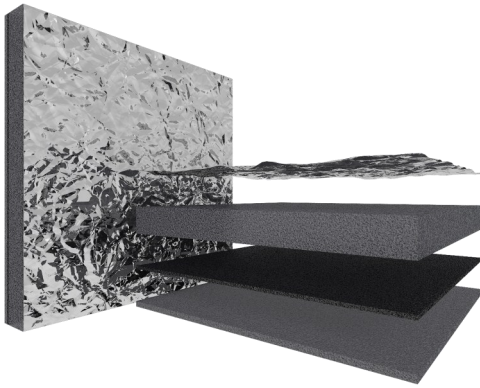




### Metallised Polyester Faced Barrier - Absorber Composite



**Sorberbarrier® M** is a unique composite noise control product that offers both excellent noise transmission loss and high absorption with a durable impervious facing of metallised polyester film. It was developed to meet market noise reduction requirements in light transport, mining equipment, marine and general OEM partial enclosures.

**Sorberbarrier M** combines the superior performance of the flexible mass barrier, **Wavebar®** together with the high absorption properties of **Sorberfoam™**.

The facing used on **Sorberbarrier M** affords mechanical protection and a decorative appearance. It is impermeable to contamination by dust, oil, liquids or sprays and allows for sound absorption in the high frequency range.

The excellent performance of **Sorberbarrier** is achieved by its unique construction. Placing the mass barrier between two layers of absorbing foam, keeps the barrier separate from the structure to which it is bonded, allowing it to remain flexible at all times, This increases noise transmission loss.

Tests have revealed that altering the thickness of foam that separates the noise barrier from the structure, improves the product's performance in some frequencies without an increase in overall weight.

**Sorberbarrier M's** surface allows for absorption in a broad range of frequencies which combined with a mass barrier provides maximum noise reduction, making it the most versatile product for controlling noise in the market place.

#### FEATURES

- Multi-function product: An absorber and barrier in one
- Metallised polyester facing allows sound absorption in critical high and mid frequency region
- The light weight, semi decorative facing is highly reflective for enhanced lighting
- Impermeable to contamination from dust, oils, liquids, fuels or sprays
- No ozone-depleting substances generated during manufacture
- Free from formaldehyde, phenolic resins and irritating fibres
- **Sorberfoam** is engineered to substantially resist degradation (foam rot) more than traditional acoustic foam
- Quick and easily installed in awkward places
- Easy to cut, adhere or mechanically fasten into position
- Custom designs available, profile cut into 2D or 3D shapes
- Choice of three high performance self adhesive tapes for easy installation (see page 2)
- Can be constructed with other absorption products such as **Sorberpoly™** and **Sorbermel®**
- Offers an alternative to mineral fibre products which tend to shed fibres

#### APPLICATIONS

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

Refer to our website [www.pyroteknc.com](http://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 M20/4.5	20	M12/4.5/06	1.3 x 1.0 and 1.3 x 2.2	-40 to 100 (Continuous)  -40 to 120 (Intermittent)	0.033W/mK*
Sorberbarrier M25/4.5	25	M12/4.5/12	1.3 x 1.0 and 1.3 x 2.2		
Sorberbarrier M32/4.5	32	M25/4.5/06	1.3 x 1.0 and 1.3 x 2.2		
Sorberbarrier M32/8.0		M25/8.0/06	1.3 x 1.0		
Sorberbarrier M50/4.5	50	M25/4.5/25	1.3 x 1.0 and 1.3 x 2.2		
Sorberbarrier M50/8.0		M25/8.0/25	1.3 x 1.0		
Sorberbarrier M75/4.5	75	M50/4.5/25	1.3 x 1.0		
Sorberbarrier M75/8.0		M50/8.0/25	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 – <b>A</b>	Premium high performance transfer tape suitable for most applications.	-10 to 110
Alpha - <b>A1</b>	Versatile, resilient, high tack adhesive with excellent bonding strength to a wide range of substrates.	-10 to 80
Alpha - <b>A2</b>	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.

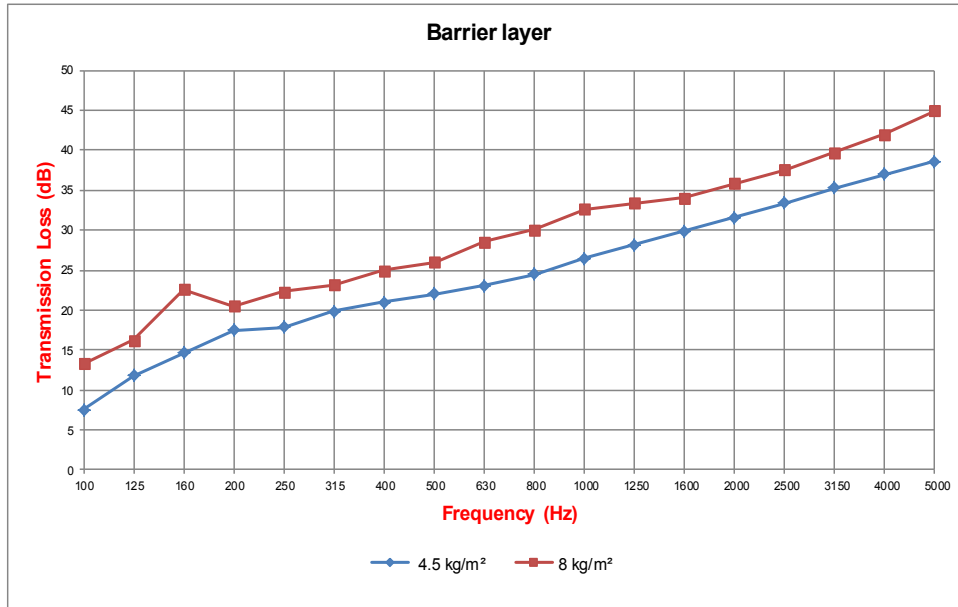
When ordering products with adhesive backing, please specify your choice of tape with the appropriate code **A**, **A1** or **A2** as Sorberbarrier M32**A**/4.5, Sorberbarrier M32**A1**/4.5 or Sorberbarrier M32**A2**/4.5. Unless otherwise stated, the standard adhesive backing supplied is premium grade (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](http://www.pyroteknc.com))

## FLAMMABILITY PROPERTIES

TEST METHOD	INDEX	RESULTS	DESCRIPTION
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

## ACOUSTIC PERFORMANCE

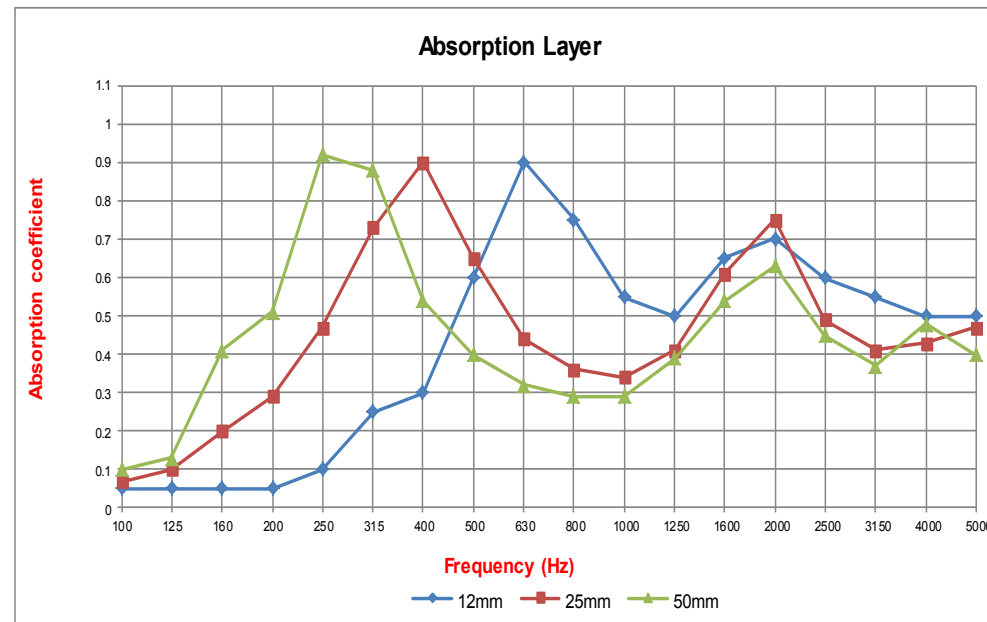


\*Results for 4.5kg m<sup>2</sup> are tested to AS1191 Transmission loss report ATF-173 (revision 1 )

\*\*Results shown for 8kg m<sup>2</sup> are tested to ISO15186-1/ISO 10140-4 (Report No. 189 Issue: 1)

Frequency (Hz)	4.5 kg/m <sup>2</sup>	8 kg/m <sup>2</sup>
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
<b>STC</b>	<b>27</b>	<b>31</b>
<b>Rw</b>	<b>27</b>	<b>31</b>

## AS ISO 354 RMIT



Frequency (Hz)	12 mm	25 mm	50 mm
100	0.05	0.07	0.10
125	0.05	0.10	0.13
160	0.05	0.20	0.41
200	0.05	0.29	0.51
250	0.10	0.47	0.92
315	0.25	0.73	0.88
400	0.30	0.90	0.54
500	0.60	0.65	0.40
630	0.90	0.44	0.32
800	0.75	0.36	0.29
1000	0.55	0.34	0.29
1250	0.50	0.41	0.39
1600	0.65	0.61	0.54
2000	0.70	0.75	0.63
2500	0.60	0.49	0.45
3150	0.55	0.41	0.37
4000	0.50	0.43	0.48
5000	0.50	0.47	0.40
<b>NRC</b>	<b>0.50</b>	<b>0.55</b>	<b>0.60</b>

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](http://www.pyroteknc.com/disclaimer).

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**Pyrotek**  
noise control