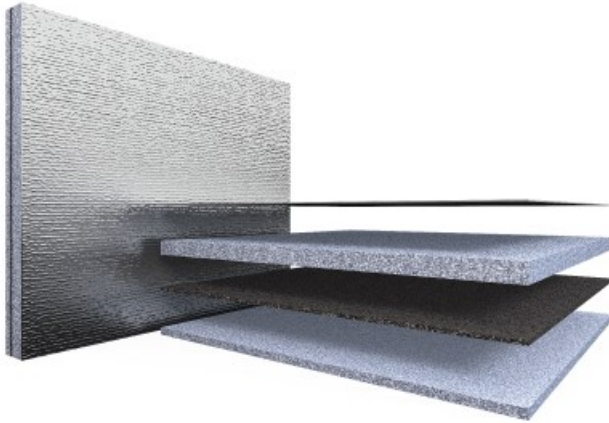




Barrier - Absorber Composite with Aluminium Foil Glass Cloth Facing



Sorberbarrier® AGC is a barrier-absorber composite noise control product that offers both excellent noise transmission loss and high sound absorption. It was specially developed to provide complete noise control solutions within one high performance, versatile product.

Its unique construction comprises a high mass, flexible noise barrier, **Wavebar®**, laminated between two layers of flexible acoustic foam, **Sorberfoam™**, consisting of a sound absorption layer and a decoupling layer. A durable, flame retardant, aluminium foil glass cloth facing - **AGC**, is laminated to the outer absorptive foam layer.

Sorberfoam™ is **Pyrotek's** specially developed combustion modified, polyurethane foam offering high sound absorption across a broad frequency range and engineered to resist degradation or foam rot.

The faced foam layer absorbs airborne sound and reduces the effect of reverberant sound build-up within an enclosed space. Its **AGC** facing alters the natural absorption curve enhancing its sound absorption in mid to low frequencies besides providing additional protection to the foam from mechanical stress and dirt, oil and liquid ingress. Being flame retardant, it further enhances the fire and thermal insulation performance of the foam.

The decoupling layer isolates the mass barrier layer from the structure to which it is bonded. This allows the decoupled mass barrier to remain flexible at all times, significantly enhancing its transmission loss performance. Tests have revealed that altering the thickness of the decoupling foam improves the product's performance at some frequencies without an increase in its overall weight.

Sorberbarrier AGC is easy to install without the need for specialist tools or equipment.

FEATURES

- Multi-function product: An absorber and barrier in one
- No ozone-depleting substances generated during manufacture
- Free from formaldehyde, phenolic resins and irritating fibres
- **Sorberfoam** is engineered to resist degradation (foam rot) more than traditional acoustic foam
- Low spread of flame surface
- The AGC facing outperforms comparative products at lower frequencies
- Long service life
- Quick and easily installed in awkward places
- Easy to cut, adhere or mechanically fasten into position
- Choice of three high performance self-adhesive tapes for easy installation (see page 2)
- Offered in varying thicknesses and material compositions.
- Can be constructed with other absorption products such as **Sorberpoly™** and **Sorbermel®**

APPLICATIONS

- **Sorberbarrier** offers an alternative to mineral fibre products, which tend to shed fibres
- Engine rooms in boats under CE Marine Survey
- Power generation units and containerised generator sets
- Additional thermal and acoustic 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
- General enclosures

Please refer to our 'Sorberbarrier Brochure' on our website for a complete range on Sorberbarrier products.

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

PRODUCT SPECIFICATIONS

PRODUCT NAME	TOTAL THICKNESS (mm)	CONSTRUCTION Absorptive layer(mm)/Mass barrier(Kg)/Decoupler(mm)	SHEET SIZE ** (metres)	OPERATING TEMPERATURE RANGE (°C)	THERMAL CONDUCTIVITY (K)
Sorberbarrier AGC20/4.5	20	AGC12/4.5/06	1.3 x 1.0 and 1.3 x 2.2	-40 to 100 (Continuous) -40 to 120 (Intermittent)	0.033W/mK*
Sorberbarrier AGC25/4.5	25	AGC12/4.5/12	1.3 x 1.0 and 1.3 x 2.2		
Sorberbarrier AGC32/4.5	32	AGC25/4.5/06	1.3 x 1.0 and 1.3 x 2.2		
Sorberbarrier AGC32/8.0		AGC25/8.0/06	1.3 x 1.0		
Sorberbarrier AGC50/4.5	50	AGC25/4.5/25	1.3 x 1.0 and 1.3 x 2.2		
Sorberbarrier AGC50/8.0		AGC25/8.0/25	1.3 x 1.0		
Sorberbarrier AGC75/4.5	75	AGC50/4.5/25	1.3 x 1.0		
Sorberbarrier AGC75/8.0		AGC50/8.0/25	1.3 x 1.0		

Tolerances: Weight: +/- 0.5Kg; Thickness: +/- 3mm ; Length and Width: -0 to +5mm

* Typical value for Polyurethane foam - Polyurethane handbook: Chemistry, Raw Materials, Processing, Application, Properties 2nd edition

**Useable width is specified. Some surface coverings such as foils, films or fabric may overhang the useable width.

SELF-ADHESIVE TAPES SPECIFICATIONS

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

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.

When ordering products with adhesive backing, please specify your choice of tape with the appropriate code **A**, **A1** or **A2** as Sorberbarrier AGC32A/4.5, Sorberbarrier AGC32A1/4.5 or Sorberbarrier AGC32A2/4.5. Unless otherwise stated, the standard adhesive backing supplied is premium grade (Alpha - A).

(For details on properties of the classified self adhesive tapes and installation of PSA backed products, refer document 'PSA Tapes - 525IP' on our website www.pyroteknc.com)

FLAMMABILITY PROPERTIES OF COMPOSITE COMPONENTS

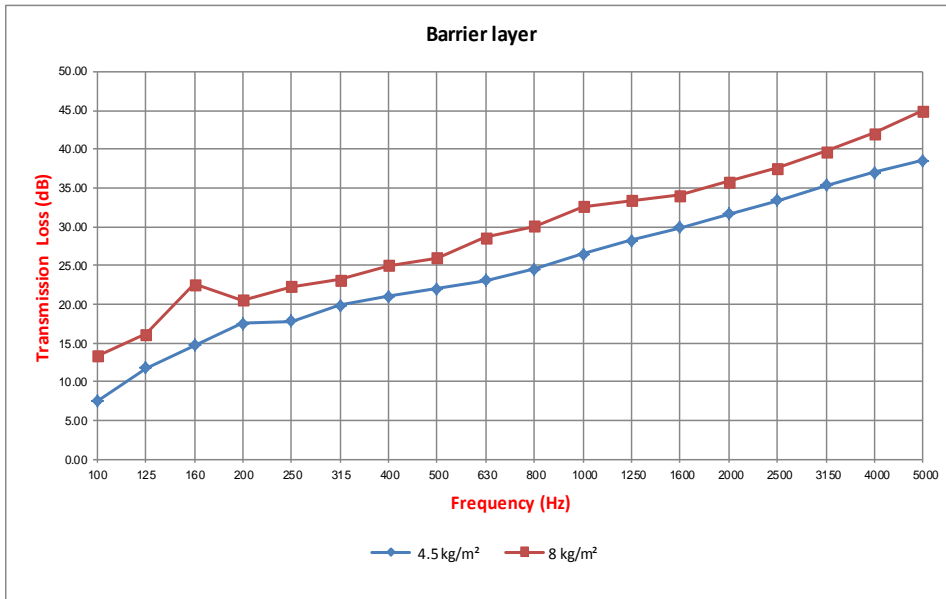
TEST METHOD	INDEX	RESULTS	DESCRIPTION
ISO 4589.2 - 1996 (Report No. 328271)	Limiting Ambient Oxygen Index (LOI)	22.6%	Determination of the burning behaviour of plastics by oxygen index at ambient temperature.
BS EN ISO 4589.3 - 1996 (Report No. 328272)	Limiting Elevated Oxygen Index (LOI)	21.3%	Determination of the burning behaviour of plastics by oxygen index at an elevated temperature of 60°C.
DIN 5510-2:2009-05 DIN 54 837:2007-12 DIN EN ISO 5659-2:2007 (Report No. P60-15-0598en)	Flammability (S1 to S5); Smoke Development Class (Not awarded, SR1, SR2); Dripping Class (ST1 or ST2)	S3, SR2, ST2	German standard of product burning behaviour for railway vehicles.
DIN 5510-2 Annex C (Report No. P60-15-3390en)	FED	Pass	Toxicity (FED) requirement of FED≤1
EN ISO 9094-1:2003 (Report No. 328272(A)) Summary Report	Classification/Compliance	Complies	Complies to Directive 94/25/EC. Material suitable for use as insulation of engine space in recreational maritime craft.
ASTM E162 & ASTM E662, NFPA130 / 49 CFR part 238** (Certificate No. 101869004MID, 102057878MID)	$I_s \leq 25$, $D_s(1.5) \leq 100$, $D_s(4.0) \leq 200$	Complies for wall and ceiling linings and panels	Radiant panel index and smoke emission requirements of US (FRA) Federal Railroad Administration.
UL94* (Report No. 13513JY7)	After flame time ≤ 2 seconds	HF-1	Horizontal burn test for foam materials. Complies
FMVSS-302* (Report No. 14713JY1)	Burn Rate - mm/min	Self-Extinguishing	Automotive burn rate test. Complies

*Results for plain foam only

**Results apply to AGC faced composite.

All other results for AGC faced foam component

ACOUSTIC PERFORMANCE

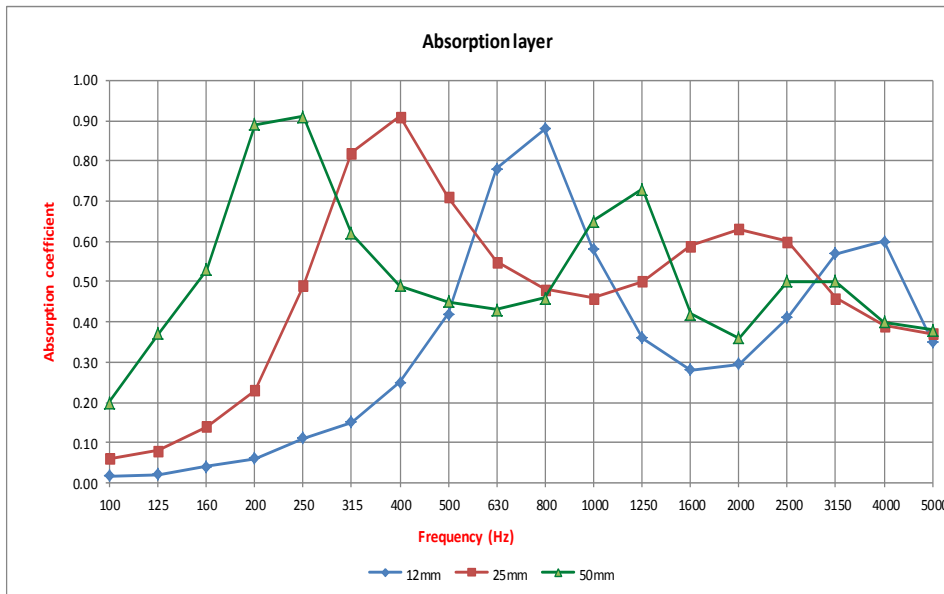


Frequency (Hz)	4.5 kg/m ²	8 kg/m ²
100	7.50	13.30
125	11.76	16.19
160	14.66	22.55
200	17.50	20.51
250	17.80	22.29
315	19.80	23.16
400	21.00	25.00
500	22.00	25.99
630	23.10	28.58
800	24.50	30.09
1000	26.50	32.66
1250	28.20	33.43
1600	29.90	34.09
2000	31.60	35.86
2500	33.40	37.56
3150	35.30	39.74
4000	37.00	42.06
5000	38.60	45.00
STC	27	31
Rw	27	31

*Results for 4.5kg m² are tested to AS1191 Transmission loss report ATF-173 (revision 1)
 **Results shown for 8kg m² are tested to ISO15186-1/ISO 10140-4 (Report No. 189 Issue: 1)

ACOUSTIC PERFORMANCE

(Tested ISO 354-2003 at Canterbury University , New Zealand—Report Numbers 278,279,280)



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	0.45	0.49	0.45
800	0.78	0.43	0.43
1000	0.88	0.46	0.46
1250	0.42	0.65	0.73
1600	0.28	0.42	0.42
2000	0.29	0.36	0.42
2500	0.41	0.60	0.36
3150	0.57	0.50	0.50
4000	0.60	0.46	0.40
5000	0.35	0.37	0.38
NRC	0.35	0.55	0.60



CONTACT DETAILS:
 for further information and contact details,
 please visit our website at www.pyroteknc.com



LOCATIONS:
 AUSTRALIA, CHINA/HONG KONG,
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 INDIA, INDONESIA, JAPAN, KOREA,
 MALAYSIA/SINGAPORE, NEW ZEALAND,
 TAIWAN, THAILAND, TURKEY,
 UNITED KINGDOM, USA VIETNAM

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.