Part :4

Dr. F Nayeb Morad

Best Soundproofing Materials

29. Industrial Acoustic Soundproof Panels

Acoustic PanelsThese acoustic panels are invariably manufactured from more industrial materials such as steel and aluminium to be employed to mitigate noise sources with higher power and pressure output.

Specifically designed to withstand outdoor exposure in full sunlight, extreme weather conditions, and harsh industrial environments (NRC of 1.0 is the highest sound absorption rating possible).

Examples like Acoustiblok All Weather Soundproof Panels are a triple core approach to include a perforated facia for diffusion, an internal layer of U.L. classified Acoustiblok 3mm Sound Isolation Membrane material for acoustic conversion plus a specifically engineered 50mm Acoustiblok QuietFibre hydrophobic/weather-proof, open cell, core sound absorbing material.

Pros: very effective soundproofing option in areas of high dB, sound and power noise pollution such as plant, generators, HVAC and any other external environment.

Cons: typical rigid construction, quite costly due to materials and labour.

30. Acoustic Louvres

Acoustic LouvresTypically, acoustic louvres are used in building openings permitting air to flow, whilst shielding the environment from unwanted noise.

As an open shutter with horizontal, curved or linear blades/slats that are angled to admit light and air, but to keep out rain and direct sunshine.

The angle of the slats may be adjustable

Uses: multi-purpose as acoustic screens around mechanical plants where equipment requires airflow.

Pros: effective at reducing acoustic energy whilst allowing direct flow of air where required.

Cons: allows for a weakness and a break in any acoustic isolation strategy but essential where needed.

Conclusion

Through this article we've explained in great detail what soundproofing is, the various types of soundproofing methods and products available on the market.

We have also explained which products work best in different scenarios, according to one or more core soundproofing principles.

After this thorough overview, we hope that you have achieved a much clearer idea of this detailed subject.

If you are currently considering soundproofing your home, business premises, or perhaps a particular room such as a recording studio, home theatre or workshop, hopefully you can now make a wellinformed decision on the best soundproofing method and materials to use. room.

End