Techmel Foam

SOUND ABSORBERS



Datasheet 38



The Products

These panels, made from Melamine Foam, are designed to aid speech intelligibility. Suitable for direct bonding onto well prepared vertical or horizontal surfaces they can also be vertically hung.

Sizes, Colours and Finishes

Techmel Foam Panels are available in raw form, fabric covered or PVC spray painted. The standard Cara and Lucia fabrics both meet the requirements of Class 1 Surface Spread of Flame when tested to BS476:Part 7 1997. Thermal conductivity: 0.035 W/mk @ 10°C. Standard and Bespoke sizes available to a maximum size of 2.5m x 1.25m. Various thicknesses available all to BS Absorber Classification C.

Typical Applications

Schools, Multi-purpose Halls and any large space where reducing reverberation and increasing speech intelligibility is important.

Domestic Dwellings | Offices | Hotels | Conference Centres | Leisure Centres | Schools | Restaurants | Showrooms



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.

Colours and Finishes

Techmel FBA is available in two fabric ranges as standard; Cara fabric has an open hessian weave appearance, 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 colour information.

Installation Guidance

JCW 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

8.30am - 5.00pm Monday to Friday

The Cara and Lucia fabrics both 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

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 100mm spacing between them.

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.

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 and 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

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 1250mm x 1250mm.

Building Regulation Classification

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