



Techmel Decorative direct bond ceiling and wall sound absorbers

The Products

Decorative sound absorption products specifically designed to reduce reverberant noise and aid speech intelligibility within a given environment. Techmel panels are suitable for direct bonding onto well prepared vertical or horizontal flat surfaces.

Techmel FBA– fabric bonded absorber

Features panels manufactured from ultra light weight, open cell Melamine Foam. FBA panels are available in straight edged shapes i.e. square, rectangle and triangle, in a variety of standard or bespoke sizes which offer flexible architectural and design applications.

Techmel PBA – plain bonded absorber

These decorative, flame retardant plain bonded panels are manufactured from ultra light, open cell natural Melamine Foam in either white or light grey colour. Techmel PBA panels are available in a range of standard or bespoke shapes and sizes and can be cut and formed to create virtually any design shape, allowing for total flexibility in architectural application.

Techmel FHA– fabric hanging absorber

These decorative, flame retardant fabric covered acoustic panels are manufactured from ultra light weight open cell Melamine Foam. In addition, standard or bespoke panel sizes are available based on a straight edged design i.e. square, rectangle or triangle shapes, allowing for flexible design options. Available in a variety of thicknesses and adaptable to suit the acoustic performance required, all panels are fabric wrapped to the face and visible edges.

Techmel NHA – natural hanging absorber

These decorative flame retardant natural acoustic hanging panels are manufactured from ultra light weight open cell Melamine Foam. All panels are supplied in either white or light grey. Techmel NHA hanging panels are available in various thicknesses and in addition standard or bespoke panel sizes are available. Unlike fabric covered absorbers natural Melamine Foam can be cut to form virtually any design shape. (Any RAL paint colour can be applied but no current Fire Rating is available).

Colours and Finishes

Techmel FBA is available in three fabric ranges as standard; **Cara** fabric has an open hessian weave appearance, **Screen** fabric has a closer weave offering a smoother finish, while **Lucia** fabric provides a crepe texture finish. Where clients prefer to specify their own fabrics we require a 1m² fabric sample be provided to ensure compatibility with the manufacturing process and acoustic transparency. See above for Techmel PBA and Techmel NHA colour information.



Installation Guidance

John C Wilkins provide a full supply and installation service or any competent contractor should be able to install the bonded or hanging absorber range. White linen gloves should be worn when handling and installing natural Melamine or Techmel Foam as it is difficult to clean once soiled. Shadow gap spacing is also suggested with Techmel Foam and butt jointing of these panels is not recommended due to the potential for minor expansion and contraction.

Technical Advice

Our qualified and experienced acoustic engineers can provide architects, consultants and contractors with detailed technical advice on product specifications, suitability, installation and reverberation time (RT) calculations needed to meet the required acoustic performance.

Operating Temperature:

Techmel and Echo bonded products are compatible with all normal building temperatures.

Fire Performance

The Cara, Screen and Lucia fabrics all meet the requirements of Class 1 Surface Spread of Flame when tested to BS476: Part 7 1997. Screen fabrics can be chemically treated to provide Class "O" fire rating, subject to colours and minimum order quantity.

Thermal Conductivity: 0.035 W/mK @ 10°C

APPLICATIONS

- Offices
- Meeting Rooms
- Hotels
- Conference Centres
- Leisure Centres
- Schools
- Restaurants
- Showrooms



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Packaging, Handling and Storage

Absorbers should be stored inside and under cover in a dry, well ventilated area protected from dirt and dust. Pallets should be kept level and not double stacked. Extreme care should be taken when handling and to avoid soiling the product.

Application and Fixing

Dimensional changes may occur in Techmel Ceiling Panel Absorbers dependent on the relative humidity of the area in which they are being installed. Absorbers should therefore be left to acclimatize for 24 hours before installation. For best results it is recommended that panels are hung with minimum 100 mm spacing between them.

Acoustic Performance

Hanging Absorbers	Thickness mm	Sound Absorption Co-efficient (tested to BS EN ISO 354:2003)					
		125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz
Techmel Plain Absorbers	25	0.04	0.22	0.54	0.74	0.88	0.92
	50	0.22	0.46	0.95	1.00	1.00	1.00
	100	0.61	1.00	1.00	1.00	0.99	0.97
Techmel Fabric Absorbers (Cara, Screen or Lucia)	25	0.05	0.27	0.68	0.89	1.00	0.94
	50	0.23	0.50	1.00	1.00	1.00	1.00
	100	0.60	1.00	1.00	1.00	0.98	0.96

Care and Maintenance

The surface of Techmel Ceiling Absorbers can be cleaned periodically with a vacuum cleaner. Under no circumstances should they be submerged in water or subjected to a high pressure water jet spray. Stains on the fabric covering may be treated with an appropriate non-solvent based cleaning solution applied in accordance with the manufacturer's instructions.

Availability

Techmel Ceiling Absorbers are available to order and should only be fitted by suitably qualified tradesmen or specialist contractors.

Dimensions and Weight

Thickness mm	Nominal Size * mm	Nominal Weight of Absorber (Complete with Metal frame)
25mm	2500 x 1250	11.5kg
50mm	2500 x 1250	12.0kg
75mm	2500 x 1250	13.0kg
100mm	2500 x 1250	13.5kg

*Other sizes and thicknesses are available to suit individual projects or a clients own design and detailing, subject to minimum order quantities. Further details are available on request. Note: **Direct Bonded Absorbers** have a maximum size of 1250 mm x 1250 mm

Building Regulation Classification

Hanging Ceiling Absorbers	Absorber Classification (When tested to BS EN ISO 11654-1997)
25mm	C
50mm	C
75mm	C
100mm	C

For further details, call John C Wilkins Acoustic Installations on 01204 548400.

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