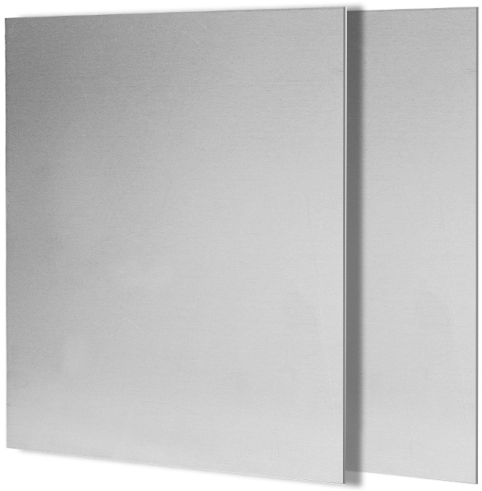
SOUNDALLOY® MPM

constrained layer metal composite

0575



Soundalloy MPM is a damped aluminium composite comprising two layers of aluminium laminated together using a layer of a viscoelastic polymer to form the laminate. The function of the viscoelastic interlayer is to damp structure-borne sound.

Soundalloy MPM is free from resonance and coincidence phenomena which often detract from the performance of other acoustic insulation materials. And because of the aluminium base material, Soundalloy MPM can be used in severe environments which other materials cannot withstand.

The product can be used to fabricate acoustic doors, laundry & garbage chutes, ducts, enclosures, extraction hoods, and automotive components such as valve covers & oil sumps. Using aluminium sheet also allows the laminate to be used as a structural material in equipment construction.

Other metals such as stainless steel and EG steel can be substituted for aluminium.

Note: Powder-coated panels should not be bent. Bending should be completed on plain panels and painted on site. We recommend conducting trials on small samples pieces first.

VOC, ODP, HEALTH AND SAFETY

Soundalloy MPM is non-toxic and safe to handle by methods prescribed in the Safety Data Sheet.

SPECIFICATIONS

Colour	Silver
Available	Standard sheet size: 1.2 x 2.4 m (3.9 x 7.9 ft) Standard thicknesses: 1.6 and 2.1 mm (0.06 to 0.08 in) Various configurations of metal thicknesses available from 1 to 6 mm (0.04 to 0.2 in)
	Custom sizes, colours and/or thicknesses available depending on MOQ

applications

- Engine rooms for high-speed craft and vessels
- Machinery, equipment, compressor and generator set enclosures
- Acoustic hoods and chutes
- Conveyor systems
- Crushers / Granulators
- Coin counters
- Air conditioner casings
- Automotive sumps and panels
- Acoustic wall panels and doors
- LNG cladding

features

- Maximum damping performance even at minimum thickness
- Complies to IMO FTP 2010 - low spread of flame
- Can be used as part of the "main structure"
- Able to cut, die form into complex shapes and join
- Insulates against airborne sound, impact and vibration
- Can be painted & powder coated - best results from the
- manufacturer for powder coating
- Effective "in-structure damping"
- No need for external damping materials
- Reduces or eliminates the need for the use of external isolators
- Lightweight damped structures
- Broad temperature range: -40 to 110 °C (-40 to 230 °F)
- Able to fabricate using conventional machine shop tools

PRODUCT SPECIFICATION

Product	Thickness	Standard sheet size	Approximate surface density	Transmission loss	Recommended maximum service temperature
Soundalloy MPM 1600	1.6 mm (0.06 in)	1.2 x 2.4 m (3.9 x 7.9 ft)	4.2 kg/m² (0.9 lb/ft²)	Rw 23 / STC 23*	110 °C (230 °F)
Soundalloy MPM 2100	2.1 mm (0.08 in)		5.5 kg/m² (1.1 lb/ft²)	Rw 25 / STC 25*	

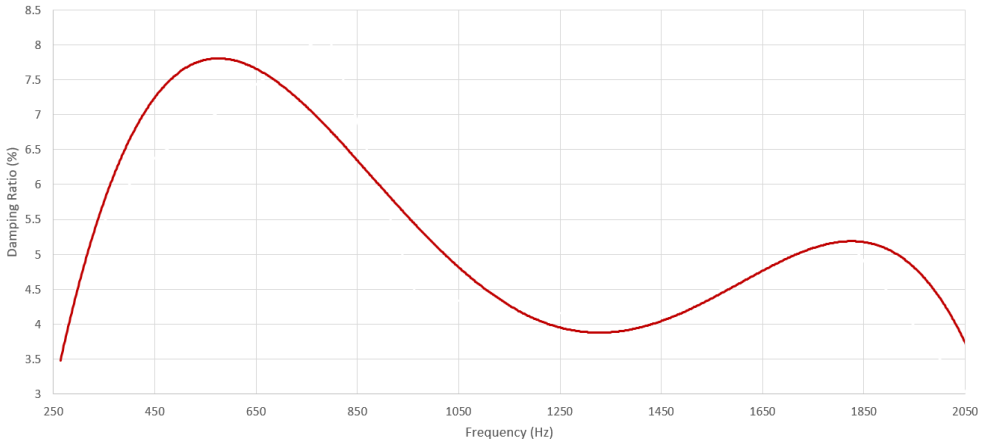
Tolerances: Dimensions & Weight: ±10%. Other grades/thicknesses are available, please contact your local Pyrotek representative for more information.

**Published transmission loss results have been calculated using transmission loss prediction software with a general tolerance of ±3 dB. Full prediction data can be shared upon request.*

MATERIAL PROPERTIES

Test method	Property	Report no.	Results
IMO FTP 2010	Surface flammability	Resolution MSC.307(88) Annex 1 Part 5 323596	>50.5 kW/m² >30.3 MJm⁻² <0.01 kW <0.01 MJ Meets all low flame spread requirements for bulkhead, wall, ceiling and floor coverings
MED B	EC Type Certificate (Module B) for Marine Equipment Directive	MEDB000082M	Complies for Bulkhead, walls and ceiling linings. USCG Type approval granted.
MED D	EC Type Certificate (Module D) for Marine Equipment Directive	MEDD000028J	

ACOUSTIC PERFORMANCE



Results for Soundalloy® 1.6 mm
Test Report 31521CD

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