

SORBERFOAM™ AGC

combustion modified acoustic foam with aluminium foil glass cloth facing

Sorberfoam™AGC combines the next generation of combustion modified, flexible acoustic foams laminated with a durable, flame retardant aluminium foil covered glass cloth surface covering-AGC.

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

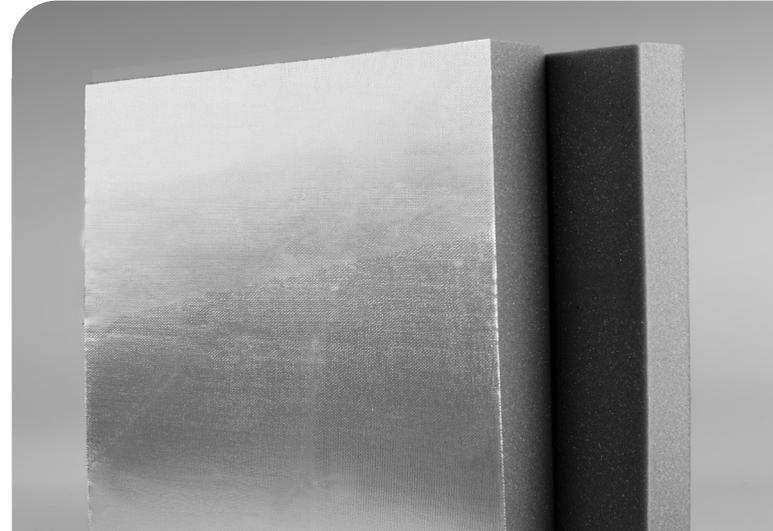
An aluminium foil covered glass cloth facing is laminated to the surface of Sorberfoam to alter the natural absorption curve enhancing sound absorption in mid to low frequencies. The facing also provides additional protection to the foam from mechanical stress and dirt, oil and liquid ingress and enhances the fire and thermal insulation performance of the foam. It offers higher level of flame resistance than Reinforced Aluminium (ALR) facing thereby enhancing the fire and thermal insulation performance of the foam.

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

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

SPECIFICATIONS

Colours	Grey with silver facing
Available	Available in 15, 30, 60 m rolls Other roll lengths and sheet sizes also available
	Minimum order quantities apply
	Thicknesses of 6, 12, 25, 50 mm
	1.4 m usable width (some surface coverings may overhang)



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

features

- The AGC 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 rolls or sheets
- Choice of three high performance self adhesives for ease of installation
- Seal joints with reinforced tape to eliminate water and dust penetrations



PRODUCT SPECIFICATIONS

Standard thickness (mm)	Density (kg/m ³)	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 +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.

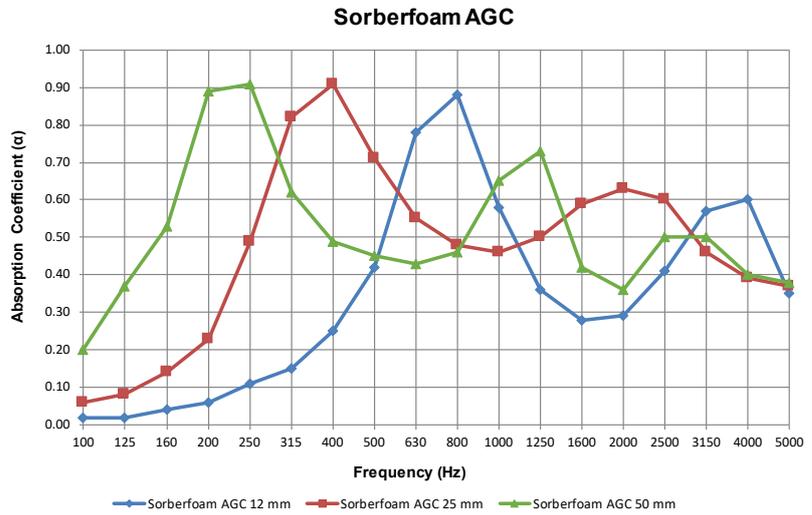
MATERIAL PROPERTIES

Test method	Property	Report No.	Results
ISO 4589-2	Determination of the burning behaviour of plastics by oxygen index at ambient temperature.	328271	22.6%
ISO 4589-3	Determination of the burning behaviour of plastics by oxygen index at an elevated temperature of 60°C.	328272	21.3%
ISO 9094-1 Summary	Classification / Compliance	328272 (A)	Complies to Directive 94/25/EC. Material suitable for use as insulation of engine space in recreational maritime craft.
ASTM E 162	Surface flammability	101731845MID-001b	<ul style="list-style-type: none"> Complies for US (FRA) Federal railroad administration requirements (Title 49- Transportation Part 238). Complies for US (DOT) Department of transportation requirements for acoustic insulation of transit bus and vans (Docket 90-A) Complies to NFPA 130 requirements for small parts
ASTM E 662	Optical Density of Smoke Generated	101731845MID-002b	
ASTM E 800 (SMP-800C)	Gases Present or Generated During Fires	101731845MID-003b	
ASTM E 1354	Heat and Smoke Release Rates (Oxygen Consumption Calorimeter)	102838298MID-001	
UL94 *	Flammability of plastic materials	13513JY7	HF-1
FMVSS-302 *	Flammability of interior materials	14713JY1	Complies to the requirements of US (DOT) Department of transportation for occupant compartments of motor vehicles

*For 12 mm plain foam

ACOUSTIC PERFORMANCE

Frequency (Hz)	12 mm	25 mm	50 mm
100	0.02	0.06	0.20
125	0.02	0.08	0.37
160	0.04	0.14	0.53
200	0.06	0.23	0.89
250	0.11	0.49	0.91
315	0.15	0.82	0.62
400	0.25	0.91	0.49
500	0.42	0.71	0.45
630	0.78	0.55	0.43
800	0.88	0.48	0.46
1000	0.58	0.46	0.65
1250	0.36	0.50	0.73
1600	0.28	0.59	0.42
2000	0.29	0.63	0.36
2500	0.41	0.60	0.50
3150	0.57	0.46	0.50
4000	0.60	0.39	0.40
5000	0.35	0.37	0.38
NRC	0.35	0.55	0.60
SAA	0.38	0.58	0.58
α_w	0.35 (MH)	0.55	0.50



Tested to ISO 354:2003 at University of Canterbury, New Zealand
Report Number: 280, 279 & 278

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

Caveats: Specifications are subject to change without notice. The data in this document is 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, mechanical or fire engineer on data presented by the manufacturer. Due to the wide variety of individual projects, Pyrotek 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 pyroteknc.com/disclaimer.

