

One of the **isomass** systems range

**isocheck**<sup>TM</sup>

# Absorba<sup>®</sup> Ceiling Tile



Recyclable post-use

## LAMINATED STICK-ON ABSORPTION SYSTEM FOR CEILINGS

- New build
- Conversions



### DESCRIPTION

- ❑ Isocheck Absorba<sup>®</sup> tiles are designed to absorb sound and reduce reverberation noise.
- ❑ The tiles comprise a fibreglass core with a white speckled laminated coating that enhances the panels visual and practical appearance. They also have bevel edges contributing to allowing unique wall and ceiling designs.
- ❑ Although the panels come in a standard white colour to blend in with most ceilings, they can be emulsion painted to any colour.
- ❑ Isocheck Absorba tiles reduce reverberated noise for the necessary compliance of Approved Document E of the building regulations.

### BENEFITS

The Isocheck Absorba tiles:

- ❑ are a Class C Absorber (Class A versions are also available upon request).
- ❑ are lightweight with a low thickness and easy to install and clean.
- ❑ have reinforced bevel edges for increased durability.
- ❑ can be emulsion painted to any colour without significant loss in noise absorption.
- ❑ are BB93 compliant for use in schools.
- ❑ are fire rated to BS476 Class 0.



Taking the *mystery* out of Acoustics

**isocheck**<sup>TM</sup>  
acoustic insulating products

## Product data:

Tile size:	1200mm x 600mm x 30mm
Weight (nominal)	4.0kg/m <sup>2</sup>
Dimensional tolerances:	+/- 3mm
Core:	sound absorbent fibreglass
Finish:	White speckled laminated facing

Sound absorption to common areas in buildings containing multiple dwellings such as flats is now covered in guidance within Approved Document E of the building regulations. It covers two methods of application the most common of which is:

### Method A

Entrance halls, corridors or hallways should be treated with a Class 'C' performance noise absorber such as Absorba tiles covering equal or greater than the floor area. Similarly it also states that stairwells or stair enclosures have a Class 'C' absorber covering an area of at least 50% of the ceiling of the combined area of the stair treads, the upper surface of the landing plus the top floor ceiling area. These noise absorbers are typically applied to the ceilings.

### Class C

Isocheck (Class C) Absorba tiles gives a very high sound absorption rating 0.85 (i.e. 85%) (with or without emulsion applied) with ceiling height loss of only 30mm. It is worth noting however the thin coating of emulsion paint on the surface does act as a membrane absorber leading to higher absorption at the lower frequencies and a drop off at the higher frequencies but leaves the overall NRC unchanged at 0.85.

### Class C test results

30mm thick Absorba ceiling tile direct mounted (method A)

Absorption/frequency band (KHz)																	
0.10	0.125	0.16	0.20	0.25	0.315	0.40	0.50	0.63	0.80	1.00	1.25	1.60	2.00	2.50	3.15	4.00	5.00
0.05	0.11	0.16	0.29	0.41	0.65	0.77	0.92	1.06	1.03	1.03	1.08	1.08	1.06	1.06	1.07	1.00	0.99
Absorption Coefficient																	

### Class A test results (for comparison)

30mm thick Absorba ceiling tile mounted over 100mm cavity (method E-130)

Absorption/frequency band (KHz)																	
0.10	0.125	0.16	0.20	0.25	0.315	0.40	0.50	0.63	1.0	1.25	2.0	3.15	4.0	5.0			
0.32	0.37	0.50	0.86	0.96	1.04	1.02	1.01	1.07	0.97	1.04	1.06	1.10	1.03	1.07			
Absorption Coefficient																	

Every effort has been taken in the preparation of this sheet to ensure the accuracy of representations contained herein. Recommendations as to the use of materials, construction details and methods of installation are given in good faith and relate to typical situations. However, every site has different characteristics and reliance should not be placed upon the foregoing recommendations. Advice can be given as to specific applications of the products, upon request to isomass building products.

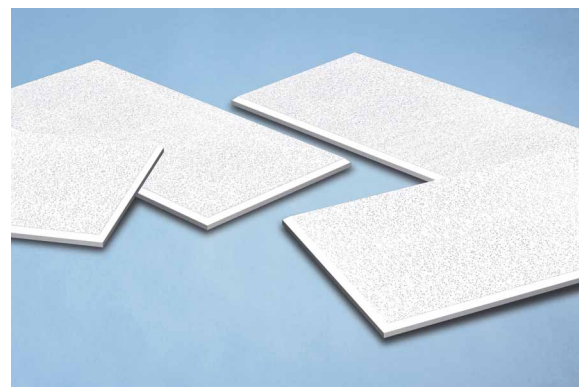
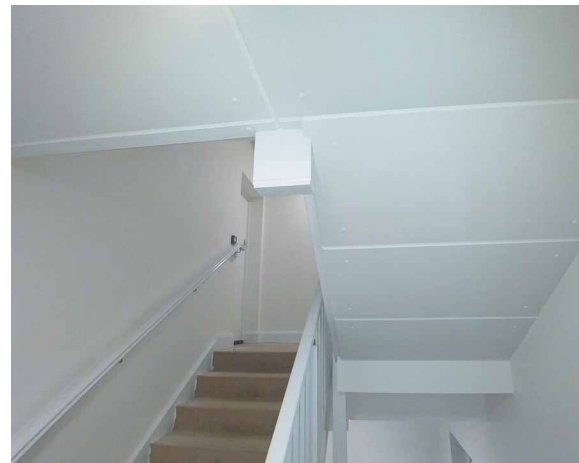
## SPECIFICATION

The acoustic ceiling shall be:

- Isocheck Absorba Tiles, supplied by Isomass Ltd. Units 10 & 11, Avenue Business Park, Off Brockley Road, Elsworth, Cambridgeshire, CB23 4EY and installed in accordance with manufacturer's instructions / recommendations.

## PERFORMANCE

- Acoustic test data is provided at the bottom of the page. All the data we publish has been generated in approved acoustic testing facilities according to recognised acoustic test standards.



## INSTALLATION

### General

Absorba tiles are easy to cut to any size or shape to accommodate light fittings and other services using a sharp utility knife, making it easier on site. Any cut edges which are visually exposed can be touched up with matching white emulsion paint.

Ensure the panels are cut to the front of the panel by using a long sharp blade to avoid visible damage on the face of the panel. Care should be taken when cutting the edges of the panels as they are reinforced. The cut edge can be lightly sanded and after sanding ensure the area is free from dust before painting. The core of the panel is very porous to paint and therefore may require more than one coat; however painting may not be necessary in areas where the cut edges are not exposed.

When **fixing tiles with a 100mm air gap** between tiles and ceiling/wall this fixing method results in very high sound absorption especially at low frequencies.

The air gap can be created by using 100mm thick timber battens (or similar) fixed to the ceiling structure. The Absorba ceiling tiles are then glued to the pre-sealed (PVA) battens.

When **direct fixing**, check the ceiling structure for condensation or cold bridging, as this condition should be avoided when the acoustic panels are fixed, for example, it may occur when there is no heated upper floor above the ceiling. The ceiling must also be clean, flat, dry, solid and free from dust, grease and other similar contaminants before applying the adhesive. Absorba tiles are fixed using an Isocheck Contact spray adhesive applied to both the tile and the ceiling surface.

Apply the adhesive at room temperature of approximately 20°C and in well ventilated conditions. Hold the spray adhesive 150mm to 300mm away from the surface and at a constant 90° angle and spray in a web pattern. To avoid overspray onto the edges of the tiles or other surfaces, it may be necessary to mask any vulnerable areas. To avoid soiling the panels, we would advise the use of white cotton gloves.

The tiles can be either butted together or left with up to a 3mm gap. The tiles and ceiling surface should be fully coated and then allowed to dry for 3 - 5 minutes before bonding. The tiles should be placed accurately into position as the adhesive creates an immediate bond upon contact. Once the panel is in place it should be pressed firmly to ensure overall contact.

### BB93 Acoustics in schools

Isocheck Absorba tiles are architectural noise absorbers designed to achieve Class 'C' sound absorption in common areas for stairwells, hallways, corridors for flats (and can also be used in other open spaces to meet the requirements of Building Bulletin 93 (BB93)) linked to part E of the Building Regulations. These are the highest class required for common areas in this section of the building Regulations.

### Fire

Isocheck Absorba tiles meet the requirements of Class 1 and Class 0 of BS476 Part 6 and 7.

Absorba tiles will resist up to 93% Relative Humidity at 40°C in accordance with ISO 4611.

### Support

Isomass supply absorba panels throughout the UK and Europe. Support for specifiers includes technical advice, relevant data sheets and product samples where required.

*If you can't find the information you need please contact us. We are regularly developing and testing new acoustic treatment and sound proofing products.*



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