

Advantages

- Excellent thermal and acoustic insulation.
- Fire and temperature resistant.
- Tough and durable.
- Cost effective and easy to install.
- Vermin and rot proof.
- Erosion resistant, suitable for high velocity systems.

Applications

Wilhams GF-SL Sonic Liner is designed for installation in air handling equipment and internal duct systems. It is also suitable for general purpose sound absorption applications in walls, ceilings and enclosures where a fire safe requirement is specified erosion resistance is essential.

Description

Wilhams GF-SL Sonic Liner is a glass fibre mat faced with a tough dimensionally stable white woven glass cloth to prevent fibre migration. The glass fibre mat and facing are rot proof, odourless, non hygroscopic, do not sustain vermin, fungi, mould or bacteria.

Physical Information

DIMENSIONS

Standard roll width:	1200mm
Standard roll sizes:	20m x 25mm
	13m x 50mm
	10m x 75mm

Technical Information

Wilhams GF-SL Sonic Liner conforms to the following specifications:

- Maximum air velocity – 30 m/s
- Service temperature – <230°C

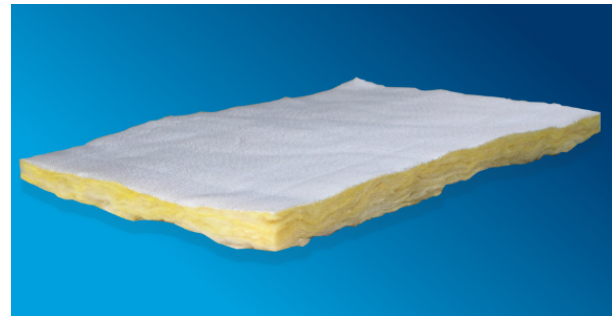
Thickness (mm)	Density (Kg/m ³)	Thermal Conductivity (W/mK)	Thermal Resistance (m ² K/W)
25	20	0.037	0.68
50	20	0.037	1.35
75	16	0.037	2.03

Base Glass fibre

- Density – 16 to 20 kg/m³ (depending on thickness)
- BS 476:Part 4:1984 – Non combustible
- BS 476:Part 7:1997 – Class 1 surface spread of flame
- UK Building Regulations – Class 'O'

Glass cloth facing

- Surface weight – 166 gms/m²
- BS 476:Parts 6 & 7 – Class 'O'



Acoustic Performance

For general applications the length of duct to be lined is normally 10 times the mean width of the duct. Where the application is more critical, i.e. supplying to a quiet room, the length of duct work to be lined should be about 20 times the mean duct width.

Noise absorption is expressed as a factor between 0 and 1.0, the more sound that a surface absorbs the higher the coefficient. NRC is the average over the 250 to 2000Hz range

Sound Absorption Coefficients (BS 3638 1987)

Thickness (mm)	Frequency (Hz)						NRC
	125	250	500	1k	2k	4k	
25	0.10	0.35	0.65	1.0	1.0	1.0	0.75
50	0.30	0.90	1.00	1.00	0.86	0.85	0.98
75	0.45	0.90	1.00	1.00	0.95	0.90	0.96

Sound Attenuation (BS 4718:1971)

(25mm thick Sonic Liner lined straight 1m ductwork)

(dB)	Frequency (Hz)					
	125	250	500	1k	2k	4k
125mm wide duct	0.5	1.0	7.5	16.5	22.5	19.5
250mm wide duct	-	0.6	5.0	9.5	10.0	9.0

Installation

Wilhams GF-SL Sonic Liner is easily and quickly installed, using a combination of adhesive, pins and locking washers, metal nosing were required.

For a detailed installation method statement please contact our technical department.

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