

Uniclass **FPIC** L586+L542:N372 E42+E512:Y45 CI/SfB (43)+(45)(P2)

A SOUND REDUCTION SYSTEMS PRODUCT

SOUNDBLOCKER ACOUSTIC CEILING **SYSTEM:** THE MOST COMPREHENSIVE SYSTEM AVAILABLE FOR REDUCING THE BREAKOUT OF SOUND VIA SUSPENDED CEILINGS.

4 ranges of Soundblocker are available:

- OFFICE AND CLASSROOM RANGE
- PRIVATE OFFICE RANGE
- CONFIDENTIALITY RANGE
- ENTERTAINMENT RANGE

KEY BENEFITS:

- Reduces noise breakout through suspended ceilings in offices, classrooms, hospitals, cinemas and nightclubs.
- Reduces noise breakout from services within the suspended ceiling void.
- Easily installed with new or existing suspended ceilings.
- **Easily removed for access.**
- Allows complete flexibility with relocation of partitions, unlike vertical cavity barrier solutions.
- Great to work with and easily cut.
- Accessories for treating light fittings, air diffusers and gaps, are available.
- Available for all types of suspended ceilings.



D. Perimeter strip

INTRODUCTION

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).

There are 4 variations of the SoundBlocker available to tackle any level of noise problem through a suspended ceiling, from the standard **'Office and Classroom'** and **'Private Office'** ranges, through to the extremely high performance **'Confidentiality'** and **'Entertainment'** ranges.

Please review the individual products and their performance below to select the right option for your project. Should you need any further advice, please contact the SRS Ltd Technical Department on **01204 380074** or email **info@soundreduction.co.uk**.



Fig 1. An example of 'crosstalk'.



Fig 2. An example of noise generated in ceiling voids - air conditioning for example.

SOUNDBLOCKER OFFICE AND CLASSROOM RANGE



BENEFITS

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

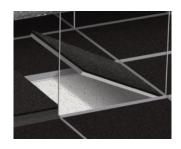
Ideal for the standard office, the Soundblocker Office and Classroom Range will reduce cross talk through the ceiling to an acceptable standard for non-private areas.

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 Office and Classroom Range 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. Soundblocker Office and Classroom Range is 16mm thick and constructed from a rigid attenuating layer bonded to an sound absorbing foam.

INSTALLATION GUIDANCE

See page 3 & 4 for full installation guidance.



PHYSICAL PROPERTIES

Fire properties: Fire propagation BS 476:Part 6: 1989 Class 0

Surface spread of flame: BS 476:Part 7: 1997 Class 1

| PROPERTIES | SIZE* | THICKNESS | WEIGHT |
|------------|---|--------------|----------------------|
| | 600x600mm (nominal) 1200x600mm (nominal) | 16mm 16mm | 7.2Kg/m ² |

^{*} We can also manufacture bespoke sizes to suit/fit almost any grid.

ACOUSTIC DATA

| SOUNDBLOCKER OFFICE AI | ND CLASSROOM RANGE |
|------------------------|------------------------|
| R _W (dB) | D _{nc,w} (dB) |
| 24 | 46 |

Tested to ISO 140-9 and rated to ISO 717-1 Soundblocker Office and Classroom Range achieved a $D_{\Pi C,W}$ of 46dB when installed onto all suspended ceiling tiles in both the source and receiver rooms. Tested to ISO 140-3 and rated to ISO 717-1 Soundblocker Office and Classroom range achieved an R_W of 24 dB as a single pass figure. Test reports available on request.



SOUNDBLOCKER 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 ceiling void
- Dramatically increases speech privacy levels
- Extremely easy to install
- Accessories to treat light fittings and air grilles available

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.

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

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

INSTALLATION GUIDANCE

See page 3 & 4 for full installation guidance.



PHYSICAL PROPERTIES

Fire properties: Fire propagation BS 476:Part 6: 1989 Class 0 Surface spread of flame: BS 476:Part 7: 1997 Class 1

| PROPERTIES | SIZE | THICKNESS | WEIGHT |
|------------|---------------------|-----------|----------------------|
| | 600x600mm (nominal) | 19mm | 9.3Kg/m ² |

* We can also manufacture bespoke sizes to suit/fit almost any grid.

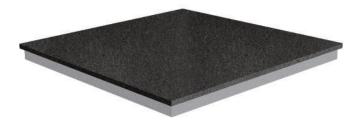
ACOUSTIC DATA

| SOUNDBLOCKER 19 | | |
|---------------------|------------------------|--|
| R _W (dB) | D _{nc,w} (dB) | |
| 26 | 48* | |

*Estimated

Tested to ISO 140-3 and rated to ISO 717-1 Soundblocker Private Office range achieved an R_w of 26 dB as a single pass figure. Test reports available on request. SRS estimate that Soundblocker Private Office should achieve a $D_{\text{nc,w}}$ of approximately 48dB when installed onto all suspended ceiling tiles in both the source and receiver rooms.

SOUNDBLOCKER CONFIDENTIALITY RANGE



BENEFITS

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

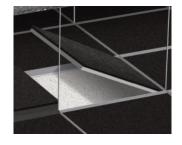
Speech privacy and confidentiality is paramount for executive offices, medical consulting rooms and boardrooms. Buildings such as Government offices, hospitals, banks, and police stations all have areas where this is of paramount importance.

Soundblocker Confidentiality 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.

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

INSTALLATION GUIDANCE

See page 3 & 4 for full installation guidance.



PHYSICAL PROPERTIES

Fire properties: Fire propagation BS 476:Part 6: 1989 Class 0 Surface spread of flame: BS 476:Part 7: 1997 Class 1

| PROPERTIES | SIZE | THICKNESS | WEIGHT |
|------------|---|--------------|---------|
| | 600x600mm (nominal) 1200x600mm (nominal) | 25mm 25mm | 15Kg/m² |

^{*} We can also manufacture bespoke sizes to suit/fit almost any grid.

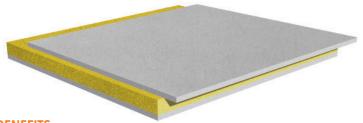
ACOUSTIC DATA

| SOUNDBLOCKER CONFIDENTIALITY | | |
|------------------------------|------------------------|--|
| R _W (dB) | D _{nc,w} (dB) | |
| 27 | 50 | |

Tested to ISO 140-9 and rated to ISO 717-1 Soundblocker Executive Office achieved a $D_{\text{nc.w}}$ of 50dB when installed onto all suspended ceiling tiles in both the source room and the receiver room. Tested to ISO 140-3 and rated to ISO 717-1 Soundblocker Confidentiality range achieved an Rw of 27 dB as a single pass figure. Test reports are available on request.



SOUNDBLOCKER 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

Soundblocker Entertainment Range is ideal for any environment where extreme noise breakout through roofs or suspended ceilings creates 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.

Soundblocker Entertainment Range is 75mm thick and constructed from two rigid attenuating layers bonded either side of a 50mm Maxi Slab.

INSTALLATION GUIDANCE

See below and page 4 for full installation guidance.

PHYSICAL PROPERTIES

Fire properties: Fire propagation BS 476:Part 6: 1989 Class 0 **Surface spread of flame:** BS 476:Part 7: 1997 Class 1

| SOUNDBLOCKER 75 | SIZE | THICKNESS | WEIGHT |
|-----------------|---|--------------|---------|
| | 600x600mm (nominal) 1200x600mm (nominal) | 75mm 75mm | 19Kg/m² |

^{*} We can also manufacture bespoke sizes to suit/fit almost any grid.

ACOUSTIC DATA

| SOUNDBLOCKER ENTERTAINMENT RANGE | | |
|----------------------------------|------------------------|--|
| R _w (dB) | D _{nc,w} (dB) | |
| 33 | 53* | |

Tested to ISO 140-3 and rated to ISO 717-1 Soundblocker Entertainment range achieved an $R_{\rm W}$ of 33 dB as a single pass figure. Test reports available on request. SRS estimate that Soundblocker Entertainment should achieve a $D_{\rm nc,w}$ of approximately 53dB when installed onto all suspended ceiling tiles.

*Estimated

INSTALLATION GUIDANCE

Installation (Soundblocker Office and Classroom, Private Office, and Confidentiality Ranges)

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. Soundblocker tiles are easily removed with the suspended ceiling 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, Soundblocker tiles 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 tile will vary.

Installation (Soundblocker Entertainment Range)

Installation of the Soundblocker Entertainment Range 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

If access to the ceiling void is required following installation of the Soundblocker Entertainment range, then SRS recommend removing the shiplap edge from the Soundblocker Entertainment tile in the required location. This will allow both the Soundblocker Entertainment tile and the suspended ceiling tile to be pushed up into the void and moved to the side to grant access.

For all Soundblocker installations Soundblocker Accessories must be used to treat modular light fittings, downlighters, perimeters, air diffuser grilles and small apertures.

GRID SPECIFICATION

Ceilings that have yet to be installed

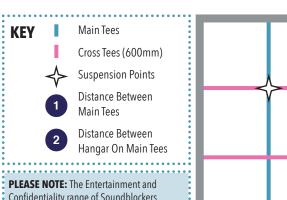
Using a conventional lay in grid system, main tees should be installed at 600mm centres and suspended down their length at 1200mm centres. This installation will accommodate all Soundblocker ranges up to and including the Soundblocker Confidentiality range, when basic mineral fibre ceiling tiles are used. If heavier ceiling tiles or the Entertainment Range of Soundblockers (20kg/m²) are used, the suspension centres must be reduced to 900mm along the length of the tee.

Ceilings that are already in-situ

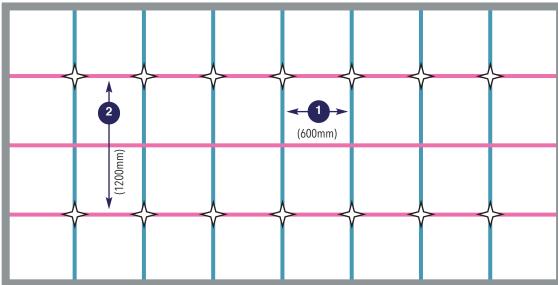
Where Soundblocker is to be installed into an existing ceiling and the main tees are at 1200mm centres:

- 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.

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.



Confidentiality range of Soundblockers significantly increase the loading on the suspended ceiling grid and it will be usually be necessary to strengthen the supports accordingly. The diagram to the right is offered as general guidance only. For further advice on grid specification please contact the manufacturer of the suspended ceiling grid.



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.

| SOUNDBLOCKER PERIMETER STRIP: | DETAILS: | |
|-------------------------------|-------------------|--|
| Size: | 15000 x 100 x 6mm | |



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.

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.

| MODULAR SIDE STRIPS: | DETAILS: |
|----------------------|-------------------|
| Size: | 1200 x 100 x 13mm |

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.

| SOUNDBLOCKER DOWNLIGHT HOOD: | DETAILS: |
|------------------------------|----------------------------|
| Internal Dimensions: | (L)180 x (W)160 x (H)135mm |
| External Dimensions: | (L)220 x (W)210 x (H)210mm |
| Weight: | 2.5kg |

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.

Important Note:

The ceiling grid must be suspended at each corner to support the weight of the diffuser.

| SOUNDBLOCKER AIR DIFFUSER HOOD: | DETAILS: |
|---------------------------------|----------------------------|
| Internal Dimensions: | (L)555 x (W)555 x (H)235mm |
| External Dimensions: | (L)595 x (W)595 x (H)305mm |
| Weight: | 12kg |



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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.

