Uniclass	EPIC
L586+L542:N372	E42+E512:Y45
CI/SfB	
(43)+(45) R+T (P2)	

ACOUSTILAY

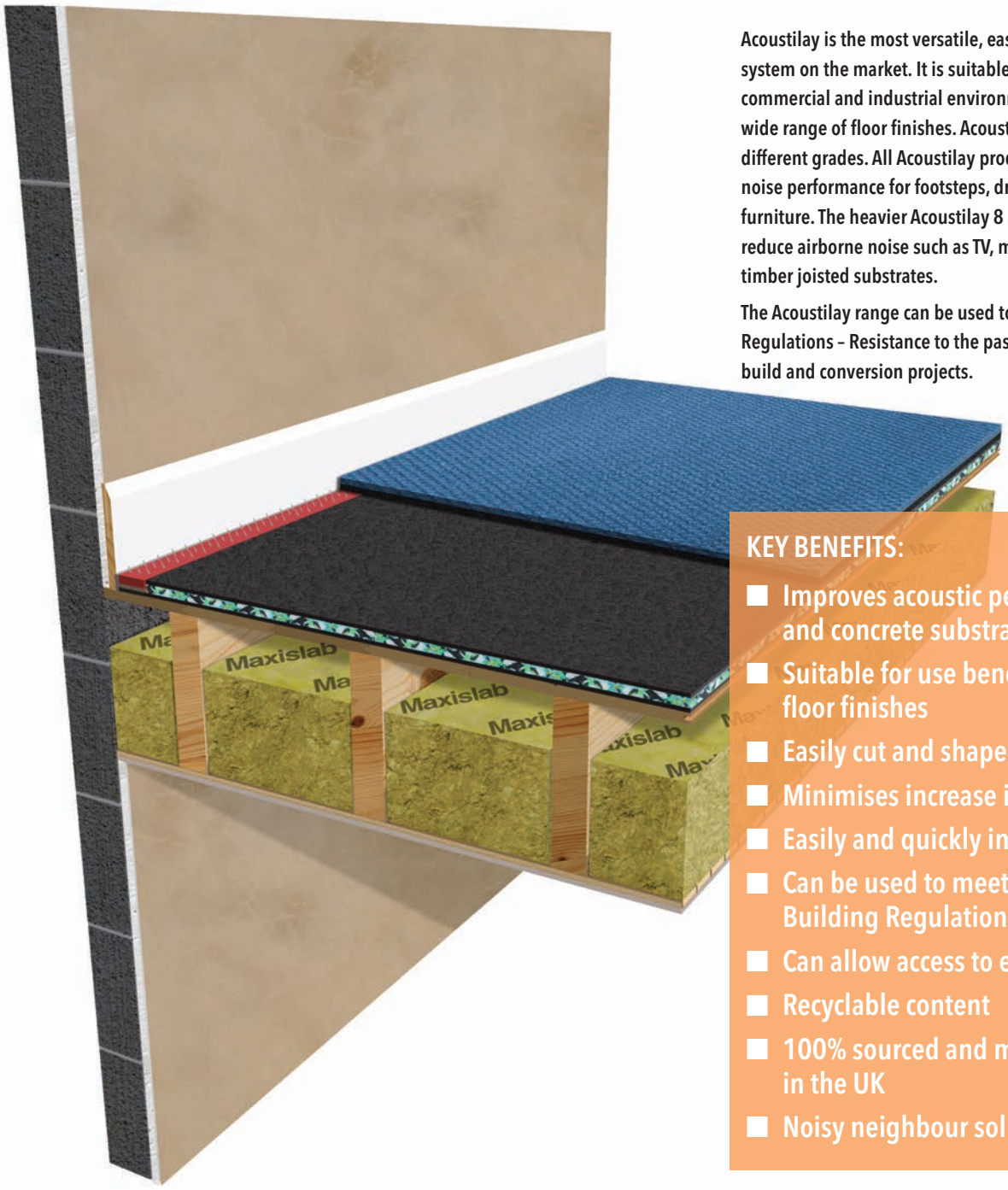
High performance, versatile acoustic flooring system

A SOUND REDUCTION SYSTEMS PRODUCT

ACOUSTILAY: THE PERFECT PRODUCT FOR SOUND INSULATING FLOORS IN DOMESTIC AND COMMERCIAL ENVIRONMENTS

Acoustilay is the most versatile, easy to install acoustic flooring system on the market. It is suitable for use in domestic, commercial and industrial environments and can be laid under a wide range of floor finishes. Acoustilay is manufactured in 3 different grades. All Acoustilay products provide excellent impact noise performance for footsteps, dropped items and moving furniture. The heavier Acoustilay 8 and 15 products are also able to reduce airborne noise such as TV, music and speech when used on timber joisted substrates.

The Acoustilay range can be used to meet Part E of the Building Regulations – Resistance to the passage of sound – in both new build and conversion projects.



KEY BENEFITS:

- Improves acoustic performance of timber and concrete substrates
- Suitable for use beneath a variety of floor finishes
- Easily cut and shaped
- Minimises increase in floor level
- Easily and quickly installed
- Can be used to meet Part E of the Building Regulations
- Can allow access to existing floor
- Recyclable content
- 100% sourced and manufactured in the UK
- Noisy neighbour solution

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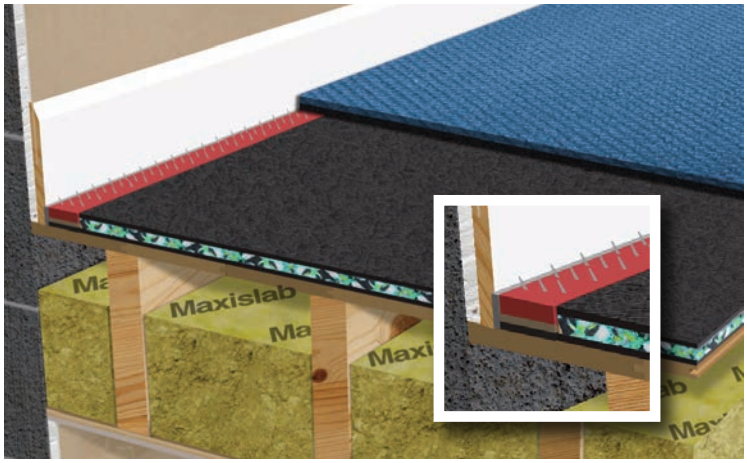
INSTALLATION GUIDANCE

Hessian-Backed Carpet Finishes, Fitted with Gripper (Domestic only)

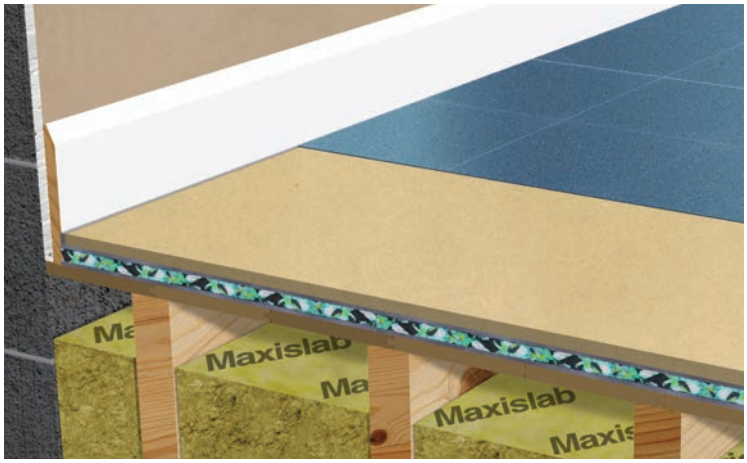


Acoustilay installed on a floor with perimeter strip and carpet gripper

Acoustilay Perimeter Strips are nailed or glued around the perimeter of the room with the barrier layer facing downwards and the acoustic seal, compressed by two thirds, to the wall or skirting board. Carpet gripper rods are then nailed in place on top of the Acoustilay Perimeter Strip.

Acoustilay panels are tightly butted up to the perimeter detail, and loose laid in brick bond pattern onto the floor. Care should be taken to ensure that no gaps occur between the Acoustilay panels and the Acoustilay Perimeter Strips or between the Acoustilay panels themselves. Acoustilay 3 and 8 should be installed with the embossed black barrier mat facing upwards.

Laminate, Vinyl, Carpet Tile, Bonded Carpet Floor Finishes (Domestic and Commercial)



MDF detail

When installing Acoustilay beneath laminate flooring, vinyl flooring, carpet tiles, or bonded carpet, it is necessary to install Acoustilay MDF between the Acoustilay and the floor finish. The use of Acoustilay MDF improves stability for the floor finish and prevents problems due to point loading, carpet rucking, and joint damage to the floor finish. In the case of bonded carpet and carpet tile floor finishes the use of Acoustilay MDF will also aid the installation by giving a stable surface to bond to.

Acoustilay should be bonded to the sub-floor in brick bond pattern using SRS Acoustilay Adhesive. Acoustilay 3 and 8 should be installed with the embossed black barrier mat facing upwards. Care should be taken that Acoustilay panels are butted tight against the perimeter wall or skirting and that no gaps occur between the Acoustilay panels themselves. Acoustilay MDF should then be bonded to the top of Acoustilay with SRS Acoustilay Adhesive.

The Acoustilay MDF boards should be bonded to each other using a PVA adhesive on the T&G joint, and any such joint should be a minimum of 50mm away from any Acoustilay joint. An isolation gap of 5-10mm should be left between the wall and the Acoustilay MDF to avoid sound transmission flanking into the structure. The isolation gap should be filled with SRS Acoustic Sealant. The floor finish should then be installed on top of the Acoustilay MDF as per the manufacturer's instructions.

In areas where the floor covering is returned, a timber fillet, the same thickness as the Acoustilay, should be placed around the perimeter to create a solid edge.

Please note that timber based products are prone to expansion and contraction, as such SRS recommend that expansion gaps are introduced across the Acoustilay MDF, as well as at the edges, in large applications. Further details on expansion gaps can be found at the Timber Research and Development Association website: www.trada.co.uk. If you have a large area to treat with Acoustilay MDF, SRS recommend that you contact TRADA for advice.

Engineered Timber Floor Finishes (Domestic)

In our experience, there is no issue installing Acoustilay 8 or 15 directly beneath engineered timber floors in domestic installations. The Acoustilay should be installed as described in the 'Hessian Backed Carpet Finishes, Fitted with Gripper' section, but without the perimeter strip detail – the Acoustilay should be butted tight up to the wall or skirting. As with all floating floor installations, no fixings should be allowed to penetrate the Acoustilay and an expansion gap should be allowed between the timber floor and the perimeter wall and services. This should be filled with SRS Acoustic Sealant or alternative flexible sealer.

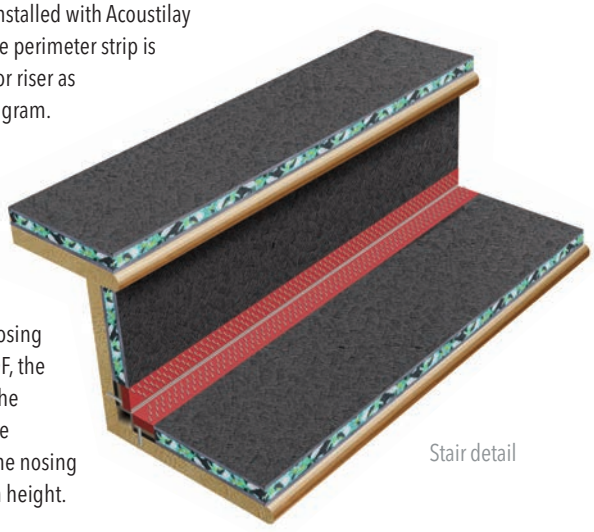
For confirmation on the suitability of any engineered timber floor for use with Acoustilay, please check with the floor finish manufacturer prior to installation. If the floor manufacturer feels that the resilience of the Acoustilay is excessive, or if the installation occurs anywhere other than a domestic environment, SRS recommend that the timber floor should be supported by installing a layer of Acoustilay MDF, bonded to the top of the Acoustilay. In this situation the full instructions of the 'Laminate, Vinyl, Carpet Tile, Bonded Carpet Floor Finishes' section should be followed.

If required, SRS will be happy to provide samples to the engineered timber floor manufacturer for test purposes. The density of the open-cell resilient layer in all the Acoustilay products is 135kg/m^3.

Stairs (Domestic, Hessian-Backed Carpet Finishes)

Acoustilay 3 (impact sound insulation) – Acoustilay 3 should be installed with black barrier mat facing upwards. Panels should be cut to size and bonded to tread using SRS Acoustilay Adhesive. Acoustilay 3 can be formed around the nosing of the stair, as with conventional underlay, if required.

Acoustilay 8 and 15 (impact and airborne sound insulation) - Acoustilay 8 should be installed with black barrier mat facing upwards. Acoustilay 8 and 15 must be installed with Acoustilay Perimeter Strips. The perimeter strip is nailed to the tread or riser as displayed in the diagram. Acoustilay panels should be cut to size and bonded to tread and riser using SRS Acoustilay Adhesive. For the nosing detail, a fillet of MDF, the same thickness as the Acoustilay should be installed beneath the nosing to ensure a uniform height.



Stair detail

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INSTALLATION GUIDANCE (CONT.)

Fixtures and Fittings

When installing Acoustilay it is important not to fix directly though the product into the sub-floor due to the risk of sound bridging.

When items such as kitchen or bathroom units need to be securely fixed to the floor they should first be mounted and fixed onto an MDF plinth to the same height as the Acoustilay being used. Ideally the plinth will cover the footprint of the item and the Acoustilay can then be butted up to the MDF, maintaining a consistent floor level and providing secure fixing points. In the case of fitted cupboards and wardrobes, Acoustilay should be used to treat floors inside the cupboard to prevent flanking of airborne sound.

Kitchen unit detail

Ceramic and Stone Tiles

Acoustilay 3, 8 and 15 **are not suitable** for use beneath ceramic and stone tiles. For such finishes, please refer to the Acoustilay Tilemat datasheet. Acoustilay Tilemat is a technical, acoustic flooring system that can be tiled onto directly to significantly reduce the transmission of impact noise.

HANDLING

Acoustilay 8 and 15 are heavy products. Please exercise caution when lifting and installing. The HSE can provide information and guidance on the lifting and handling of heavy goods www.hse.gov.uk.

PHYSICAL PROPERTIES AND ACCESSORIES

Fire properties: The surface barrier layer of Acoustilay is self extinguishing to FMVS S302.

THERMAL RESISTANCE	TOG
Acoustilay 3	2.33
Acoustilay 8	2.35
Acoustilay 15	2.38

Compression and dynamic loading: Acoustilay has been tested in according with BS4098:1998 (1999) work of compression BS4052:1987 (1996) Dynamic loading test and meets the requirements of BS5808:1991 (1996) Classified luxury use, domestic/contract where high energy absorption is required.

Dimensions: Sheet size - 1200mm x 1200mm

ACOUSTILAY	THICKNESS	WEIGHT
Acoustilay 15	15mm	15Kg/m^2
Acoustilay 8	12mm	8Kg/m^2
Acoustilay 3	10mm	3Kg/m^2

Cutting: By sharp long bladed trimming knife. Score the surface then run through with knife several times to avoid tearing. When shaping use large scissors or tin snips. A circular saw should be used for large numbers of straight cuts.

Storage: Must be laid flat, kept dry, and protected from frost.

Perimeter Strip - 1200mm long x 25mm wide

ACOUSTILAY PERIMETER STRIP	THICKNESS
Acoustilay 8 strip	6mm
Acoustilay 15 strip	9mm

Perimeter sealer: Rolls 8m x 15mm wide and 3/15mm thick.

Acrylic adhesive: 5kg tub - coverage up to 20m^2 per tub depending on substrate.

ACOUSTILAY T&G MDF
1200 x 1200 x 6mm
1200 x 600 x 9mm

Tested in accordance with BS 4745 :1990 (ISO 5085-1: 1989) Tests carried out by British Textile Technology Group, 2002.

ACOUSTIC DATA

Building Regulations Part E - Resistance to the Passage of Sound

Dwelling-houses and flats - performance standards for separating floors and stairs that have a separating function.		
	Airborne Sound Insulation $D_{nT,w} + C_{tr}$ dB (minimum values)	**Impact Sound Insulation** $L'_{nT,w}$ dB (maximum values)
Purpose built dwelling-houses or flats Floors + Stairs	45	62
Dwelling-houses or flats formed by material change of use Floors + Stairs	43	64

Rooms for residential purposes - performance standards for separating floors, and stairs that have a separating function.		
	Airborne Sound Insulation $D_{nT,w} + C_{tr}$ dB (minimum values)	**Impact Sound Insulation** $L'_{nT,w}$ dB (maximum values)
Purpose built rooms for residential purposes Floors + Stairs	45	62
Rooms for residential purposes formed by material change of use Floors + Stairs	43	64

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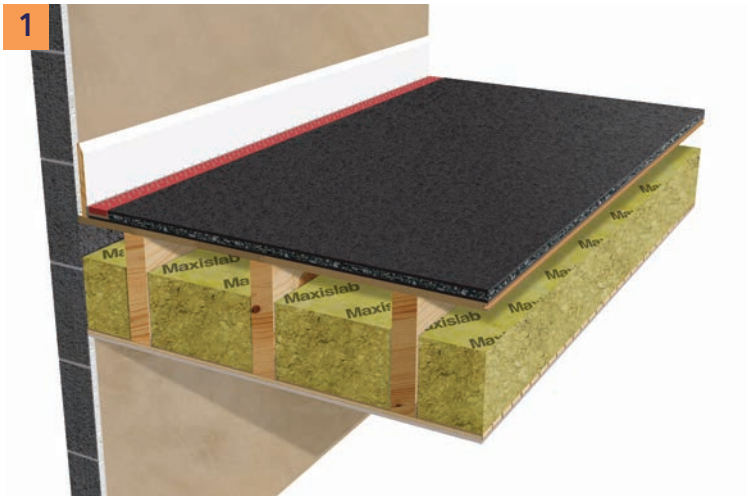
ACOUSTIC DATA FOR ACOUSTILAY

1

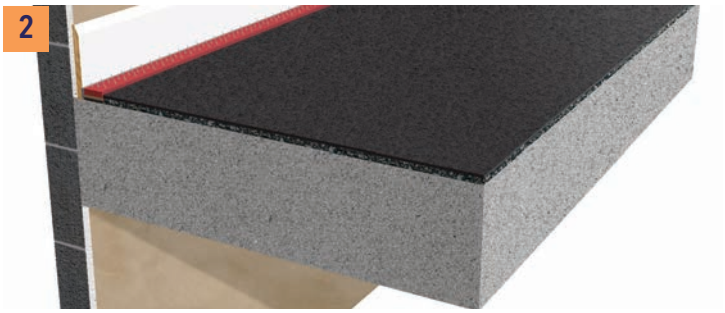


1	Acoustilay with a lath and plaster ceiling		
	Airborne $D_{nT,w}$ (dB)	Airborne $D_{nT,w} + C_{tr}$ (dB)	Impact $L'_{nT,w}$ (dB)
With Acoustilay 15 - without board	52	45	43
With Acoustilay 15 - with board	-	-	57

Lath and plaster ceiling

Carried out independently by Noise Control Services at a site in Darwen on 03/11/03, (conducted prior to the ANC advice to impact test on a rigid board) in accordance with ISO 140 parts 4 and 7. Rated to ISO 717 parts 1 and 2. Test references: NCS 11031/1, NCS 11031/2. Impact test on Acoustilay, covered with a rigid board, carried out by Floorscan Installations & Surveys Ltd on 20/10/06, in accordance with ISO 140 part 7. Rated to ISO 717 part 2. Test Reference 1260.

2

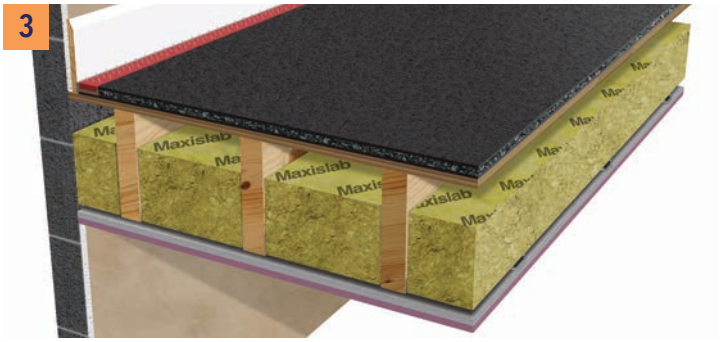


2	Acoustilay on a concrete floor
	Impact ΔLw (dB)
Acoustilay 3 - without board	42
Acoustilay 15 - without board	42

Concrete floor

Carried out at University of Salford 23/05/96 to ISO 140 Part 8. Report number AT/96/47.

3

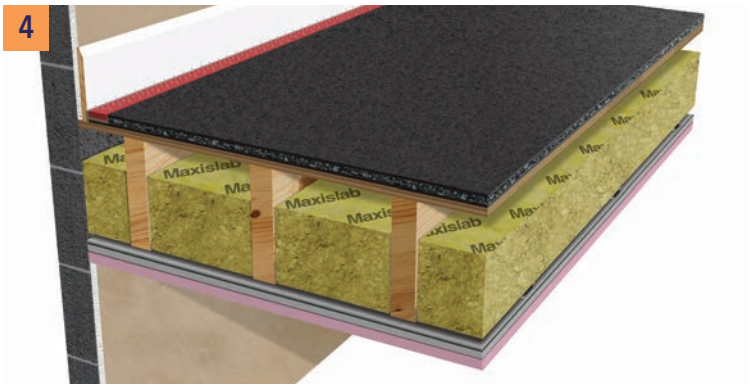


3	Acoustilay above plasterboard on resilient bars		
	Airborne $D_{nT,w}$	Airborne $D_{nT,w} + C_{tr}$ (dB)	Impact $L'_{nT,w}$ (dB)
Acoustilay 15 - with board	57	51	48

Above plasterboard

Carried out by Floorscan Acoustic Installation & Surveys Ltd, 14/09/05 in accordance with ISO 140 parts 4 and 7. Rated to ISO 717 parts 1 and 2. Test reference numbers 195- 3, 195-4 (results averaged over two tests).

4



4	Acoustilay above Maxi 60 Ceiling		
	Airborne $D_{nT,w}$	Airborne $D_{nT,w} + C_{tr}$ (dB)	Impact $L'_{nT,w}$ (dB)
Acoustilay 8 - without board	58	52	30

Maxi 60 ceilings

Carried out independently by Noise Control Services, 02/06/03. The tests, on Acoustilay 8 above the Maxi 60, were conducted prior to the changes to the ANC PCT scheme that now requires impact sound insulation tests to be conducted on a rigid board, when a proprietary underlay has been installed. The tests were carried out in accordance with ISO 140 parts 4 and 7. Rated to ISO 717 parts 1 and 2. Test reference numbers: 06031/1-4.

GENERAL NOTES

In all non-domestic environments, such as offices, hospitals and schools, it is recommended that Acoustilay MDF is installed onto the Acoustilay regardless of the floor finish. Installing Acoustilay MDF, as detailed in the 'Laminate, Vinyl, Carpet Tile, Bonded Carpet Floor Finishes, will eliminate the risk of the carpet rucking under wheeled furniture and protect both the floor finish and Acoustilay from heavy traffic wear.

There are a vast number of floor finishes available, and, as such, the installation guidance in this datasheet is given in good faith and to the best of our knowledge. The final decision regarding the compatibility of any floor finish installed onto Acoustilay must remain the responsibility of the flooring contractor/installer. If in any doubt, please seek advice from the floor finish manufacturer.

Good practice applies in all cases. Prior to installation of Acoustilay the floor should be level, clean, and dry. Acoustilay should be allowed to acclimatise to site conditions prior to installation.

SOUND REDUCTION SYSTEMS

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