

soundblocker
acoustic insulation
for suspended ceilings



Sound Insulation in:

Offices & Classrooms



Private Offices



Consultancy & Interview Suites



Cinemas & Nightclubs



sound
reduction
systems

Manufacturers of Acoustic Insulation Products

Introduction

Why use Sound Reduction Systems Ltd?

Acoustic insulation innovators, Sound Reduction Systems Ltd (SRS), are the leading manufacturer of sound insulation materials. Over 25 years experience in the field of building acoustics ensure that the customer receives accurate and effective advice on the correct solution.

Why use Soundblocker?

Effective sound insulation is essential in commercial, educational and industrial environments for privacy, comfort, and health and safety.

Often in such environments, a suspended ceiling is installed to screen services above head height and provide acoustic absorption. Partitions are typically installed to the underside of the suspended ceiling, leaving a common void between adjacent rooms. Although effective absorbers of sound, the lightweight nature of suspended ceiling tiles often leads to poor sound insulation and problems can occur due to “crosstalk” (see fig.1) between adjoining areas, as well as noise generated by services within the ceiling void (see fig.2).

Soundblocker offers an ideal solution to these problems. Simply installed onto the back of the suspended ceiling tiles, Soundblocker provides a rapid and effective means of improving the sound insulation of a suspended ceiling.

Four types of Soundblocker are available to meet specific demands. Accessories provide treatment to modular light fittings, downlighters, perimeters, air diffuser grilles and small apertures, providing a complete system for limiting sound transmission through suspended ceilings. All test data shown is for the Soundblocker system installed onto a basic mineral fibre tile (3.5kg/m²).

Should it not be possible or practical to install the Soundblocker, perhaps due to the additional loading on the grid being too large, please contact the SRS technical department on **01204 380074** or email info@soundreduction.co.uk for an alternative solution.

Fig 1 - crosstalk from an adjacent space.

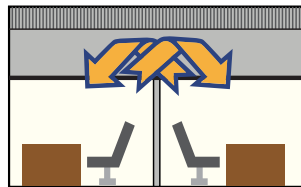
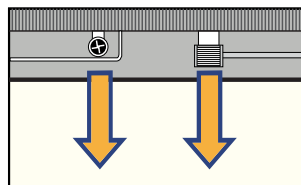


Fig 2 - noise coming down through a suspended ceiling into a room.



A Soundblocker for Every Situation

Soundblocker: Office and Classroom Range

Page 4

The Soundblocker Office and Classroom range is ideal for any standard office or classroom environment where noise transfer through suspended ceilings or over the top of partitions is an issue.

Soundblocker: Private Office Range

Page 5

The Soundblocker Private Office range is ideal for any environment where noise transfer through suspended ceilings or over the top of partitions could compromise personal and sensitive information, e.g. boardrooms and disciplinary/interview rooms.

Soundblocker: Confidentiality Range

Page 6

The Soundblocker Confidentiality range is ideal for any environment where speech privacy is of paramount importance, e.g. Hospital consulting rooms and police interviews suites.

Soundblocker: Entertainment Range

Page 7

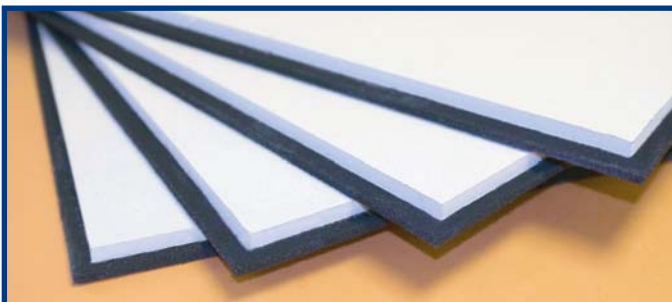
The Soundblocker Entertainment range is ideal for any environment where extreme noise breakout through suspended ceilings could cause a public nuisance, e.g. cinemas and nightclubs.

Soundblocker Accessories

Page 8

Physical Properties

Page 10

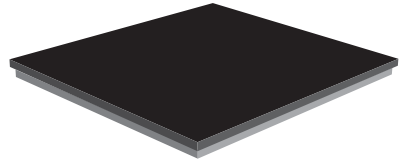


Soundblockers

Office and Classroom range

Benefits

- ✓ Reduces “crosstalk” between offices and classrooms
- ✓ Reduces noise from services / pipes in the void
- ✓ Increases comfort and productivity
- ✓ Increases privacy levels
- ✓ Extremely easy to install
- ✓ Accessories to treat light fittings and air grilles available



Thickness	Weight	R_w	$D_{nc,w}$
16mm	8.5kg/m ²	24dB	46dB

Modern offices and classrooms can be very busy, noisy places. As noise levels rise so do stress levels, whilst productivity and comfort suffer.

Introducing Soundblocker to the suspended ceiling to reduce noise can make a real improvement to the working environment. In educational environments, Soundblocker can improve both teaching and learning. The Office and Classroom range of Soundblocker is 16mm thick and constructed from a rigid attenuating layer bonded to an sound absorbing foam.

Installation

For lay-in mineral fibre suspended ceiling tiles, perforated metal tiles containing a mineral wool pad, and non-perforated metal tiles, Soundblockers are placed onto the back of the tiles/pads with the foam facing upwards. The foam compresses against the grid forming an acoustic seal. Soundblockers are easily removed with the tile for access. When

replaced, the acoustic seal is automatically reformed.

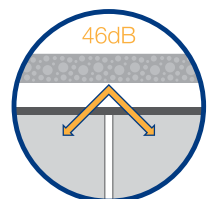
If the suspended ceiling tiles are perforated metal or perforated spring tee and no pad is in-situ, Soundblockers are placed within the rebate of the tiles with the foam facing downwards.

When ordering for all metal type tiles, it must be made clear which method of installation is required, as the size of the Soundblocker will vary.

Soundblocker Accessories must be used to treat modular light fittings, downlighters, perimeters, air diffuser grilles and small apertures (see pages 8 and 9)

Soundblocker standard sizes fit 600x600mm or 1200x600mm grids, however SRS Ltd are able to manufacture bespoke sizes to fit almost any grid.

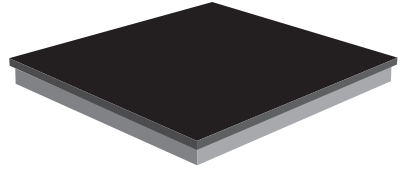
Tested to ISO 140-9 and rated to ISO 717-1 Soundblocker Office and Classroom achieved a $D_{nc,w}$ of 46dB when installed onto all suspended ceiling tiles in both the source and receiver rooms. Test reports available on request



Private Office range

Benefits

- ✓ Provides a secure and confidential work area
- ✓ High level of 'crosstalk' reduction between offices
- ✓ High level noise reduction of services / pipes in the void
- ✓ Dramatically Increases speech privacy levels
- ✓ Extremely easy to install
- ✓ Accessories to treat light fittings and air grilles available



Thickness	Weight	R_w	$D_{nc,w}$
19mm	11kg/m ²	26dB	48dB*

**estimated*

Most businesses and organisations have areas where higher levels of privacy are necessary. Whether it is a private office, or a disciplinary room in a school or business, ensuring confidentiality and privacy in certain areas is essential.

The Private Office Soundblocker is ideal for any environment where noise transfer through suspended ceilings or over the top of partitions could compromise personal and sensitive information.

The Private Office Soundblocker is 19mm thick and constructed from a rigid attenuating layer bonded to a sound absorbing foam.

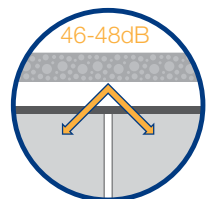
Installation

Installation of the Private Office Soundblocker is as described for the Office and Classroom Soundblocker on page 4.

Soundblocker Accessories must be used to treat modular light fittings, downlighters, perimeters, air diffuser grilles and small apertures (see pages 8 and 9)

Soundblocker standard sizes fit 600x600mm or 1200x600mm grids, however SRS Ltd are able to manufacture bespoke sizes to fit almost any grid.

SRS estimate that Soundblocker Private Office should achieve a $D_{nc,w}$ of approximately 48dB when installed onto all suspended ceiling tiles in both the source and receiver rooms.

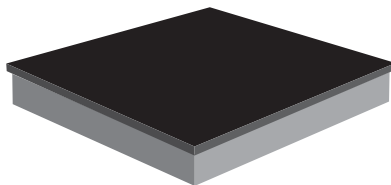




Confidentiality range

Benefits

- ✓ Very high level of ‘crosstalk’ reduction between offices
- ✓ Very high level noise reduction of services / pipes in the void
- ✓ Dramatically Increases privacy levels
- ✓ Extremely easy to install
- ✓ Accessories to treat light fittings and air grilles available



Thickness	Weight	R_w	$D_{nc,w}$
25mm	16kg/m ²	27dB	50dB

Speech privacy and confidentiality is paramount for executive offices, medical consulting rooms and boardrooms. Buildings such as Government offices, hospitals, banks, and police stations all have areas where this is of paramount importance.

The Confidentiality Soundblocker is ideal for any environment where noise transfer through suspended ceilings or over the top of partitions could compromise very personal and highly sensitive information.

The Confidentiality Soundblocker is 25mm thick and constructed from a rigid attenuating layer bonded to a sound absorbing foam.

Installation

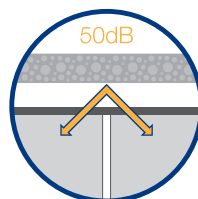
Installation of the Confidentiality Soundblocker is as described for the Office and Classroom Soundblocker on page 4.

Soundblocker Accessories must be used to treat modular light fittings, downlighters, perimeters, air diffuser grilles and small apertures (see pages 8 and 9).

Soundblocker standard sizes fit 600x600mm or 1200x600mm grids, however SRS Ltd are able to manufacture bespoke sizes to fit almost any grid.

The Confidentiality Soundblocker increases the loading on the suspended ceiling grid and it will be necessary to strengthen the supports accordingly. For guidance please refer to page 9 of this brochure and the manufacturer of the suspended ceiling grid.

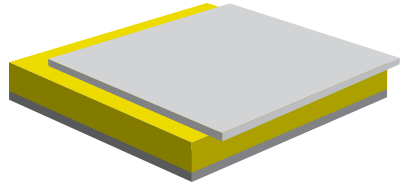
Tested to ISO 140-9 and rated to ISO 717-1 Soundblocker Executive Office achieved a $D_{nc,w}$ of 50dB when installed onto all suspended ceiling tiles in both the source room and the receiver room. Test reports are available on request.



Entertainment range

Benefits

- ✓ Provides very high levels of acoustic insulation
- ✓ Reduces extreme noise break out through suspended ceilings
- ✓ Ideal for nightclubs, cinemas, and industrial applications
- ✓ Accessories to treat light fittings and air grilles available



Thickness	Weight	R_w	$D_{nc,w}$
75mm	25kg/m ²	33dB	53dB*

*estimated

The Entertainment Soundblocker is ideal for any environment where extreme noise breakout through roofs or suspended ceilings would create a serious environmental problem. Nightclubs and cinemas must eliminate the breakout of sound through the structure, whilst in addition cinemas must also stop the ingress of sound.

The Entertainment Soundblocker is 75mm thick and constructed from two rigid attenuating layers bonded either side of a dense mineral wool slab.

Installation

Installation of the Entertainment Soundblocker differs slightly from the other versions of Soundblocker. Like the other versions, it is placed onto the back of the suspended ceiling tile, but it must be installed in the correct sequence, so that the shiplap edges interconnect correctly. Where the Soundblocker tile meets the perimeter of the ceiling the shiplap

edge should be trimmed so that the tile sits flush against the adjunct. Small notches should be cut in the overlapping flange to accommodate the suspension hangers.

Soundblocker Accessories must be used to treat modular light fittings, downlighters, perimeters, air diffuser grilles and small apertures (see pages 8 and 9)

Soundblocker Entertainment standard sizes fit 600x600mm grids, however SRS Ltd are able to manufacture bespoke sizes to fit almost any smaller grid.

The Entertainment Soundblocker increases the loading on the suspended ceiling grid and it will be necessary to strengthen the supports accordingly. For guidance please refer to page 9 of this brochure and the manufacturer of the suspended ceiling grid

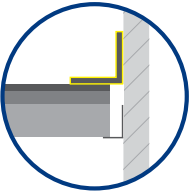
SRS estimate that Soundblocker Entertainment should achieve a $D_{nc,w}$ of approximately 53dB when installed onto all suspended ceiling tiles.



Accessories

Treatment of Penetrations

It is important to provide acoustic treatment to lights installed in the suspended ceiling as well as any gaps or penetrations. SRS produce a full range of accessories to be used along side the Soundblocker tiles.



Gaps at the Perimeter

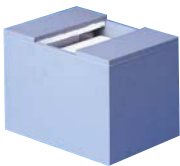
Self adhesive Soundblocker Perimeter Strips are used at the perimeters or around columns etc. These are 15000x100x6mm in size and are self adhesive.



Modular Light Fittings

Self adhesive Modular Side Strips (1200x100x13mm) are fixed around all sides of the fitting. They are positioned onto the side of the fitting and should return onto the back of the ceiling covering the tee and any gap between the fitting and the ceiling. Should the modular light fitting be open ended, Modular End Caps (600x200x13mm) should be used.

Soundblockers can normally be placed on top of the fitting when low brightness or louvre type diffusers are used. Air must be allowed to flow through the louvre, and circulate around the tubes and switch gear. Soundblocker tiles should not be placed on top of modular light fittings if a plastic lens type diffuser is used.



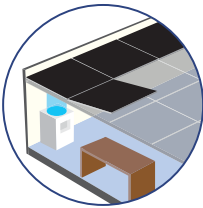
Recessed Downlighters

To reduce the acoustic weakness presented by downlighters, a hole is cut in the Soundblocker tile to accommodate the downlighter and a Soundblocker Downlighter Hood is simply positioned over this. The standard hood is manufactured to accommodate a 50mm diameter lamp. Other sizes are available on request.



Air Diffuser Acoustic Hoods

Soundblocker Air Diffuser Acoustic Hoods are for use where air is vented via the ceiling void through grilles within the ceiling. Unless acoustically treated, sound will travel through the void, reducing the acoustic performance of the ceiling. The hood is placed on top of the air grille within the ceiling grid. (The ceiling grid must be suspended at each corner to support the weight of the diffuser.)



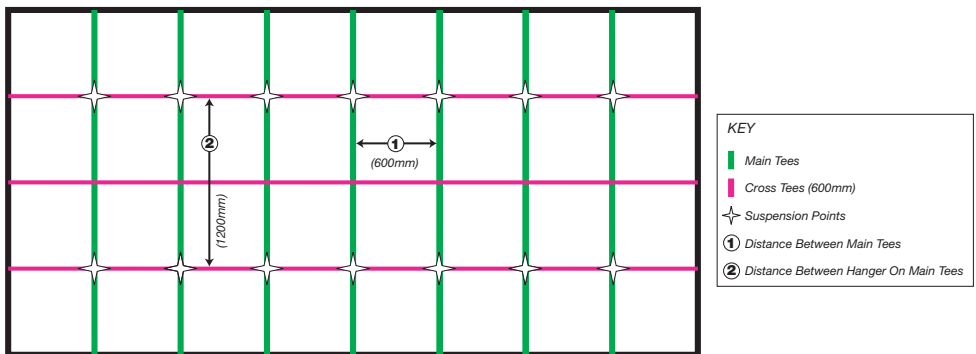
Grid specification

Ceilings that have yet to be installed

Using a conventional lay in grid system, main tees should be installed at 600mm centres and suspended down their length at 1200mm centres. This installation will accommodate all Soundblocker ranges up to and including the Soundblocker Confidentiality range, when basic mineral fibre ceiling tiles are used. If heavier ceiling tiles or the Entertainment Range of Soundblockers (25kg/m²) are used, the suspension centres must be reduced to 900mm along the length of the tee.

SRS recommend that the manufacturer of the suspended ceiling grid be consulted before installing Soundblocker to ensure that the additional weight can be safely accommodated. The following diagram is offered as general guidance only.

Grid Specification Diagram



Ceilings that are already in-situ

Where Soundblocker is to be installed into an existing ceiling and the main tees are at 1200mm centres:

- The centres of the hangers on the main tees must be reduced to a maximum of 900mm centres.
- All the 1200mm cross tees should be suspended.

Specifications



Size (Nominal): 600 x 600mm and 1200 x 600mm (*Other sizes available to order*)

Thickness/Weight: Soundblocker Office & Classroom - 16mm, 8.5kg/m²
Soundblocker Private Office - 19mm, 11kg/m²
Soundblocker Confidential - 25mm, 16kg/m²
Soundblocker Entertainment - 75mm, 25kg/m²

Fire Rating: BS476 Part 6 Class 0 BS476 Part 7 Class 1

Cutting: By trimming knife or saw.

Modular Side Strips: 1200 x 100 x 13mm

Modular End Caps: 600 x 200 x 13mm

Perimeter Gasket: 15000 x 100 x 6mm

Downlighter Hoods: Height 210mm (140mm internally)
Width 220 x 200mm (180 x 155mm internally)
Weight 2.5kg

Air Diffuser Hood: Height 305mm, Width 595mm x 595mm, Weight 13kg

Other systems available from SRS:



01204 380074
www.soundreduction.co.uk

**NEW
PRODUCT**

Acoustic innovators Sound Reduction Systems Ltd, in association with DEDPAN Technology, have developed the perfect acoustic damping material to reduce the noise generated by rain falling on metal profiled roofing systems.



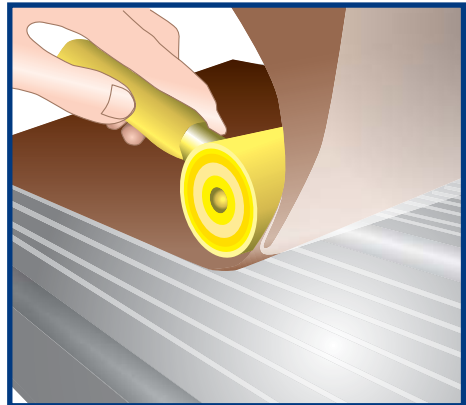
Benefits of Raincheck:

- **BB93 solution to rain noise in schools**
- **Improves learning and working conditions**
- **Reduces rain noise through all metal profile roofs**
- **Manufactured in association with DEDPAN Technology**
- **Supplied in self adhesive rolls and strips**
- **Ideal for both new build and retro fit installations**
- **Tested to the BS EN ISO 140-18:2006**
- **Only 1mm thick**

Rain falling on metal profile roofs causes a nuisance in many different environments, ranging from commercial offices to industrial factory units. The problem has been highlighted in the BB93 document for the acoustic design of schools. Referring specifically to the issue mentioned above, the guidance of BB93 is to provide 'damping of the profiled cladding (e.g. using commercial damping materials)'.

Raincheck is designed for this application, and has been tested to BS EN ISO 140-18:2006, a laboratory measurement of sound generated by rainfall on building elements. The application of Raincheck provides significant improvements to the overall roofing system under these test conditions.

Raincheck is quickly and easily installed on the metal profiled sections. Simply remove a section of the backing paper and adhere the Raincheck strip to the metal profile. The lightweight, flexible material will easily mould to the contours of the roofing system.



A demonstration of Raincheck is available to view online at www.soundreduction.co.uk



soundblocker is available from:



sound
reduction
systems

Manufacturers of Acoustic Insulation Products

Sound Reduction Systems Ltd
Adam St, Off Lever St, Bolton BL3 2AP

Tel: +44 (0)1204 380074 · Fax: +44 (0)1204 380957

E-mail: info@soundreduction.co.uk · Web: www.soundreduction.co.uk

Site conditions and installation standards vary. SRS cannot take responsibility for the performance of any installed system of which SRS products are only a part, or that have been installed incorrectly. Prior to installation, it is necessary to identify and eliminate possible flanking paths that may compromise the acoustic performance of any SRS product.