

noise
noise
noise
noise



noise

control

by

vitec

class

'O'

**acoustical
foams**

**AS TESTED AT WARRINGTON
RESEARCH CENTRE**

vitec

class

'O'

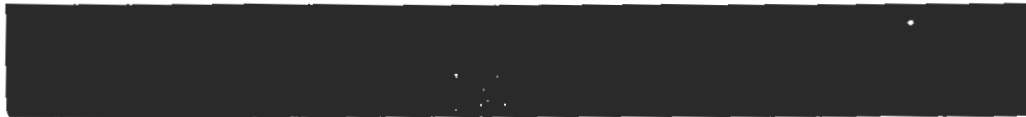
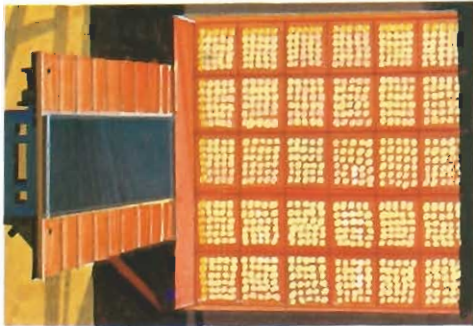
acoustic foam . . .

For the very latest in foam technology, PYROSORB[®] Acoustic Foam offers a unique blend of properties which will place it high on anyone's list when considering acoustic foam that should also ideally meet other important criteria.

Sound Absorption... Flame Retardancy... Thermal Insulation

PYROSORB[®] Foam not only has superb acoustic characteristics, the flame retardancy and thermal insulation properties make this product suitable for a wide range of applications. Add to this the fact that PYROSORB[®] Foam is available in a variety of specifications and you have a product with potential uses that probably haven't yet been discovered...

Consider for example, a range which extends from soft, flexible and resilient to semi rigid, thermoformable panels—**all easy to cut—all easy to shape**—and with self adhesive backing and water/oil barrier coating—the possibilities already seem endless...



for sound absorption . . .

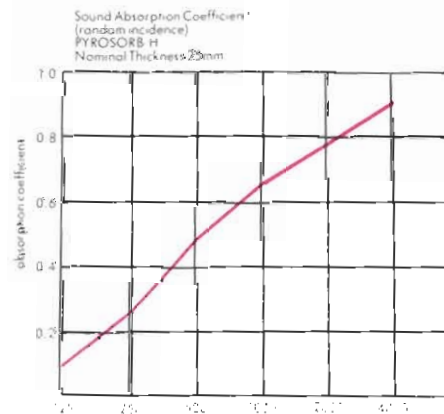
When selecting which PYROSORB[®] product to use, it is worth considering in more detail what may at first appear obvious—namely, that the use of any sound absorption material depends on the particular application.

The frequency of the sound to be absorbed must be identified so that the method used to "engineer" the foam can be established to ensure optimum sound absorption.

For certain applications and frequency ranges, various facing materials can be applied to obtain a composite sound absorption material. To improve sound absorption even further, various thicknesses of PYROSORB[®] may be bonded together—this can be particularly effective at the lower end of the frequency range.

The graph opposite illustrates the typical absorption coefficients for a sample of nominal thickness 25mm and nominal density 100kg/m³ over the frequency range 125—4000 Hz.

octave band centre frequency Hz	125	250	500	1000	2000	4000
Abs Coeff	0.10	0.25	0.50	0.70	0.80	0.90



for thermal insulation . . .

PYROSORB® Acoustic/Insulation Foams have good thermal insulation values with the added advantage of avoiding the dust and fibre particle problems normally associated with the more traditional insulation materials.

This, together with the unique benefits of combined flame retardancy and good acoustic absorption, make PYROSORB® an ideal choice in applications where optimizing such properties in a single product has a technological advantage.

for flame resistance . . .

PYROSORB® Acoustic/Insulation Foams do not support combustion, melt or drip. Neither do they suffer wicking effects from contamination by dust and dirt. When a flame is applied, PYROSORB® Foams simply char, leaving an inert char barrier that will protect other underlying materials from a wide range of ignition sources. When tested to B.S. 476 Parts 6 and 7, PYROSORB® Foams achieve class 'O' to the British Building Regulations.

Typical Flammability Properties of Vitec Class "O" Acoustic Foams		
Property	PYROSORB® -S	PYROSORB® -H
Density (Kgm ⁻³) minimum	75	100
FMVSS 302	Self extinguishing/no burn rate	
BS 4735	Char length 4-5mm	
ASTM 1692: 1974	Resists ignition	
BS476 Parts 7 & 6 Class	0	0
UL94 Class	94V-0	94V-0
Oxygen Index	41	50
CAA8/FAA	Pass	Pass
Smoke, max. obstruction % to BS 5111	55	55
Wicking	None	None
Dripping	None	None

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so many uses . . .

- Heavy Vehicles
- Caravans
- Rigid Chalets and Office Accommodation
- Railways
- Aviation
- Marine
- Agricultural Machinery
- Office Equipment
- Building Panel Lining
- Heating and Ventilation
- General Processing Industry

SPECIFICATION

Grades

Standard Thickness:

Standard Width:

Supplied:

Cutting & Shaping:

Coatings:

General:

PYROSORB® -S

6mm, 10mm, 12mm, 15mm, 20mm, 25mm, 40mm, 50mm

2 metres

In roll or sheet form

PYROSORB Foams can be cut and shaped to customers' specification.

Self adhesive backings can be supplied which would allow PYROSORB Foams to be applied direct to various surfaces. Also available with coated facings which provide a water/oil barrier.

PYROSORB Foams can be fabricated and handled using all the standard methods. They can be slit, cut with band knives, milled, buffed and profiled as normal foams. Flame retardant adhesives should be used which, like the PYROSORB Foams, have no tendering effects on cellulose fabrics such as cotton should such materials be used in composite construction.

PYROSORB® -H

vitec
Composite Systems

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