



Cesit Ingegneria S.P.A.
www.cesit.net

Safety and Environment

Building Acoustics

The aim of building acoustics is to ensure the correct sound insulation of buildings, both in relation to noise originating from the external environment and noise generated within the building itself and transmitted through its structural components.

Building acoustics is based on predictive design using specific simulation software to check that the provisions for sound insulation are correct before proceeding with construction, and on instrumental tests conducted on existing buildings. Checks are performed on the degree of insulation of the entire building and its components, using appropriate sources of noise and dedicated measuring instruments.

Services

Acoustic testing of buildings and systems

Instrumental verification, during construction, of compliance with acoustic requirements for vertical, façade and footfall insulation, systems noise levels, reverberation times and calculation of the respective reverberation index

Passive acoustic requirements of buildings

Predictive assessment of requirements in relation to legal and regulatory requirements

Predictive calculation of index levels

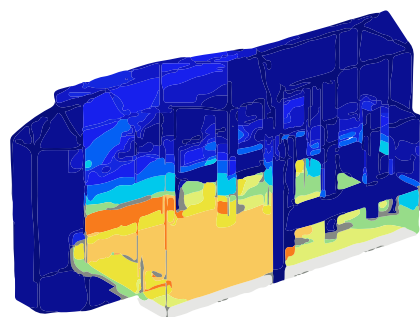
Evaluation of the index of each passive acoustic requirement (vertical, façade and footfall insulation, and system noise levels) established by the applicable laws and regulations, by means of algorithms and simulation software

Studies of comfort, upgrading and sound insulation

Measurement of acoustic parameters with sound level meters or specific software to achieve acoustic comfort conditions and improve the acoustic performance of rooms and partitions

Design and realisation of sound insulation for new buildings and their technical installations (lifts, hoists, boiler and/or refrigeration rooms, air conditioning systems)

Design and realisation of sound insulation for existing buildings, measurement of reverberation and calculation of the reverberation index



Design and measuring instruments

Finite elements predictive software for the sound insulation of structures

Footfall generators for floor slabs

Omnidirectional sources for indoor vertical partitions

Very high power directive sources for testing the insulation of façades, doors and windows

Complete set of microphones and accelerometers

Class 1 sound level meters