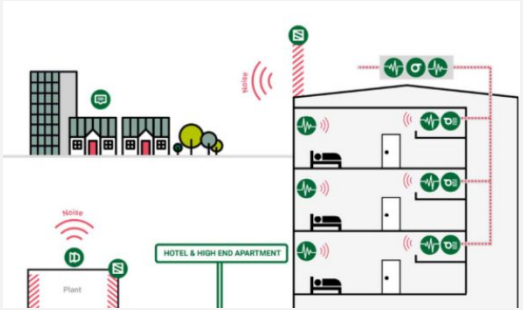
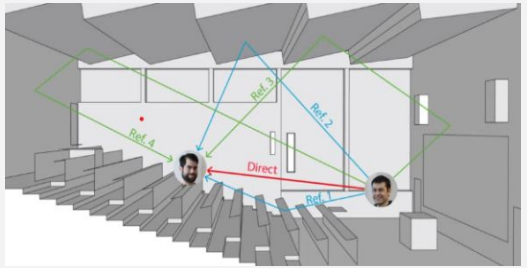
What is Architectural Acoustics?

Architectural acoustics is the science and engineering of controlling sound within buildings to achieve specific goals, like clear speech in a theater or quietness in an office, by managing how sound waves reflect, absorb, and transmit through surfaces and materials. It's about designing spaces for optimal sound, ensuring clarity for music and speech, managing unwanted noise, and enhancing comfort and function for occupants.



Main Types/ Areas

1. Room Acoustics : Manages sound within a Space
2. Sound Isolation : Prevents sound from entering or Leaving a Space .
3. Mechanical system noise control : Addressing noise from HVAC , plumbing , elevators etc .
4. Electro Acoustics : Design of sound systems (PA Audio) for clear delivery .

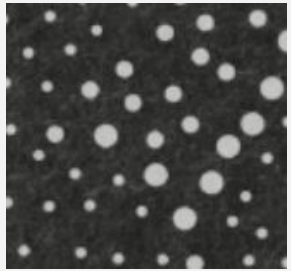


Commonly Used :

1. Commercial and office Environments
2. Educational Facilities
3. Healthcare Facilities

Absorption panels / Wall panels

Sound Absorption Panels or Acoustic panels can be provided in a variety of materials and finishes. They can be heavy duty durable or more decorative finish to suit the application. From Generator rooms to Office Board rooms or Music Studios.



Ceiling Acoustics

Ceiling Acoustics can be dealt with using a variety of materials and systems. They can be Lay in or board type false ceilings. Alternatively, a series of horizontal or vertical acoustic panels, all tailored to the particular requirement and Application.

Upholstery

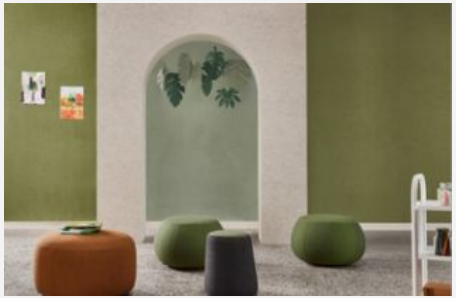
Upholstery can be a key in building acoustics. Using correct textiles for partitions and workstations along with the Seating can contribute to a more pleasant working environment by reducing noise.

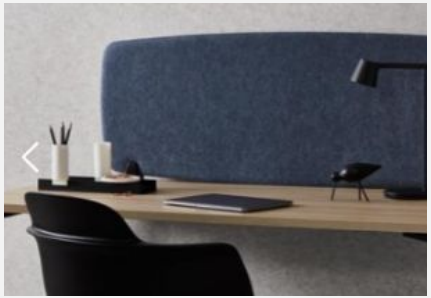
Acoustic Tiles

Acoustic wall tiles can also be a contributing factor when addressing noise issues in a space. Again, these can come in a multitude of materials , styles , colours and finishes . All adding to the overall resultant noise levels.

Wall Coverings

In Addition to Absorption or Acoustic Panels , There are a variety of wall coverings available in the market that are effective in operating noise reduction whilst creating a pleasant and authentically pleasing environment.





Space Dividers

Dividers in offices and other such areas can provide suitable privacy screening and break up open plain areas whilst at the same time screening sound and creating quiet individual working space.

Fabrics

Fabrics can be in a variety of colours, textures and finishes.

Soundproof Curtains

Suitable Soundproof Curtains can play an essential part in providing a more comfortable and quieter environment whilst adding to the ambience in the space

Acoustic Carpet

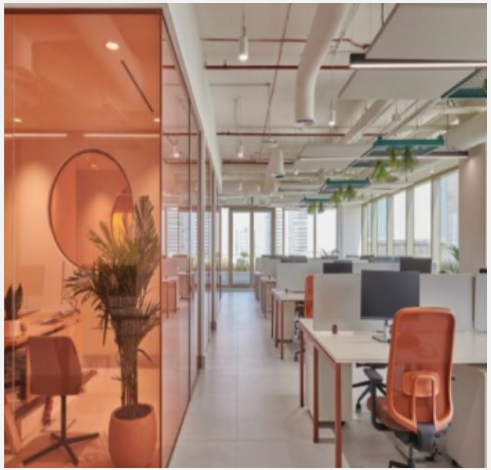
Acoustic Foam

Acoustic Doors

Acoustic doors block,absorb and dampen sound.This creates a more controlled environment in some commercial ,industrial and residential settings. The deliver performance advantages that go well beyond ordinary interior or exterior doors.
Improved energy efficiency thanks to tight seals that also limit air leakage ,added property value and tenant appeal through higher acoustic comfort .

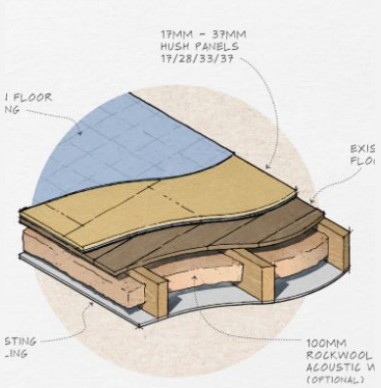
Acoustic Glass

Reduce noise pollution from traffic, construction, or internal sound transfer, creating quiet environments for focus, privacy, and health by using laminated layers to block sound waves



Floating Floor

A type of flooring (like laminate, vinyl, or engineered wood) installed without nails or glue, allowing it to "float" over a subfloor or underlayment, connected by interlocking mechanisms like click-locks or tongue-and-groove,



Acoustics AV(Audio Vision)

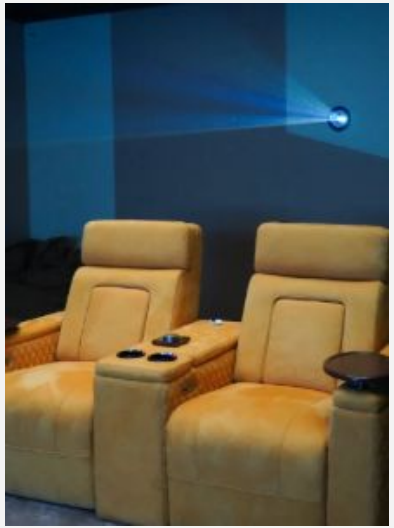
Acoustic treatments

Speaker placement

Acoustic carpets

Acoustic incliners

Acoustic ceiling



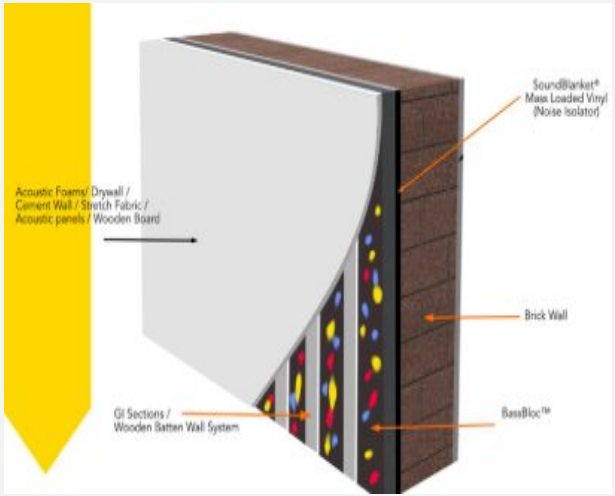
Wooden Acoustics

Wooden acoustics refers to using wood and wood-based materials for sound control, leveraging wood's natural ability to absorb, reflect, and channel sound waves, making it ideal for beautiful yet functional acoustic panels in concert halls, studios, and homes to reduce echo and improve clarity. Modern solutions often combine wood slats or veneers with sound-absorbing felt

Absorber

Low frequency Absorber
High density ie 100 kg/m3
NRC > 1.20
Panel Size 6 × 3 Feet (1.8 × 0.9m)
Available Thickness :
25mm,50mm,75mm,100mm,125mm,150mm

- Absorbs mighty bass from all directions, control sound leakage
- Application : Infill behind gypsum, wooden, cement walls and partitions. Can be used on walls & ceiling



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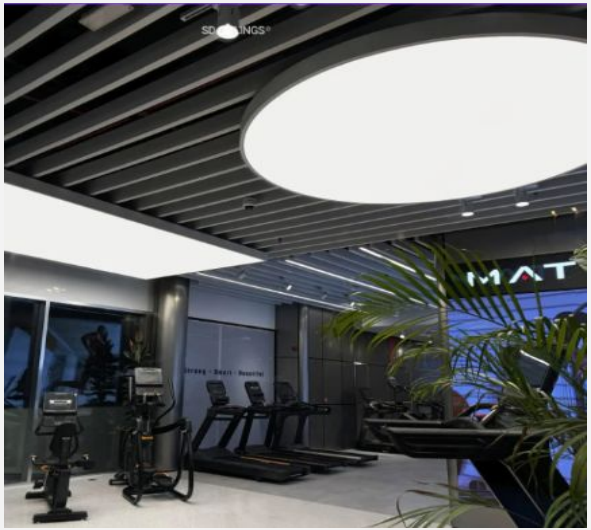
Translucent Ceiling

Custom Lamps



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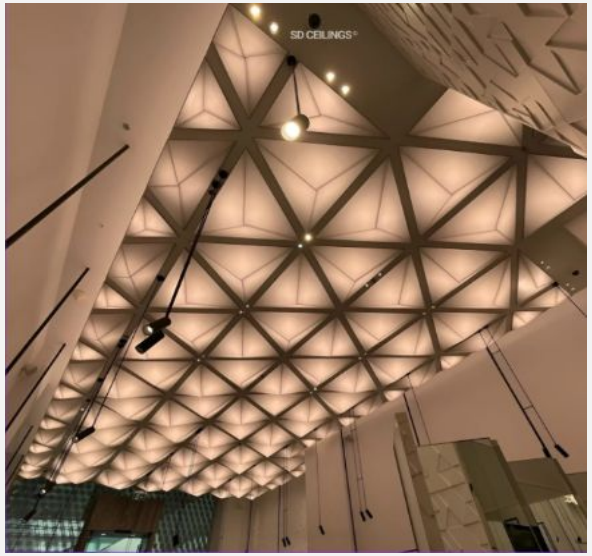
3D Shape Ceilings



Wave Fabric

Star Ceiling

Track Lights