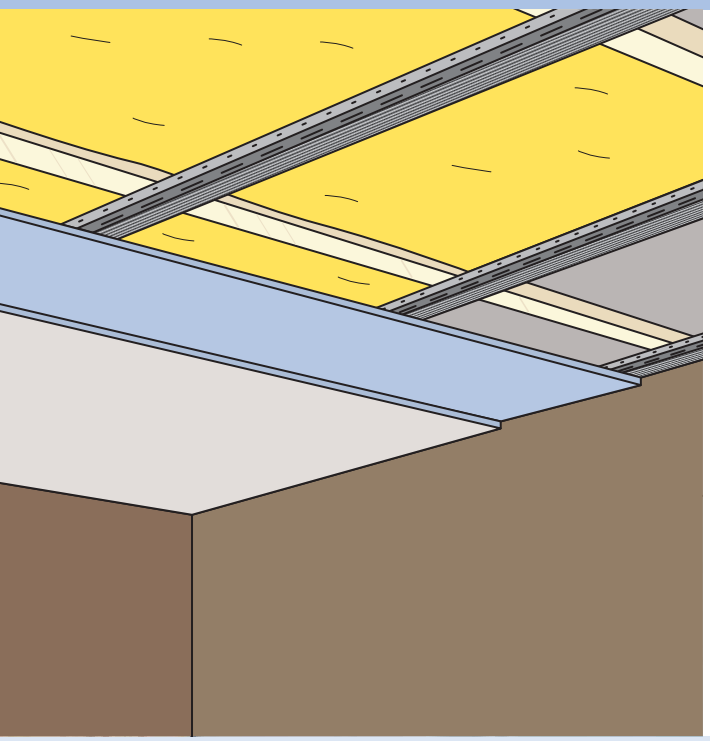
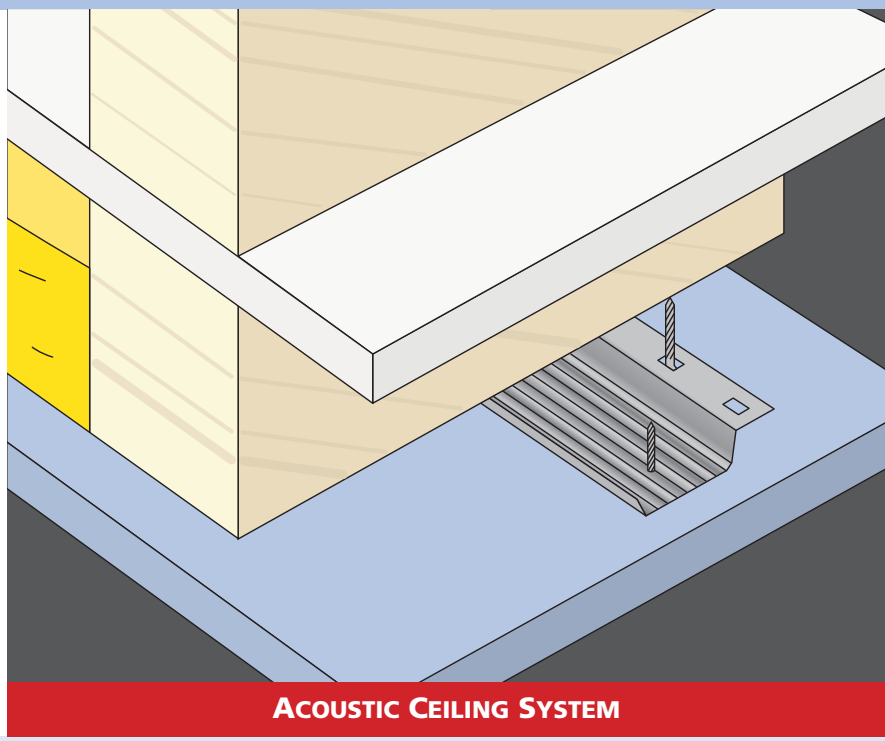
CI/SfB (42) Rm1 (P2)
Soundsorba Ltd.
May 2014

ISOSORBA™
Noise Reduction Ceiling Systems





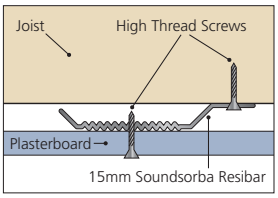
ACOUSTIC CEILING SYSTEM

ISOSORBA™ sound insulating ceilings systems are designed to reduce noise transmission through ceiling constructions in multiple dwellings. Not only do these systems reduce airborne sound but are also very effective in reducing impact noise too.

The systems are simple but very effective. It can be installed easily with minimal disruption by the work being carried out below the ceiling to meet Approved Document E of the Building Regulations.

SOUNDSORBA®
ACOUSTIC PRODUCTS

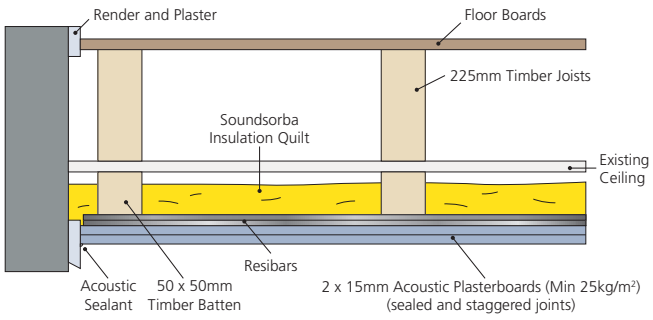
ISOSORBA™
Noise Reduction Ceiling Systems



APPLICATION
Used to reduce airborne and impact noise through ceiling constructions in flats, houses, commercial buildings, etc.
Used on its own to improve the sound insulation values of separating ceiling construction or with Floorsorba acoustic flooring and/or Quietsorba wall reduction systems where higher values need to be achieved to meet Building Regulations.

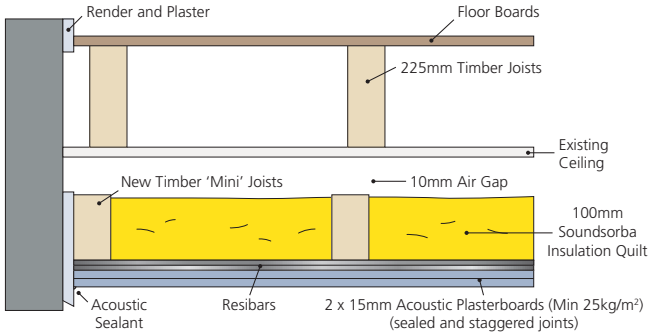
ACOUSTIC PERFORMANCE
Two versions are available:
ISOSORBA95 is used where an improvement is required to make the noise transmission more bearable.
ISOSORBA170 is used where there is a need to meet Approved Document E of the Building Regulations.

ISOSORBA95 (IMPROVEMENT STANDARD)



Airborne Dnt,w+Ctr d B (higher figure is better)	Impact LnT,w d B (lower figure is better)
40	65

ISOSORBA 170 (CONVERSION STANDARD FOR BUILDING REGS)



Airborne Dnt,w+Ctr d B (higher figure is better)	Impact LnT,w d B (lower figure is better)
45	60

The above is typical acoustic performance based on Isosorba noise reducing ceiling systems applied to a standard existing timber joist floor with floorboards above and a plasterboard or lath and plaster ceiling.

Important: The acoustic performance of any floor structure will vary according to each individual building construction. Acoustic performance of any sound reducing system can be significantly reduced by flanking sound. Steps must be taken to negate flanking sound transmission paths to avoid degradation of acoustic performance. Examples are boxing soil/heating pipes, sealing of conduits, wall flanking control, recessed lights, etc.

INSTALLATION OF ISOSORBA95 - IMPROVEMENT STANDARD

1. Store the Isosorba components in the rooms where they are going to be used for at least 24 hours before use at normal room working temperature.
2. Screw fix the 50 x 50mm timber battens, using woodscrews, through the plasterboard ceiling and into the floor joists and ensure a firm and strong fixing at not more than 400mm centres. Double check the strength of the timber battens to make sure that they are very firmly fixed and ensure that the battens are fixed through to the joists and NOT just to the existing plasterboard.
3. Fit Soundsorba 50mm thick acoustic insulation quilt between the timber battens. The insulation can be kept in place using thin wire or thread until the acoustic plasterboard is installed.
4. Using woodscrews, screw the 15mm Soundsorba Resibars to the underside of the 50 x 50mm timber battens. Screw fix to every timber batten ,at not more than 400mm centres, through the square slot in the Soundsorba Resibar with a course thread wood screw. The Resibars should be fitted perpendicular to the timber battens. Soundsorba Resibars are thin gauge vibration isolating sections manufactured from galvanised steel with a corrugated face onto which the acoustic plasterboard is screwed.
5. Install the first layer of 15mm thick Soundsorba acoustic plasterboard screwed to the Soundsorba Resibars with 42mm drywall screws. It is very important that the screws only penetrate the corrugated webs and do not touch the Resibar supports or battens. Screw at not greater than 400mm centres reducing to 150mm at perimeters. Special attention should be taken to ensure that the screws only locate into the Resibars and do not make contact with the timber batten. Seal all the board joints as well as the perimeter joints where the boards butt against the walls using Soundsorba acoustic sealant. Ensure that there are no gaps or cracks through which sound can pass through.
6. Install the second layer of 15mm thick Soundsorba acoustic plasterboard screwed through the first layer of acoustic plasterboard and into the Resibars using 42mm drywall screws. Make sure that you stagger the joints of the second layer of acoustic plasterboard so that the joints are never in line with the first layer. Screw at not greater than 400mm centres reducing to 150mm at perimeters into the Resibars only. Special attention should be taken to ensure that the screws only locate into the Resibars and do not make contact with the timber batten. Again, seal all the board joints as well as the perimeter joints where the boards butt against the walls using Soundsorba acoustic sealant. Ensure that there are no gaps or cracks through which sound can pass through.
7. Plaster finish to ensure sealing of all joints.

INSTALLATION OF ISOSORBA150 - CONVERSION STANDARD

1. Store the Isosorba components in the rooms where they are going to be used for at least 24 hours before use at normal room working temperature.
2. Screw fix the 100 x 50mm (or whatever size is require to span the room dimensions) timber mini joists to similar size wall plates, ensuring that these new joists framework does not physically touch the existing ceiling (only fixed to the side walls) and leaving a minimum gap of around 10mm. Hence creating a secondary isolated timber ceiling structure. These independent 'mini' joists must be fixed only to surrounding joists.
3. The new 100 x 50mm (or size required) to be at not more than 400mm centres. Double check the strength of this isolated timber mini joists ceiling to make sure that it is strong and firm. A clearance of at least 10mm should be left between the top of the new 'mini' independent ceiling joists and the underside of the existing ceiling construction.
4. Fit Soundsorba 100mm thick acoustic insulation quilt between these mini timber joists . The insulation can be kept in place using thin wire or thread until the acoustic plasterboard is installed.
5. Using woodscrews, screw the Soundsorba Resibars to the underside of the 100 x 50mm timber (or size required). Screw fix the Resibars to every timber batten, at not more than 400mm centres, through the square slot in the Soundsorba Resibars with a course thread drywall wood screw . The Resibars should be fitted perpendicular to the timber mini joists. Soundsorba Resibars are thin gauge vibration isolating sections manufactured from galvanised steel with a corrugated face onto which the acoustic plasterboard is screwed.
6. Install the first layer of 15mm thick Soundsorba acoustic plasterboard screwed to the Soundsorba Resibars with 42mm drywall screws. Screw at not greater than 400mm centres reducing to 150mm at perimeters. Special attention should be taken to ensure that the screws only locate onto the corrugated web of the face of the Resibars and do not make contact with the timber mini joists. Seal all the board joints as well as the perimeter joints where the boards butt against the walls using Soundsorba acoustic sealant. Ensure that there are no gaps or cracks through which sound can pass through.
7. Install the second layer of 15mm thick Soundsorba acoustic plasterboard, screwed through the first layer of acoustic plasterboard and into the Resibars using 42mm drywall screws. Make sure that you stagger the joints of the second layer of acoustic plasterboard so that the joints are never in line with the first layer. Screw at not greater than 400mm centres reducing to 150mm at perimeters into the Resibars only. Special attention should be taken to ensure that the screws only locate onto the corrugated web face of the Resibars and do not make contact with the timber mini joists. Again, seal all the board joints as well as the perimeter joints where the boards butt against the walls using Soundsorba acoustic sealant. Ensure that there are no gaps or cracks through which sound can pass through.
8. Plaster finish to ensure sealing of all joints.

SOUNDSORBA® ACOUSTIC PRODUCTS

SOUNDSORBA LIMITED, 27-29 DESBOROUGH STREET, HIGH WYCOMBE, BUCKS HP11 2LZ, UK
TEL: +44 (0) 1494 536888 FAX: +44 (0) 1494 536818 EMAIL: info@soundsorba.com
www.soundsorba.com