SORBERFOAM™

combustion modified acoustic foam

Sorberfoam™ is the next generation of combustion modified, flexible acoustic foams, offering high noise absorption properties across a broad frequency range.

It was developed to meet market requirements for reducing reverberation noise in the domestic, commercial, OEM and automotive markets.
In conjunction with leading laboratories and test facilities, Pyrotek has formulated and developed a polyurethane foam that outperforms traditional acoustic foams by controlling the cell size, porosity, density and the flow resistivity throughout the cell structure.

Sorberfoam has been proven to absorb substantially more energy across the entire frequency range than traditional polyurethane foams.

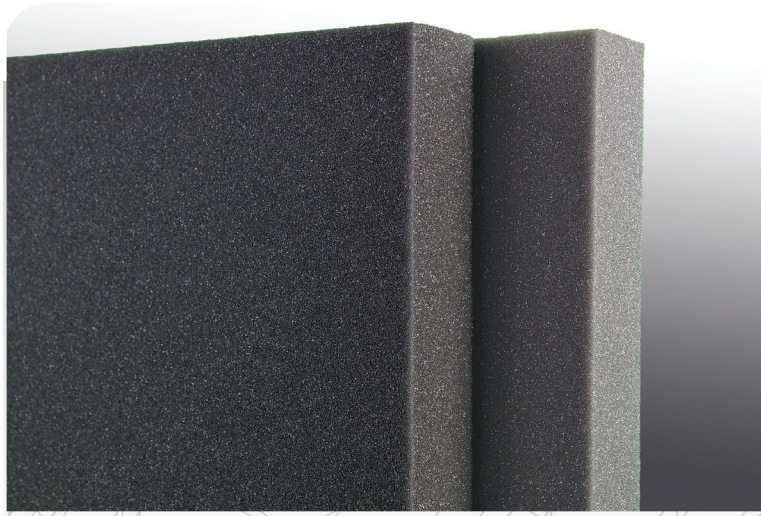
Traditional polyurethane foams often break down through hydrolysis (foam rot) under hot, humid and acidic conditions. Sorberfoam is engineered to resist degradation or foam rot.

Sorberfoam offers an alternative to mineral fibre products that tend to shed fibres during application. If not encapsulated, those fibrous products can be deemed a health hazard. The tendency for fibrous products to lose thickness over a period of time means their absorption properties will also be reduced.

Sorberfoam eliminates the hazards and offers an equal and safer alternative in noise absorption.

SPECIFICATIONS

Colour	Grey, others on request
Available	Available in 15, 30, 60 m rolls Other roll lengths and sheet sizes also available *Minimum order quantities apply*
	Thicknesses from 6 to 100 mm
	1.4 m usable width (untrimmed)



applications

- Recording studios, home theatre and music rooms
- Designed wedge shapes for anechoic chambers
- Enclosures, compressors and generator casings
- Decorative wall and ceiling absorbing panels
- Decorative faced hanging ceiling baffles
- Office partition screens
- Automotive engine bays, cabin and cavity linings

features

- Low cost, long lasting, with over 40 years' industry use
- Custom designs available, profile cut into 2D or 3D shapes
- Does not shed irritating fibres
- Hydrolysis (foam rot) resistant
- Self-extinguishes upon flame removal
- No ozone-depleting substances generated during manufacture
- Free from formaldehyde and phenolic resins
- Quick and easily installed in awkward places
- Easy to cut, adhere or mechanically fasten into position
- Available with various surface coverings such as aluminium reinforced foil, metallised film, perforate vinyl, urethane film, glass cloth and textiles.
- Available in various widths, rolls or sheets
- Available with self-adhesive backing for ease of install or as part of custom cut kits
- All rolls are typically supplied at 1400 mm (Untrimmed)

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 +130 Intermittent
12		30			
25		30			
50		15			

Tolerances: Length: -0 to +50 mm; Width: -0 to +5 mm; Thickness: ±2 mm; 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 and humidity conditions, air flow or where the substrate surfaces cannot be free from contaminants, mechanical fixing will be required. For all inverted installations including ceiling installations, mechanical fixing must be done in addition to pressure sensitive adhesive. Please consult your local Pyrotek representative for more information.

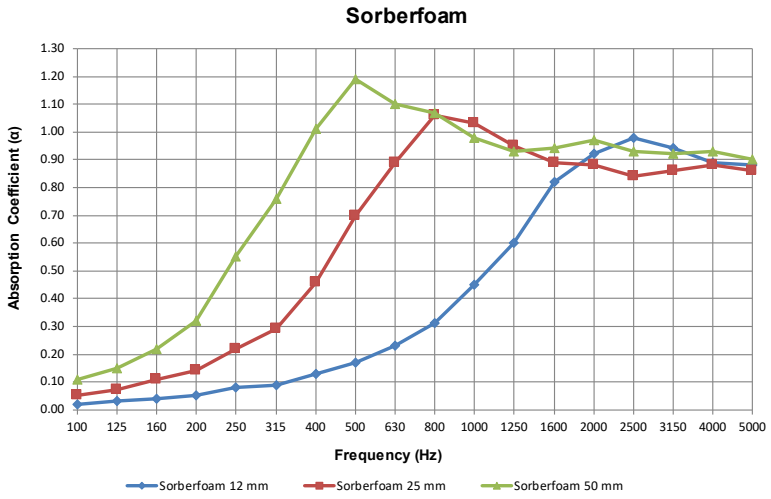
MATERIAL PROPERTIES

Test method	Index	Report no.	Results	Description
UL94	After flame time ≤ 2 seconds	13513JY7	HF-1*	Horizontal burn test for foam materials. Compiles.
FMVSS-302	Burn rate - mm/min (LOI)	22210-MK5	Self extinguishing	Automotive burn rate test. Complies.

**Result applies to 12 mm thickness.*

ACOUSTIC PERFORMANCE

Frequency (Hz)	12 mm	25 mm	50 mm
100	0.02	0.05	0.11
125	0.03	0.07	0.15
160	0.04	0.11	0.22
200	0.05	0.14	0.32
250	0.08	0.22	0.55
315	0.09	0.29	0.76
400	0.13	0.46	1.01
500	0.17	0.70	1.19
630	0.23	0.89	1.10
800	0.31	1.06	1.07
1000	0.45	1.03	0.98
1250	0.60	0.95	0.93
1600	0.82	0.89	0.94
2000	0.92	0.88	0.97
2500	0.98	0.84	0.93
3150	0.94	0.86	0.92
4000	0.89	0.88	0.93
5000	0.88	0.86	0.90
NRC	0.40	0.70	0.90
SAA	0.40	0.70	0.90
α_w	0.25 (H)	0.50 (MH)	0.85



Tested to ISO 354:2003 at University of Canterbury, New Zealand
Report Number: 282, 283 & 284

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