

Concrete Repair and Protection



Social Security Offices Brun House, Burnley

Brun House in Burnley, is a reinforced concrete framed building with brick and rendered infill panels around conventional glazing in its facade. The building houses the busy Social Security offices of the local DHSS for the area.

A routine visual inspection by the client's surveyors, noted signs of distress and spalling in some of the concrete elements. Specialist UK Restorations Ltd (SUKR) were therefore requested to carry out a full Condition Survey and to investigate the root cause(s) and extent of the problems.

As usual, this survey consisted of a detailed report with marked up drawings for all elevations and surfaces, plus photographic records and hammer testing results. This resulted in a schedule for the extent of the individual repairs to the concrete, which was spalling over corroding steel reinforcement. In combination with laboratory analysis, this also clearly showed the root cause of the problems to be carbonation of the unprotected

concrete. This was particularly evident in areas with insufficient concrete cover, or honeycombing due to poor compaction, i.e. itself due to poor workmanship originally. This loss of alkalinity was now allowing the steel in these areas to corrode, causing spalling of the cover concrete.

SUKR provided a full remedial specification, including a complete Sika concrete repair and protection system. This was designed to repair the damage and importantly, prevent its recurrence in future. It also included full budget costings and access proposals, to enable the client to schedule their ongoing maintenance programme simultaneously.

Due to the cost effectiveness of this combined approach, it was decided that SUKR should continue with the works immediately. An additional requirement was also to minimise disruption and noise for the tenants, so all of the noisy preparatory work was carried out outside of office hours.

Project Summary

Problem: Inadequate concrete cover to steel reinforcement

Result: Concrete cracking and spalling over corroded steel

Solution: Complete concrete repair and protection system

Specialist **UK** Restorations

Project Details:

Client:
Land Securities Trillium Limited

Material supplier:
NCC (North West) Limited

Materials Manufacturer:
Sika Limited

For professional support on your project contact:

Specialist **UK** Restorations

Case Studies are available to illustrate our expertise and experience in all of the areas where we provide our Technical Services. These include:

Structural Repair and Reinforcement Systems



Concrete Repair and Protection



Structural Waterproofing



Facade Cleaning and Maintenance



Stone Restoration and Conservation



External Wall Insulation



Timber Repair and Restoration



Bird Deterrent Systems

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