Contact us

Construction Materials Testing

Characterisation of basic building materials, end products and specific construction solutions in order to assess their performance.

Applus+ Laboratories has an extensive portfolio of testing services related to the characterisation of construction materials and systems. We have ISO/IEC 17025-accredited laboratories and we are a notified body (nº 0370) for type testing with a view to CE marking.

A comprehensive service

- Materials and product characterisation
- Definition and implementation of customised testing plans
- Creation of a testing plan for a particular product or standard
- Forensic engineering and fault analysis
- Support in developing new construction products
- Management of certifications, including CE marking, European Technical Assessment (ETA), etc.

Tested Products

- **Aggregates and natural stone**: erosion, absorption, density, hardness, grain size, chemical properties, elasticity, petrography
- **Cement, lime and plaster**: chemical composition, setting time, resistance, purity, reactivity, expansion
- **Concrete, additives and admixtures**: resistance, dosages, additive and admixture capacities, elasticity, load creep, retraction, expansion, modules, chemical composition

- **Steel, profiles, cables and structures**: tensile strength, shear strength, torsional strength, dynamic testing, vibration, corrosion, passivation, forensic damage analysis
- **Natural wood, laminate and chipboard**: compression, traction, adhesion, changes in volume, impact, hardness, elastic modulus
- **Masonry components**: compression, absorption, dimensions, elasticity, slip resistance, expansion, flex, thermal insulation, fire resistance
- **Windows and partitions**: flex resistance, impact, punching shear, thermal and acoustic insulation
- **Railings**: Dimensional characteristics, flex, impact
- **Walls and enclosures**: user safety, impact, flex, fire resistance, acoustic insulation, window, door and skylight seals
- **Floors and ceilings**: flex resistance, impact, fire resistance, slip resistance
- **Boards and panels**: Compression, flex, traction, adhesion, dimensions, thermal and acoustic insulation, thermal contrast, reaction to fire, fire resistance
- **Thermal and acoustic insulators**: compressibility, water uptake, dimensional stability, conductivity, density, reaction to fire
- **Taps**: durability of on/off mechanism, thermostatic, pressure and acoustic testing
- **Adhesives and grouts**
- **Sealants**
- **Mortars and concrete-repair products**
- **Speciality and composite products and materials**