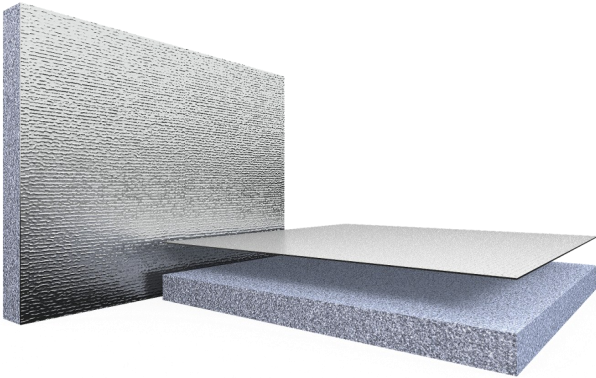




Foil Faced Combustion Modified Acoustic Foam



Sorberfoam™ ALR combines the next generation of combustion modified, flexible acoustic foams, with a durable flame resistant surface covering, enhancing sound absorption in critical low frequencies. It was developed to meet market requirements for reducing reflected reverberated noise in the industrial, OEM, marine and automotive markets.

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 has been proven to absorb substantially more energy across the entire frequency range than traditional polyurethane foams. The facing used on **Sorberfoam ALR** is a robust and tear-resistant surface providing good mechanical protection, whilst the aluminium foil provides excellent vapour barrier for flame, dust, water and oil resistance.

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

Sorberfoam ALR 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 ALR** eliminates this hazard offering a safer alternative in noise absorption.

FEATURES

- The ALR facing outperforms comparative products at lower frequencies
- Impermeable to contamination from dust, oils, liquids, fuels or sprays
- No ozone-depleting substances generated during manufacture
- Free from formaldehyde and phenolic resins
- Low spread of flame surface
- Self-extinguishes upon flame removal
- Quick and easily installed in awkward places
- Easy to cut, adhere or mechanically fasten
- Hydrolysis (foam rot) resistant
- Does not shed irritating fibres
- Available in thicknesses from 6 to 100mm
- Available in rolls or sheets
- Choice of three high performance self adhesives for ease of installation (See page 2)
- All rolls are typically supplied at 1400mm useable width (some surface coverings may overhang the useable width)
- Roll lengths - typically 15, 30 and 60 lineal metres. Various roll lengths and sheet sizes also available
- Surface colour - Aluminium - silver
- Seal joints with reinforced tape to eliminate water and dust penetrations

APPLICATIONS

- Engine rooms in boats under CE Marine Survey
- Power generation units
- Containerised generator sets
- Additional thermal insulation for air-conditioning
- Engine compartments and firewalls of cars, boats, trucks, buses and construction machinery
- Machinery and equipment enclosures
- Pool and spa motor enclosures
- Whitegoods industry

Refer to our website www.pyroteknc.com to check you have the latest information page

PRODUCT SPECIFICATIONS

STANDARD THICKNESS (mm)	DENSITY (kg/m ³)	ROLL LENGTH (lineal metres)	ROLL WIDTH (mm)	THERMAL CONDUCTIVITY (w/mK)	OPERATING TEMPERATURE RANGE (°C)
6	28	60	1400*	0.033**	-40 to +90 Continuous
12		60			
25		30			-40 to +110 Intermittent
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.

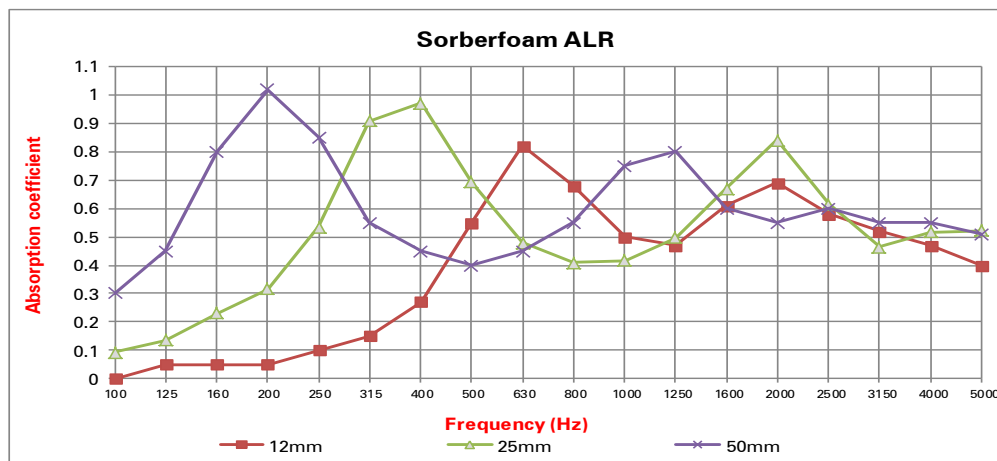
SELF ADHESIVE TAPES SPECIFICATIONS

CODE	DESCRIPTION	OPERATING SERVICE TEMPERATURE
Alpha - A	Premium high performance transfer tape suitable for most applications.	-10 to 110°C
Alpha - A1	Versatile, resilient, high tack adhesive with excellent bonding strength to a wide range of substrates.	-10 to 80°C
Alpha - A2	Scrim reinforced acrylic backing for extra strength and high durability.	-10 to 60°C

When ordering products with adhesive backing, please specify your choice of tape with the appropriate code A, A1 or A2 as Sorberfoam ALR 12A, Sorberfoam ALR 12A1 or Sorberfoam ALR 12A2. Unless otherwise stated, the standard adhesive backing supplied is premium grade (Alpha - A)

ACOUSTIC PERFORMANCE

(AS ISO 354 RMIT)



Frequency (Hz)	12 mm	25 mm	50 mm
100	0.00	0.09	0.30
125	0.05	0.14	0.45
160	0.05	0.23	0.80
200	0.05	0.32	1.02
250	0.10	0.54	0.85
315	0.15	0.91	0.55
400	0.27	0.97	0.45
500	0.55	0.69	0.40
630	0.82	0.48	0.45
800	0.68	0.41	0.55
1000	0.50	0.42	0.75
1250	0.47	0.50	0.80
1600	0.61	0.67	0.60
2000	0.69	0.84	0.55
2500	0.58	0.61	0.60
3150	0.52	0.47	0.55
4000	0.47	0.52	0.55
5000	0.40	0.52	0.51
NRC	0.45	0.60	0.65

FLAMMABILITY PROPERTIES

TEST METHOD	INDEX	RESULTS	DESCRIPTION
AS 1530.3 1999 (Report No. 7-564774-CV)	Ignitability Spread of Flame Heat Evolved Smoke Developed	0* 0 0 0-1	Method for fire tests on building materials, components and structures. Complies.
ISO 4589.2 - 1996 (Report No. 7-54912-CV)	Limiting Ambient Oxygen Index (LOI)	24.9%	Oxygen Index in accordance with ISO-4589-2 plastics determination of burning behaviour by oxygen index-part 2 ambient temperature.
BS EN ISO 4589.3 - 1996 (Report No. 194354)	Limiting Elevated Oxygen Index (LOI)	21.5%	Oxygen Index in accordance with ISO-4589-3 plastics determination of burning behaviour by oxygen index-part 3 elevated temperature @ 60°C.
EN ISO 9094-1:2003 (Report No. 192822) Summary Report	Classification/Compliance	Non Combustible/ Complies	Complies to Directive 94/25/EC and EN ISO 9094-1:2003
UL94	After flame time ≤ 2 seconds	HF-1**	Horizontal burn test for foam materials. Complies
FMVSS-302	Burn Rate - mm/min	Self Extinguishing	Automotive burn rate test. Complies

*Result applies to 25mm.

**Result applies to 12mm thickness.

Caveats: Specifications are subject to change without notice. The data in this document are typical of average values based on tests by independent laboratories or by the manufacturer and are indicative only. Materials must be tested under intended service conditions to determine their suitability for purpose. The conclusions drawn from acoustic test results are as interpreted by qualified independent testing authorities. Nothing here releases the purchaser/user from responsibility to determine the suitability of the product for their project needs. Always seek the opinion of your acoustic or mechanical engineer on data presented by the manufacturer. Due to the wide variety of individual projects, Pyrotek NC is not responsible for differing outcomes from using their products. Pyrotek disclaims any liability for damages or consequential loss as a result of reliance solely on the information presented. No warranty is made that the use of this information or of the products, processes or equipment to which this Information Page refers will not infringe any third party's patents or rights. DISCLAIMER: This document is covered by Pyrotek standard Disclaimer, Warranty and © Copyright clauses. See www.pyroteknc.com/disclaimer.

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Sorberfoam ALR

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Pyrotek
noise control