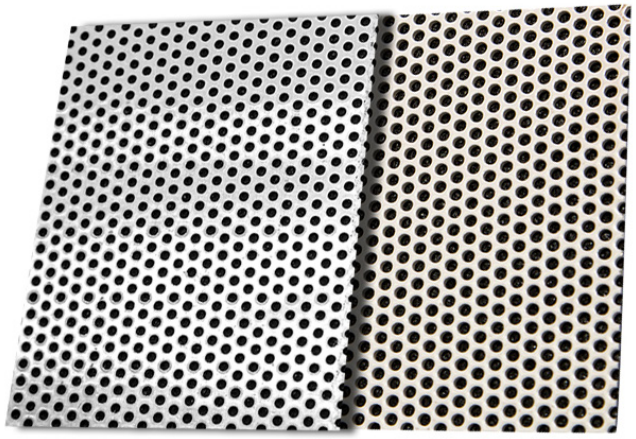
0575

SORBERSCREEN®™

high-performance metal perforated sound absorber



Sorberscreen is a perforated metal sheet sound absorber. The sheets are supplied either plain or backed with Sorbertextile STA, a black, high airflow 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 extending the air gap behind Sorberscreen. This cavity created, can be filled with any other insulation material to enhance sound absorption further. The backing material provides a protective layer and prevents fibre release, if any, from such insulation materials.

Sorbertextile STA with hot melt reactive adhesive backing has a low spread of flame properties and is recognised as a Group 1-s material by Australian and New Zealand building codes. The fabric offers high opacity and an aesthetic appearance to provide a perfect finish in engine rooms, soundproof enclosures, architectural walls and ceiling absorptive panel applications.

VOC, ODP, HEALTH AND SAFETY

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

SPECIFICATIONS

Colour	White (RAL 9010). Can be supplied plain or powder coated to any other colour on request
Available	Standard sheet size: 2.5 x 1.25 m (8.2 x 4.1 ft) Electro-galvanised steel: 2.44 x 1.22 m (8 x 4 ft) Standard total thickness: 1.22 mm (0.05 in) Various thicknesses available: 0.55 to 2 mm (0.02 to 0.08 in)
	Custom sizes, colours and/or thicknesses available depending on MOQ

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 airborne noise reduction
- Complies to IMO FTP 2010 - low spread of flame
- Complies to BS 476.6 and 7 - meeting Class 0 rating
- 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 shaped using conventional metalworking tooling
- Excellent performance between 630 Hz to 2.5 kHz 1/3rd-octave bands

PRODUCT SPECIFICATION

Product	Coating/colour	Perforated metal thickness	Backing thickness	Total thickness	Standard Sheet size
Sorberscreen ALU1000	Plain	1 mm (0.04 in)	No backing	1 mm (0.04 in)	2500 x 1250 mm (98.4 x 49.2 in)
Sorberscreen PC ALU1000	Powder Coated/ White (RAL 9010)		No backing	1 mm (0.04 in)	
Sorberscreen ALU1000ST	Plain		0.22 mm (0.09 in)	1.22 mm (0.05 in)	
Sorberscreen PC ALU1000ST	Powder Coated/ White (RAL 9010)		0.22 mm (0.09 in)	1.22 mm (0.05 in)	
Sorberscreen EGS 900	Plain	0.9 mm (0.035 in)	No backing	0.9 mm (0.035 in)	2440 x 1220 (96.06 x 48.03 in)
Sorberscreen PC EGS900	Powder Coated/ White (RAL 9010)		No backing	0.9 mm (0.035 in)	
Sorberscreen EGS900ST	Plain		0.22 mm (0.09 in)	1.12 mm (0.04 in)	
Sorberscreen PC EGS900ST	Powder Coated/ White (RAL 9010)		0.22 mm (0.09 in)	1.12 mm (0.04 in)	

Tolerances: Thickness: ±0.1 mm (0.004 in). Please contact your local Pyrotek representative for other thicknesses and choice of colours.

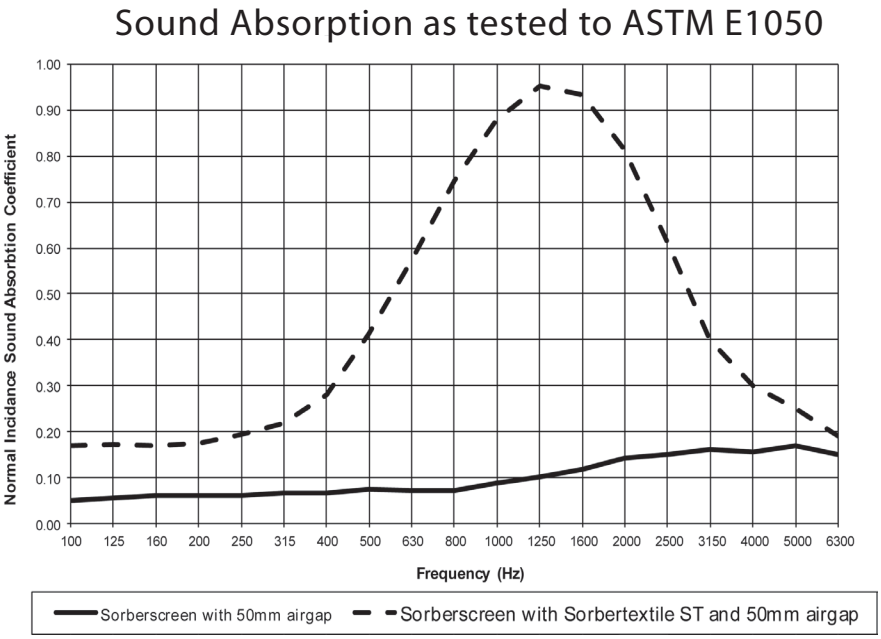
MATERIAL PROPERTIES

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	MEDB00007RW	Complies
MED D	EC Type Certificate (Module D) for Marine Equipment Directive	MEDD000028J	USCG type approval granted. WHEELMARK
BS 476 Part 6	Fire propagation	393022	Complies with Class 0
BS 476 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	
	w/ 50 mm airgap	w/ Sorbertextile ST + 50 mm 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 E1050



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