

Construction products weathering and aging testing

Evaluate the behavior of a material when faced with weather cycles and accelerated aging conditions



Manufacturers of construction products should ensure that the materials used are functionally operational throughout the building's lifetime. Before launching a new product in the market, they should evaluate how it will behave when faced with cycles that accelerate the operating conditions to which it will be subjected.

Our solution

Applus+ offers a wide range of weathering and aging tests for construction products in order to characterize them according to their nature and end use. Our laboratories are ISO 17025 accredited. Our service covers:

- Identifying materials, uses and applicable regulations
- Test plan design and execution
- Test report issuing and improvement plans

We carry out tests according to European and international standards for the following products, among others:

- Mortars, cement based adhesive, adhesives: Performance tests after heat-ice, water-ice, immersion in water, CO₂, pressure, light, UV and other aging cycles.
- Building enclosures (Windows, curtain walls, shutters, awnings, doors, hardware): [hygrothermal testing](#) and resistance tests for damage caused by external agents (wind, rain, heat/cold, humidity)

- Suspended ceilings and profiles: Mechanical strength tests in extreme use conditions Profile protection degree (e.g. galvanization)
- Glass and screens: Chemical resistance and mechanical strength tests after thermal shock, condensation and other cycles
- Ceramic parts: Expansion in water, thermal expansion, conductivity, etc.

Likewise, these tests or equivalent ones are applicable to other construction products.

- Basic products: Binders, mortars, adhesives, ceramic materials, aggregates, paints, waterproofing materials, insulation, wood, coatings, glass, natural stone, etc.
- Finished products: Applications, pavements, panels, plates, plumbing fittings, plastics, parts, etc.

We have proven quality-accredited laboratories (ISO 17025) to test construction products. Our testing capabilities allow us to fully characterize the products using numerous technologies (mechanical, acoustic, and thermal behavior, reaction to fire, physical-chemical characterization of materials, etc.), thus adjusting the time and costs needed to characterize your product.

Applus+ is also [Notified Body under the Construction Products Regulations](#) and provides CE Marking services for construction materials and products.

Benefits

- Improve your product's quality and lower the costs for non-quality, post-sale incidents, etc.
- Applus+, one stop shop for your product's full characterization and validation.
- Speed up the product's time to market