

Suspended Absorbers



Description

Suspended Absorbers are manufactured from open cell melamine foam or glass fibre. Plain melamine foam absorbers are supplied with corkscrew hangers, whilst glass fibre absorbers are encapsulated in white Tedlar PVF film or glass cloth with a 50mm semi-rigid top-flap, fitted with two eyelets for fixing.

They are designed to reduce reverberant noise in large areas. Reflected sound waves from roofs and walls are absorbed by both sides of the Suspended Absorbers resulting in noise reductions, up to half the measured reverberant sound level.

Suspended Absorbers can also be enclosed in materials suitable for use in hygienic applications subject to minimum order requirements.

Colour: White

Melamine foam absorbers can be spray painted to any RAL colour. Further detail available on request.

Design

Highly qualified technical engineers are available to work with clients and designers to calculate the volume of Suspended Absorbers required to achieve specified performance requirements and to discuss spacings and fixing methods.

Application

Melamine foam Suspended Absorbers are used extensively in swimming pools, sports halls, ice rinks, leisure centres, children's nurseries, galleries and foyers.

Glass fibre Suspended Absorbers tend to be used for more industrial applications e.g. engineering workshops, food factories, bottling halls, manufacturing plants etc.

Temperature

Suspended Absorbers are suitable for use at normal building temperatures.

Fire Performance

Melamine foam Suspended Absorbers comply with the Class 'O' requirements of the Building Regulations, when tested to BS476: Part 6: 1981 and Part 7: 1987.

Glass fibre Suspended Absorbers encapsulated in glass cloth are non-combustible, when tested in accordance with BS476: Part 4: 1970 (1984).

When suspended vertically in continuous rows at 600mm spacings, the sound absorption coefficients are as follow:

Product	Thickness mm	Sound Absorption Coefficient dB					
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
melamine foam Suspended Absorbers	75	0.1	0.45	0.80	0.85	0.81	0.67
glass fibre Suspended Absorbers encapsulated in Tedlar	75	0.35	0.65	0.85	0.75	0.70	0.63
glass fibre Suspended Absorbers encapsulated in glass cloth	75	0.20	0.55	0.90	0.95	0.95	0.95

Dimensions and weight

Product	Thickness mm	length mm	width mm	weight per absorber kg
melamine foam	75	1200	600	0.65
glass fibre	75	1200	600	1.85

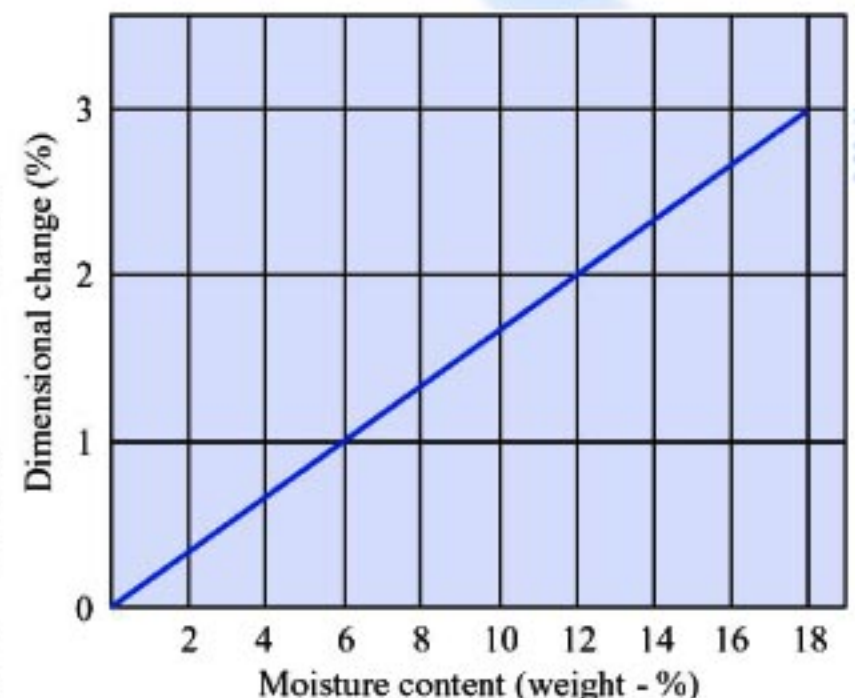
available on request.

Dimensional changes may occur in Melamine foam Suspended Absorbers dependant on the relative humidity of the surrounding air. Allowances should therefore be made to overall sizes based on the anticipated moisture content of the Melamine foam Suspended Absorbers when in-situ.

Availability

Suspended Absorbers can be manufactured in a wide range of sizes and with a variety of surface finishes to meet specified performance requirements subject to minimum order quantity. Further detail available on request.

Melamine foam Suspended Absorbers can be manufactured in three-dimensional shapes and spray-painted to any RAL colour subject to minimum order quantity. Further detail available on request.



MelaTiles



Description

MelaTile comprise a range of tiles designed for adhering onto existing flat ceiling and walls. They are manufactured from open cell melamine foam.

They are designed to improve the acoustic insulation within rooms by absorbing airborne noise.

MelaTile are available plain or in a choice of four profiled surface finishes; louvre, sinewave, pyramid or ridge.

Colour: Melamine foam - White

Surface finish - can be spray painted to any RAL colour

Application

MelaTile are suitable for adhering on to most flat ceiling and wall surfaces and are used extensively in nursery schools, themed play areas, meeting rooms, studios, village halls and other large areas with high levels of reverberation noise.

Operating Temperature

MelaTile are suitable for use at normal building temperatures.

Fire Performance

Unpainted, MelaTile comply with the Class 'O' requirements of the Building Regulations, when tested to BS476: Part 6: 1981 and Part 7: 1987.

Thermal Conductivity

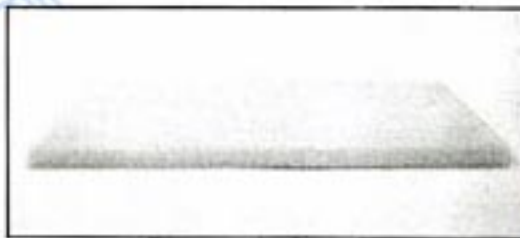
0.035 W/mK @ 10°C

Acoustic Performance

Dimensions and Density

Note: Non-standard sizes may be available subject to minimum order quantities. Further detail available on request.

Dimensional changes may occur in MelaTiles dependant on the relative humidity of the surrounding air. Allowances should therefore be made to overall sizes based on the anticipated moisture content of MelaTile when in-situ. Further detail available on request.



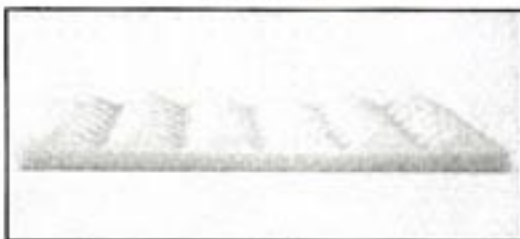
Pyramid



Sinewave



Louvre



Plain



Ridge

Application and Fixing

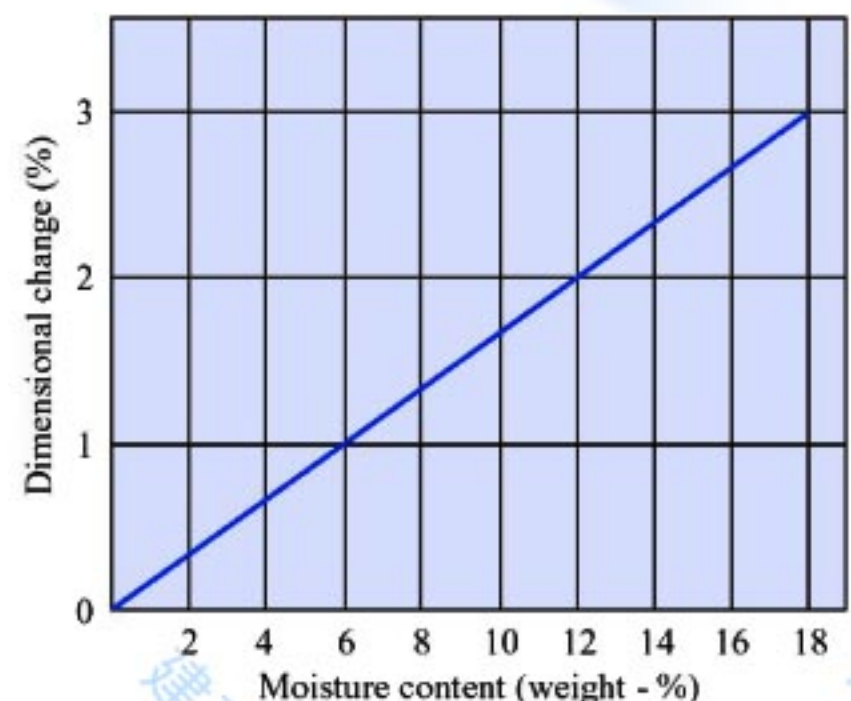
1. The dimensional stability of MelaTile is affected by humidity. To minimise the effects of any changes, MelaTile should be left in the room in which they are to be installed for at least 24 hours prior to fixing.
2. It is advisable to wear cotton gloves when fixing to prevent soiling the surface.
3. Apply a bead of IIFC adhesive, available from Hodgson & Hodgson Group Ltd, around the perimeter of the back face of the tile and in a snake pattern across the centre.
4. Position the MelaTile, applying a light pressure to secure it in place.

Acoustic Performance

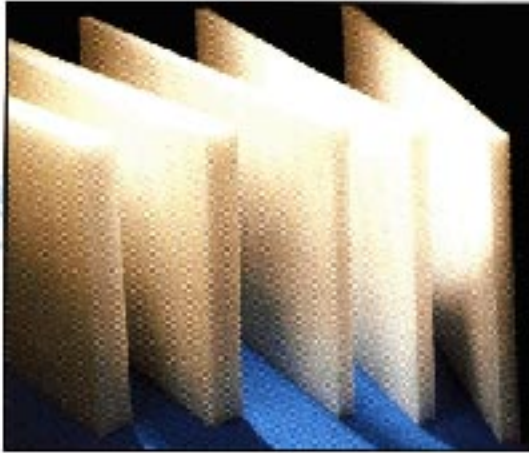
Product	Thickness mm	Sound Absorption Coefficient dB					
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
melatiles	50	0.22	0.46	0.95	1.00	1.00	1.00

Dimensions and Density

Product	size mm	Thickness range in 1mm Increments	Density kg/m ³
Plain	600x600	50mm to 250mm	9.5 ± 1.5mm
Louvre	600x600	50mm to 250mm	9.5 ± 1.5mm
Sinewave	600x600	50mm to 250mm	9.5 ± 1.5mm
Pyramid	600x600	50mm to 250mm	9.5 ± 1.5mm
Ridge	600x600	50mm to 250mm	9.5 ± 1.5mm



FiberForm



Description

FiberForm is manufactured from a specially formulated mix of high and low melt, non-irritating, water repellent polyester fibers. It is designed for use in thermal and acoustic insulation applications.

FiberForm can be supplied in sheets, die-cut to size and shape or moulded into three dimensional shapes. It can be faced one side with a range of surface finishes, as detailed overleaf.

Colour

Unfaced - White

Application

FiberForm is used extensively in architectural building applications, in wall panels and on low temperature heating and ventilating equipment.

Operating Temperature

FiberForm is suitable for use at continuous operating temperatures up to 120°C and can be used at temperatures down to -50°C providing a 100% vapour barrier is maintained to prevent the ingress of moisture vapour.

Fire Performance

Unfaced, FiberForm complies with the Class 'O' requirements of the Building Regulations, when tested to BS476: Part 6: 1981 and Part 7: 1987.

FiberForm also complies with various European and American standards. Further details available on request.

Thermal Conductivity

0.037 W/mK @ 10°C

Acoustic Performance

Product	Thickness mm	Sound Absorption Coefficient (to BS EN20354:1993)					
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
unfaced FiberForm	25	0.16	0.26	0.43	0.60	0.70	0.77
	50	0.27	0.53	0.76	0.88	0.91	0.90
Faced with: black ono-woven polyester fabric	25	0.16	0.26	0.45	0.59	0.73	0.79
	50	0.27	0.54	0.83	0.87	0.94	0.92

Dimensions and Density

Thickness mm	尺寸mm	densitykg/m ³	
25	1200x2000	30	
50	1200x2000	30	
Product		colour	ordering reference
unfaced FiberForm		white	S
Faced one side with ono-woven polyester fabric		black	PB

Dimensions and Density

Note: Other thicknesses ranging from 10mm to 150mm and densities ranging from 10kg/m³ to 100kg/m³ are available subject to minimum order quantities. Further details available on request.

Permanence

FiberForm is rot-proof, odourless, non-hygroscopic and does not sustain micro-organisms, fungi and bacteria.

Availability

Note: Other facings may be available subject to minimum order quantity. Further details available on request.

MelaTech



Description

MelaTech is an open cell, melamine foam. It is lightweight, flexible, easy to handle and does not flame or emit toxic fumes when exposed to heat.

It is designed for use in thermal and acoustic insulation applications.

MelaTech is available in sheets, die-cut to size and shape or profiled. It can be faced one side or totally enclosed in a wide range of materials to meet specific performance requirements. MelaTech can be supplied with a self-adhesive backing if required.

Colour MelaTech - White

Surface finish can be spray painted to any RAL colour

Application

MelaTech is used extensively in heating, ventilation and air conditioning equipment, railway rolling stock, wall and ceiling panels, acoustic enclosures, recording studios, theatres, cinema auditoria and other leisure complexes. It is used as case linings, splitter and louvre infills in the power generation industry and in a variety of automotive applications.

Operating Temperature

MelaTech can be used at continuous operating temperatures up to 150°C

Fire Performance

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

MelaTech with a spray painted finish does not have a fire rating.

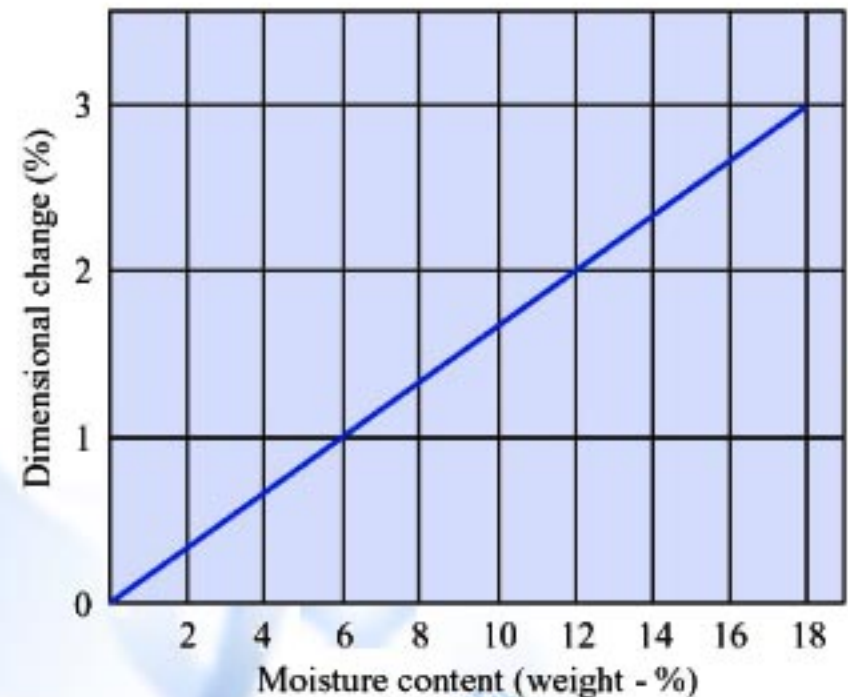
When coated with intumescent paint, MelaTech meets the French NF 10-702 and NFX 70-100 'F' classification. It achieves the French NFP 92-501 M1 rating.

MelaTech also meets various other American and European standards. Further details available on request.

Thermal Conductivity - 0.035 W/mK @ 10°C

Acoustic Performance

Product	Thickness mm	Sound Absorption Coefficient (Tested to BSEN20354:1993)					
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
Plain MelaTech	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
Faced one side with: Non-woven Tissue(NWB)	25	0.03	0.21	0.78	0.91	0.98	0.95
	50	0.13	0.72	1.00	1.00	1.00	1.00
PVC Coated	25	0.10	0.36	0.98	0.35	0.14	0.16
Glass Cloth(VK) Class 'O' Foil(B)	25	0.09	0.33	1.00	0.42	0.19	0.20



Dimensions and Density

Thickness in 1mm increments	sheet size mm	nominal density kg/m ³
from 6mm to 250mm	2500x1250	9.5±1.5

Dimensional changes may occur MelaTech in foam dependant on the relative humidity of the surrounding air. Allowances should therefore be made to overall sizes based on the anticipated moisture content of the MelaTech when in-situ.

Permanence

MelaTech is resistant to hydrolysis, alcohols, hydrocarbons, most organic solvents and dilute acids and bases.

Availability

MelaTech is available plain, or with a wide range of facings. These include:

Type of Facing	colour	fire rating	ordering reference
plain MelaTech	white	Class "O"	AM
Class "O" Foil	silver	Class "O"	B
Non Woven Tissue	black	Class "O"	NWB
Polyurethane Film	black or white	n/a	C
PVC Coated Glass Cloth	black or grey	Class1	VK
Tedlar	white	n/a	TW
PVC Spray Coating	matt black	n/a	SB
Polychlorophene Coated Glass Cloth	beige or green	Class "O"	CG
Profiled (egg box) Plain	white	Class "O"	PR
Profiled (egg box) with PVC Spray Coating	matt black	n/a	PRSB

AbFoam



Description

AbFoam comprises a range of open cell polyurethane foams, with a wide selection of surface finishes to meet various performance requirements, as detailed overleaf.

They designed to absorb noise over a wide range of frequencied.

AbFoam F is available in sheets. AbFoam NF is available in sheets or rolls. Both can also be die-cut to size and shape.

AbFoam can be supplied with a pressure sensitive self-adhesive backing if required.

Colour AbFoam F - Grey
AbFoam NF - Black

Product Range and Application

AbFoam F Is a general purpose, acoustic foam used extensively in the motor industry for vehicle interiors, hood and canopy linings, enclosures, plant, mechanical services equipment, compressors, generators, fans and motors.

AbFoam NF Is impregnated with fire retarding chemicals for use in applications requiring a Class 'O' fire rating. It is sued extensively in air conditioning and air handling equipment, ducts, plenums and air distribution systems.

Operating Temperature

AbFoam F and NF can be used at continuous operating temperatures from -10°C up to 80°C.

Fire Performance

AbFoam F meets the requirements of FMVSS 302/ISO3795

AbFoam NF complies with the Class 'O' requirements of the Building Regulations, when tested to BS476: Part 6: 1981 and Part 7: 1987.

Acoustic Performance

Product	Thickness mm	sound absorption coefficient					
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
AbFoam F	25	0.10	0.19	0.49	0.66	0.67	0.84
	50	0.15	0.33	0.76	0.85	0.81	1.02
AbFoam NF	12	0.06	0.09	0.18	0.29	0.38	0.58
	25	0.09	0.22	0.39	0.52	0.63	0.73
	50	0.24	0.46	0.71	0.84	0.87	1.02

Dimensions and Density

type of facing	Density kg/m. ³	Thickness mm	sheet size mm
AbFoamF	28-32	6to100	1200x2000
AbFoamNF	75	6,10,12,15,20,25,30	1200x2000

Dimensions and Density

Note: Other thicknesses and sheet sizes are available subject to minimum order quantities. Further details available on request.

Availability

AbFoam is available plain or with a wide range of facings. These include:

type of facing	main benefit of facing	colour	ordering reference
bright class "O" foil	class "O" fire rating	silver	B
PVC coated woven glass cloth	class 1 fire rating	black or grey	VK
polyurethane film	durable & impervious	black	C
perforated vinyl	decorative & durable	black or grey	V
unperforated vinyl	decorative & durable	black or grey	VUP
PVC spray coating	edges can be sprayed	matt black	SB
tedlar film	hygienic & durable	white	TWs
self-adhesive backing	easy to fix	clear	SA

Thermos Acoustic Ceiling Tile Pads



Description

Thermos Acoustic Ceiling Tile Pads have been developed in close liaison with leading metal ceiling tile manufacturers. They comprise a range of mineral fibre products suitable for use in perforated metal suspended ceiling systems.

They are designed to meet the most demanding requirements for thermal, acoustic and fire performance.

Thermos Acoustic Ceiling Tile Pads are available in numerous combinations of thickness, density, size and finish. They can be faced one side or totally enclosed in a variety of coverings.

Colour Mineral fibre - Greyish Brown Surface finish - Black or Silver

Application

Thermos Acoustic Ceiling Tile Pads are suitable for use in perforated metal suspended ceiling systems. They are used extensively in industrial, commercial and retail developments, offices, airports, railway and underground stations.

Operating Temperature

Thermos Acoustic Ceiling Tile Pads are suitable for use at normal building temperatures.

Fire Performance

Type A and Type F Pads are non-combustible to BS476: Part 4: 1970 (1984).

Type E Reinforced Pads are manufactured with a Class 'O' aluminium foil facing on one side. The foil complies with the Class 'O' requirements of the Building Regulations, when tested to BS476: Part 6: 1981 and Part 7: 1987.

Cassetted Tiles are manufactured with a Class 'O' aluminium foil facing on the reverse. The foil complies with the Class 'O' requirements of the Building Regulations, when tested to BS476: Part 6: 1981 and Part 7: 1987.

Thermal Conductivity

33kg/m³ mineral fibre 0.035 W/mK @ 10°C

40 to 160kg/m³ mineral fibre 0.033 W/mK @ 10°C

Acoustic Performance

In a standard suspended metal ceiling system, with a 16% free area and a plenum above, typical room to room sound insulation from installing Type E, Type E Reinforced and Type F ceiling pads, 25mm thick x 80kg/m³ density would be up to 34dB, when tested generally in accordance with BS2750:Part 9: 1987.

Acoustic Performance

Product	Thickness & Density	Sound Absorption Coefficient dB					
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
type A	25mmx45kg/m ³	0.05	0.25	0.55	0.75	0.90	1.00
	25mmx60kg/m ³	0.10	0.20	0.65	0.85	1.00	0.90
	25mmx80kg/m ³	0.60	0.23	0.56	0.88	1.00	1.00

Dimensions and Density

Product	Thickness	Density range kg/m ³
All Thermos Acoustic Ceiling Tile Pads	from 8mm to 100mm	33,45,60,80,100

Thermos Acoustic Ceiling Tile Pads are available in a range of standard sizes to fit nominal 300, 600, 1200 and 1500mm suspended ceiling system. Custom made pads are available in sizes and shapes to suit any non-standard metal ceiling system regardless of the configuration or finish. Further details available on request.

Product Range:

- Type A Plain mineral fibre
- Type B1 Mineral fibre totally enclosed in 200 gsm clear polythene with heat sealed edges.
- Type B2 Mineral fibre totally enclosed in 200 gsm black polythene with heat sealed edges.
- Type C Mineral fibre totally enclosed in black low flammable PVC with machine stitched edges.
- Type D Mineral fibre totally enclosed in 25 micro plain aluminium foil.
- Type E Mineral fibre faced one side edges and return with 25 micro plain aluminium foil, with 70 gsm black or white glass tissue on reverse
- Type E Reinforced Reinforced Mineral fibre faced one side edges and return with reinforced Class 'O' foil, with 70 gsm black or white glass tissue on reverse.
- Type F Mineral fibre faced one side with 70gsm black or white tissue.
- Cassetted Cassetted Metal ceiling trays fitted with 70 gsm black tissue, mineral fibre pad and sealed on the back and along the outward flanges with reinforced Class 'O' foil.