

dB Ceiling Absorbers

Description

dB Ceiling Absorbers are decorative ceiling panels manufactured from sound absorbing **MelaTech** foam covered with a high quality acoustically transparent fabric.



They are designed primarily to reduce reverberant noise by improving acoustic absorption within the area being treated. When installed directly below the roof space, they will also improve the thermal insulation of a building. **dB Ceiling Absorbers** can be directly bonded to both horizontal and vertical surfaces providing the receiving substrate is in suitably good condition.

dB Ceiling Absorbers are an extremely effective, economic alternative to a full suspended acoustic ceiling and can be installed to create a feature within a room to enhance the interior design.

Colour and Finish

White Bingo fabric and three coloured fabric ranges are available. *Cara* fabrics have a relatively open weave, providing a hessian effect, *Screen* fabrics have a closer weave for a smoother finish and *Lucia* fabrics have a crepe texture. Absorbers can be covered with a client's own choice of fabric, subject to it being of a suitable quality and having the required acoustic properties. **dB Ceiling Absorbers** can also be manufactured in plain **MelaTech** foam and spray painted to any BS or RAL colour subject to minimum order quantities.

Application

dB Ceiling Absorbers are used extensively in schools, particularly old Victorian buildings with vast expanses of hard surfaces by clients wishing to upgrade the acoustic environment to meet Building Bulletin 93 standards. They are also used in multi-purpose halls, gymnasias, recording studios and music practice rooms.

Technical Advice

Highly qualified acoustic engineers are available to offer assistance and advice to clients, architects and contractors on all aspects of noise control to ensure design specifications and acoustic performance requirements are achieved. They can also undertake noise surveys and provide details of anticipated reverberation times pre and post installation.

Operating Temperature

dB Ceiling Absorbers are suitable for use at normal building temperatures.

Fire Performance

Plain **MelaTech** foam absorbers comply with the Class 'O' requirements of the Building Regulations, when tested to BS476: Part 6: 1981 and Part 7: 1987.

Absorbers with a spray painted finish do not have a fire rating.

Cara, *Screen* and *Lucia* fabrics meet the requirements of Class 1 Surface Spread of Flame when tested to BS476: Part 7: 1997 (As Amended). The composite absorbers have not been fire tested.

Thermal Conductivity

- 0.035 W/mK @ 10°C

Building Regulation Classification

dB Ceiling Absorbers	Absorber Classification
25mm	C
50mm	C
75mm	C
100mm	C

Acoustic Performance

In a 'typical' Victorian school **dB Ceiling Absorbers** bonded to the underside of a ceiling or at high level around walls, could reduce reverberation time within a large assembly type hall from around 4 seconds to around 1.5 seconds and in a classroom from around 2.5 seconds to around 0.9 seconds.

Product	Thickness mm	Sound Absorption Coefficient (Tested to BS EN ISO 354: 2003)					
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
Plain MelaTech 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
Absorbers covered with Bingo, 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

Dimensions and Weight

Thickness mm	* Nominal Size mm	Nominal Weight of Absorber kg
25	1250 x 1250	0.85
50	1250 x 1250	1.22
75	1250 x 1250	1.58
100	1250 x 1250	1.95

* Other sizes and thicknesses are available to suit individual projects or a client's own design and detailing, subject to minimum order quantities. Further details available on request.

Packaging, Handling and Storage

Two **dB Ceiling Absorbers** are packed with fabric-face to fabric-face in a non-returnable polythene bag. Packs are laid flat and delivered on non-returnable wooden pallets with plastic corner protectors. 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, to avoid damage.

Application and Fixing

Dimensional changes may occur in **dB Ceiling Absorbers** dependent on the relative humidity of the area in which they are being installed. Absorbers should therefore be left to acclimatise for 24 hours prior to installation. For best results it is recommended that panels are installed with a minimum 30mm shadow gap between them.

dB Ceiling Absorbers should be bonded directly to horizontal and vertical surfaces in accordance with the adhesive manufacturer's instructions and subject to the receiving substrate being in suitably good condition.

Care and Maintenance

The surface of **dB 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

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

For Further Information

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