Top Swimming Pool

The Problem Identified

Visual observation showed water leakage from the Berkeley Hotel swimming pool onto the concrete substructure and significant corrosion damage due to chloride attack.

The Solution Developed

CPT was asked to develop a solution to the corrosion problems on the underside of the pool. A DuoGuard™ hybrid anode system was designed to satisfy the clients insistence on noise restriction which necessitated limited concrete break-out. To halt ongoing corrosion and prevent future damage anodes were installed into the beams of the substructure.

Using an external power source, an impressed current was applied to stop active corrosion and render the steel passive. The DuoGuard anodes were then disconnected from the power source to self-generate a galvanic current, sufficient to maintain steel passivity and control corrosion.

The Benefits Provided

Corrosion related deterioration of the Berkeley Hotel swimming pool was halted. After the initial power up period, the self-powered DuoGuard hybrid anodes minimise all future maintenance requirements and associated life costs. The system is flexible and allows further current to be applied at a later date if required.

Traditional methods of repair to historic structures are often costly and disruptive with only short to medium term results expected. DuoGuard hybrid anodes offer a long term and minimally intrusive alternative solution to managers of heritage assets.

Chloride corrosion to the underside of the pool

CPT Products Used

DuoGuard™

DuoCrete SD Mortar

Concrete Preservation Technologies

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