

SORBERBARRIER MLDS MW

high-performance melamine absorber-barrier composite

Sorberbarrier MLDS MW is a unique, multilayered noise control product that offers both noise transmission loss and sound absorption. The composite is comprised of two layers of Sorbermel melamine resin-based foam, bonded together with an inlay of a foil layer and a flexible mass barrier layer, Wavebar. A facing of metalised polyester film (Sorbertextile MW) is laminated to the surface of the melamine foam layer. The melamine exhibits excellent resistance to hydrolysis and combustion. The facing chosen provides additional protection to the foam from mechanical stress and dirt, oil and liquid ingress. The additional inner aluminium foil layer provides excellent vapour and fire barrier benefits.

The two layers of absorbing foam separate the barrier from the structure to which it is bonded, allowing it to remain flexible, thus enhancing noise transmission loss. Altering the thickness of foam that separates the noise barrier from the structure can improve Wavebar's performance in some frequencies without a substantial increase in overall weight.

Sorberbarrier MLDS MW is easy to cut, mechanically fasten and install. Combined with Sorbertextile MW, the unique features makes it a highly versatile soundproofing product for controlling noise.

VOC, ODP, HEALTH AND SAFETY

Sorberbarrier MLDS MW is non-toxic and safe to handle by methods prescribed in the Safety Data Sheet. No Ozone depleting substances are used during the manufacture of Sorberbarrier MLDS MW.

SPECIFICATIONS

Colour	White (Sorbertextile MW Facing) and light grey (Sorbermel)
Available	Available in 33 - 50 mm (1.30 - 1.97 in) total thickness
	Custom kits, sizes, facing, adhesive tape backing and/or thicknesses available depending on MOQ



applications

- Cavity space of locomotive and rolling stock
- Power generation units and containerised generator sets
- Additional thermal and acoustic insulation for air-conditioning
- Engine compartments and firewalls of cars, trucks, buses and construction machinery
- Machinery and equipment enclosures
- Pool and spa motor enclosures
- Whitegoods industry
- General enclosures
- Engine Room in boats under CE Marine Survey

features

- Multifunction acoustic product - absorber and barrier
- No ozone-depleting substances generated during manufacture
- Phenolic resins and irritating fibres not used during manufacture
- Available as kits (depending on MOQ) - quick and easily installed in specified applications
- Easy to cut, adhere or mechanically fasten into position
- Can be constructed with other decoupling layers such as Sorberpoly and/or Sorberfoam



PRODUCT SPECIFICATION

Product	Total thickness	Construction Absorptive melamine layer (mm)/Mass barrier (kg)/ Decoupler (mm)	Standard sheet size	Operating temperature
Sorberbarrier MLDS MW 32/4	33 mm (1.30 in)	25/4/6	1.3 m x 2.5 m (*Untrimmed) (4.3 ft x 8.2 ft) 1.25 x 2.2 m (Trimmed) (4.1 ft x 7.2 ft)	-40 °C to 100 °C (-40 °F to 212 °F) continuous -40 °C to 120 °C (-40 °F to 248 °F) intermittent
Sorberbarrier MLDS MW 32/8	35 mm (1.38 in)	25/8/6	1.3 x 1.25 m (*Untrimmed) (4.3 ft x 4.1 ft) 1.25 x 1.25 m (Trimmed) (4.1 ft x 4.1 ft)	

Tolerances: Weight: ± 0.5 kg (1.1 lb); Thickness: ± 3 mm (0.1 in); Length and Width: -0 to +5 mm (0.2 in)

Please consult your sales representative as minimum order quantities may apply.

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.

*Untrimmed means some layers may overhang the usable width

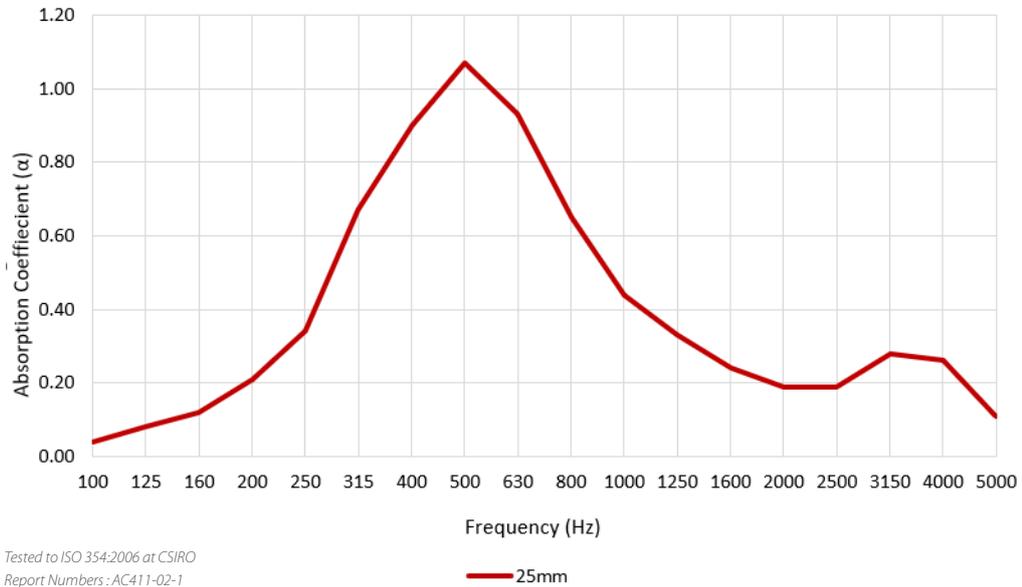
MATERIAL PROPERTIES

Test method	Property	Report no.	Results
ISO 4589-3	Determination of the burning behaviour of plastics by oxygen index at an elevated temperature of 60°C	133.0ISO170/24	21.5%
ISO9094-1	Classification/Compliance		Complies to Directive 94/25/EC. Refer to standard for test method limitations. Material suitable for use as insulation of engine space in recreational maritime craft.

ACOUSTIC PERFORMANCE

Frequency (Hz)	25 mm
100	0.04
125	0.08
160	0.12
200	0.21
250	0.34
315	0.67
400	0.90
500	1.07
630	0.93
800	0.65
1000	0.44
1250	0.33
1600	0.24
2000	0.19
2500	0.19
3150	0.28
4000	0.26
5000	0.11
NRC	0.50
SAA	0.51
α_w	0.30 (LM)

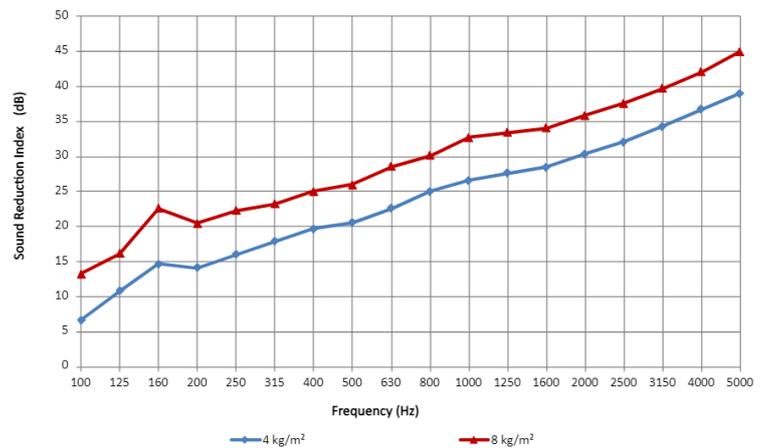
Absorptive Layer



Tested to ISO 354:2006 at CSIRO
Report Numbers: AC411-02-1

Frequency (Hz)	4 kg/m ²	8 kg/m ²
100	6.7	13.3
125	10.8	16.2
160	14.7	22.6
200	14.1	20.5
250	16.0	22.3
315	17.9	23.2
400	19.7	25.0
500	20.6	26.0
630	22.6	28.6
800	25.0	30.1
1000	26.6	32.7
1250	27.6	33.4
1600	28.5	34.1
2000	30.4	35.9
2500	32.1	37.6
3150	34.3	39.7
4000	36.7	42.1
5000	39.0	45.0
R_w	25	31
STC	26	31

Barrier Layer



Tested to ISO 15186-1:2003 & 10140-4:2010 at University of Canterbury, New Zealand | Report Number: 262d & 264d

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 and 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.
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