

SERVICES FOR CONSTRUCTION PRODUCTS MANUFACTURERS



**STRUCTURAL &
INTEGRITY TESTING**

**WEATHER
RESISTANCE &
DURABILITY**

**WIND
SERVICEABILITY**

ON-SITE TESTING

**INSTALLATION
& FABRICATION
TRIALS**

**CONFORMANCE
TESTING**

**FAILURE
ANALYSIS**

**ADVANCED
MATERIALS
DEVELOPMENT**

**FACTORY
PRODUCTION
CONTROL**

**CARBON
FOOTPRINT**

STRUCTURAL & INTEGRITY TESTING

At Lucideon, we 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.

WEATHER RESISTANCE & DURABILITY

Stone, brick, concrete or other building materials are exposed to the elements. We provide aging techniques, including: thermal stress, frost weathering, air pressure, salt crystallization and chemical weathering.

WIND SERVICEABILITY

Using instrumented wind tunnels, we are able to study the effects of air moving past solid objects. Air-tightness, displacements under wind pressure and rain penetration are parameters that we measure before the structure is forced above its breaking point.

ON-SITE TESTING

In addition to laboratory testing, which shows that a system or solution can satisfy the design criteria, we also perform on-site testing. This is critical to verify installation workmanship and prove on-site performance in unknown construction types, particularly in relation to change of use.

INSTALLATION & FABRICATION TRIALS

At Lucideon, we can verify installation and fabrication processes, and develop alternative techniques to optimize the use of energy, time or materials. These can be carried out at the manufacturing point, in a controlled laboratory environment mock-up facility, or at a real site installation.

CONFORMANCE TESTING

We use conformance testing to determine whether a product or system complies with the requirements of a specification, contract or regulation. Petrography, fatigue tests or corrosion techniques are applied to a variety of different materials, including metals, stone and concrete.

FAILURE ANALYSIS

We often employ wear, corrosion, chemical, fatigue or metallographic analysis to determine the cause of failure, set corrective actions and/or find liability. Failure analysis also plays a vital role in new product development.

ADVANCED MATERIALS DEVELOPMENT

Prior to a project beginning, we assess technology options and conduct a feasibility study to ensure the platform is viable. The development process then starts in our laboratories using the chosen technology.

FACTORY PRODUCTION CONTROL

Lucideon holds a Notified Body status under the Construction Products Regulations for Certification of Factory Production Control under ISO/IEC 17065 in areas such as masonry or road construction products.

CARBON FOOTPRINT

A carbon footprint is the total greenhouse gas (GHG) emissions caused by your business. These can come directly from your organization, or indirectly via your supply chain and/or distribution network. The Lucideon Assurance division conducts GHG verification for both voluntary and mandatory carbon schemes, as well as certifications of management systems such as energy, environmental and quality.