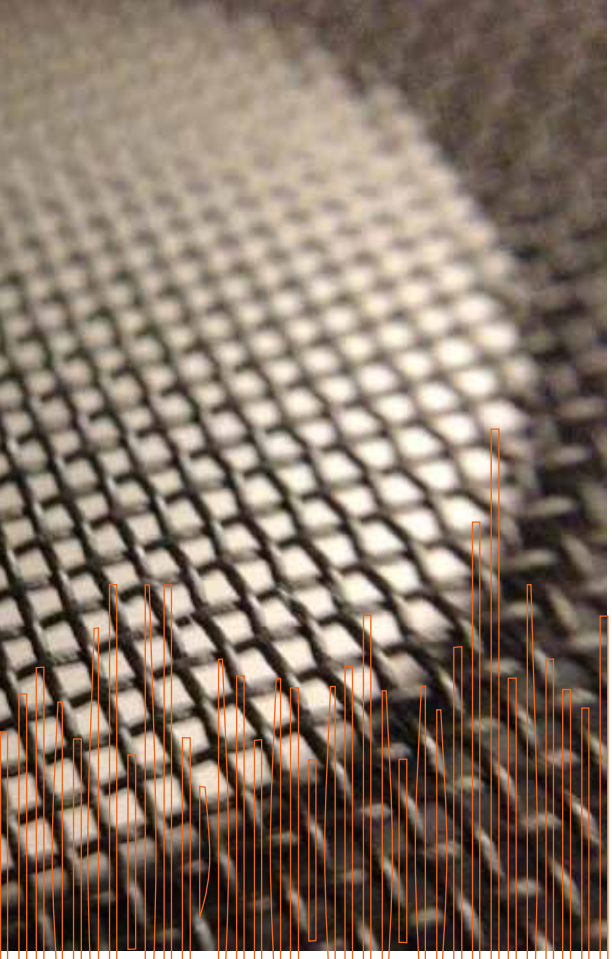

Cesit Ingegneria S.P.A.
www.cesit.net

Safety and Environment

Architectural Acoustics

Cesit Ingegneria S.P.A. designs and implements acoustic upgrades of interior space. This is vital in places where the acoustics need to be perfect, such as theatres, auditoriums, conference rooms, film and television studio control rooms and recording studios. It can also improve other aspects, such as sound quality and speech comprehension, even in everyday environments like test rooms, classrooms, multi-purposes halls, canteens, demonstration rooms, showrooms and living-rooms equipped with modern home theatre systems.

It is possible to solve problems of indoor noise and background noise in offices, open spaces, gyms, swimming pools and a wide range of other environments.

Hosting entertainment events in acoustically unsuitable spaces, without taking account of geometric and architectural factors or high levels of background noise caused by the position of the room and air conditioning systems that have not been correctly sized from an acoustic point of view, can severely compromise sound quality and generate aural annoyance.

Design of acoustic insulation and internal acoustic response for:

- public show venues
- multi-purpose halls
- conference rooms
- meeting rooms
- gyms
- canteens and restaurants
- schools
- shops
- offices, open-plan environments and call centres
- recording studios

Acoustic design and testing of air treatment and other technical systems

More widespread use of air conditioning has spawned increasing numbers of air treatment units even in small rooms or rooms that require very low levels of background noise. We verify the physical causes of these phenomena and take action, on the basis of our specific knowledge of systems engineering, to reduce or eliminate sound-related disturbance.

Modelling of the acoustics of indoor environments at the design stage by means of simulation programmes (auralisation)

Evaluation of the acoustic quality of indoor environments by means of instrumental tests (ISO 3382)

By conducting sound meter tests in an indoor environment, it is possible to describe the acoustic quality of the environment in terms of objective parameters.
These parameters can be a starting point for the design of upgrades to or modifications of the acoustic characteristics of a conference room, auditorium or any public area affected by problems of speech intelligibility.

Design of acoustic comfort in home environments

- Design and realisation of home theatres
- Design and realisation of high-end systems rooms

Services

Modal and reflection analysis

Predictive definition of acoustic parameters (reverberation time, clarity, speech transmission index, intelligibility, NC curves) for small and large environments

Acoustic treatment (diffusers, absorbers, bass-traps, QRDs)

Frequency response measurement

Digital Room Correction

Design and measuring instruments

Omnidirectional signal sources

Directional signal sources

Constant directivity signal source

Class 1 sound level meters

½”and ¼” measurement microphones

½” and ¼” microphone arrays

Artificial-head binaural microphones

Modelling software for conference rooms, theatres, auditoriums, music rooms, cinemas and discotheques

Time-domain and frequency-domain analysis systems such as MLS, TEF, sweep, real-time, single-channel and multi-channel