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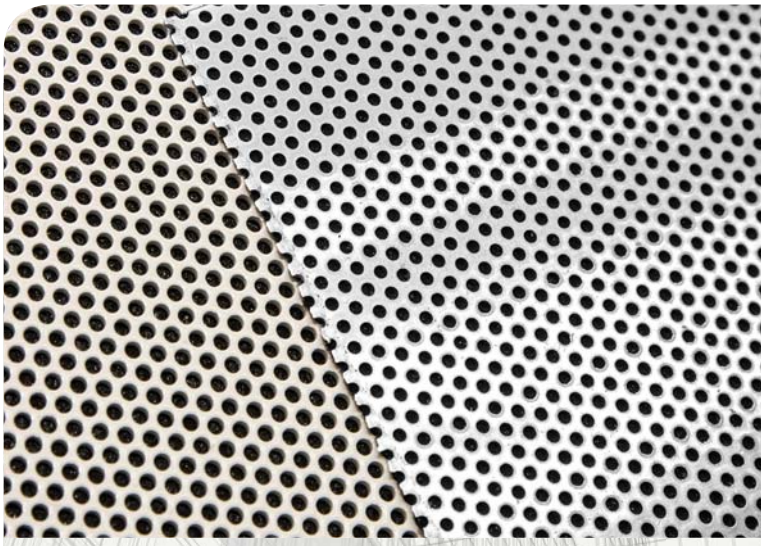
SORBERSCREEN®

advanced perforated metal sound absorber



Sorberscreen® is a perforated metal sheet sound absorber. The sheets are supplied either plain or backed with Sorbertextile™ STA, a black, high air flow resistant glass based acoustic textile, that offers high performance sound absorption. The product has a hard durable finish with an aesthetic appeal.

The perforated metal screen is made from either marine grade 5052 aluminium sheet (Sorberscreen ALU) or electro-galvanised steel (Sorberscreen EGS) with 28% open area. This open area allows the sound waves to be passed through from the noise source and be absorbed by the backing fabric. Sound waves when travelling through the flow resistant backing fabric, creates heat through friction, causing a loss of energy, thus reducing noise and reflected sound. The sheets have a white powder coating, offering resistance to corrosion. The metal screen can be easily powder coated or spray painted to any colour desired, before being bonded with the backing fabric, Sorbertextile STA.

The degree of sound absorption obtained can easily be increased, by increasing the air gap behind the Sorberscreen®. This cavity created, can be filled with any other insulation material to further enhance sound absorption. The backing material provides a protective layer and prevents fibre release, if any, from such insulation materials.

Sorbertextile™ STA is non-combustible and has a hot melt reactive adhesive backing. Besides providing excellent mechanical strength, the fabric offers high opacity and an aesthetic appearance, making the product a perfect finish for sound absorption in engine rooms, soundproof enclosures, architectural walls and ceiling absorptive panel applications.

SPECIFICATIONS

Colour	White (RAL 9010). Can be supplied plain or powder coated to any other colour on request
Available	Sheet sizes of 1.25m x 2.50m (Aluminium) and 2.44m X 1.22m (Electro-galvanised steel) Standard total thickness of 1.22mm. Other thicknesses from 0.55 - 2.0mm on request

applications

- Decorative and durable protective engine room cover in marine, power generation and engine bays of large mobile equipment.
- Wall and ceiling insulation in marine engine rooms
- Lining of acoustic enclosures
- Acoustic baffles
- Interior decorative wall absorbers

features

- Maximises noise control by providing superior air borne noise reduction
- Complies to IMO FTP 2010 - low spread of flame
- Complies to BS476.6 and 7 - Class 0
- Highly durable, offers high impact resistance
- Marine grade metal
- Can be supplied with Sorbertextile™ STA backing
- Can be used in conjunction with other insulation materials like Sorberpoly™, Sorbertextile™ Sorberfoam™, Sorberglass® and Sorberbarrier® products to increase the acoustic performance
- Easy to clean, cut and install
- Easily cut and shaped using conventional metal working tooling
- Excellent performance between 630Hz to 2.5kHz 1/3rd octave bands

PRODUCT SPECIFICATIONS

Product name	Coating/Colour	Thickness of perforated metal (mm)	Thickness of backing (mm)	Total thickness (mm)	Sheet size lengthxwidth (mm)
Sorberscreen ALU1000	Plain	1.0	No backing	1.0	2500 X 1250
Sorberscreen PC ALU1000	Powder Coated/White (RAL 9010)	1.0	No backing	1.0	
Sorberscreen ALU1000ST	Plain	1.0	0.22	1.22	
Sorberscreen PC ALU1000ST	Powder Coated/White (RAL 9010)	1.0	0.22	1.22	
Sorberscreen EGS 900	Plain	0.90	No backing	0.90	2440 X 1220
Sorberscreen PC EGS900	Powder Coated/White (RAL 9010)	0.90	No backing	0.90	
Sorberscreen EGS900ST	Plain	0.90	0.22	1.12	
Sorberscreen PC EGS900ST	Powder Coated/White (RAL 9010)	0.90	0.22	1.12	

Tolerance: Thickness: +/- 0.1mm;
Please contact your local Pyrotek representative for other thicknesses and choice of colours.

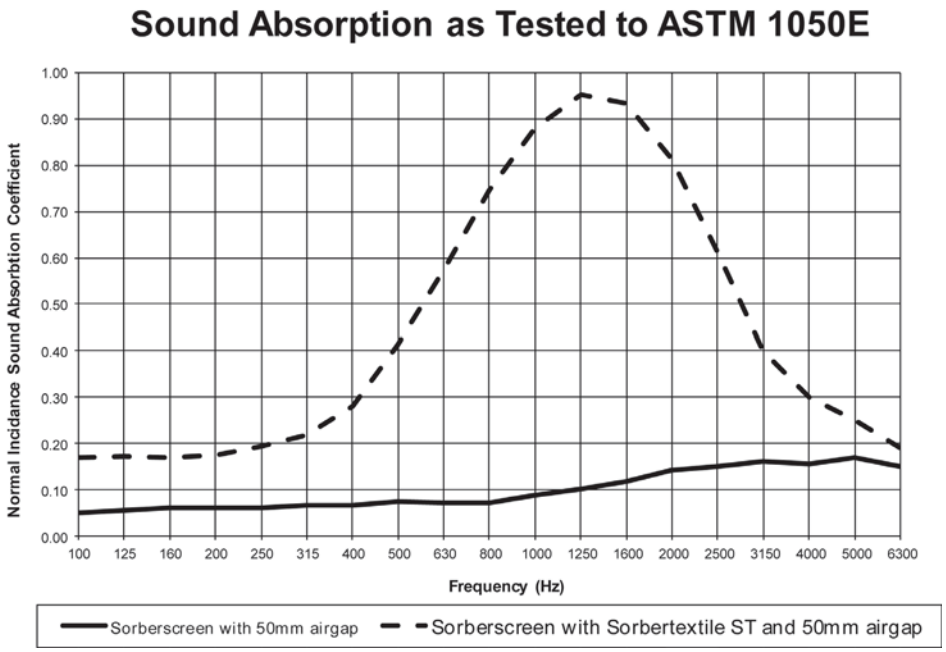
MATERIAL PROPERTIES OF SORBERTEXTILE ST BACKING

Test method	Property	Report No.	Results
IMO FTP part 5	Surface flammability	324201	Complies for bulkhead, walls and ceiling linings
MED B	EC Type Certificate (Module B) for Marine Equipment Directive	164.112/1121/ WCL MED0361TE	Complies
MED D	EC Type Certificate (Module D) for Marine Equipment Directive	MEDD-1639	USCG type approval granted. WHEELMARK
BS476 Part 6	Fire propagation	393022	Complies with Class 0
BS476 Part 7	Surface spread of flame	393021	
FMVSS - 302	Flammability of interior materials	29516AC3	Complies to the requirements of US (DOT) Department of transport for occupant

ACOUSTIC PERFORMANCE

Frequency (Hz)	Normal Sound Absorption Coefficient	
	Sorberscreen +50mm airgap	Sorberscreen + Sorbertextile ST + 50mm airgap
100	0.05	0.17
125	0.06	0.17
160	0.06	0.17
200	0.06	0.18
250	0.06	0.19
315	0.07	0.22
400	0.07	0.28
500	0.07	0.41
630	0.07	0.58
800	0.07	0.75
1000	0.09	0.88
1250	0.10	0.95
1600	0.12	0.93
2000	0.14	0.81
2500	0.15	0.61
3150	0.16	0.40
4000	0.16	0.30
5000	0.17	0.25
NRC (250-2000)	0.10	0.60

(Tested to ASTM 1050E)



For further information and contact details, please visit our website
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