

# **{ Acoustic Floating Floor System**

## A SOUND REDUCTION SYSTEMS PRODUCT



### Intro:

Maxipanel 28 is a high-performance acoustic flooring board designed to meet the sound insulation performance requirements of Building Regulations Part E for separating floor constructions.

Maxipanel 28 is suitable for use in domestic, commercial, and industrial environments and can be laid under a wide range of floor finishes.

### **Key Benefits:**

- Can be used to comply with Part E of the Building Regulations (England and Wales), Section 5 (Scotland), and Part G (Northern Ireland)
- Suitable for New build, change of use, and refurbishment projects
- Suitable to be laid over timber and concrete floor constructions as well as directly onto timber joists.
- Suitable for use beneath a variety of floor finishes including carpet and underlay, laminate and engineered timber
- Robust details E-FC-1 solution

### Installation Guidance:

Onto timber substrates (i.e floorboards or chipboard):

The existing floor surface should be level, dry, and free from debris before installation Maxipanel 28 commences. If the existing floorboards have gaps between them, they must be filled with a flexible sealant.

Maxipanel 28 should be fitted in a brick bond pattern, with the felt layer facing down. Ideally, cut panels less than 200mm in length should be avoided. As the panels are placed together the tongue and grooves should be bonded with PVA. A gap of 10mm should be left around the perimeter.

No mechanical fixings should be used to fix Maxipanel 28 to the subfloor. The only exception to this would be where two cut edges meet at a door threshold. In this case it is recommended to use

Maxipanel Grommets and fixings sparingly.

Once the Maxipanels are laid, the Maxipanel Perimeter Strip can be pressed into the perimeter gap, ensuring an air-tight seal. If required, this can then be trimmed to be flush to the top of the Maxi Panel.

Where skirting is to be installed, SRS recommend that packers are used along the top of the Maxi Panel 28 to give a 2-3mm isolation gap. The skirting can then be sat on top of the packers and fixed as normal. Once secure, the packers can then be removed, and the gap filled with SRS Acoustic Sealant.

For Robust details projects, Maxipanel RD Perimeter Strip is required in place of the standard Maxi Panel Perimeter Strip. This should be used around the perimeter and returned back over the Maxi Panel 28. The skirting board can then be sat on top of the resilient strip and the resilient strip trimmed flush to the edge of the skirting.

### Direct to joists

Where Maxi Panel 28 is to be installed directly to the top of the joists, it is important to check that the centres of the joists are at a maximum of 400mm centres.

As the Maxi Panel will be floating, and no mechanically fixed structural flooring will be used, it is likely that additional joist stiffness will be required. This can be achieved using timber noggins or stepped timber blocking between the joists.

Once the stepped blocking is installed, the installation guidance in the "Onto timber substrates" section above should be followed.

### **Part E Requirements:**

# 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' <sub>nT,w</sub> dB (maximum values)				
Purpose built dwellir Floors + Stairs	g-houses or flats 45	62				
Dwelling-houses or f Floors + Stairs	ats formed by material change of 43	use 64				
Rooms for residential purposes - performance standards for separating floors, and stairs that have a separating function.						
	Airborne Sound Insulation D <sub>nT,w</sub> + C <sub>tr</sub> dB (minimum values)	Impact Sound Insulation L' <sub>nT,w</sub> dB (maximum values)				
Purpose built rooms Floors + Stairs	Insulation D <sub>nT,w</sub> + C <sub>tr</sub> dB	Insulation L'nT,w dB				



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### **Acoustic Performance:**

### **Acoustic Performance - Resiliently Fixed Ceiling**

- 28mm Maxipanel 28
- 22mm T&G Chipboard
- 225x50mm softwood joists @ 450mm centres with 100mm thick Maxi Slab infill
- RB1 Resilient Bars @ 400mm centres
- 2 x 15mm Soundbloc plasterboard ceiling fixed to the resilient bars

	Airborn	е		Impact
MAXIPANEL 28	D <sub>nT,w</sub>	D <sub>nT,v</sub>	+C <sub>tr</sub>	L' <sub>nT,w</sub>
	57dB	50	dB	56dB

Tests carried out in accordance with BS EN ISO 140 Part 4 and rated to BS EN ISO 717 Parts 1 and 7 by Spratt and Hamer (UKAS) on 3<sup>rd</sup> February 2023. Airborne test reference: 20706S-1, Impact test reference: 20706S-2

# Acoustic Performance - Resiliently Fixed Ceiling, with Plasterboard Plank beneath Maxipanel 28

- 28mm Maxipanel 28
- 19mm Plasterboard Plank
- 22mm T&G Chipboard
- 225x50mm softwood joists @ 450mm centres with 100mm thick Maxi Slab infill
- RB1 Resilient Bars @ 400mm centres
- 2 x 15mm Soundbloc plasterboard ceiling fixed to the resilient bars

	Airborne		Impact	
MAXIPANEL 28	$D_{nT,w}$	$D_{nT,w} + C_{tr}$		L' <sub>nT,w</sub>
	58dB	510	dB	53dB

Tests carried out in accordance with BS EN ISO 140 Part 4 and rated to BS EN ISO 717 Parts 1 and 7 by Spratt and Hamer (UKAS) on 3<sup>rd</sup> February 2023. Airborne test reference: 20706S-9, Impact test reference: 20706S-10

Note: Building Regulations Approved Document E (England and Wales) a unit of measurement for airborne sound insulation which places much more emphasis on low frequency performance. Due to the inherent difficulties of measuring low frequency noise, a significant tolerance on the accuracy of airborne sound test results should be expected. Site conditions and workmanship can also limit reproducible results and therefore the above should be viewed as indicative of performance only.

### **Physical Properties and Accessories:**

MAXIPANEL 28	SIZE	THICKNESS	WEIGHT
	2400 x 600mm	28mm	13kg/m2

### Storage:

Maxipanel 28 must be laid flat and kept dry. Maxipanel 28 should only be stored on site if the building has been sealed and is completely dry.

# **Cutting:**

Maxipanel 28 is best cut using a circular saw with dust extraction fitted, however, it can also be cut using a handsaw or a jigsaw with a heavy-duty blade fitted for small areas.

# Handling:

Maxipanel 28 is a heavy product (19kg per 2400 x 600mm board). Please exercise caution when lifting and installing. The HSE can provide information and guidance on the lifting and handling of heavy goods <a href="https://www.hse.gov.uk">www.hse.gov.uk</a>

### **Accessories:**

### **MAXI PANEL ACCESSORIES**

Maxipanel Perimeter Strip

Maxipanel RD Perimeter Strip

Maxi Panel Grommets

### Floor finishes - General Guidance:

In general, floor finishes such as hessian backed carpet with underlay, laminate flooring, and engineered timber flooring can be installed onto Maxipanel 28 without any special considerations.

Solid wooden plank wooden flooring with square-edged boards can be bonded and hidden nailed to the surface of Maxipanel 28. The nails should not penetrate through the product and into the subfloor as this will create bridging paths and reduce acoustic performance. Correct depth of timber board. For some installations the flooring manufacturer requires a particular depth of board beneath their flooring and/or a plywood substrate to install onto. Please check this before commencing with the installation of any acoustic products.

Porcelain and ceramic tiling onto Maxipanel 28 is possible but it is necessary to use an anti-fraction membrane such a Norcross Permalayer or Schluter ditramat bedded within a flexible tile adhesive. A grout with flexible additive must also be used to avoid and cracking.

For situations where sheet vinyl or luxury vinyl tiles are required SRS recommend that Maxipanel 28 is installed as per our standard guidance and then a thin plywood layer (typically 6-9mm) is screwed to the surface of the Maxipanel 28, with the fixings at 300mm centres. The joints of the plywood and the screwheads can then be filled and sanded so that they don't show through the floor finish.

Should other kinds of floor finish be required, please contact SRS and we will do our best to assist.

### General Notes:

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 any acoustic flooring products 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 Maxipanel 28 the floor should be level, clean, and dry. Maxipanel 28 should be allowed to acclimatise to site conditions prior to installation.



