OSCAR ACOUSTICS

Comprehensive range of finishes

SonaCel™

NBS Plus

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Sound Proofing

The explanation for the excellent sound proofing performance of SonaCel is two fold [1] the resilient Sonamount which isolates the acoustic ceiling or wall from the structure of the building and [2] **Celbar** sound proofing cellulose void fill which tightly packs the void absorbing noise and damping vibration.

SonaCel is builder friendly:

- The installation is quick, simple, forgiving and backed with free technical support
- Safe mechanical fixing.
- Environmentally friendly materials.
- The economic solution to sound proofing

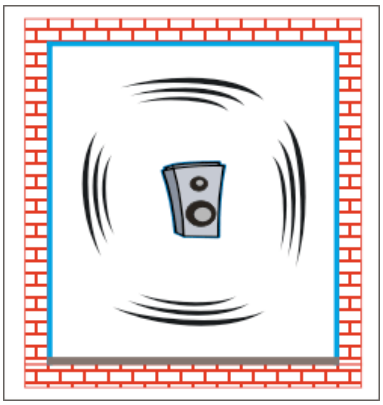


Illustration of how SonaCel works

An illustration of the sound insulation phenomenon (top left).

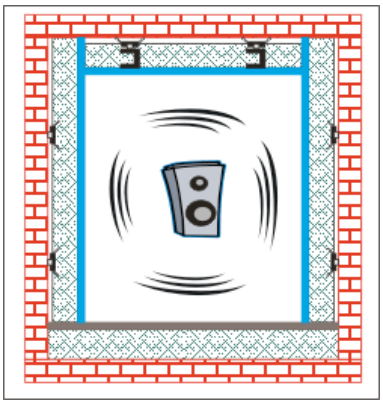
Why does sound go through buildings and pollute the environment?

The sound energy causes the construction; walls, ceiling and floor, to vibrate.

How to solve this problem

By applying a ceiling or wall on mounted isolating stud frames. The following picture (bottom left) illustrates what happens when the original construction is not affected by the sound energy anymore and does not pass on the sound vibrations.

SonaCel sound proofing is a lightweight noise barrier engineered to stop noise transfer through walls, ceilings, floors and flat roofs.



Examples

Where compliance to part E is required for transmission through floors, the Sonamount is screwed directly to the sides of the floor joists.

or where the demand is higher e.g. a nightclub with apartments above:

up to 71dBA from a 295mm deep floor – the mounts are screwed to thin gauge steel studs to achieve the additional floor depth to take the additional Celbar void fill.

Dealing with part E first

SonaCel MaxiHeight Sound Proofing Mount

This resilient sound proofing mount is supplied in boxes of 100. It is for use when the old ceiling has been removed revealing the joists. SonaCel not only reduces noise transfer between floors, but achieves this taking the minimum Amount of headroom – typically 20mm or less.

SonaMounts are fixed directly to the sides of the joists allowing adjustment up or down.

Installation of typical SonaCel MaxiHeight

[*omitting electrical works*]

- Remove old ceiling.
- Fix the SonaCel sound proofing mounts to wooden bats 19x38 [used for roof tile bats] at 500mm centres then screw the assemblies to the sides of the joists.
- Screw the first layer of plasterboard ensuring the supplied 25x10mm self adhesive isobaric edge foam strip is in place where plasterboards adjoin walls.
- Cut 100mm dia holes in the plasterboard between joists and save the plugs.
- Blow fill the void between the plasterboard and floor above with Celbar and re-plug the holes *this is normally carried out by Oscar staff or you can purchase the machine and material*
- Fix second layer of plasterboard with staggered joints – Decorate the new acoustic ceiling.

SonaCel sound proofing is acoustically effective as the new acoustic ceiling is isolated from the Building structure by the rubber isolators incorporated into the SonaCel mounts and the isobaric foam strip between the new plasterboard ceiling and walls.

HIGH PERFORMANCE EXAMPLE

GILLINGHAM FOOTBALL CLUB PRIESTFIELD STADIUM

SonaCel sound proofing installed below the Blues Bar ceiling and in the walls of the function suit.

Project Architect, Mark Carter FRIBA, stated that, "the results are everything that was promised by Oscar Acoustics, absolutely outstanding!"

Consult Oscar Acoustics technical advice **or click here for examples and independent testing data**

SonaCel floor construction with an overall depth of 295mm and was independently tested to give sound insulation of 71 dBA. This is equal to the sound insulation capacity of 600mm of solid concrete with a mass of 1400 Kgs/sq.mtr

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Typical installation of SonaCel Slimline

[*omitting electrical works*]

The builder removes the old ceiling to expose the floor

- The builder removes the old ceiling to expose the floor joists then screws 38x19mm wood bats across the joists at 500mm centres.
- The SonaCel folded metal studs are supplied by Oscar at 2.5mtrs long x the calculated depth and assembled complete with the isolating SonaCel mounts fixed at 500mm centres i.e. 5 mounts per 2.5 mtr stud.
- The builder screws the studs to the bats through holes in the isolating SonaCel mounts [10 screws per stud] and fixes the studs at 600mm centres across the ceiling.
- The builder screws the first layer of plasterboard ensuring the supplied 25x10mm self adhesive isobaric edge foam strip is in place where plasterboards adjoin walls.
- The builder cuts 100mm dia holes in the plasterboard between joists and saves the plugs.
- Oscar Blow fills the void between the plasterboard and floor above with Celbar and re plugs the holes - *this is normally carried out by Oscar staff or the builder can purchase the machine and material from Oscar to carry out this work in house.*
- The builder fixes the second layer of plasterboard with staggered joints and decorates the new acoustic ceiling.