

## Acoustic testing

Evaluate the acoustic quality of materials and products to reduce the impact of noise.



The acoustic characterization of noise-emitting products and acoustic insulation materials is key to improving their competitiveness and guaranteeing they meet the applicable regulations.

Evaluating acoustic behavior allows us to know the level of sound power, sound absorption, acoustic transmission or acoustic attenuation, which in turn will allow defining their later use in construction sites, infrastructures and facilities.

## Our solution

Applus+ Laboratories offers acoustic characterization services aimed at material manufacturers, as well as engineering companies, public administration and technical control bodies.

Our service includes:

- Comprehensive management of validation programs
- Acoustic simulation
- Test plan development
- Design, calculation and manufacturing of test equipment
- Data post-processing and test report issuing
- Product improvement consultancy
- Training for public agency technicians.

Our laboratories allow us to perform the following tests:



Measurement of airborne noise and impact noise insulation in construction materials and elements, both in the lab and on-site.

- Facades and roofing systems
- Doors and windows
- Interior partitions, vertical and horizontal
- Traffic noise barriers
- Wall linings, floor coverings and false ceilings

Measurement of acoustic absorption in materials and elements

- False ceilings, seats and others.
- Linings
- Absorbent materials
- Traffic noise barriers

Determination of the acoustic pressure and power emitted by noise sources.

- Electrical and electronic equipment
- Automotive industry material
- Sound sources
- Building equipment

Our technical teams evaluate the acoustic quality of your product based on each market's regulations (EN 10140, EN 3741, 3744 and 3746, EN 354, EN 11691, EN 7235 and EN 5135)

To do this, we have our own authorized acoustics and vibrations laboratory and some of the most specialized facilities in Europe:

- Anechoic room
- Reverberation room
- Rooms for airborne noise transmission for both vertical and horizontal separators
- Rooms for measuring impact noise.
- Combined tests: Acoustic insulation and fire resistance in a single assembly, with one sample mounted.

We have technical teams at your disposal to make the samples to be tested, making the preparation phase prior to the test easier for you.

## **Benefits**

- Acoustically identify your product to ensure compliance with legislation.
- Improve the competitiveness of emitting and insulation products by giving users better acoustic comfort



• Leverage test synergies with other technologies (fire, chemical and physical characterization, mechanical behavior, thermal insulation) offered by the Applus+facilities.