

attained and offer a low-cost alternative to relatively expensive soundproofing solutions. In fact, soundproof blankets are probably the most practical option for someone on a tight budget who wants a temporary and moveable solution. They are made from thick, plush fabric which is designed to absorb sound and prevent acoustic transference. Uses: these blankets can be hung to walls or over doors and windows.

Pros: relatively affordable, easy to install.

Cons: are a localised solution but certainly not as effective as full and complete coverage of an area with more advanced soundproofing methods

## 26. Furniture & Finishings

Furniture & Finishings Unsurprisingly, furniture and other household items can play an important role in soundproofing. In some rooms, you might experience more sound reverberation than others.

This can be a nuisance yet funnily enough, can sometimes be resolved by simply moving your furniture to better sound dampening positions.

You could also try adding lining to walls, such as tapestries or fabrics, as well as make use of sofas and large soft cushions.

If specific walls are thin, it's recommended you place heavy pieces of furniture against them, such as a wardrobe or a wooden bookcase full of books to dampen the sound.

Uses: a basic means of reducing sound reverberations or low-level noise travelling between thin walls Pros: quick and easy fix, inexpensive

Cons: limited results can only be expected.

## 27. Acoustic Fencing (External)

Acoustic Fencing Acoustic fencing is essentially an acoustic barrier or noise insulator for outside spaces. It's ideal for those who want an effective solution to block external sounds and noises.

Establishing correct height and length of fence is essential to create the necessary angles of incidence for maximum effect.

Acoustic fencing can tackle noise from road traffic, trains and railway tracks, and any noise from neighbouring plots.

Some fencing solutions will be as expected, constructed from thick, dense materials to work principally on mass and density to block line of sight. These types of fence

are great where a new structure has to be built although quite time consuming and expensive due to the amount of material and labour involved in their erection.

However, where a fence structure is already in evidence but not performing quite as well as one would like, there is also a material known as AcoustiFence.

This flexible membrane is designed to attach to an existing fence structure such as a post and rail or even chain link to increase performance.

Available in rolls of material and very easy to install with minimal labour offering a further saving on cost.

The material is essentially a membrane, and it can be hung or secured in place to post and rail, to lattice or attached to a timber frame, depending on the individual case.

Installation of soundproof fencing is fairly quick, easy and effortless.

Uses: can be installed to perimeter fences, chainlink, hoardings to block sounds entering from adjoining plots

Pros: very effective soundproofing option in areas of high noise pollution such as busy cities, noisy neighbours, and any other exterior environment which is causing noise pollution

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

## 28. Acoustic Absorber Panels (External)

Acoustic Absorber Panels As almost all regular absorber panels are compressible and work on the factor of absorption, they tend to also absorb and accumulate moisture which can create an issue when trying to use them externally.

Some materials though are hydrophobic.

An alternative to these is external acoustic absorbers which are a rigid, durable panel made from recycled glass beads with an appearance of a lightweight granite / stone.

Offering good resistance, they produce a sound absorbing, impact resistant panel solution which is not affected by liquid or moisture.

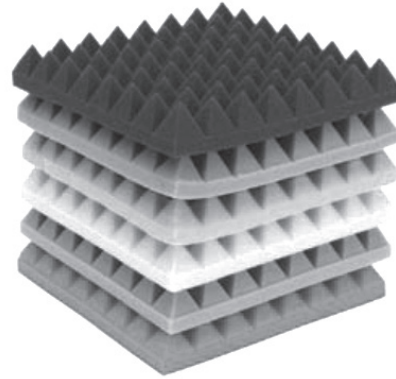
Also noncombustible, chemically inert and non-fibrous.

Uses: external where unwanted noise reverberates from buildings although can be internal especially where an element of increased impact resistance is required.

Pros: good impact resistance and not affected by rain, moisture.

Cons: relatively expensive but will perform in areas where other solutions struggle.

**End of the third part...**



Dr. F Nayeb Morad

# Best Soundproofing Materials

## 21. Acoustic Foam

Acoustic Foam Ideal for sound absorption, acoustic foam is available in a wide range of thicknesses as well as sizes and colours.

There are many brands names that sell acoustic foam. Some even offer this material in appealing colours as some customers look for the aesthetic appeal of this product aside from its practical value.

Uses: to improve audio quality in a room. As a result, acoustic foam is used for this purpose as well as to reduce sound leakage. Often found in games rooms, home theatres, music rooms and recording studios.

Pros: ideal for improving sound quality in a room, helps to reduce noise pollution, can improve the design appeal of a room or space.

Cons: doesn't perform well at preventing sound transference from room to room, some foams can be flammable

## 22. Sound Absorber Panels

Sound Absorber Panels Sound absorbers are available in many styles and types, most of which come in appealing colours. When installed, they can also make a room or space look more visually appealing.

These types of Absorber Panel such as Acoustiblok Quiet-Cloud, AcustiWall can be mounted to ceilings and to walls as it helps to cut down on acoustic reflections and sound reverberations. That is why it is called sound 'absorber' as it works on the principle of sound absorption.

Uses: ideal for recording studios, cinemas, theatres, classrooms, games rooms, gymnasiums and entertainment areas.

Pros: quite effective and affordable method if your main intention is sound absorption and improving acoustics in one room and aesthetically pleasing.

Cons: can be expensive, needs calculating and installing correctly for maximum calibration and limited performance for sound isolation.

## 23. Acoustic Ceiling Systems & Tiles

Acoustic Ceilings Directly fitted to a ceiling or used as a structural drop ceiling to create a grid system, acoustic ceiling tiles are similar to acoustic panels to provide effective acoustic control.

Available in a wide variety of materials, sizes, depths and designs. Acoustic ceiling tiles are an easy solution for improving the acoustical qualities of any space.

Uses: in soundproofing ceiling spaces to create a finished ceiling with a void above in which to house services, HVAC ducting etc.

Pros: allows a large surface area of acoustic absorption and creates a finished ceiling.

Cons: structural framing system sometimes on wire or steel drop rods to the above structure to create a grid work for the tiles to lay which needs professional installation

## 24. Soundproof Curtains

Soundproof Curtains Soundproof curtains, sometimes referred to as blackout curtains or acoustic curtains, are widely used to reduce noise passage as a temporary partition or privacy material, such as backstage at a theatre.

When hung in strategic positions the thick fabric greatly reduces the spread and movement of sound waves within an area which reduces unwanted sound from travelling from space to space.

Uses: in theatres, nurseries, bedrooms and home theatres. Pros: high quality material that is long lasting, helps to block sound as well as improve acoustics in a room.

Cons: most fabrics are costly due to their thickness and the fact they need to be made to measure.

## 25. Soundproof Blankets

Soundproof Blankets Soundproof blankets are used in various cases where sound absorption needs to be