

## FOAMSORBA™ Stick-on Acoustic Tiles



**ACOUSTIC SOLUTIONS FOR EVERY APPLICATION**

FOAMSORBA™ are extremely lightweight sound absorbing tiles. They are designed to be glued onto existing or new ceilings and high level wall surfaces. They have virtually no weight and are simple to fix. They are fibre and CFC free as well as having excellent fire ratings. Foamsorba tiles are used with great success in applications such as television studios, offices, community and multi-purpose halls, cinemas, classrooms, hallways, music rooms and shooting ranges etc.

**SOUND****SORBA**™  
ACOUSTIC PRODUCTS

# FOAMSORBA™

Stick-on Acoustic Tiles

## SOUND ABSORPTION

Noise surrounds us everywhere in modern life whether it is in the workplace, home, school or when on holiday. Not only are high noise levels harmful to human hearing but important instructions and emergency warnings can go unheard in the general commotion in noisy buildings. It is a fact that noise reduces productivity in the workplace and results in lack of concentration, irritation and higher stress levels.

This problem is recognised and minimum acoustic standards are set out for builders and designers of existing and new buildings. Buildings shall comply with the acoustic standards set out by the British Standards Institute (B.S.I.) and by the Department for Education (D.F.E.E.). Our technical department can help you to determine what is required for your particular room or hall to enable you to comply with these requirements.

FOAMSORBA™ acoustic tiles provide a simple and effective means of markedly increasing the sound absorption within rooms and halls resulting in lower sound levels to comply with these regulations. The fact that FOAMSORBA acoustic tiles are easily glued with adhesive to the ceiling or wall surfaces means that no specialist installation tradesmen are required. This means that installation costs are minimal.

## APPLICATION

FOAMSORBA acoustic tiles are used to reduce reverberant noise levels in schools, leisure centres, community centres, offices, music studios and multi-purpose halls. Standard tiles should only be used in places where they cannot get hit or damaged.

FOAMSORBA-SLEET stick-on tiles can be covered on the face and all four edges with acoustic fabric facing to provide high resistance to football impacts etc. which makes it ideal for high level use in sports buildings. Samples are available on request for evaluation.

## MANUFACTURE

FOAMSORBA acoustic tiles are manufactured from soft foam on a melamine resin base. This makes the tiles free of both artificial and natural mineral fibres (such as rock fibre and fibre glass). It is also free from halogens and CFCs and is environmentally friendly. FOAMSORBA tiles are safe in use, handling and application.

## DENSITY

FOAMSORBA tiles have a density of approximately 11kg/m<sup>3</sup>. Hence the tiles have virtually no weight.

Due to their extremely low density and high acoustic performance, FOAMSORBA tiles are eminently suitable for installation into existing buildings without substantially increasing the load on the structure.

## FLAMMABILITY

FOAMSORBA melamine foam meets the requirements of Class 1 of BS476 and also Class 0 of BS476. Class 0 is the optimum performance required by the Building Regulations Approved Document B.

When exposed to intense heat levels, it does not start to drip and produces no after glow.



Classrooms



Music Studios

## INSTALLATION

FOAMSORBA acoustic tiles are simply, quickly and easily adhered directly to ceilings and walls by using FOAMSORBA adhesive. The tiles can be easily cut with a Stanley knife or sharp knife.

*Further installation information is given on the back page of this brochure.*

## CLEANING & MAINTENANCE

Clean periodically using a vacuum cleaner as required. Tiles may be redecorated by spraying a fine mist coat of suitable paint.

## HEALTH & SAFETY

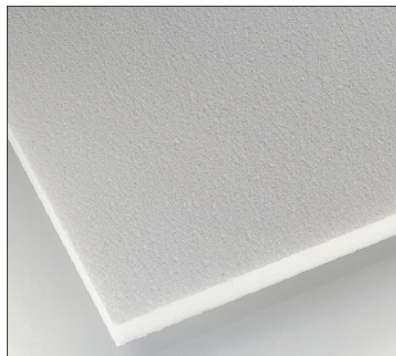
FOAMSORBA tiles are free from mineral fibres, halogen and CFCs and are environmentally friendly.



**FINISHES:** FOAMSORBA tiles are available in three standard face patterns:-

## ● FOAMSORBA-SLEET

This has a plain, flat face structure where anonymity of the tile face is preferred.



### COLOURS

Standard colour is white. Non standard colours may be provided to RAL colours upon request, depending on quantity.

### DIMENSIONS & WEIGHT

Nominal dimensions of tiles are 1250 x 625mm.

Thicknesses	Weight
20mm	0.25kg/m <sup>2</sup>
50mm	0.6kg/m <sup>2</sup>
80mm	0.9kg/m <sup>2</sup>

*Dimensional tolerance in accordance with M4 DIN 7715, Part 2.*

## ● FOAMSORBA-SNOW

This has a unique moulded structure to allow design creativity for building specifiers.



### COLOURS

Standard colour is white. Non standard colours may be provided to RAL colours upon request, depending on quantity.

### DIMENSIONS & WEIGHT

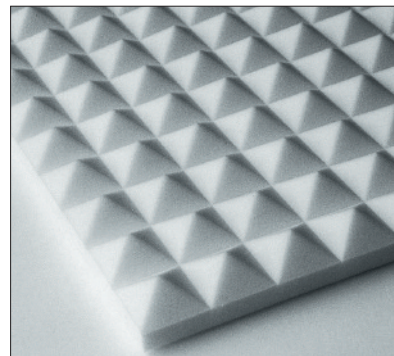
Nominal dimensions of tiles are 1250 x 625mm.

Thicknesses	Weight
35mm	0.4kg/m <sup>2</sup>
45mm	0.6kg/m <sup>2</sup>
65mm	0.8kg/m <sup>2</sup>

*Dimensional tolerance in accordance with M4 DIN 7715, Part 2.*

## ● FOAMSORBA-ICE

This has a pyramid like surface and provides the greatest area of absorption of all.



### COLOURS

Standard colour is white. Non standard colours may be provided to RAL colours upon request, depending on quantity.

### DIMENSIONS & WEIGHT

Nominal dimensions of tiles are 1260 x 630mm.

Thicknesses	Weight
55mm	0.6kg/m <sup>2</sup>
85mm	0.9kg/m <sup>2</sup>
115mm	1.1kg/m <sup>2</sup>

*Dimensional tolerance in accordance with M4 DIN 7715, Part 2.*



Lecture Halls



Leisure Halls

### Sound absorption

	Frequency (Hz)						
	125	250	500	1k	2k	4k	
Sleet 20mm	0.07	0.09	0.16	0.30	0.54	0.76	
Sleet 50mm	0.13	0.23	0.48	0.74	0.97	0.92	
Sleet 80mm	0.20	0.45	0.78	0.95	0.96	0.99	

### Sound absorption

	Frequency (Hz)						
	125	250	500	1k	2k	4k	
Snow 35mm	0.08	0.21	0.45	0.71	0.82	0.91	
Snow 45mm	0.15	0.27	0.63	0.91	1.03	1.06	
Snow 65mm	0.17	0.44	0.88	1.08	1.10	1.16	

### Sound absorption

	Frequency (Hz)						
	125	250	500	1k	2k	4k	
Ice 55mm	0.13	0.25	0.50	0.75	0.88	0.94	
Ice 85mm	0.22	0.49	0.77	0.96	0.96	1.05	
Ice 115mm	0.40	0.77	0.92	1.01	1.00	1.04	

# FOAMSORBA™

Stick-on Acoustic Tiles

## INSTALLATION

FOAMSORBA acoustic tiles are made from flexible open-cell melamine resin-based acoustic foam. They are simply stuck on the walls and ceiling using the appropriate adhesive. They are very lightweight (approx. 10kg/m<sup>3</sup> density) and simple and easy to install. They are also fibre free and have excellent sound absorption characteristics over a wide range of frequencies. FOAMSORBA tiles are made from soft melamine foam and can be damaged. Therefore they should only be used in places where they cannot get hit or damaged. FOAMSORBA tiles are easily cut with a sharp knife.

Two types of adhesive are available for adhering the tiles.

Details are as follows:-

### FOR ABSORBENT SURFACES

**FOAMSORBA acoustic 'AK20' adhesive** comes ready to use in a 20kg tub. The adhesive adheres immediately upon contact. However, it is still possible to correct placement of tiles shortly after adhesion. This adhesive provides a secure bond to concrete, masonry, plaster tiles, plasterboard and plaster fibre as well as chipboard (please follow manufacturers' recommendations).

When applying the tiles, the under surface must be smooth, clean, dry, solid and free from dust, oil and wax residues. Under surfaces which lack sufficient solidity, for example, sandy surfaces, must first be treated with commercially available water-based primers at a dilution ratio of 1 part water to 1 part primer. Uneven surfaces must first be levelled.



Generally clean the surface.



Coat the dry surface with 'AK20' adhesive.

The adhesive is spread evenly over the entire back surface of the acoustic tile to be adhered or to the underside to which the tile is to be adhered. The tiles are then positioned into place, pressed to the surface and adjusted. Any adhesive drips or excess can be wiped away while still fresh with water. During adhesion and afterwards, attention must be paid to providing adequate ventilation to ensure quick bonding. We recommend a test adhesion be carried out before proceeding with full installation.



Cut tiles to size.



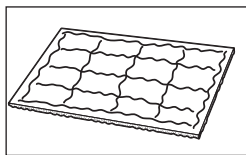
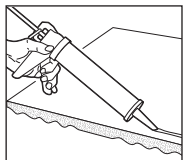
Position and affix tiles.

Coverage of 'AK20' adhesive is approximately 1.2 – 1.5kg/m<sup>2</sup> when the entire surface is being covered.

### FOR NON ABSORBENT SURFACES

**FOAMSORBA acoustic 'silicone' adhesive** comes ready to use in mastic tube cartridges. The adhesive adheres immediately upon contact. However, it is still possible to correct placement of tiles within 3 minutes after adhesion. 'Silicone' adhesive provides a secure bond to under surfaces such as sheet metal, trapezoidal corrugated sheet metal and PVC. The under surface must be clean, dry, solid and free from oil and grease residue.

A bead of 'silicone' adhesive is applied to the back of the tile to be adhered, around the tile perimeter and several bead stripes are applied to the intermediate areas of the tile. The number of stripes depends on the particular tile version and tile size. Ensure that adequate bead stripes are applied to prevent any sagging of the tile in any area.



We recommend a test adhesion to be carried out before proceeding with the full installation.

Coverage is approximately 0.5 cartridges/m<sup>2</sup>.

Approx 1.0 cartridges/m<sup>2</sup> when adhering FOAMSORBA-SNOW.

### APPLICATION DETAILS

When adhering FOAMSORBA-SNOW, special attention must be paid as the tiles are paired. This version of the tiles must be fitted in tile pairs in the same configuration as the tiles are shipped in. Each pair is folded open and adhered with the adjoining edges butting up to each other.

To prevent soiling of the tiles during adhesion, we recommend that clean gloves be worn. We recommend that adhesive is applied at a temperature range of between +10°C and 23°C. The adhesive must not be exposed to temperatures below 4°C.

For areas exposed to pollution that might eventually soil the tiles, we recommend the use of the tiles in the paint coated versions, such as light grey. We also recommend the use of paint coated tiles in situations where air might flow through the tiles. However, make sure to eliminate this airflow by filling and sealing any gaps, holes or other air paths in the backing surface first, before applying the tiles.

Attention must also be paid to ensure that there is no cold bridging on the backing surface and the backing surface is a 'warm' surface and that the dew point does not shift. Thermal conductivity of the tiles at 10°C is 0.034 W/(mK).

Due to fluctuations in atmospheric humidity, dimensional tolerance changes of up to 2% may occur with FOAMSORBA tiles. Acclimatise tiles in the area where they are to be used for 72 hours before installation.

The standard FOAMSORBA tiles are uncoated and are white in their natural colour. But they are available in two standard paint coated colours in white or light grey at extra cost. Other paint coating colour options are available for orders exceeding 100m<sup>2</sup> upon request. Prior colour sampling is required. Variations in colour cannot be completely excluded.

### GUIDE SPECIFICATION

#### A. General

1. All FOAMSORBA tiles should be installed in accordance with manufacturer's instructions.
2. The contractor shall be responsible for the examination and acceptance of all conditions and project suitability prior to the acoustic tile installation.

#### B. Product

1. Install FOAMSORBA-SLEET\* / FOAMSORBA-SNOW\* / FOAMSORBA-ICE\* acoustic tiles, size.....mm x.....mm x thickness.....mm
2. Fix tiles using FOAMSORBA silicone\*/'AK20' adhesive\*.

\*Delete as applicable.

**FOAMSORBA acoustic tiles are distributed by:**

### Prices and Conditions of Sale

Our standard terms and conditions (copy available on request) apply to all orders. Since Soundsorba Limited exercise no control over the use of its products, no legal responsibility is accepted for any application of their products. We reserve the right to change specifications without notice as our policy is one of continuous improvement. Copyright Soundsorba Limited 2011.