SORBERFOAM™ M

metallised polyester film faced acoustic foam

Sorberfoam™ M combines the next generation of combustion modified, flexible acoustic foams, with a durable impervious facing of metallised polyester film. It was developed to meet market requirements for reducing reverberation noise in light transport, mining equipment, marine and general OEM partial enclosures.

In conjunction with leading laboratories and test facilities, Pyrotek has formulated and developed polyurethane foam that outperforms traditional acoustic foams by controlling the cell size, porosity, density and the flow resistivity throughout the cell structure.

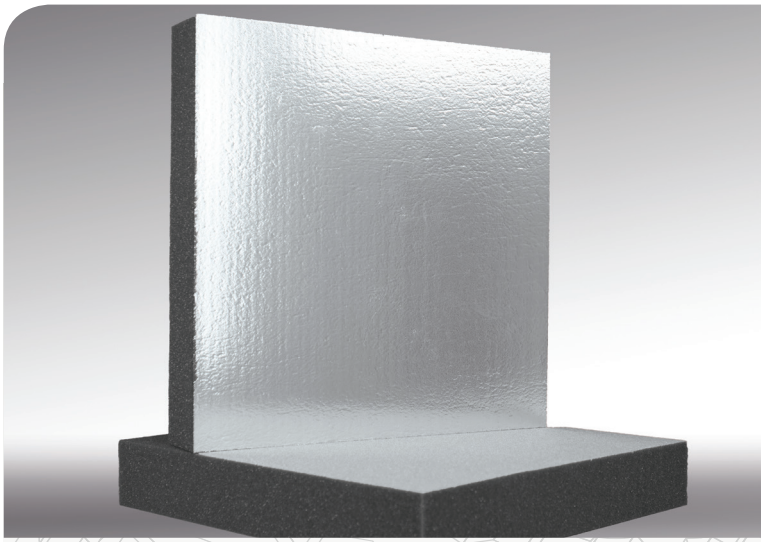
Sorberfoam M has been proven to absorb substantially more energy across the entire frequency range than traditional polyurethane foams. The metallised facing affords mechanical protection and a decorative appearance. It is impermeable to contamination by dust, oil, liquids or sprays.

Traditional polyurethane foams often break down through hydrolysis (foam rot) under hot, humid and acidic conditions. Sorberfoam M is engineered to resist degradation or foam rot.

Sorberfoam M offers an alternative to mineral fibre products that tend to shed fibres during application. The tendency for fibrous products to lose thickness over a period of time means their absorption properties will also be reduced. Sorberfoam M eliminates this hazard offering a safer alternative in noise absorption.

SPECIFICATIONS

Surface Colour	Bright silver semi-decorative
Standard (Rolls or sheets)	Available in 15, 30, 60 m rolls Other roll lengths and sheet sizes also available
	Thicknesses 6 to 100 mm
	1.4 m usable width (untrimmed)



applications

- Mining equipment
- Machinery and equipment enclosures
- Compressor and generator set enclosures
- Hydraulic pump enclosures
- Car, boat, truck and bus compartments

features

- Metallised polyester facing allows sound absorption in critical high and mid frequency
- Lightweight with a semi decorative appearance
- Highly reflective for enhanced lighting
- Non conductive and anti-static
- Does not shed irritating fibres
- Hydrolysis (foam rot) resistant
- Impermeable to contamination from dust oils liquids, fuels or sprays
- Low spread of flame surface
- Self-extinguishes upon flame removal
- Quick and easily installed in many places, awkward areas
- No ozone-depleting substances generated during manufacture, free from formaldehyde and phenolic resins
- Available with self-adhesive backing for ease of install
- Roll lengths - typically 15, 30 and 60 lineal metres. Other roll lengths and sheet sizes also available
- Seal joins with rmetallised tape to eliminate water and dust penetrations

PRODUCT SPECIFICATIONS

Standard thickness (mm)	Density (kg/m³)	Roll length (lineal m)	Roll width (mm)	Thermal conductivity (W/mK)	Operating temperature range °C
6	28	60	1400*	0.033**	-40 to +90 Continuous -40 to +110 Intermittent
12		60			
25		30			
50		15			

Tolerances: Length: -0 to+50mm; Width: -0 to+5mm; Thickness: +/- 2mm; Density: +/- 5%
**Supplied untrimmed - means some surface coverings such as foils, film or fabric may overhang the ordered useable width*
***Polyurethane handbook: Chemistry, Raw Materials, Processing, Application, Properties 2nd edition.*
All above products are available with pressure-sensitive adhesive backing. Under extreme temperature conditions or where the substrate surfaces cannot be free from contaminants, mechanical fixing will be required on vertical surfaces. For all inverted installations including ceiling installations, mechanical fixing must be done in addition to PSA adhesion. Please consult your local Pyrotek representative for more information.

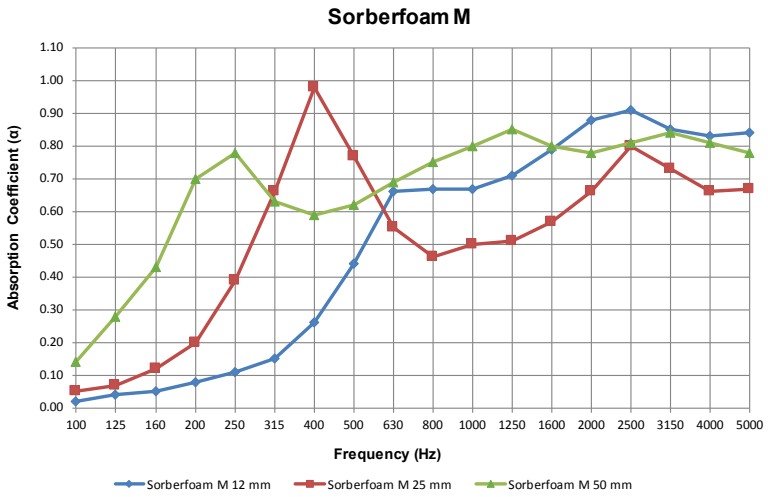
MATERIAL PROPERTIES

Test method	Index	Results	Description
UL94	After flame time ≤ 2 seconds	HBF*	Horizontal burn test for foam materials.
FMVSS-302	Burn rate - mm/min	Self extinguishing	Automotive burn rate test. Ccomplies

**Result applies to 12mm thickness.*

ACOUSTIC PERFORMANCE

Frequency (Hz)	Sorberfoam M 12 mm	Sorberfoam M 25 mm	Sorberfoam M 50 mm
100	0.02	0.05	0.14
125	0.04	0.07	0.28
160	0.05	0.12	0.43
200	0.08	0.20	0.70
250	0.11	0.39	0.78
315	0.15	0.66	0.63
400	0.26	0.98	0.59
500	0.44	0.77	0.62
630	0.66	0.55	0.69
800	0.67	0.46	0.75
1000	0.67	0.50	0.80
1250	0.71	0.51	0.85
1600	0.79	0.57	0.80
2000	0.88	0.66	0.78
2500	0.91	0.80	0.81
3150	0.85	0.73	0.84
4000	0.83	0.66	0.81
5000	0.84	0.67	0.78
NRC	0.55	0.60	0.75
SAA	0.53	0.59	0.73
aw	0.40 (MH)	0.60	0.75



Tested to ISO 354:2003 at University of Canterbury, New Zealand
Report Numbers: 288, 289 & 290

For further information and contact details, please visit our website pyroteknc.com