

SERVICES FOR LOCAL GOVERNMENT



DURABILITY

SAFETY ASPECTS

**FAILURE ANALYSIS
& FORENSIC
INVESTIGATIONS**

**MAINTENANCE
ASSESSMENTS**

**LITIGATION &
EXPERT WITNESS**

**CONDITION
SURVEYS**

**STRUCTURAL
ADEQUACY**

DURABILITY

The working life of a building is now commonly required to be 60 years. Some materials will have a recognized working life of 60 years, but when acting within a composite system, this may be compromised. We are able to use thermal stress, frost weathering, air pressure, salt crystallization or chemical weathering as aging techniques to assess the long-term performance of systems enabling the 60-years guarantee to be attained.

SAFETY ASPECTS

Although standards and building regulations ensure certain levels of performance for systems or products used in construction, long-term use or poor installation can have a detrimental effect on performance. We provide surveys and testing programs to ensure live buildings are still safe for public use. These programs can include slip/skid of floors, balustrade stability, cladding integrity and structural connections' assessments.

FAILURE ANALYSIS & FORENSIC INVESTIGATIONS

In the event of a failure of a material, structure or structural element, either during the construction phase or during its working life, our experts can make site visits to visually assess failures and develop work programs (including sampling for materials analysis at our laboratories or non-destructive on-site techniques). The information is then used to discover the cause of the failure (material or structural) and to develop a method to mitigate it, correct the failure or find liability.

MAINTENANCE ASSESSMENTS

Many installations have a requirement for maintenance schedules in order to uphold the manufacturer or installer guarantees, or to ensure that the building is working efficiently as a safe and economic environment. We can carry out condition assessments in order to create a maintenance schedule, or to advise of retrofitting or refurbishment routes.

LITIGATION AND EXPERT WITNESS

Litigation and expert witness is often required if accidents occur during service of the building, or to investigate failure within the structure and building envelope. The failure may be due to poorly or wrongly specified materials, structural components, or poor installation. Our expert witnesses can carry out site inspections and create a customized program to investigate the causes of any failures.

CONDITION SURVEYS

We provide condition surveys which are necessary to monitor and flag up any problems with the structural, aesthetic or durability integrity of a building throughout its life. These may be required in order to program in maintenance or repair works, to help maintain the building within the available budget.

STRUCTURAL ADEQUACY

The structural adequacy of a building or structure can be assessed by test or inspection. At Lucideon, we can conduct destructive tests until the specimen fails. This type of testing provides an understanding of the performance or material behavior under different loads and testing conditions, and is used across a wide range of materials and products, from ancillary components and flooring, through to cladding and roofing systems.