

Heron House

322 Holborn, London, WC1



Heron House is a prestige 1970's Commercial Office Building in the centre of Holborn, London WC1, that was being refurbished and upgraded for new tenants.

The lower levels had originally been built with a concrete 'rib' beam and void form 'pot' floor and this was fully exposed again during the refurbishment works.

The structural engineers from HKW Partnership noticed that in the relatively constant environment behind and above the old decorative facade and suspended ceilings, carbonation had progressed into the supporting concrete beams. In many areas this had now reached the depth of the primary steel reinforcement, particularly where the concrete cover was low. This had removed the normal passivating alkalinity of the

cement matrix and the steel could therefore corrode.

This potential for future corrosion leading to structural problems or inadequate performance in fire, meant that Structural Renovations Limited were contracted to advise and then repair the problem areas.

To do this required them to remove all of the damaged concrete over corroding steel, clean and remove any corrosion products, then reinstate the concrete to the correct thickness and profile. This was achieved with Remmers Betofix® RM Mortar, an advanced cementitious repair mortar which is designed to be easy to use and fast curing. This allows it to be applied and built up, even overhead, in several layers and within a short period of time.

The whole facade was successfully repaired and then the new external cladding and suspended ceilings were installed.

Project Details

Application:

Concrete Repair and Protection

Market:

Commercial - Offices

Structural Engineer:

HKW Partnership

Contractor:

Structural Renovations Limited

