

Condition Surveys

We offer an assessment service to the built environment which provides condition survey work on any structure. The work includes highway structures, commercial and public premises and residential buildings. These works generally take the form of a site survey with sampling followed by the associated laboratory work carried out in our UKAS accredited laboratory.

The results can be used to assess the structural stability, aging, corrosion and degradation of steel and concrete structures. In conjunction with a <u>structural survey</u> to assist engineers by the production of structural drawings detailing vertical load paths and horizontal stability systems as well as connections and building fabric details; and finally during forensic engineering to determine the causes of any structural defects and failures.

We can also assist in the production of fully detailed solutions to any remedial works that are required following our condition survey work.

In particular we have a wide range of expertise in the assessment of reinforced concrete structures and have carried out a wide variety of projects investigating this type of structure.

The durability of concrete structures can be endangered by two different processes: the disintegration of the concrete material as such on the expansive corrosion of the embedded reinforcement causing spalling and cracking of the concrete.

The causes of both can be either aggressive attack of substances in the external environment, or deleterious ingredients within the concrete. Information gained can be verified by a complete suite of insitu and laboratory tests to determine the causes of defeats and condition of the structure, the durability of the structure and the requirement for any remedial works.

This information can be used to assess the structural suitability for redevelopment or change of use of an existing structure as well as determining the requirement for remedial works.